Dallas Bike Master Plan

Phase 3 Engagement Report

Report Prepared For: City of Dallas

Report Prepared By: Gresham Smith

Date: August 8, 2023

This report is to serve as a summary regarding the Phase 3 public engagement events completed for the Dallas Bike Plan project. A narrative describing the Phase 3 public engagement process is included below, and attachments are included with copies of the engagement materials used and citizen responses received. Community engagement has been on-going throughout the life of the Dallas Bike Plan project. It has included regular meetings with two stakeholder committees including the Bicycle Advisory Committee (BAC) and the Technical Advisory Committee (TAC) and three defined phases of intentional public engagement and outreach. The third and final public engagement phase for the project commenced on June 19, 2023, and closed on July 18, 2023.

PHASE 3 COMMUNITY ENGAGEMENT

Overview

The Dallas Department of Transportation facilitated a three-week virtual engagement event with a live, online public forum for its third and final phase of public engagement for the Dallas Bike Plan project. Engagement materials were posted on the Dallas Bike Plan webpage on the Dallas Department of Transportation's website. The City of Dallas advertised this community engagement event on their various social media platforms. City-managed distribution lists were utilized to send out additional email notifications. These notifications were sent to over 200 residents and homeowner association representatives. A project team managed distribution list was also used to include stakeholders that have participated since the Phase 1 engagement. Members of the BAC and TAC were encouraged to share notice of the engagement events and were supplied with individual ads for each public meeting to post throughout the three-week engagement period, along with a suggested posting calendar. Notices were also distributed to each of the City Council offices for distribution across their own email lists, newsletters, and social media channels.

Overview & Methodology

The third phase of public engagement was styled as a three-week virtual open house, with a live, online public forum hosted on Thursday, June 22, 2023, from 5:30 – 7:30 pm. The third phase of engagement included four different dimensions of interaction to encourage public participation:

(1) Interactive Draft Network Webmap,
(2) Survey Comment Form for Draft Plan,
(3) Survey Comment Forms for Each of the Fifteen (15) Draft Priority Projects (in-person and online), and a
(4) Virtual Forum Event.

A virtual engagement webpage on the project website for the Dallas Bike Plan, hosted on the Dallas Department of Transportation's website, was made available for public viewing and comment. The webpage contained the following:

- A copy of the Draft Plan document for viewing, with a link to a survey form to provide input and comment,
- A link to a virtual webmap of the Draft Final Bike Network, for viewing and direct comment on the webmap bike network, as with prior phases of public engagement,
- Individual project cut sheets for each of the fifteen priority capital projects, with links to survey forms for participants to provide comments for each project,
- Invitations to participate in two interactive activities:
    - A scavenger hunt to visit the sites of the fifteen priority capital projects and search for a QR code to enter a give-away, after providing input or comment on the proposed project
    - An opportunity to share a photo of the participant biking in Dallas (to be shared in the virtual forum) in order to enter a give-away.

The live, virtual forum was designed (a) to tell the story of how the Dallas Bike Plan was developed, (b) to showcase the bike network and priority capital projects in order to inform residents about the proposed projects and build excitement, and (c) to seek public input on the draft Dallas Bike Plan document and its next steps. The virtual forum comprehensively described the existing conditions analysis phase, bike network development process, and project prioritization methodology. It also summarized the community engagement process that was collaboratively applied throughout the life of the project, including its two prior phases of public involvement and its on-going BAC and TAC stakeholder committee meetings. The forum then unveiled the draft final bike network and brought the draft bike network to life by visualizing possible routes available to Dallas residents riding along the bike network upon its implementation and construction. Then, the forum reviewed recommendations for updates to City of Dallas bike facility design standards, bike-related policies, and implementation (including funding, phasing, and coordination). The forum included Q&A throughout the presentation and concluded with open discussion.

Finally, to encourage as much interaction as possible and bring a virtual-only engagement phase beyond an online experience, an on-location scavenger hunt was designed and implemented. For the fifteen priority projects, signs were designed and installed on-location on the back of stop signs (2-3 signs per corridor) with QR codes to the survey for that priority project. Residents were incentivized to go on-site and participate with the opportunity to win one of two available $100 Visa gift cards. The QR code surveys for each of the fifteen priority projects were replicated for posting on the project website to provide ample opportunities to participate and provide comment.

Participation Metrics

(1) Interactive Draft Bike Network Webmap

Below is an interaction count summarizing resident participation on the draft bike network webmap. The interaction count is determined by summing likes and dislikes; one count was added for any comments on each respective feature. This does *not* account for multiple comments/interactions with those comments (as the webmap allowed for back-and-forth discussion among commenters and participants to encourage open dialogue)*. This interaction summary only represents interactions with recommended routes. It does not reflect any open-ended comments provided via the webform included on the webmap platform.

Planning Area	Total Routes with Comments	Total Interactions (Like/Dislike/Comment*)
Central	70	211
NC	48	243
NE	97	291
NW	59	162
SC	60	43
SE	56	34
SW	74	136
Grand Total	**464**	**1120**

(2) Survey Comment Form for Draft Plan Document

A brief survey comment form was developed in English and Spanish to guide resident comments on the draft bike plan. For each of the chapters 2-6 (Methodology, Draft Network, Design Standards, Policy Recommendations, and Implementation), two questions were asked: (1) “Did this chapter comprehensively cover the topics you expected to be discussed?” and (2) “Please share your comments, thoughts, or recommendations for this chapter of the bike plan.”

The survey form was provided on the project Phase 3 engagement webpage. Residents were encouraged to participate in the survey in Phase 3 engagement advertisements and during the virtual forum. Sixty (60) residents provided survey responses. A breakdown of their demographics is included in Attachment #1. Participants were generally not current members of a bicycling club or advocacy group (85%), were well-dispersed among age groups and self-identified income

ranges, were well-dispersed among genders and tenure of residence in Dallas, were predominately white (70%), and were predominately bike-owners (88%) who also have access to a single occupancy vehicle (98%).

(3) Survey Comment Forms for Each of the Fifteen (15) Draft Priority Projects

A brief survey comment form was developed in English and Spanish to guide resident comments on each of the fifteen (15) priority projects. Two versions of the survey form were created based on whether the participant was interacting with the form online or in-person/on-location via QR code. The priority project survey form asked participants the following questions: (1) "What features of this project are you most excited about?", (2) "Are there any changes or additions you would recommend be incorporated in the design?", and (3) "Please share any other feedback." The QR code version of the survey asked additional personal identifying information for participants wishing to be entered into the $100 Visa gift card drawing incentive. Respondent metrics by priority project location are included in the table below.

	QR Code Scans	QR Code Survey	Webpage Survey
Community Dr.	8	0	1
Ewing Ave.	4	0	0
Kiest Blvd.	4	0	1
Lamar St.	4	0	4
Maple Ave.	5	0	53
Meandering Way	7	1	6
MLK Jr. / Cedar Crest Blvd.	1	0	4
N Beckley Ave.	1	0	5
Peak St.	2	1	4
Pine St.	0	0	0
S Beacon St.	3	0	2
S Malcolm X Blvd.	4	0	0
Sylvan Ave.	3	0	3
Timberline Dr.	0	0	1
W 7th St.	2	0	2
TOTAL	45	2	86

The Community Dr. project survey received one response. The respondent identified as white, male, and between the ages of 45-64.

The Kiest Blvd. project survey received one response. The respondent identified as white, male, and between the ages of 45-64.

The Lamar St. project survey received four responses. The respondents identified as white and male, with ages equally distributed among 25-34, 35-44, 45-64, and 65-74.

The Maple Ave. project survey received fifty-three responses from across the City of Dallas. Respondents identified predominately as white (64%), were well distributed across genders (53% male, 42% female, 5% non-binary/non-confirming/prefer-not-to-respond), and were well distributed across age brackets – predominately 25-34 (34%), 35-44 (32%), and 45-64 (26%).

The Martin Luther King Jr. Blvd./Cedar Crest Blvd. project survey received four responses. Respondents identified as white and predominately male (75%) and were distributed across age brackets 25-34, 35-44, and 65-74.

The Meandering Way project survey received seven total responses. Four respondents declined to self-identify their race/ethnicity, and the remaining three identified as white. Respondents were predominately male, though 2 declined to respond with their genders, and ages were well distributed from 35-75+.

The N. Beckley Ave. project survey received five responses. Respondents identified as white and predominately male (80%), and respondent ages were well distributed across age brackets.

The Peak St. project survey received five total responses. Respondents identified as predominately white (60%) and male, and respondent ages were well distributed across age brackets.

The S. Beacon St. project survey received two responses. Respondents identified as white and Native American (respectively), male, and between the ages of 25-44.

The Sylvan Ave. project survey received four responses. Respondents identified as white and predominately male (75%, with one respondent choosing not to respond), and respondent ages were well distributed across age brackets.

The Timberline Dr. project survey received one response. The respondent identified as white, male, and between the ages of 45-64.

The W. 7th St. project survey received three responses. Respondents identified predominately as white and male (67%), and respondent ages were well distributed across age brackets.

(4) Virtual Forum Event

The Virtual Forum event included over 20 attendees throughout the two-hour interactive virtual event and extended 30-minute Q&A open discussion. The meeting was recorded and hosted on the project website to allow for the public to view the meeting and learn more about the plan and the bike network map throughout the third phase of engagement. Of additional note, a shortened hyperlink used in the advertisement of the Phase 3 virtual engagement period to direct people to the Phase 3 project webpage was clicked 837 times between June 12th and July 18th.

Analysis & Key Take-Aways

(1) Interactive Draft Bike Network Webmap

Comments on the webmap generally recommended alterations to proposed routes on the network, recommended modifications to the proposed facility types for proposed routes on the bike network, or voiced support for a proposed route and its benefit to the overall network. Overall themes included requests for safe crossings at intersections, support for separated bike lanes (whether visually or, better yet, physically, if feasible), connections to parks and the existing trail network, traffic calming for vehicles, and connections to transit stations. Requests to modify proposed facility types for proposed routes on the bike network included (1) a desire to elevate certain bike boulevards to visually separated facilities and (2) a desire to elevate certain visually separated facilities to physically separated facilities (particularly near schools and other trip generators that attract a younger demographic). Respondents often provided a basis for their recommendations, including land use and observed vehicle travel speeds/volumes. Recommendations for alterations to proposed routes on the network generally promoted connections to the existing trail network or DART stations, closing of perceived gaps where observed, or shared common behavior by regular cyclists that would recommend a parallel route in lieu of the proposed (sometimes related to steep slopes or reduced conflicts with cars and driveways).

(2) Survey Comment Form for Draft Plan

Note: Survey questions were not asked for the Executive Summary and Chapter 1 "Introduction" sections.

Chapter 2 – Chapter 2 of the bike plan discusses the Methodology for Updating the Bike Network, including the Existing Conditions analysis, Public Engagement, and the process for Network Development. 34 respondents (57%) said they felt the chapter comprehensively covered the topics the respondents expended to be discussed (35 gave no opinion and 5 said no, though those responders corresponded with comments in opposition of a specific proposed project on the bike network). Of the 60 survey responses for this chapter, 39 respondents provided additional comment. Comments mostly requested specific recommendations for the bike network (18 comments), offered general support for new and improved bike facilities in Dallas (10), shared general opposition to biking in Dallas (7) – though those comments were mostly with reference to specific projects proposed on the bike network, and gave general comments on preferred facility types (1) and the intersection with micromobility (1). Two comments provided relevant feedback for the Draft Plan document itself. One comment requested additional detail be provided to further define the bike boulevard facility type (note: relevant for Chapter 3). The second commented suggested further detail be provided with regard to colored/green pavement type applications (note: relevant for Chapter 4). Comments on Chapter 2 of the Bike Plan can be found in Attachment #2.

Chapter 3 – Chapter 3 of the bike plan discusses the proposed Bike Network and its component facility types. 37 respondents (61%) said they felt the chapter comprehensively covered the topics the respondents expended to be discussed (18 gave no opinion and 5 said no, though those responders corresponded with comments in opposition of a specific proposed project on the bike network). Of the 61 survey responses for this chapter, 35 respondents provided additional comment. Comments mostly requested specific recommendations for the bike network (10 comments), offered general support for new and improved bike facilities in Dallas (10), and shared general opposition to biking in Dallas (3) – though those comments were mostly with reference to specific projects proposed on the bike network. 11 comments were direct repeats from Chapter 2. One comment discussed the plan document in general, with regard to public safety and police. This comment and one other (with specific recommendations for the proposed bike network) suggested that further expansion of the proposed bike network could occur in North Dallas. Comments on Chapter 3 of the Bike Plan can be found in Attachment #3.

Chapter 4 – Chapter 4 of the bike plan discusses proposed recommendations for the City's existing bike facility design standards. 32 respondents (53%) said they felt the chapter comprehensively covered the topics the respondents expended to be discussed (24 gave no opinion and 4 said no, though those responders corresponded with comments in opposition of a specific proposed project on the bike network). Of the 66 survey responses for this chapter, 24 respondents provided additional comment. Comments provided recommendations for design standards in this chapter (6 comments), requested specific recommendations for the bike network (2), or shared that the content in the chapter was comprehensive and useful (1). Most comments (15) were repeats of comments from prior chapters. Of the six comments that offered recommendations for Chapter 4, most discussed methods for visual and physical separation along with their preferences for each, recommendations for colored/green pavement, concerns regarding on-going maintenance and sweeping, and support for the addition of shade along bike routes to encourage usage in high-heat times of the year. Comments on Chapter 4 of the Bike Plan can be found in Attachment #4.

Chapter 5 – Chapter 5 of the bike plan discusses proposed bike-oriented policies recommendations. 32 respondents (53%) said they felt the chapter comprehensively covered the topics the respondents expended to be discussed (24 gave no opinion and 4 said no, though those responders corresponded with comments in opposition of a specific proposed project on the bike network). Of the 60 survey responses for this chapter, 21 respondents provided additional comment. Comments provided recommendations for additions or further detail in the proposed policies (3 comments), general support for bike lanes and bike-oriented policy in Dallas (2), and general opposition to funding for bike infrastructure (1). Most comments (15) were repeats of comments from prior chapters. Of the three comments that offered recommendations for Chapter 5, all discussed a need for on-going maintenance of bike facilities, along with a secondary recommendation for encouraging private developers to support/construct bike infrastructure and to maintain bike lanes during private development construction. Comments on Chapter 5 of the Bike Plan can be found in Attachment #5.

Chapter 6 – Chapter 6 of the bike plan discusses implementation recommendations for the bike plan. 30 respondents (50%) said they felt the chapter comprehensively covered the topics the respondents expended to be discussed (26 gave no opinion and 4 said no, though those responders corresponded with comments in opposition of a specific proposed project on the bike network). Of the 60 survey responses for this chapter, 27 respondents provided additional comment. Comments provided general support for the bike plan (5 comments), recommendations for implementation guidance in the bike plan (3), and a note that the chapter content was helpful for the respondent (1). Most comments (17) were repeats of comments from prior chapters. Of the three comments that offered recommendations for Chapter 6, one requested public education regarding bike safety and road etiquette for car drivers, one requested guidance for how community groups could support implementation for the bike plan, and two requested more detail regarding expected timelines. Two other comments also recommended the inclusion of shade trees to abate heat issues. Comments on Chapter 6 of the Bike Plan can be found in Attachment #6.

(3) Priority Project Surveys

Community Dr. – One response was received for this survey. The commenter is most excited that the project will connect with the Community Dr. project south of Northwest Hwy., had no changes or design recommendations for the project, and shared that the project will be a "great enhancement" for the community.

Kiest Blvd. – One response was received for this survey. The commenter is most excited that the project includes separated bike lanes and recommended that the project extend to Rugged Dr. or Hampton to connect with the trails in the park. The commenter additionally shared that by extending the project to Rugged Dr. bike riders would be able to more easily access the park from the east and that further extending the project to Hampton would create a loop around the park and reduce conflicts in the park with pedestrians using the trail.

Lamar St. – Four responses were received for this survey. The commenters are most excited that the project will improve provide a way to connect the Katy Trail to west Dallas via the pedestrian bridge and improve bike access and safety in the urban core (especially as one commenter expressed concerns with safety in/out of downtown). One commenter was not in favor of the project due to concerns regarding public safety and services needed for unhoused populations. Regarding design considerations, commenters supported physical protection for the bike lane and emphasized the importance of addressing signaling and traffic calming for the right-turn slip lane from westbound Lamar onto northbound I-35/DNT.

Maple Ave. – Fifty-three responses were received for this survey. Fifty-one comments (96%) were in favor of the project, with only two comments either opposing or concerned. The commenters are most excited that the project will improve overall network connectivity (a general theme in all comments), provide separated bike facilities and improve bike safety (34 comments), provide access to/from the Katy Trail and UTSW campus (14), improve connections to UTSW Campus (11),

and improve commuting for work (8). Commenters opposed to or concerned about the project voiced concerns regarding lane reductions and increasing vehicle congestion (with one commenter noting the Inwood Rd. and Butler Rd. intersections, as well as the school zone within the project limits). Regarding design considerations, commenters discussed amenities, desired extensions of the project limits/proposed connecting projects, intersection improvements, alternatives to lane reductions, physical separation, vehicle signage, and wayfinding signage for bike riders. Amenities mentioned include shade structures and shade trees, bike racks, and public safety/security stations (4 comments total). Extensions requested include the following (10 comments total): to Burbank/Bachman Lake, Denton Dr. (from Maple to Denton/Shore Crest), Reverchon Park, direct to UTSW CUH hospital, further east into East Dallas, consider travel between Walnut Hill and Mockingbird, past Katy Trail to connect with proposed Maple/Routh connection, dedicated facility on Parkland Blvd., extensions on Inwood and Butler. Intersection improvements requested include the following (1 comment total): extending signal cycle lengths for comfortable bike crossing times, automatically including bike/pedestrian signal phases rather than requiring bikes/pedestrians to press crossing button. Comments discussing the proposed lane reduction included the following (4 comments total): avoiding vehicle travel lane removal due to existing congestion and expanding the footprint of the roadway to include the proposed bike facilities rather than reducing Maple Ave. to two lanes. Requests for physical separation included the following (19 comments total): vertical delineators/flex posts or physical barriers between bike lanes and vehicle travel lanes (the most common request), raised pavement markings between bike lane and vehicle travel lane, the use of high-visibility pavement markings and green bike lanes, and a desire for separated bike and pedestrian facilities. Vehicle signage comments (2 comments total) emphasized the need to increase driver awareness of bikes. Wayfinding signage was requested (1 comment) for finding the UTSW campus by bike.

Martin Luther King Jr. Blvd./Cedar Crest Blvd. – Four responses were received for this survey. The commenters are generally most excited that the project introduces physical separation for the bike lane, particularly along Cedar Crest Blvd. (described as “harrowing” by one commenter), and that the bike route offers residents south of the Trinity a safer bike route to Fair Park. One commenter, however, was not in favor of the project due to perceived lack of maintenance and use of bike lanes. Regarding design considerations, commenters discussed treatment types for physical separators (like using planters or adding reflectors) and opportunities to additionally include traffic calming measures, connect to the LOOP Dallas Trinity Forest Trail, and introduce bike infrastructure to help bikes navigate stairwells.

Meandering Way – Seven responses were received for this survey. The commenters are most excited that the project will create dedicated bike lanes, connect the Beltline to Valley View Park also well as create other connections to existing trails, and provide an alternative to riding on Hillcrest and Preston. Two commenters were not in favor of the project, with one commenter concerned about reducing vehicle capacity and increasing vehicle travel times. Regarding design considerations, commenters would like to see the project extended to Spring Valley or Alpha and consider including traffic calming or physical separation.

N. Beckley Ave. – Five responses were received for this survey. The commenters are most excited that the project will provide dedicated, separated space for bikes from cars, provide a connection to the Trinity River Greenbelt, and overall make the bike network more cohesive. One commenter did note that they ride this route regularly as-is and do not have issues with the existing bike facilities; their preference is to keep vehicle traffic moving. Regarding design considerations, commenters would like to see bike signals at each traffic signal (with a particular note about intersection consideration at Beckley and Singleton due to the northbound traffic turning on to the bridge), the introduction of physical separation or control elements at intersections, and a request that the project not include shared bike lanes/vehicle right-turn lanes.

Peak St. – Five responses were received for this survey. The commenters are most excited that the project will improve overall connectivity, provide new options for biking in a neighborhood previously disconnected, and offer a bike route between uptown and the Santa Fe Trail. One commenter, however, was not in favor of the project. Regarding design considerations, commenters would like to see the addition of physical separation, the use of on-street pavement markings (like bike boxes/bike lanes through intersections), and other treatment types to improve bike facility visibility to all road users.

S. Beacon St. – Two responses were received for this survey. The commenters are most excited that the project will support connecting the Santa Fe Trail to the protected bike lane on Abrams, improving accessibility to amenities on Abrams. Regarding design considerations, the commenters would like to see the project provide physical separation for the bike lanes.

Sylvan Ave. – Four responses were received for this survey. The commenters are most excited that the project will incorporate physical separation for the bike lanes on a heavily-used existing bike lane. Regarding design considerations, the commenters would like to see the project extended south to Ft. Worth Ave., address the wide lanes and vehicle travel speeds on the bridge, include physical separation or control elements at intersections (with a particular note that the project not include shared bike lanes/vehicle right-turn lanes), and that the bike lanes go under the railroad track instead of ceding the right-of-way to vehicle travel lines (as perceived by the commenter on Beckley).

Timberline Dr. – One response was received for this survey. The commenter was most excited that the project will provide safe access to Bachman Lake Park and trail. Regarding design considerations, the commenter believes the project should terminate as a connection to the trail around the lake.

W. 7th St. – Three responses were received for this survey. The commenters are most excited that the project will provide safer crossings at Polk, Tyler, and Davis, introduce traffic calming to lower vehicle speeds, improve overall street pavement quality, and introduce an innovative solution for safe biking on a regularly-used bike route. Regarding design considerations, the commenters would like to see intersection improvements at above-mentioned Polk, Tyler, and Davis, considering including modal filters to limit car traffic, and add stop signs at the north-south cross streets (Llewellyn, Van Buren, Vernon, etc.; the commenter noted this could be a quick-fix, short term intervention to help make the street more bikeable).

(4) Virtual Forum

The Virtual Forum provided the public with an opportunity to see the final version of the bike network map and the draft version of the bike plan document. During the event the project planning team introduced the Bike Plan Update document and walked attendees through the chapters and concepts within. This interactive event provided several opportunities for participants to view and interact with the webmap as well as ask pointed questions about the overall network, bicycle facility types and implementation processes.

Many of the questions asked by the attendees were residents looking to understand more about the bike network and timelines for implementation of the routes in their local areas. Several attendees asked how they could advocate for the completion of routes in their neighborhoods and how they could share and contribute to the efforts in their community. The project team shared different strategies to help contribute to the project and plan, including informing their neighbors of the plan and reaching out to their districts council member to voice support for the overall plan and their local neighborhood segments.

One attendee asked pointed questions regarding network gaps and other short or missing connections from the proposed network. The project team asked that the attendee continue to provide this feedback to the team by commenting directly on the project webmap to review any potential gaps or missing connections. The project team also spoke to the various geographic obstacles or available right-of-way to make these connections. The project team noted that a few examples provided of the missing gaps occurred when a route was unable to continue due to a private development with its own privately owned and maintained roadways.

Another attendee asked about the coordination between various cities within the Dallas metropolitan region and if there was consideration of their bike planning efforts. The respondent noted efforts by other jurisdictions and their own bicycle planning efforts and if these efforts were being considered or even coordinated amongst the various municipalities. The project team reviewed their efforts to review and incorporate bike planning efforts in other geographies and the city noted that their staff works frequently with other jurisdictions to ensure greater coordination across the metro region.

ON-GOING ENGAGEMENT: BICYCLE AND TECHNICAL ADVISORY COMMITTEES

Overview

To ensure engagement is on-going through the life of the project, a Technical Advisory Committee (TAC) and a Bicycle Advisory Committee (BAC) were formed to provide counsel, guidance, and feedback to the project team. TAC members include representatives from the City of Dallas and other intergovernmental and interagency partners who were recommended and invited to participate by the Dallas Department of Transportation. The BAC is comprised of individuals appointed by each of the 14 City Council members for the City of Dallas and the Mayor of Dallas, as well as additional members recommended by Dallas Department of Transportation staff to ensure a diverse cross-section of community voices.

During Phase 3, four virtual committee workshops were held via Microsoft Teams: one with the BAC, two with the TAC, and one joint with the TAC and BAC. The BAC session was held on March 14th, the TAC sessions were held on March 16th and April 27th, and the joint TAC-BAC meeting was held on June 15th. The committee meetings were generally broken into two segments: (1) a live PowerPoint presentation and (2) an open discussion session guided by discussion prompts and different interactive activities. TAC Meeting #7 included live polling via Mentimeter throughout the presentation portion of the meeting to engage stakeholders during a detailed and technical discussion. Attendees were invited to ask questions live on the Teams call and/or ask questions in the Teams chat. The presentations and corresponding meeting summaries were subsequently published on the Dallas Bike Plan project webpage on the City of Dallas website.

All presentation materials and discussion summaries for the meetings discussed below are included as an attachment to this report.

Methodology: Bicycle Advisory Committee (BAC)

BAC #5 (March 14th, 2023): The meeting opened with an introduction to the project and emphasized the importance of providing feedback for this session. Updates on the project's progress were provided, and the second draft of the proposed bike network was introduced. The prioritization factors and variables for the top 15 priority projects were discussed, and initial thoughts and opinions from the group were collected. Concerns were raised regarding map legibility, and the team committed to finding alternative presentation methods. Discussions took place regarding project details, funding, equity, council districts, and engaging with elected officials. The proposed policy recommendations were not discussed due to time constraints, and any remaining questions would be addressed via email or at the final joint meeting.

BAC #6 (June 15th, 2023): At the City's request, an extra meeting was facilitated with the BAC in order to ensure this body had an opportunity to preview the draft bike plan. BAC members were

invited to the 8th TAC meeting, and the meeting was facilitated jointly. A summary of that meeting is included in the TAC section.

Methodology: Technical Advisory Committee (TAC)

TAC #6 (March 16th, 2023): This meeting opened with an update on the project progress and introduced the second draft of the proposed bike network. The changes made were reviewed, and the consideration of public engagement feedback in updating the network was discussed. The committee then discussed the prioritization of projects, including factors, variables, and scoring methodology. Concerns were raised about interagency projects, implementation processes, and funding applications. The proposed policy recommendations were not discussed due to time constraints. Follow-up actions were planned to address remaining questions and review previous comments.

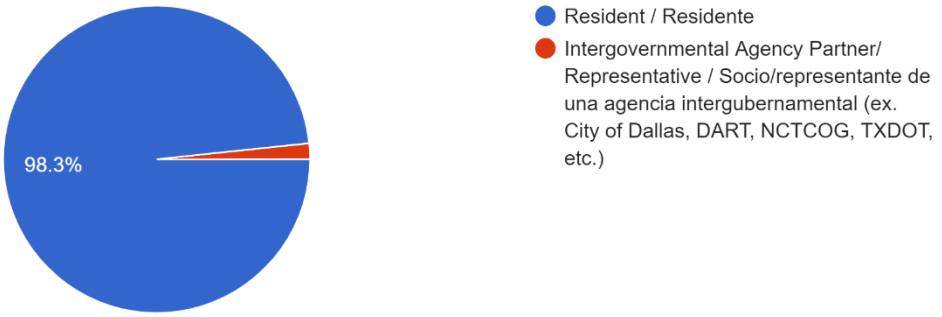
TAC #7 (April 27th, 2023): During this meeting, the project team provided project updates and introduced the topic of bike-friendly design standards in Dallas. TAC members engaged in interactive polling and discussed existing design resources, proposed recommendations, and integration of proposed design standards into the process. Topics covered included bike detection, green paint in bike lanes and through intersections, transit integration, bike parking, intersection design, and more. Suggestions were made to incorporate standards into codes, consulting contracts, and development checklists. Tactical urbanism, testing, and messaging campaigns were proposed for project success. Other topics included bike lane design, parking requirements, and creative ideas from other cities. The meeting concluded with a project schedule review.

TAC #8 (June 15th, 2023): This meeting was held jointly with the BAC. This meeting provided a detailed overview of the entirety of the contents of the draft plan, chapter by chapter. All analyses, summaries, and recommendations included in the plan document were thoroughly reviewed by the project team to assist the TAC and BAC with their independent reviews of the draft plan. The meeting also served as a preview for the upcoming virtual forum, which would present the same information. The meeting concluded with a review of the project schedule.

ATTACHMENT #1: Draft Plan Survey Comment Form Response Demographics

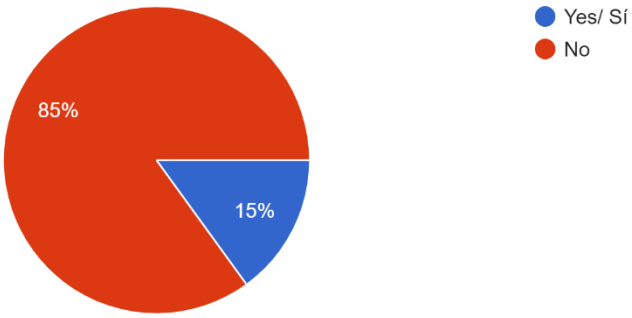
Which of the following describes you? / ¿Cuál de las siguientes opciones le describe?

60 responses



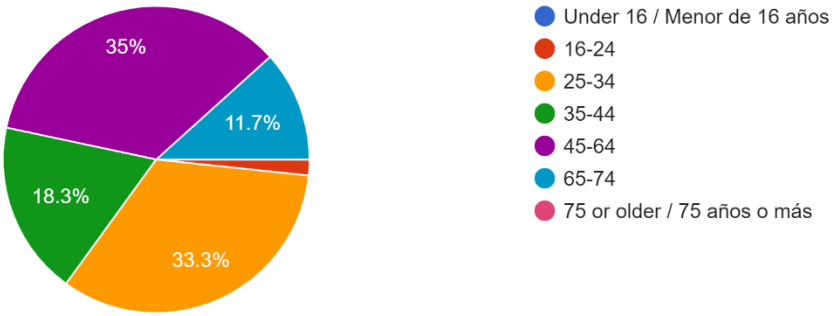
Are you a member of a bicycling club or bicycle advocacy organization? / ¿Es usted miembro de un club de ciclistas o de una organización de defensa de la bicicleta?

60 responses



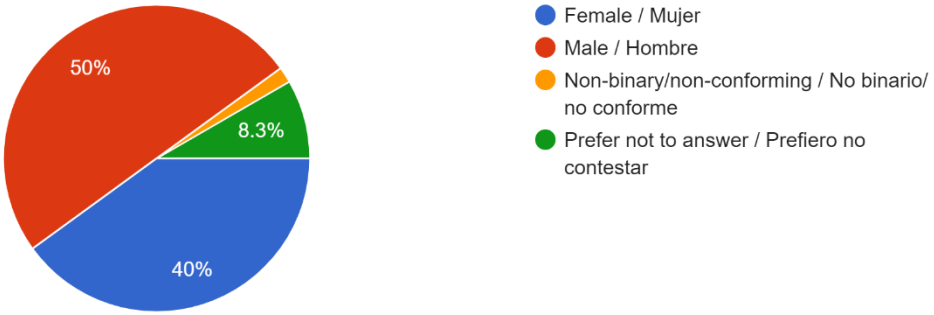
What is your age? / ¿Cuál es su edad?

60 responses



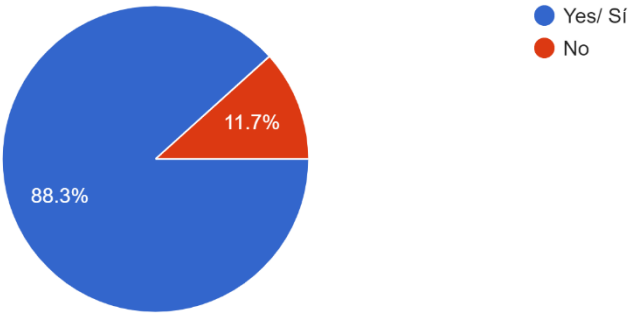
How do you describe your gender identity? / ¿Cómo describe su identidad de género?

60 responses



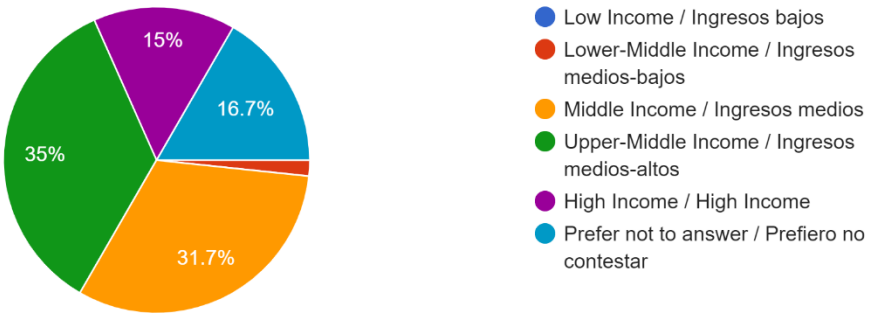
Do you own a bike? / ¿Tiene una bicicleta?

60 responses



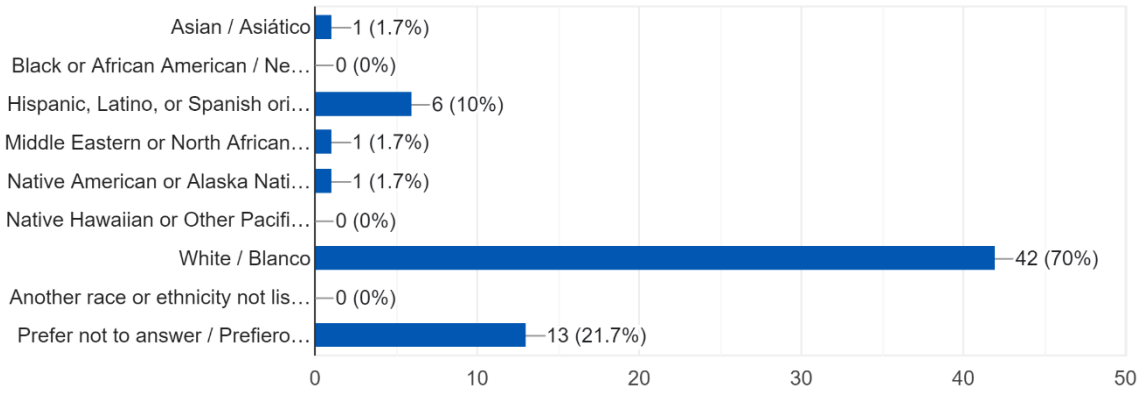
Would you describe your family as: / Describiría a su familia como:

60 responses



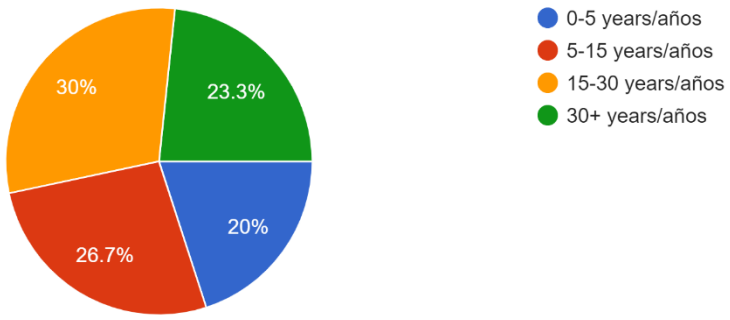
Which racial and ethnic group(s) do you identify with? (Select all that apply.) / ¿Con qué grupo(s) racial(es) y étnico(s) se identifica? (Seleccione todos los que correspondan)

60 responses



How long have you lived in Dallas? / ¿Cuánto tiempo lleva viviendo en Dallas?

60 responses



ATTACHMENT #2: Draft Plan Survey Comment Responses: Chapter 2

When referencing products for colored pavement markings, it is vital to highlight the types of products that are suitable for the application. Generalizing the product type as "pavement marking" may lead to the use of unsustainable solutions, which would result in higher maintenance costs for the city. It is important to rule out certain solutions, such as hot applied thermoplastic and traffic paint, completely. Moreover, it is essential to prioritize elements like skid resistance to ensure that the implementation not only increases motorists' awareness but also reduces the risk of slips and falls for cyclists.
Love that there is a focus in connectivity to trails, equity, protected lane stats, and reduction in vehicle lanes. Great work!
I would like to have more physically separated options throughout the city and directly linked from highly lived spaces to DART stations. Drivers in Dallas are not yet used to there being alot of bikes on the road and some are actively upset to see bikes. We need to protect riders while the city comes around on travelling by other means of transport.
I am encouraged to see future plans to connect the trails, but also wonder how long it will take? It seems to take forever to get anything completed, and wonder why? I look at Ft. Worth and they've had their bike trails established for a very long time. In addition, and this is a huge concern not only for me, but for many cyclists I speak to. First, I was riding Northhaven Trail almost daily. Last summer I was hit by a car as I crossed Jamestown Ave. The lady wasn't paying attention and she was in the wrong, she even admitted that. I was a little injured and bike was wrecked. She paid for a new bike. Since then, I am very nervous to ride that trail and rarely ride it, and when I do, I see that cars don't even stop when the light is red at busy intersections. Something MUST be done to make sure someone isn't killed. It could have easily been me. Another point is safety. White Rock Creek Trail and Cottonwood Trail is full of homeless people along the path and under the bridges. Is there nothing that can be done to clean this up??? It's great to make all these plans, but if you don't police or monitor these trails, they won't be used and are worthless. I get very involved in my neighborhood and community, I am the First Vice-President of our voluntary homeowner's association in the Royal Lane/Midway area. I would be happy to be involved in offering suggestions regarding these topics. I can be reached at bstonevp@msn.com. Thank you, Barbara S. [last name redacted]

One of the most cost effective methods for safer multimodal access is creating slow streets from already existing underutilized roadways. Take for instance Glencoe Ave in East Dallas which runs north from Henderson Ave all the way to Glencoe park. Installing bollards to reduce cut through traffic every few blocks, and limit access to local traffic only would create a de facto linear park for people to bike, walk, roll how they please, and would still provide access to alleyways and driveways to local traffic. Slow streets and bollards are the way. Sharrows and "Bike boulevards" will only result in more needless bike deaths. Also, we need to prioritize downtown connectivity. There is no way to access downtown from East Dallas (just one example) without subjecting yourself to death defying roadways.
Very cool to see that Dallas is expanding bike paths! Can not wait to see this all done and how we invite people to use a bike more often to visit our busy city as a great means of transportation, exercise, exploring, and saving on gas.
The bikes are a welcome addition to transportation around town!
Someone needs to be monitoring these bikes/scooters. Putting a sign on them that says “not for sidewalk” does nothing. Every single person on them does not abide by that policy, they don’t watch for pedestrians, often they will stand kids in front of them on the scooters, they cut in between cars, and they expect drivers to watch for them instead of the other way. Just like the last time you tried these, someone was killed. Honestly, I don’t think the city cares as long as it puts money in their pocket.
the more options for alternative transportation the better for the city and parking

Notes for Dallas Bike Updates - Love Field access and bike parking there would be amazing. - The intersection of Buckner and Peavy should have trail or protected access down to the lake trail system. As it is currently designed, it is actually quite difficult to enter and exit the trail system from that intersection. - It would be great to have bicycle connections to Casa Linda shopping center, and other similar shopping centers (Like Mockingbird and Abrams) that doesn't have any connections - Harwood St, where it crosses Klyde Warren should have a dedicated bike lane passing through the park, with caution of course. As it is currently designed, one must dismount and walk through Klyde Warren - There generally seem to be a lot of isolated segments protected bike lanes that begin an end abruptly. These will likely not attract a lot of use, as they will require riders to be constantly turning and checking navigation. - The protected lane along River Front Blvd, should continue where it splits into Market Center and Irving. This would be a crucial connection and will be vital for bicycle access to one of the city's prized cultural centers. - The Commerce St. protected lane should continue all the way through Deep Ellum and connect to the Columbia ave protected lane. - Please make sure the Santa Fe trail has a safe â€œon ramp/offrampâ€ connection to the Peak Ave planned protected lane - The Peak Ave planned lane is amazing, my only critique would be that it ends abruptly at a complicated intersection where it hits Oak Lawn Ave going NW. - In general, the more â€œon rampsâ€ and â€œoff rampsâ€ connecting the trails to business/entertainment centers, the better. If the trails are isolated from these centers, they will not offer a meaningful car alternative, and thus won't have the desired traffic calming results. If they are connected to business centers, they will attract meaningful car replacement uses, not just recreational exercise purposes. - The Dallas Arboretum should have an entrance facing the White Rock Lake bike trail!! (I know this probably isn't your decision but how awesome would that be!) - Protected lanes with trees planted in the barrier between the car lane and bike lane would provide shade, more protection, and beauty. - Overall, this is very exciting and a huge step forward for Dallas. Thank you for your efforts!!!
Love the plan. Please add the proposed Campbell road lanes to your priority list of bike lanes. Visually separated lanes on Campbell (from Preston Trail Drive to Willow Wood) will connect Rose Haggar Elementary, Shelton School, and a few Dallas city parks. It will also help the area use the upcoming Silverline DART rail. Getting people out of cars will reduce congestion. Helping parents feel comfortable with their kids biking/walking to school will get them out of cars and also reduce congestion. Thank you!
The plans and maps were easy to follow to see the various proposals.
Great idea and support!
The bicycle path should include a designated lane on Hillcrest running from genstar lane or the path by Mapleshade to the north, down to Preston ridge trail. This would also create a buffer between cars traveling around 50 mph and pedestrians who frequently walk or jog on Hillcrest (including children).
No bike lanes please

I do not want more bike lanes, especially now that so many roads are under construction and too narrow
The chapter does not seem to include any consideration for new-build bicycle facilities outside of shared-use paths â€" though retrofit facilities on existing streets should probably be the priority at this time.
Campbell Road should not have lane reductions for bike lanes. Traffic is already high and there are few E-W roads in that area. Otherwise support the other proposals.
I support updating the bike network. I would like to see Campbell Road between Frankford and Preston Road considered as one option.
I am in support of developing bike lanes in the Dallas areas, and other means of non-car transport
The definition of a bike boulevard could have been made more clear.
It seems that bike lane would interfere with parking for homeowners on these streets, therefore I am NOT in favor of a bike lane.
I don't want a bike lane on Genstar. I live on Genstar, and rarely ever see bikers. There are lots of residents and guests that park on Genstar, though. I think it's important to preserve that. I don't think taxpayer money needs to be spent on a bike lane considering it would rarely get used (based on my observation).
Putting a bike boulevard on Fisher Road from Greentree to W. Lawther is a very bad idea. Most of the road is not even wide enough for two cars to pass each other. Especially bad spots are between Dalgreen and Branchfield and Branchfield to Lawther.
I prefer to not have a bike lane on Genstar, as that is primarily a residential street and I feel that a bike lane would give the impression that it is more of a thoroughfare.
I was impressed with the number of analyses completed and in particular, found the equity analysis and safety analysis most illuminating.
no bike lanes please
We love the idea of more bike lanes on our roads!
I do not want more bike paths on our already crowded streets
No bikes lanes for Trinity Mills/Voss/Briargrove. This is a high vehicle traffic and pedestrian walking area. Bikes are rarely seen. Lots of buses in this area so a bike lane would only congest our neighborhood. Completely unnecessary.
I only see proposed or routes. Where are the details of what could happen on Campbell road. How will it affect traffic if a lane of traffic is removed. Does not sound like a good thing
I am against adding a bike lane down Genstar, Dallas, 75252. The driving lanes down Genstar have already been decreased with the addition of parking lanes that were put in by the city a few years ago. A lot of people park on Genstar and it's a busy street. With the addition of these parking lanes, the driving lanes are not that wide and adding a bike lane would seem very dangerous for the bike rider and the folks in vehicles trying to drive down this street. As a safety issue, I would vote NO. I think adding a bike lane would contribute to serious accidents to bike riders.

I love the addition of new bike lanes near Timberglen Library and around the area of Voss Road!
Waste of money . . . fix the streets and traffic signals first.
No bike lanes on Trinity Mills or Briargrove. Not enough room. Too much traffic and will only worsen when the new apartments on Addison Rd are finished and occupied
Please do not add a Far North Dallas bike lane down Davenport and into LaManga. I live on Amberwood Road. I think this would add more congestion for commuter cars and would benefit only a very small number of cyclists that actually ride through these streets. There is a dedicated bike path close by behind Brentfield Elementary and Campbell Green Rec Center which cyclists can utilize.
I am a resident of the Maplewood subdivision (and member of the WRNA) whose auto access in and out of the subdivision is exclusively via Fischer Rd. Southeast of Mockingbird. I am concerned about safety and neighborhood ingress and egress if we convert this section of Fisher to a boulevard with a sharrow. As it is very narrow it's often impassable now via automobile due to on street parking, construction, sanitation(frequent delays on bulk and weekly days) current recreational (vs transportation) bike traffic and and pedestrians/runners- this is the only auto access to the Maplewood subdivision. Increased bicycle volume being used for transportation purposes can completely bypass this segment on the SOPAC trail with the same access to - Lawther Dr. and White Rock lake via various exits making a sharrow redundant and potentially dangerous due to the aforementioned congestion (e.g. currently many bicyclists disregard existing traffic control for all vehicular traffic in the area creating a lot of "near misses" at intersections- this problem would likely increase) . Please consider leaving this section as is and adding signage to trailheads at Ridgewood and on Lawther (e.g. Lakeshore Dr.) that the existing SOPAC trail can be used without automobile interaction for through travel to points North and West providing an existing a safer alternative than Fischer Rd. Thank You.
You invited opinions regarding Dallas's Bike Plan and here is mine. First, I have lived in Lakewood for my 70 years and most recently near Williamson at Bob-O-Link on Frontier Lane. I travel in and around the area more than a human probably should, but I love my Lakewood. In my sincere judgement I have never seen an issue where the city and the intended beneficiary (in this care bike riders) have been so much at polar opposites. The current bike lanes obstruct traffic and are NEVER used and where bikers take their lives in their own hands, e.g. Williamson Road, Winstead Rd, White Rock Road and West Lawther, is a choice of their own making because the city has already gone to great lengths constructing bike path arteries both to and around the entire lake. I understand bikers would rather not compete with pedestrians on the trail but the city's solutions to extend the path through neighborhoods and the Lakewood business district simply has not worked to their benefit and at great cost. Please, please, please, stop this madness, avoid legal action until the city assesses the best cost benefit to this issue. And be willing to say we made a mistake and reclaim unused paths that will allow traffic to flow better. Thank you, Russ M. [last name redacted] [address redacted]
I feel that you missed out on some opportunity for North Dallas, one of the areas that should have a bike lane is preston oaks Rd and Monfort. This area has a large amount of residents and housing but it is not bike friendly. Especially with the new proposed development at the valley view mall.

ATTACHMENT #3: Draft Plan Survey Comment Responses: Chapter 3

Please complete these plans as soon as possible. I would also suggest updating the White Rock Creek Trail, very narrow and not in great shape. Again, cleaning up the homeless would be a huge plus.
I'm very excited by the additional safety afforded by the dedicated bike lanes that are proposed for the north-east part of Dallas, where access to and from the trail system has historically required relatively dangerous biking on large, secondary surface streets. The proposed lanes along Arborside, Whitehurst, Audelia, and Miller will make the trail system substantially more accessible to the neighborhoods in this area.
I like how much we are creating zones for biking that are very clear and adding safety measures
See my response to the first comment section.
I like the physically separated areas more than visibly separated just from a safety standpoint
Notes for Dallas Bike Updates - Love Field access and bike parking there would be amazing. - The intersection of Buckner and Peavy should have trail or protected access down to the lake trail system. As it is currently designed, it is actually quite difficult to enter and exit the trail system from that intersection. - It would be great to have bicycle connections to Casa Linda shopping center, and other similar shopping centers (Like Mockingbird and Abrams) that doesn't have any connections - Harwood St, where it crosses Klyde Warren should have a dedicated bike lane passing through the park, with caution of course. As it is currently designed, one must dismount and walk through Klyde Warren - There generally seem to be a lot of isolated segments protected bike lanes that begin an end abruptly. These will likely not attract a lot of use, as they will require riders to be constantly turning and checking navigation. - The protected lane along River Front Blvd, should continue where it splits into Market Center and Irving. This would be a crucial connection and will be vital for bicycle access to one of the city's prized cultural centers. - The Commerce St. protected lane should continue all the way through Deep Ellum and connect to the Columbia ave protected lane. - Please make sure the Santa Fe trail has a safe â€œon ramp/offrampâ€ connection to the Peak Ave planned protected lane - The Peak Ave planned lane is amazing, my only critique would be that it ends abruptly at a complicated intersection where it hits Oak Lawn Ave going NW. - In general, the more "on ramps" and "off ramps" connecting the trails to business/entertainment centers, the better. If the trails are isolated from these centers, they will not offer a meaningful car alternative, and thus won't have the desired traffic calming results. If they are connected to business centers, they will attract meaningful car replacement uses, not just recreational exercise purposes. - The Dallas Arboretum should have an entrance facing the White Rock Lake bike trail!! (I know this probably isn't your decision but how awesome would that be!) - Protected lanes with trees planted in the barrier between the car lane and bike lane would provide shade, more protection, and beauty. - Overall, this is very exciting and a huge step forward for Dallas. Thank you for your efforts!!!

Love the plan. Please add the proposed Campbell road lanes to your priority list of bike lanes. Visually separated lanes on Campbell (from Preston Trail Drive to Willow Wood) will connect Rose Haggar Elementary, Shelton School, and a few Dallas city parks. It will also help the area use the upcoming Silverline DART rail. Getting people out of cars will reduce congestion. Helping parents feel comfortable with their kids biking/walking to school will get them out of cars and also reduce congestion. Thank you!
The map and the planned type of bike lane makes sense for the particular area. For example busier roads need a dedicated bike lane.
Agree
The purple trail alongside George Bush should connect to the Dobra system in Katie Jackson park. There should be a physically separated lane on Arapaho between Preston and Addison. The Genstar and Davenport section are unnecessary. They don't go anywhere important and those routes are low traffic outside of rush hour.
The bicycle path should include a designated lane on Hillcrest running from genstar lane or the path by Mapleshade to the north, down to Preston ridge trail. This would also create a buffer between cars traveling around 50 mph and pedestrians who frequently walk or jog on Hillcrest (including children).
Not interested in more bike lanes
I do not want more bike lanes. Too many roads r under construction and too narrow already
The maps show bicycle facilities on Sylvan ave. north of I-30 and on Tyler south of Colorado blvd., but nothing on Sylvan between these points. This seems like an oversight, especially given the steep slope southbound on this portion of Sylvan. As someone who lives in the area, dedicated facilities on all of Sylvan ave. would be a valuable connection across I-30 â€" the nearest alternative routes would be quite far out of the way.
The city streets (La Manga and Amberwood) in Prestonwood subdivision are too small for encouraging bikes. It's hard enough for cars to get by all the parked and moving cars now. Encouraging bikes is just going to endanger the bike riders.
I support removing a vehicle lane to incorporate a bike lane on Campbell Road. This area does not need 4 lanes for traffic
I am in support of developing bike lanes in the Dallas areas, and other means of non-car transport

All three proposed bike paths between 75 and White Rock Lake in the 1.5 mile north/south stretch between Mockingbird and Richmond are only proposed as bicycle boulevards. I believe that at least one of these three -- most likely the route along Monticello because it is central -- should be at least visually separated. While there are trails and separated routes to White Rock Lake from other directions, residents who live in east Dallas (M-streets, Wilshire Heights, Lakewood Heights, Glencoe Heights, Lakewood, etc) do not have a dedicated separated bike path to the lake within their own neighborhood. This plan provides safer access to the lake from other neighborhoods than residents within east Dallas will have to get to the lake. The current plan would require residents of this roughly 5.25 square-mile area to leave and go around their neighborhood in order to get to the lake on an either dedicated or separated bike path, which seems unfair to east Dallas residents.
There has been mention of adding bicycle lanes to Genstar Lane (75252). I live at 6622 Genstar Lane. It seems like a great idea on the face of it. However, where would a bike lane or lanes be added? Are you going to remove the parking lines or restrict on street parking in order to do so? It's a busy through street that already suffers from speeders and drivers who roll through the stop sign that was added at Featherwood in an effort to calm traffic. If you do not intend to either remove or restrict on street parking in order to accommodate a bicycle lane or lanes, I am against the idea, because it's just not safe for cyclists. I don't even bicycle down my own street because I'm afraid I'll get hit by a car. The only way I will support bike lanes on my street is if speed bumps are installed (as the majority of the neighborhood voted for in the first place) and street parking is restricted.
Please extend the proposed bike boulevard down the rest of Trammel to connect with NW HWY! Lots of bikers and especially kids biking towards the bike trails at Ridgewood park would benefit. We don't have continuos sidewalks the whole way and cars go too fast. I think this would help us feel safe biking through our nieghborhood and also for the folks cutting across NW HWY from the Flag Pole Hill Trail. Also, where the proposed boulevard crosses Abrams and Skillman, will there be crosswalks with lights? It's very dangerious crossing those streets.
I don’t want a bike lane on Genstar. I live on Genstar, and rarely ever see bikers. There are lots of residents and guests that park on Genstar, though. I think it’s important to preserve that. I don’t think taxpayer money needs to be spent on a bike lane considering it would rarely get used (based on my observation).
I am in favor of the bike lanes in my area (Genstar, Davenport, Campbell). I moved here to this area specifically so I could bike to work, but found the roads to be too unsafe. I would like to use my bike for transportation more often and would feel much safer doing so with biking infrastructure.
no bike lanes please
We would love to see more bike lanes on our Dallas roads!
I do not want more bike paths on our already crowded streets
No bikes lanes for Trinity Mills/Voss/Briargrove. This is a high vehicle traffic and pedestrian walking area. Bikes are rarely seen. Lots of buses in this area so a bike lane would only congest our neighborhood. Completely unnecessary.
I want more info about Campbell road

Just wanted to share that the planned crossings along Garland road, especially at Barnes Bridge is deeply appreciated. There are a lot of bikers in this neighborhood. I am a little concerned that just a visual marker won't be enough at those crossings. There have been numerous fatal pedestrian and biker accidents there. People often pull pretty deep into the crosswalk there, or don't look before turning right. There can be congestion there, too, because of the train. Regardless, the progress is very much appreciated, but I did want to voice this concern. (A personal anecdote: I live 2 miles from the library, and I'd love to bike there, but I have to cross Garland road. The high speeds and congestion make me very wary to cross on a bike.)

I am against adding a bike lane down Genstar, Dallas 75252. The driving lanes down Genstar have already been decreased with the addition of parking lanes that were put in a few years ago. A lot of people park on Genstar and it's a busy street. With the addition of these parking lanes, the driving lanes are not that wide and adding a bike lane would seem very dangerous for the bike rider and the folks in vehicles trying to drive down this street. As a safety issue, I would vote NO. I think adding a bike lane would contribute to serious accidents to bike riders.

No bike lanes of any type on Meadow Creek/Parkhill, Coit, or Campbell road.

First off I'll say I'm thrilled we're investing in a bike plan for Dallas, even if it's long overdue.

But in general, as a member of North Dallas I'm a bit disappointed on the conservativeness of the plan. In my opinion, physically separated bike lanes should be the standard, and there should be enough of these lanes connected around the city to safely travel to local restaurants, daycares, etc.

For example- I live near Coit and Campbell but my son's daycare is near Frankford and the tollway (HCCA). Right now the best way I have to get him is to take Preston Ridge Trail to Davenport where I cross over Preston, then take Westgrove to Knoll Trail, then hop three curbs to get into the neighborhood.

This is due to a creek which has limited bridges over it, Frankford being the main thoroughfare. Frankford is plenty large to accommodate bike lanes and would open up a major east-west path for people to bike on.

This will cause more traffic at certain times of day, guaranteed. This is a GOOD thing. Traffic will encourage residents to take up cycling and make our city better.

In summary- be more aggressive. Plenty of younger residents (20s-30s) are realizing the painful aspects of car dependency and would love to live in bikable/walkable neighborhoods. The unique older neighborhoods of Far North Dallas are perfect for this transformation, but if we play it safe with mostly just paint (instead of physically separating bike lanes), nothing will change as we try to satisfy everyone.

Again- thanks for all the hard work on the plan so far! I'm excited to see this come to reality.

Please do not add a Far North Dallas bike lane down Davenport and into LaManga. I live on Amberwood Road. I think this would add more congestion for commuter cars and would benefit only a very small number of cyclists that actually ride through these streets. There is a dedicated bike path close by behind Brentfield Elementary and Campbell Green Rec Center which cyclists can utilize.
I am a resident of the Maplewood subdivision (and member of the WRNA) whose auto access in and out of the subdivision is exclusively via Fischer Rd. Southeast of Mockingbird. I am concerned about safety and neighborhood ingress and egress if we convert this section of Fisher to a boulevard with a sharrow. As it is very narrow it's often impassable now via automobile due to on street parking, construction, sanitation(frequent delays on bulk and weekly days) current recreational (vs transportation) bike traffic and and pedestrians/runners- this is the only auto access to the Maplewood subdivision. Increased bicycle volume being used for transportation purposes can completely bypass this segment on the SOPAC trail with the same access to - Lawther Dr. and White Rock lake via various exits making a sharrow redundant and potentially dangerous due to the aforementioned congestion (e.g. currently many bicyclists disregard existing traffic control for all vehicular traffic in the area creating a lot of "near misses" at intersections- this problem would likely increase) . Please consider leaving this section as is and adding signage to trailheads at Ridgewood and on Lawther (e.g. Lakeshore Dr.) that the existing SOPAC trail can be used without automobile interaction for through travel to points North and West providing an existing a safer alternative than Fischer Rd. Thank You.
I feel this plan focused on uptown and downtown than the other areas of Dallas. I feel you are going to make the driving more complex and people could be injured. Are you going to add additional police officers to patrol the areas?
Would love to see the proposed trail get built to Saint Francis Park. That would be a huge win for connecting that part of the Ferguson Road community.

ATTACHMENT #4: Draft Plan Survey Comment Responses: Chapter 4

The green pavement markings plan is lacking a crucial element - the use of methyl methacrylate instead of thermoplastic. This alternative not only saves costs but also requires minimal maintenance. Despite my repeated attempts to discuss this with the team and even offer a free product demo, I have either received no response or been met with disinterest. Methyl methacrylate is widely utilized for bike lanes in the US, including Houston. I would appreciate the opportunity to present this solution for consideration. Green pavement markings have a proven track record of positively influencing driver behavior, and adopting this solution at a more affordable price without compromising durability would free up funds for other safety measures or additional bike paths.
It covers the content that I expect, however, I feel that though a move is being made to update the bike plan, there aren't necessarily updates being made to the design thinking and approach to the ways that these different methods will be implemented. For instance, the ways in which we understand what a separated bike lane "looks" like. There are many cities across the country and the world that have adopted some unique ways that separate bike lanes from traffic and how separated bike lanes interact with intersections. I'll add this later to my thoughts as well, but a key problem in Dallas is not just the existence of bike lanes, but also their maintenance, included cleaning. There are bike lanes throughout this city that are in places where they should be and are needed, but are unusable because road debris makes them unsafe for bike use.
Seeing the pros and cons clearly stated is very nice to have a better understanding. There are things I didnt even think about that helped me understand why or why not on certain designs
See my first comment.
For physically separated bike lanes, the city should only use concrete raised medians (e.g.- N. Houston St.) or vehicle on street parking buffers (Fort Worth Ave. and Richmond Ave.) Both of those are aesthetically pleasing. I agreed with most of the recommendations on the matrix. However, for the visually separated bike lane, the max speed should be 30. If the max speed is 40, then a 3 foot buffer should be required, not "preferred." I believe the the posted speed limit on Sylvan is 35 and the current bike lanes do not feel safe to ride on at all.
Busy roads should have the type of lane with a barrier curve.
The bicycle path should include a designated lane on Hillcrest running from genstar lane or the path by Mapleshade to the north, down to Preston ridge trail. This would also create a buffer between cars traveling around 50 mph and pedestrians who frequently walk or jog on Hillcrest (including children).
Not interested inb more bike lanes
I do not want more bike lanes

The lack of consideration for new-build bicycle facilities ” that is, bicycle facilities for new or newly rebuilt roadways ” is a glaring omission in this chapter. The discussion of bicycle boulevards, visually separated bike lanes, and physically separated bike lanes in the chapter clearly refers primarily to retrofit facilities ” those facilities build on existing streets between existing curbs. New-build bicycle facilities should be off-street, separated by curbs, and separate from pedestrian facilities. Discussion of physically separated bicycle facilities failed to mention the need for greater protection near intersections, high-traffic driveways or side streets, and curves in the roadway. Facility type recommendations matrix should reduce maximum number of lanes for visually separated bike lane from 4 to 2. Dedicated bicycle signals are necessary at any signalized intersection with dedicated bicycle facilities. All new or replacement traffic signals on bicycle routes should include bicycle signals. It is noted that a 1 foot curb offset is required for car traffic at a concrete island protecting a bicycle facility â€” what curb offsets are required for bicycle traffic, why, and under what conditions? (Answer: according to the CROW design manual for bicycle traffic, a 0.25 meter offset is required from a vertical curb higher than 5 cm â€” approximately 1 foot from any vertical curb higher than 2 inches.)
The city streets (La Manga and Amberwood) in Prestonwood subdivision are too small for encouraging bikes. It's hard enough for cars to get by all the parked and moving cars now. Encouraging bikes is just going to endanger the bike riders.
For Campbell Road the use of on-street elements and dedicated bike Lane would be more than welcomed
We have concerns regarding the Fisher Rd bike sharrows...would really encourage cyclists to utilize the SoPac Trail vs. all the way down Fisher Rd. The SoPac takes rides to WRL. We'd also encourage the City of Dallas to add a bike and pedestrian path/trail from Greentree/Fisher RD to the SoPac entrance to allow for safe passage along a dangerous blind curve. Bikers are accessing the SoPac and exiting the SoPac at a dangerous location.
I am in support of developing bike lanes in the Dallas areas, and other means of non-car transport
All three proposed bike paths between 75 and White Rock Lake in the 1.5 mile north/south stretch between Mockingbird and Richmond are only proposed as bicycle boulevards. I believe that at least one of these three -- most likely the route along Monticello because it is central -- should be at least visually separated. While there are trails and separated routes to White Rock Lake from other directions, residents who live in east Dallas (M-streets, Wilshire Heights, Lakewood Heights, Glencoe Heights, Lakewood, etc) do not have a dedicated separated bike path to the lake within their own neighborhood. This plan provides safer access to the lake from other neighborhoods than residents within east Dallas will have to get to the lake. The current plan would require residents of this roughly 5.25 square-mile area to leave and go around their neighborhood in order to get to the lake on an either dedicated or separated bike path, which seems unfair to east Dallas residents.
I don’t want a bike lane on Genstar. I live on Genstar, and rarely ever see bikers. There are lots of residents and guests that park on Genstar, though. I think it’s important to preserve that. I don’t think taxpayer money needs to be spent on a bike lane considering it would rarely get used (based on my observation).
no bike lanes please
I do not want more bike paths on our already crowded streets

No bikes lanes for Trinity Mills/Voss/Briargrove. This is a high vehicle traffic and pedestrian walking area. Bikes are rarely seen. Lots of buses in this area so a bike lane would only congest our neighborhood. Completely unnecessary.
I am against adding a bike lane down Genstar, Dallas 75252. The driving lanes down Genstar have already been decreased with the addition of parking lanes that were put in a few years ago. A lot of people park on Genstar and it's a busy street. With the addition of these parking lanes, the driving lanes are not that wide and adding a bike lane would seem very dangerous for the bike rider and the folks in vehicles trying to drive down this street. As a safety issue, I would vote NO. I think adding a bike lane would contribute to serious accidents to bike riders.
No bike lanes of any type on Meadow Creek/Parkhill, Coit, or Campbell road.
Please do not add a Far North Dallas bike lane down Davenport and into LaManga. I live on Amberwood Road. I think this would add more congestion for commuter cars and would benefit only a very small number of cyclists that actually ride through these streets. There is a dedicated bike path close by behind Brentfield Elementary and Campbell Green Rec Center which cyclists can utilize.
I am a resident of the Maplewood subdivision (and member of the WRNA) whose auto access in and out of the subdivision is exclusively via Fischer Rd. Southeast of Mockingbird. I am concerned about safety and neighborhood ingress and egress if we convert this section of Fisher to a boulevard with a sharrow. As it is very narrow it's often impassable now via automobile due to on street parking, construction, sanitation(frequent delays on bulk and weekly days) current recreational (vs transportation) bike traffic and and pedestrians/runners- this is the only auto access to the Maplewood subdivision. Increased bicycle volume being used for transportation purposes can completely bypass this segment on the SOPAC trail with the same access to - Lawther Dr. and White Rock lake via various exits making a sharrow redundant and potentially dangerous due to the aforementioned congestion(e.g. currently many bicyclists disregard existing traffic control for all vehicular traffic in the area creating a lot of "near misses" at intersections- this problem would likely increase) . Please consider leaving this section as is and adding signage to trailheads at Ridgewood and on Lawther (e.g. Lakeshore Dr.) that the existing SOPAC trail can be used without automobile interaction for through travel to points North and West providing an existing a safer alternative than Fischer Rd. Thank You.
I dont believe this plan takes into account traffic, those bike lanes will more than likely not be used as much as you think when it is 100 degrees. There needs to be more shade trees surrounding the lanes.

ATTACHMENT #5: Draft Plan Survey Comment Responses: Chapter 5

It lists the topics that I expected, but does not go into some of the detail that I expected. In addition, I would love for a policy recommendation to show some inclusion of maintenance and upkeep of the bike lanes in order to ensure they are usable as intended over time. It does no good to build something that six months later is unusable for its intended purpose because of debris in the lanes.
Again, see my first comment.
Yes the bike plan to add more bike lanes in Dallas to allow people to safely ride bikes and utilize them as a safe form of transportation is necessary. The city needs to make adding bike lanes to increase safety a top priority. One of the top barriers for not using bikes as transportation is safety.
The bicycle path should include a designated lane on Hillcrest running from genstar lane or the path by Mapleshade to the north, down to Preston ridge trail. This would also create a buffer between cars traveling around 50 mph and pedestrians who frequently walk or jog on Hillcrest (including children).
Not interested inb more bike lanes
I do not want more bike lanes
The city streets (La Manga and Amberwood) in Prestonwood subdivision are too small for encouraging bikes. It's hard enough for cars to get by all the parked and moving cars now. Encouraging bikes is just going to endanger the bike riders.
I submit Campbell Road as a candidate roadway for a bike Lane. Enforcement of non-compliance of traffic laws is a major problem on the roadway between Frankford and Preston road.
I am in support of developing bike lanes in the Dallas areas, and other means of non-car transport
I don't want a bike lane on Genstar. I live on Genstar, and rarely ever see bikers. There are lots of residents and guests that park on Genstar, though. I think it's important to preserve that. I don't think taxpayer money needs to be spent on a bike lane considering it would rarely get used (based on my observation).
I'm in favor of the policy recommendations, like green paint being used in the bike lanes.
no bike lanes please
I do not want more bike paths on our already crowded streets
No bikes lanes for Trinity Mills/Voss/Briargrove. This is a high vehicle traffic and pedestrian walking area. Bikes are rarely seen. Lots of buses in this area so a bike lane would only congest our neighborhood. Completely unnecessary.
What about traffic enforcement/other measures to protect/maintain bike lines?
I am against adding a bike lane down Genstar, Dallas 75252. The driving lanes down Genstar have already been decreased with the addition of parking lanes that were put in a few years ago. A lot of people park on Genstar and it's a busy street. With the addition of these parking lanes, the driving lanes are not that wide and adding a bike lane would seem very dangerous for the bike rider and the folks in vehicles trying to drive down this street. As a safety issue, I would vote NO. I think adding a bike lane would contribute to serious accidents to bike riders.
No bike lanes of any type on Meadow Creek/Parkhill, Coit, or Campbell road.

A policy suggesting that a bike lane must be maintained, even through construction would be good to have. Right now, the recommendation is that a bike lane should be restored, but what is the rule about during construction? Also, is there anything we can add to encourage private development to support bike infrastructure (lanes, parking, signage, parklets, etc) as part of their construction costs?
Please do not add a Far North Dallas bike lane down Davenport and into LaManga. I live on Amberwood Road. I think this would add more congestion for commuter cars and would benefit only a very small number of cyclists that actually ride through these streets. There is a dedicated bike path close by behind Brentfield Elementary and Campbell Green Rec Center which cyclists can utilize.
I am a resident of the Maplewood subdivision (and member of the WRNA) whose auto access in and out of the subdivision is exclusively via Fischer Rd. Southeast of Mockingbird. I am concerned about safety and neighborhood ingress and egress if we convert this section of Fisher to a boulevard with a sharrow. As it is very narrow it's often impassable now via automobile due to on street parking, construction, sanitation(frequent delays on bulk and weekly days) current recreational (vs transportation) bike traffic and and pedestrians/runners- this is the only auto access to the Maplewood subdivision. Increased bicycle volume being used for transportation purposes can completely bypass this segment on the SOPAC trail with the same access to - Lawther Dr. and White Rock lake via various exits making a sharrow redundant and potentially dangerous due to the aforementioned congestion(e.g. currently many bicyclists disregard existing traffic control for all vehicular traffic in the area creating a lot of "near misses" at intersections- this problem would likely increase) . Please consider leaving this section as is and adding signage to trailheads at Ridgewood and on Lawther (e.g. Lakeshore Dr.) that the existing SOPAC trail can be used without automobile interaction for through travel to points North and West providing an existing a safer alternative than Fischer Rd. Thank You.
Is this the best spent money? Is this necessary?

ATTACHMENT #6: Draft Plan Survey Comment Responses: Chapter 6

Again, I'm going to harp on maintenance and, part of implementation has to cover maintaining usable bike infrastructure. Glass, sharp metal, building materials, etc. litter our existing bike infrastructure. We can't wait for a strong rain to wash that debris into a storm drain (where it also doesn't belong), but rather should be committed to proactively cleaning and maintaining bike lanes for safe public use.
This plan lay out for the time line was good to see when we can expect these changes
See first comment.
Despite what Cara thinks, please implement this bike plan!
Implement them fast and with as much trees and vegetation as possible.
Agree
I'm thrilled to see more bike lanes in Dallas- anything to give us more safety while having to rely less on cars. This is great for kids too.
The bicycle path should include a designated lane on Hillcrest running from genstar lane or the path by Mapleshade to the north, down to Preston ridge trail. This would also create a buffer between cars traveling around 50 mph and pedestrians who frequently walk or jog on Hillcrest (including children).
Not interested inb more bike lanes
I do not want more bike lanes
The city streets (La Manga and Amberwood) in Prestonwood subdivision are too small for encouraging bikes. It's hard enough for cars to get by all the parked and moving cars now. Encouraging bikes is just going to endanger the bike riders.
Campbell Road has two schools located between Frankford and Preston that would benefit from a bike lane
I am in support of developing bike lanes in the Dallas areas, and other means of non-car transport
I would like to see public education and/or public service announcements added to implementation, mostly to educate drivers and/or non-riders on road etiquette around cyclists. I've been honked at, yelled at, had things thrown at me, etc. while I've been riding in a designated bike lane on the current facilities. Adding more cyclists to the road without educating drivers is dangerous and, frankly, negligent. The city needs to make it clear that bicyclists have the same rights vehicle drivers and motorcyclists do on the roads, and that bad driver behavior will not be tolerated.
I don't want a bike lane on Genstar. I live on Genstar, and rarely ever see bikers. There are lots of residents and guests that park on Genstar, though. I think it's important to preserve that. I don't think taxpayer money needs to be spent on a bike lane considering it would rarely get used (based on my observation).
Putting a bike boulevard on Fisher Road from Greentree to W. Lawther is a very bad idea. Most of the road is not even wide enough for two cars to pass each other. Especially bad spots are between Dalgreen and Branchfield and Branchfield to Lawther.
no bike lanes please
I do not want more bike paths on our already crowded streets
No bikes lanes for Trinity Mills/Voss/Briargrove. This is a high vehicle traffic and pedestrian walking area. Bikes are rarely seen. Lots of buses in this area so a bike lane would only congest our neighborhood. Completely unnecessary.

When is construction started/how quickly will it progress
I am against adding a bike lane down Genstar, Dallas 75252. The driving lanes down Genstar have already been decreased with the addition of parking lanes that were put in a few years ago. A lot of people park on Genstar and it's a busy street. With the addition of these parking lanes, the driving lanes are not that wide and adding a bike lane would seem very dangerous for the bike rider and the folks in vehicles trying to drive down this street. As a safety issue, I would vote NO. I think adding a bike lane would contribute to serious accidents to bike riders.
No bike lanes of any type on Meadow Creek/Parkhill, Coit, or Campbell road.
I appreciate the recommendation for an internal working group. But I wish there was more about how community groups can support the work. The bike coalition is available to work with the city. Can our work help your grants? Can we hold educational opportunities? Can we raise money? More information about how community groups like the coalition, neighborhood groups, trail groups, and more are a part of implementation would be helpful.
Please do not add a Far North Dallas bike lane down Davenport and into LaManga. I live on Amberwood Road. I think this would add more congestion for commuter cars and would benefit only a very small number of cyclists that actually ride through these streets. There is a dedicated bike path close by behind Brentfield Elementary and Campbell Green Rec Center which cyclists can utilize.
I am a resident of the Maplewood subdivision (and member of the WRNA) whose auto access in and out of the subdivision is exclusively via Fischer Rd. Southeast of Mockingbird. I am concerned about safety and neighborhood ingress and egress if we convert this section of Fisher to a boulevard with a sharrow. As it is very narrow it's often impassable now via automobile due to on street parking, construction, sanitation(frequent delays on bulk and weekly days) current recreational (vs transportation) bike traffic and and pedestrians/runners- this is the only auto access to the Maplewood subdivision. Increased bicycle volume being used for transportation purposes can completely bypass this segment on the SOPAC trail with the same access to - Lawther Dr. and White Rock lake via various exits making a sharrow redundant and potentially dangerous due to the aforementioned congestion(e.g. currently many bicyclists disregard existing traffic control for all vehicular traffic in the area creating a lot of "near misses" at intersections- this problem would likely increase) . Please consider leaving this section as is and adding signage to trailheads at Ridgewood and on Lawther (e.g. Lakeshore Dr.) that the existing SOPAC trail can be used without automobile interaction for through travel to points North and West providing an existing a safer alternative than Fischer Rd. Thank You.
I appreciate the efforts, but this maybe like the HOV lanes, nice in theory but unused and just a traffic barrier. You should spend some additional funds including shade trees or opt for more shade than bike lanes those lanes that have cares moving on both sides of them will be dangerous. Seattle and Austin should not be used as a model for Dallas.

Dallas Bike Plan

Virtual Forum

Phase III Summer Engagement

June 22, 2023

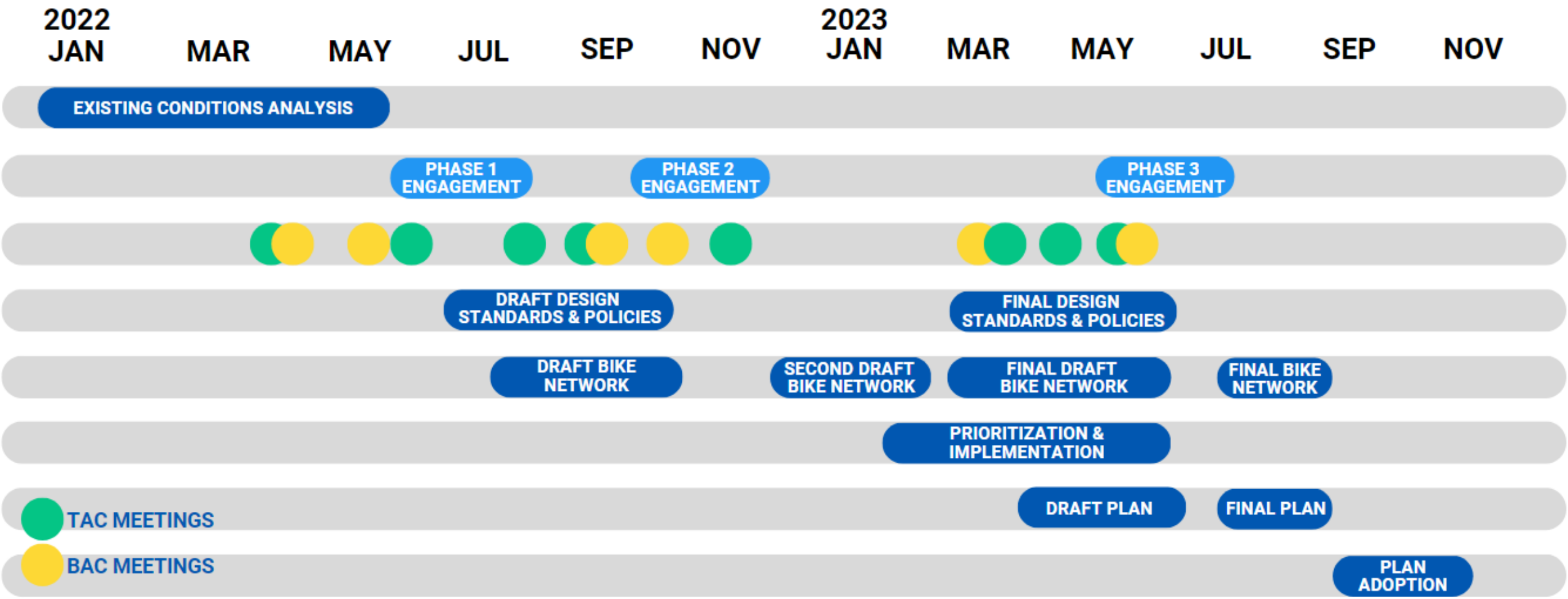
DALLAS
BIKE PLAN
UPDATE

DALLAS BIKE PLAN UPDATE

2023

DALLAS
BIKE PLAN
UPDATE

PROJECT SCHEDULE



DALLAS BIKE PLAN UPDATE

2023

Follow along with us!

https://tinyurl.com/2023DBP

Contents

EXECUTIVE SUMMARY

1. Introduction
2. Methodology for Updating the Bike Network
3. Bike Network
4. Recommended Design Standards
5. Policy Recommendations
6. Implementation & Next Steps

CHAPTER 1

INTRODUCTION

Vision

The Dallas Bike Plan update envisions a bike network that is unique to our city—one that is safe, accessible, and comfortable—and also provides the avenue for Dallas to become world class for biking. This plan update will focus on developing a safe and connected bike network that serves the different types of people who have to, choose to, and want to bike.

CHAPTER 1

INTRODUCTION

Goals

Update the Bike Network to reflect existing conditions, priority destinations or connections, and desired facility types comfortable for a wide range of ages and abilities.

Update design standards for bike facilities based upon identified national, state, and local best practices.

Create a prioritized and phased implementation plan that identifies "quick win" priority bike facilities and establishes priorities for future capital improvement programs. The focus should be on what can be built within the next five years.

Set a path for incorporating the Dallas Bike Plan in the City's guiding policies, plans, and codes.

CHAPTER 1

INTRODUCTION

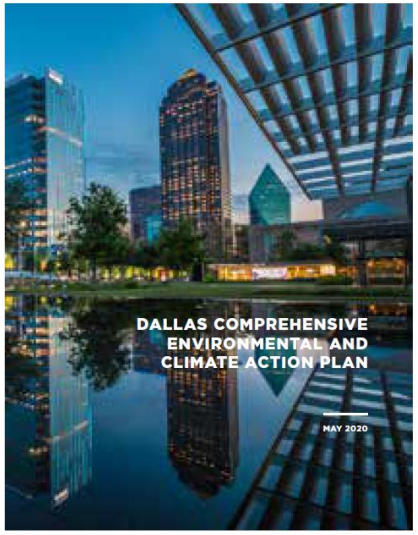
Achievements since the 2011 Bike Plan

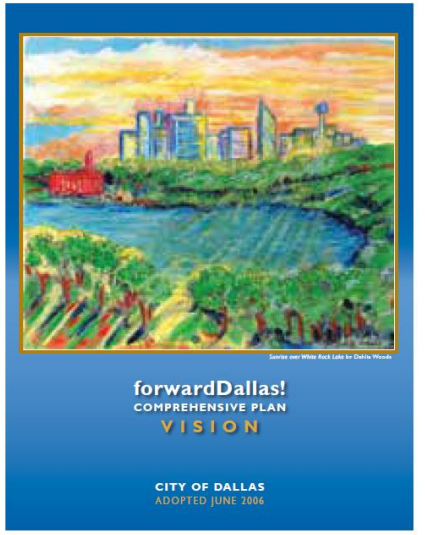
- From 0 mi → to **84 mi of on-street bike lanes**
- From 130 mi → to **174 mi of trails & off-street bike facilities** *(existing & funded)*
- The City has passed landmark plans & manuals:
  - Complete Street Design Manual (2016)
  - Downtown 360 Plan (2017)
  - Street Design Manual (updated 2019)
  - Comprehensive Environmental & Climate Action Plan (CECAP) (2020)
  - Connect Dallas Strategic Mobility Plan (2021)
  - Racial Equity Plan (2022)

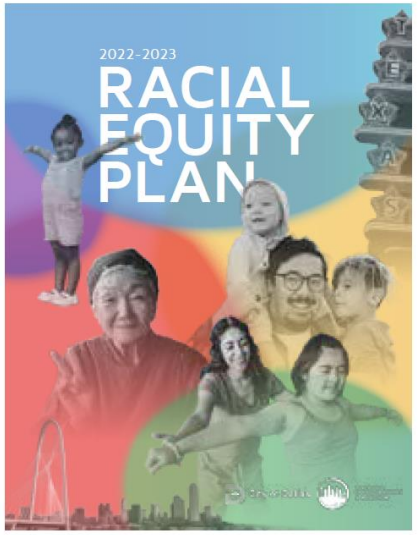
CHAPTER 1

INTRODUCTION

Planning Framework







SINGLE OCCUPANT VEHICLE TRAVEL MODE SHIFT

88% to 79% in 2030

88% to 62% in 2050

- ☑ **4.2.2.2** Update the Bike Plan
- ☑ **4.2.2.3** Use "Context Sensitive Design" standards

"More progress, fewer plans"

*"…a lack of updated infrastructure in Dallas, **primarily historically disadvantaged communities**"*

Any questions so far?

CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Existing Conditions Analysis

1 The City's Existing Bike Network

Facility Type	Existing Length (Miles)	Funded Length (Miles)
Shared Roadway (Sharrow)	46	53
Bike Lane	8	7
Buffered Bike Lane	11	9
Cycle Track	8	2
Trail	147	53

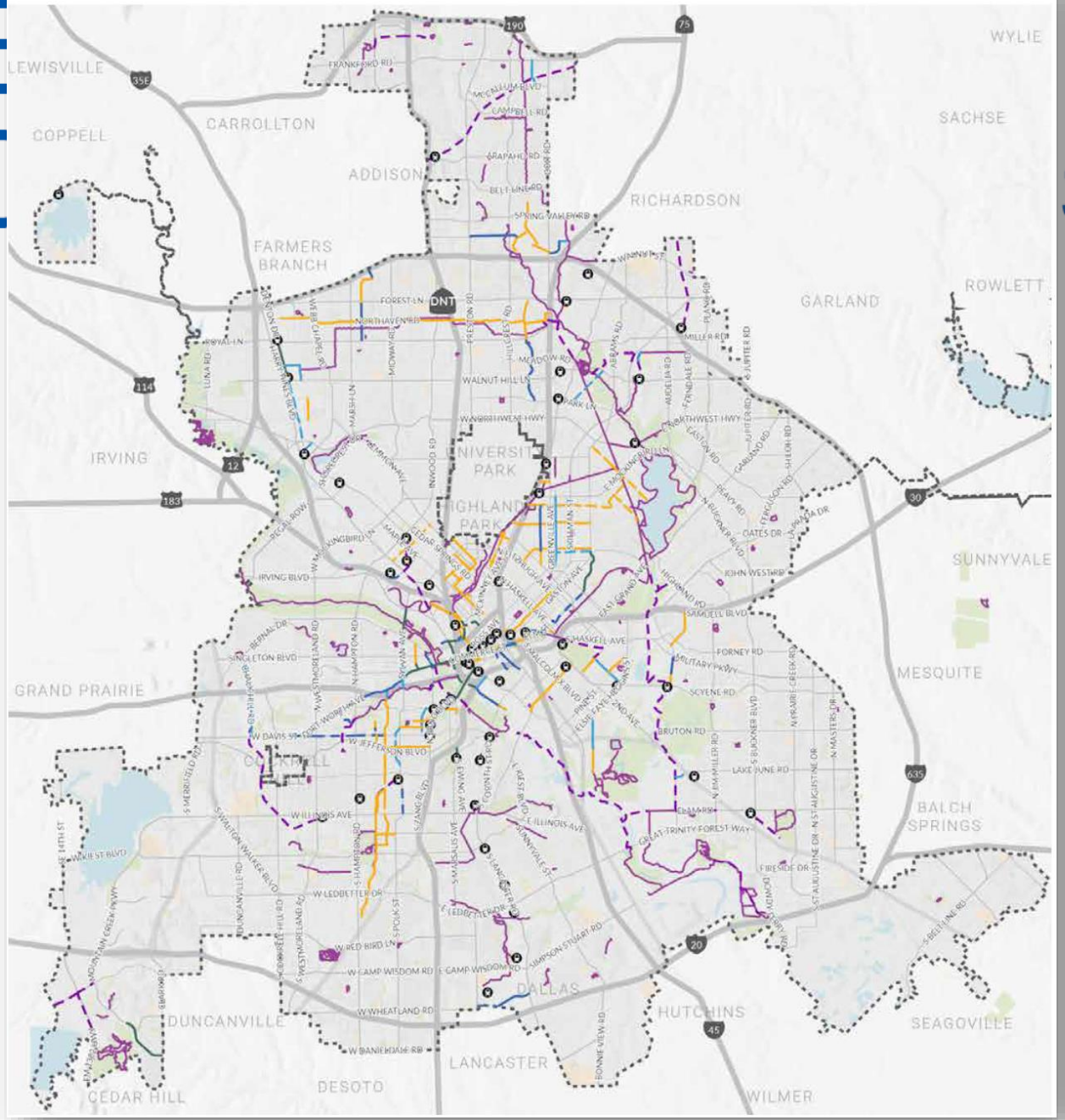
The disconnected bikeway network is further divided by highways, which serve as barriers to active travel.

CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Figure 2.1 Existing and Funded Bikeways in Dallas



CHAPTER 2

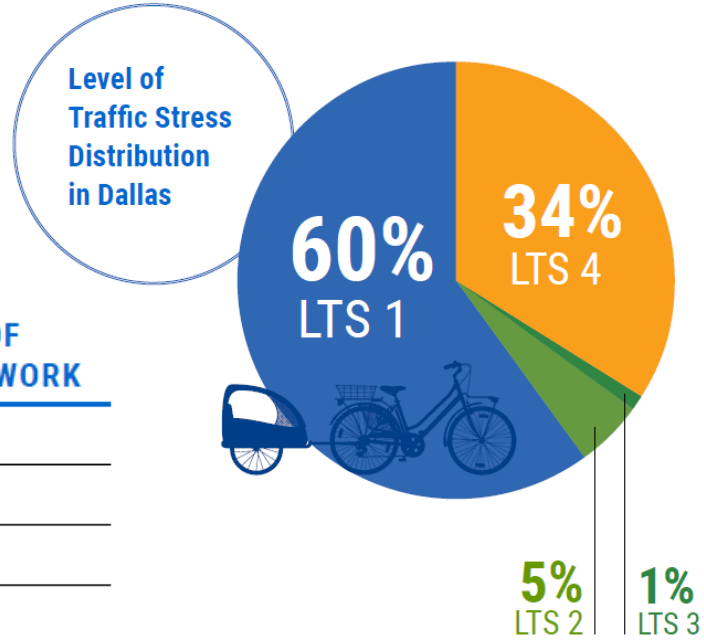
METHODOLOGY

for Updating the Bike Network

Existing Conditions Analysis

2 Level of Traffic Stress

LEVEL OF TRAFFIC STRESS	PERCENT OF ROADWAY NETWORK
LTS 4 – Highest Stress	34%
LTS 3	1%
LTS 2	5%
LTS 1 – Lowest Stress	60%

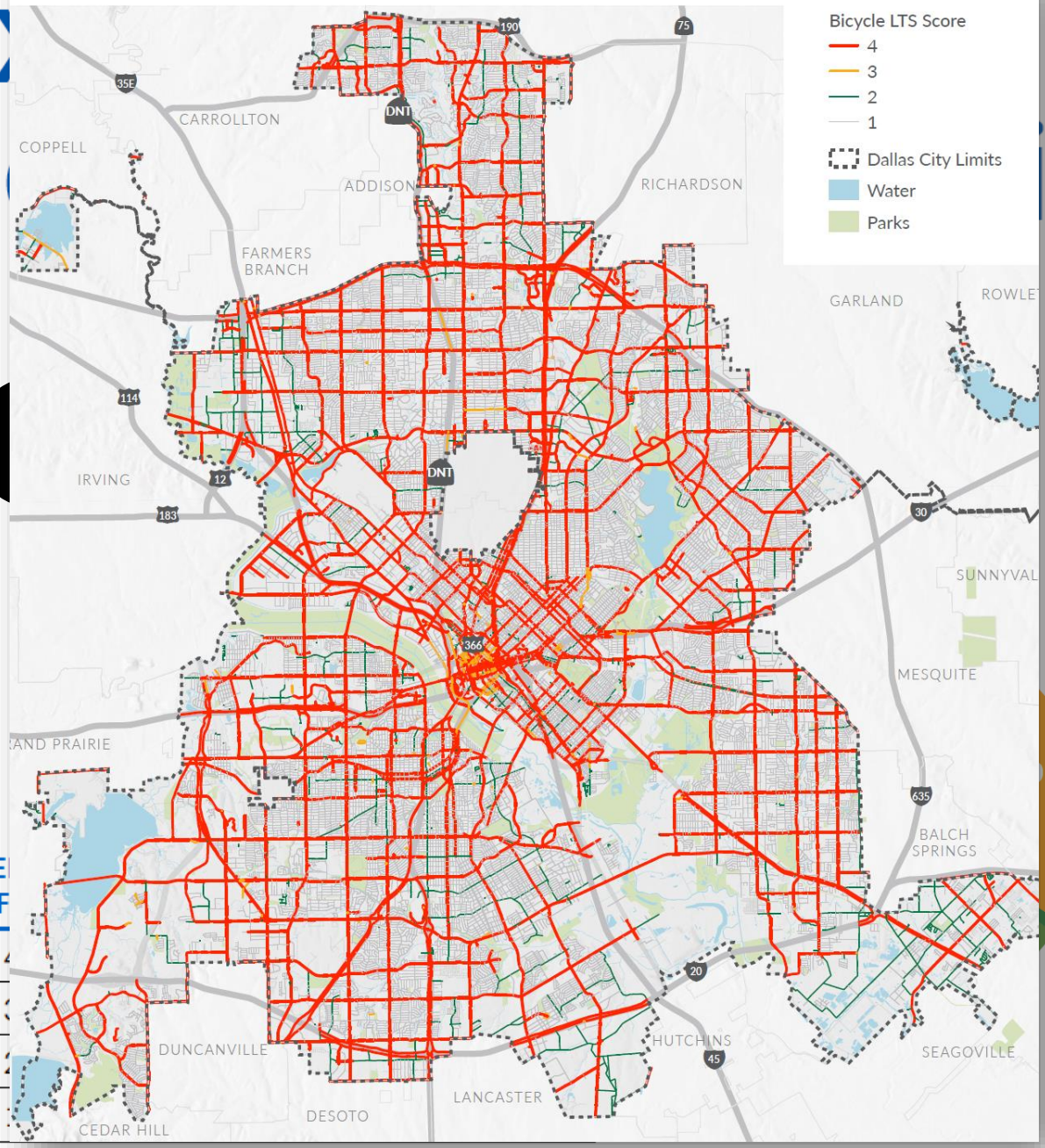


CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Figure 2.2 Level of Traffic Stress



LEVE
TRAF
LTS 4
LTS 3
LTS 2
LTS 1

1%
LTS 3

CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Existing Conditions Analysis

3 Safety

PLANNING AREA	NUMBER OF FATALITIES	NUMBER OF SEVERE INJURIES
Northwest	2	9
Northcentral	0	7
Northeast	0	24
Central	3	22
Southwest	1	18
Southcentral	3	6
Southeast	5	22

Most severe, or fatal bike-involved collisions have occurred on streets without bike facilities.

CHAPTER 2

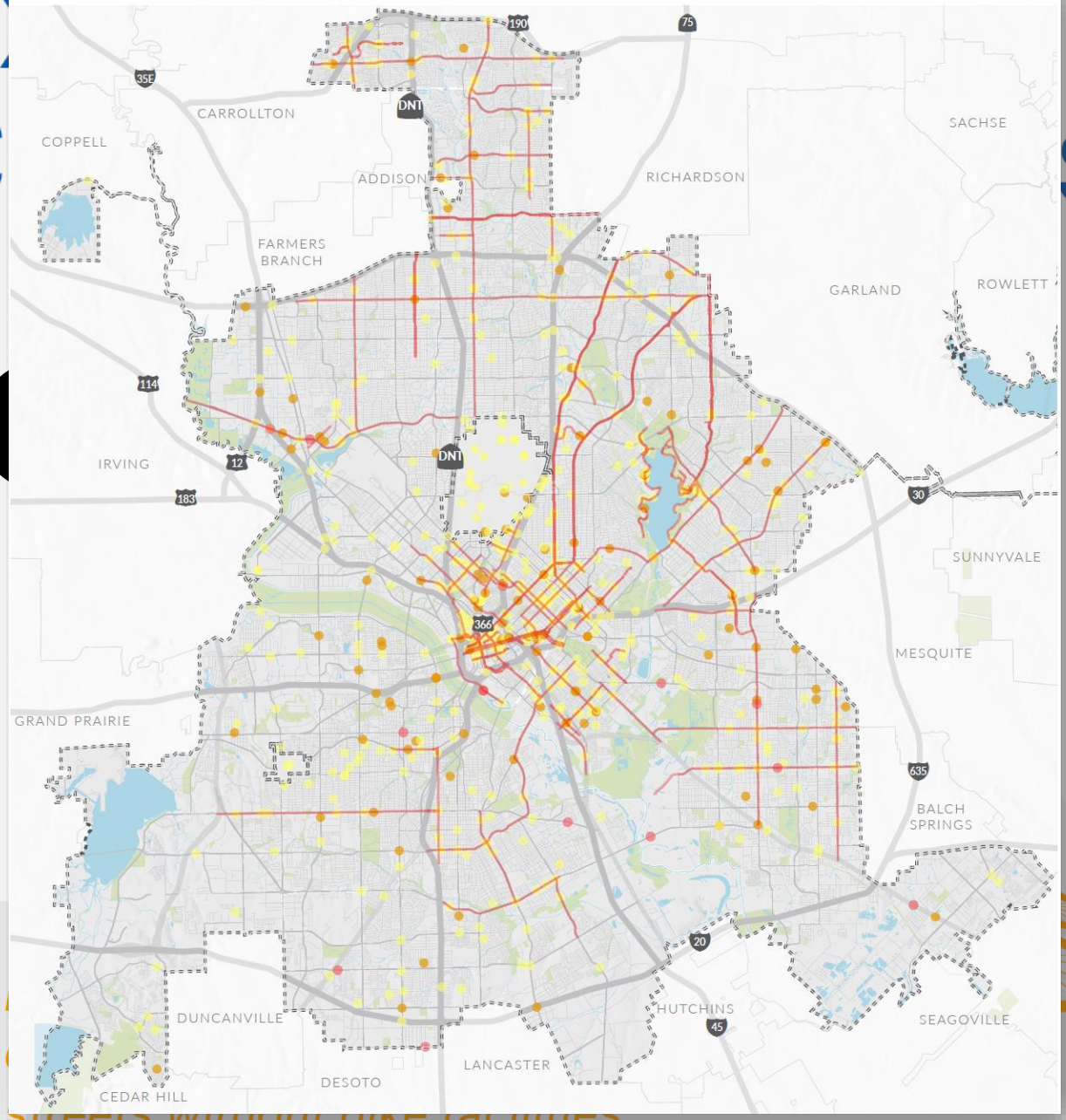
METHODOLOGY

for Updating the Bike Network

Ex

C s

Figure 2.3 Safety - Bicycle Collisions 2014-2019



Streets without bike facilities.

CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Existing Conditions Analysis

4 Active Trip Demand

Fifty percent of all car trips in the US are three miles or less

Short trips make up at least 40% of trips in most areas of Dallas.

CHAPTER 2

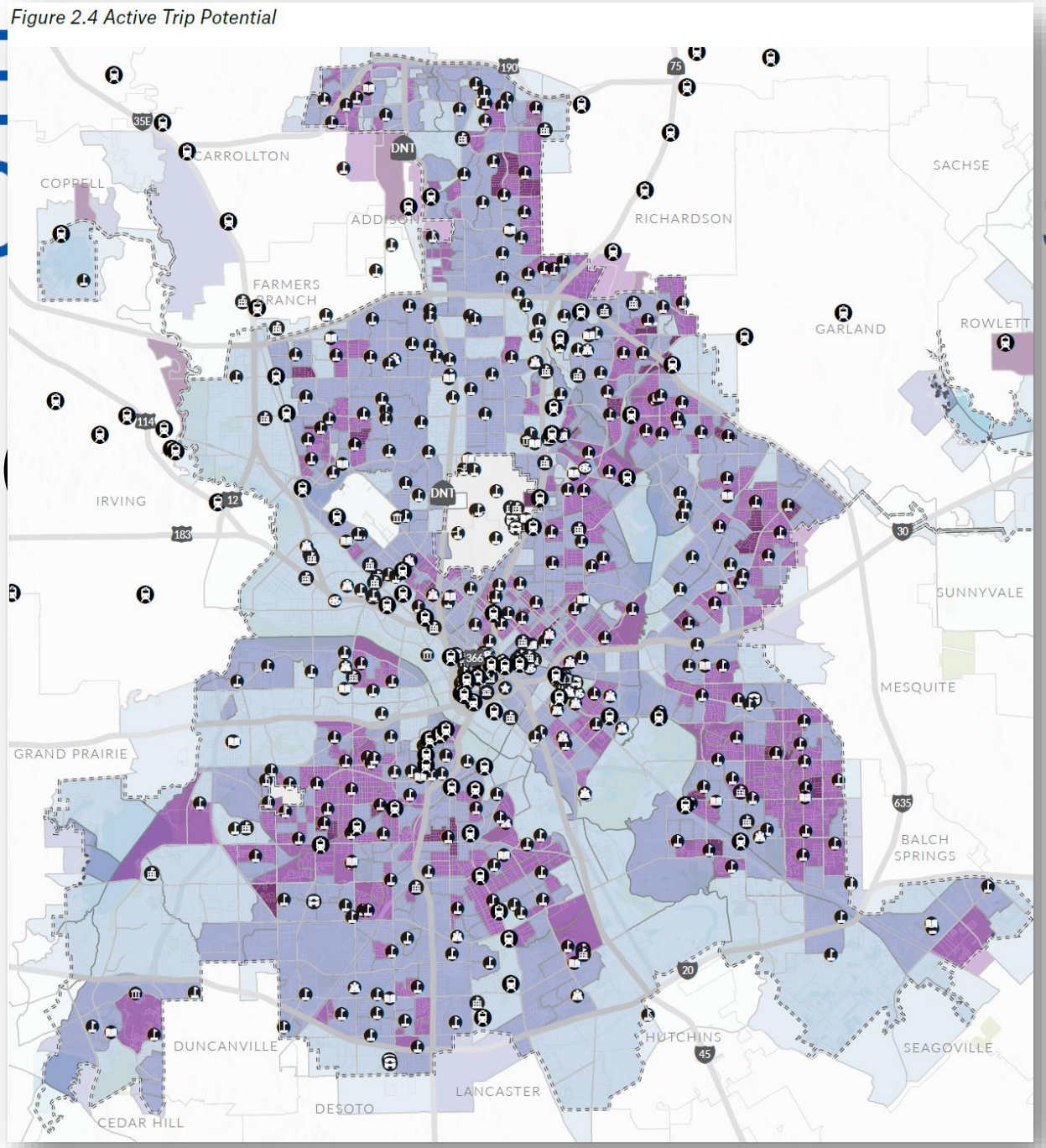
METHODOLOGY

for Updating the Bike Network

E

C S

Figure 2.4 Active Trip Potential



CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Existing Conditions Analysis

5 Equity & Public Health

Opportunity + Accessibility

Environmental Justice

Health

Affordability (Cost of Living)

Vulnerability

CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Existing Conditions Analysis

5 Equity & Public Health

KEY TAKEAWAYS

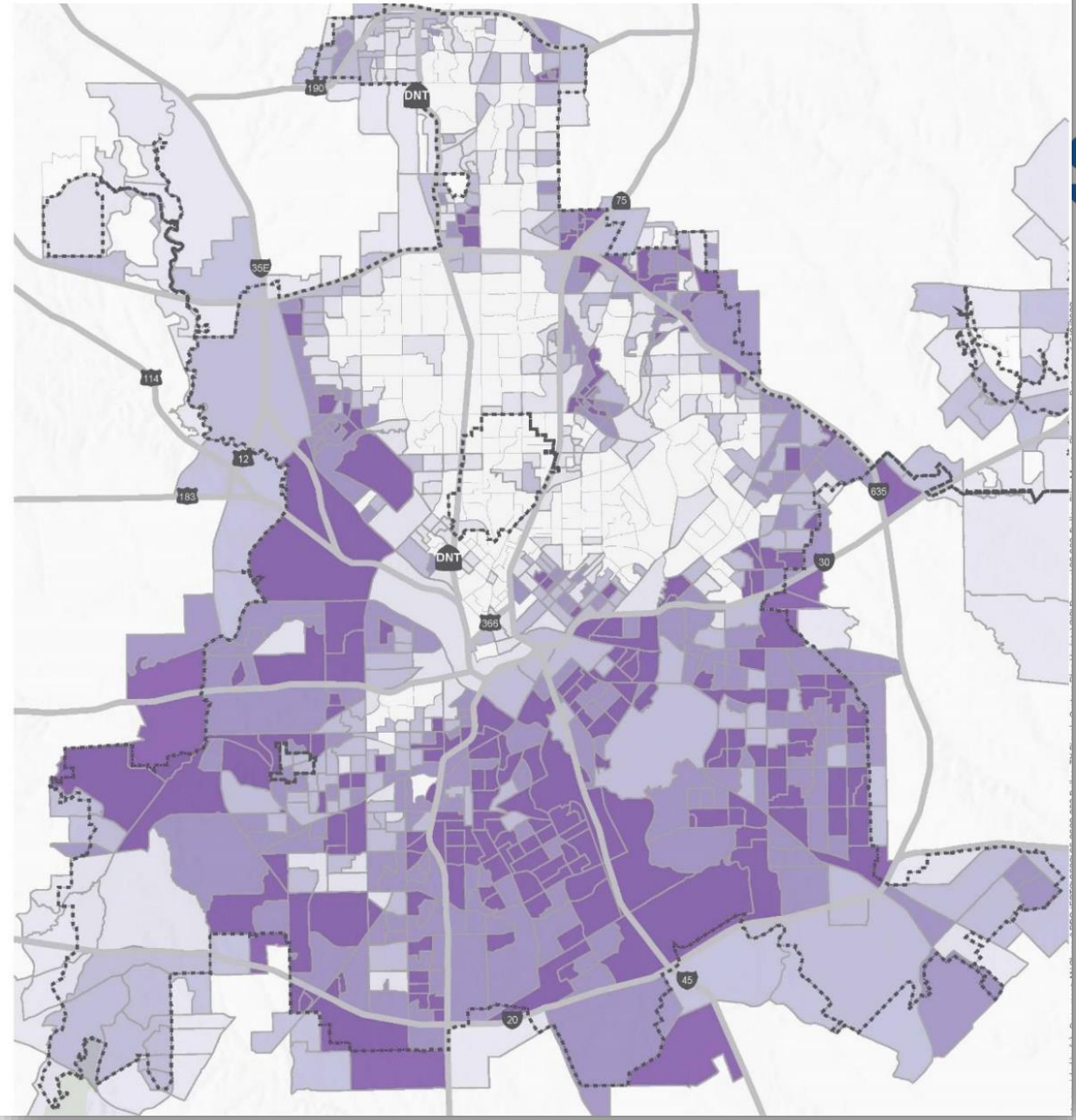
- High-need areas are most often near highways
- Poorest health outcomes in South Dallas
- Disproportionate number of bike-involved fatalities & severe-injury bike collisions in highest-need areas and areas with poorest health outcomes
- Limited bike connections to DART transit
- South Dallas also has fewest existing bike facilities

CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Figure 2.5 Equity Analysis



CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Existing Conditions Analysis

6 Pedestrian & Transit Multimodal Facilities

OUR ASSESSMENT

- **Sidewalk gap analysis**
- **Transit connection analysis**

CHAPTER 2

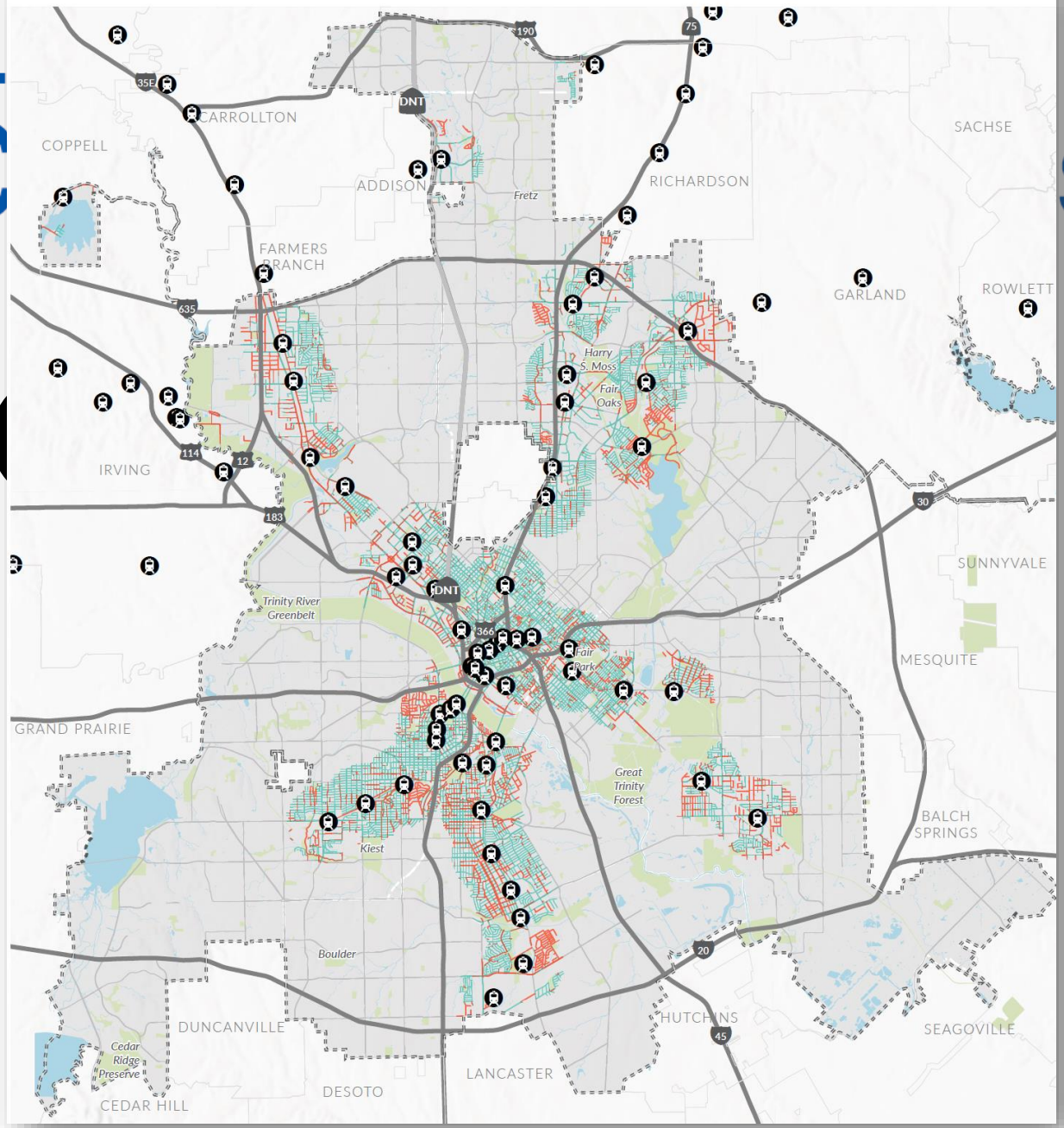
METHODOLOGY

for Updating the Bike Network

E

C S

Figure 2.7 Multimodal Facilities



Any questions so far?

CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Engagement

PHASE I VIRTUAL ENGAGEMENT

Summer 2022

PHASE II OPEN HOUSES

Fall 2022

PHASE III VIRTUAL ENGAGEMENT

Summer 2023

BICYCLE ADVISORY COMMITTEE

TECHNICAL ADVISORY COMMITTEE

CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Engagement Phase I

Summer 2022

Quantitative Responses

87% of respondents were in support of bike-friendly policy change

more than 60% of survey respondents mentioned conflicts with cars, fears for safety, and lack of access to bike facilities as barriers to biking in Dallas

35% of online map comments described a location with a challenge/barrier to biking

13% of comments highlight specific locations that need improvement

85% of respondents were willing to take a longer route to avoid heavy traffic

5% of comments mentioned crashes or dangerous and scary conditions

CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Engagement Phase II

Fall 2022

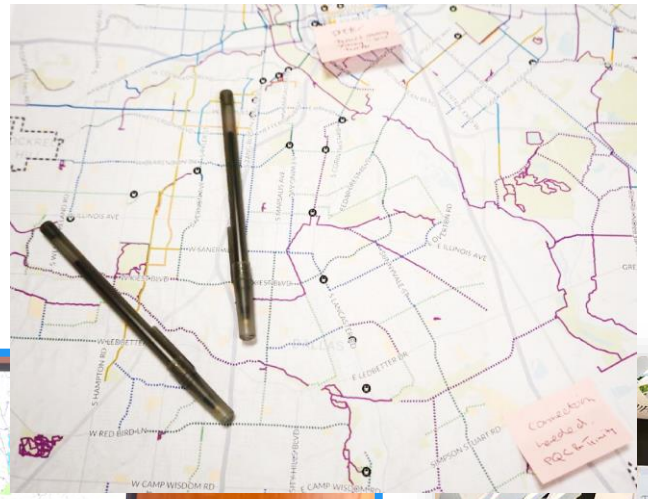
CHAPTER 2

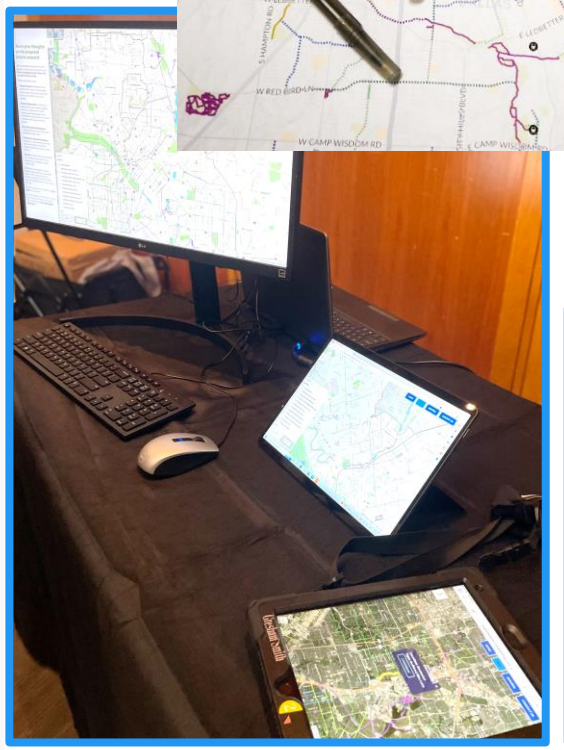
METHODOLOGY

for Updating the Bike Network

Engagement Phase II

Fall 2022





CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Engagement

BICYCLE ADVISORY COMMITTEE

04/06/22: Project Overview, Purpose of BAC, & Public Involvement Plan

05/17/22: Existing Conditions Analysis, Bike Network Guiding Principles, Vision & Goals SWOT

09/30/22: Review of Bike Network Development Framework

10/18/22: Draft Bicycle Network, Fall Engagement Strategies

03/14/23: Second Draft Bike Network, Candidate Priority Projects & Proposed Policy Recommendations

06/15/23: Draft Plan Review

TECHNICAL ADVISORY COMMITTEE

04/28/22: Project Overview, TAC Purpose, & Project Development

07/13/22: Existing Conditions, Prioritization Principles & Discussion

08/16/22: Summer Engagement Update, Network Development & Bike Facility Considerations

09/22/22: Project Updates & Bike Facility Type Workshop

11/03/22: Proposed Bike Network Review & Fall Engagement Updates

03/16/23: Second Draft Bike Network, Candidate Priority Projects & Policy Recommendations

04/27/23: Review Existing & Proposed Design Standards

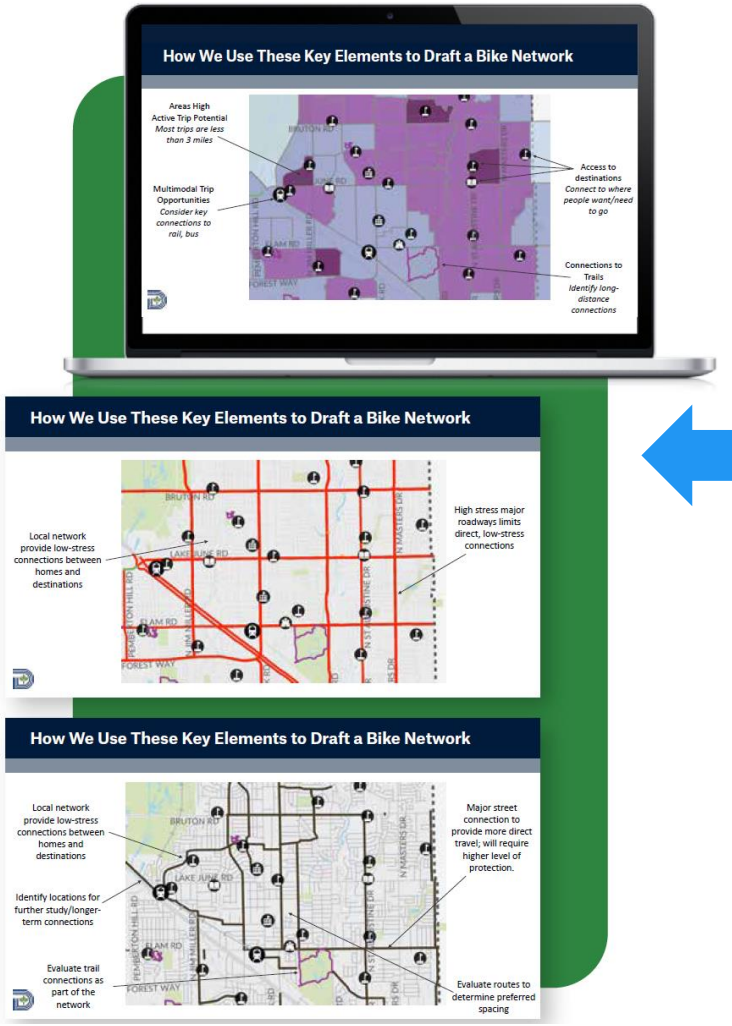
06/15/23: Draft Plan Review

CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Network Development Process



Key Elements for Defining the Bike Network

- Connections to Existing & Future Trails
- Low-Stress Routes
- Access to Destinations
- Connections to Areas of High Active Trip Potential
- Interconnectivity & Directness
- Bike Rider Safety & Comfort

Any questions so far?

CHAPTER 3

BIKE NETWORK

Facility Types

BIKE BOULEVARDS


Speed Management


Intersection Priority

Berkeley, CA Example

VISUALLY SEPARATED


Conventional Bike Lane


Conventional Bike Lane


Bishop Avenue


Parking Side Buffer


Travel Side Buffer


North Polk Street

PHYSICALLY SEPARATED


One Way, Parking Buffer


Two Way


Forth Worth Avenue

TRAILS


Katy Trail


Great Trinity Forest Trail


White Rock Lake Trail

The network development framework approach elements are summarized as follows:

1. Adding lower stress bike routes to the bike network (and introducing the bike boulevard facility type)
2. Considering separation and safety for bike routes that are along major roadways
3. Connecting areas of high active trip potential
4. Providing direct bike routes to support bike travel of all distances
5. Expanding bike access to destinations
6. Increasing bike connections to the robust existing and proposed City-wide trail network

CHAPTER 3

BIKE NETWORK

Bike Network

536 miles

Total of Improvements or Additions to the Bike Network

175
Miles of Bike Boulevards

140
Miles of Visually Separated On-street Bike Lanes

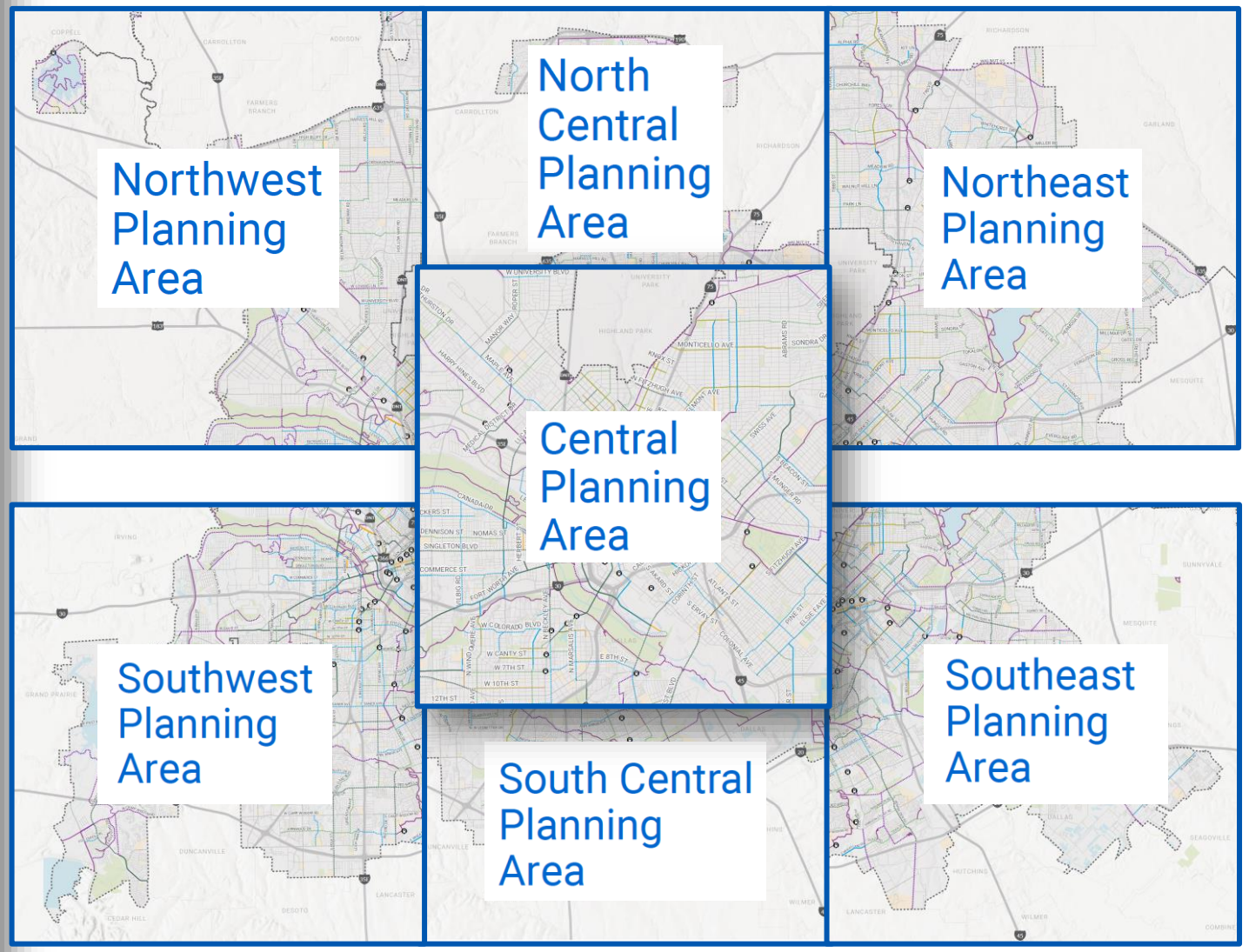
91
Miles of Physically Separated On-street Bike Lanes

130
Miles of Trails

CHAPTER 3

BIKE NETWORK

Bike Network

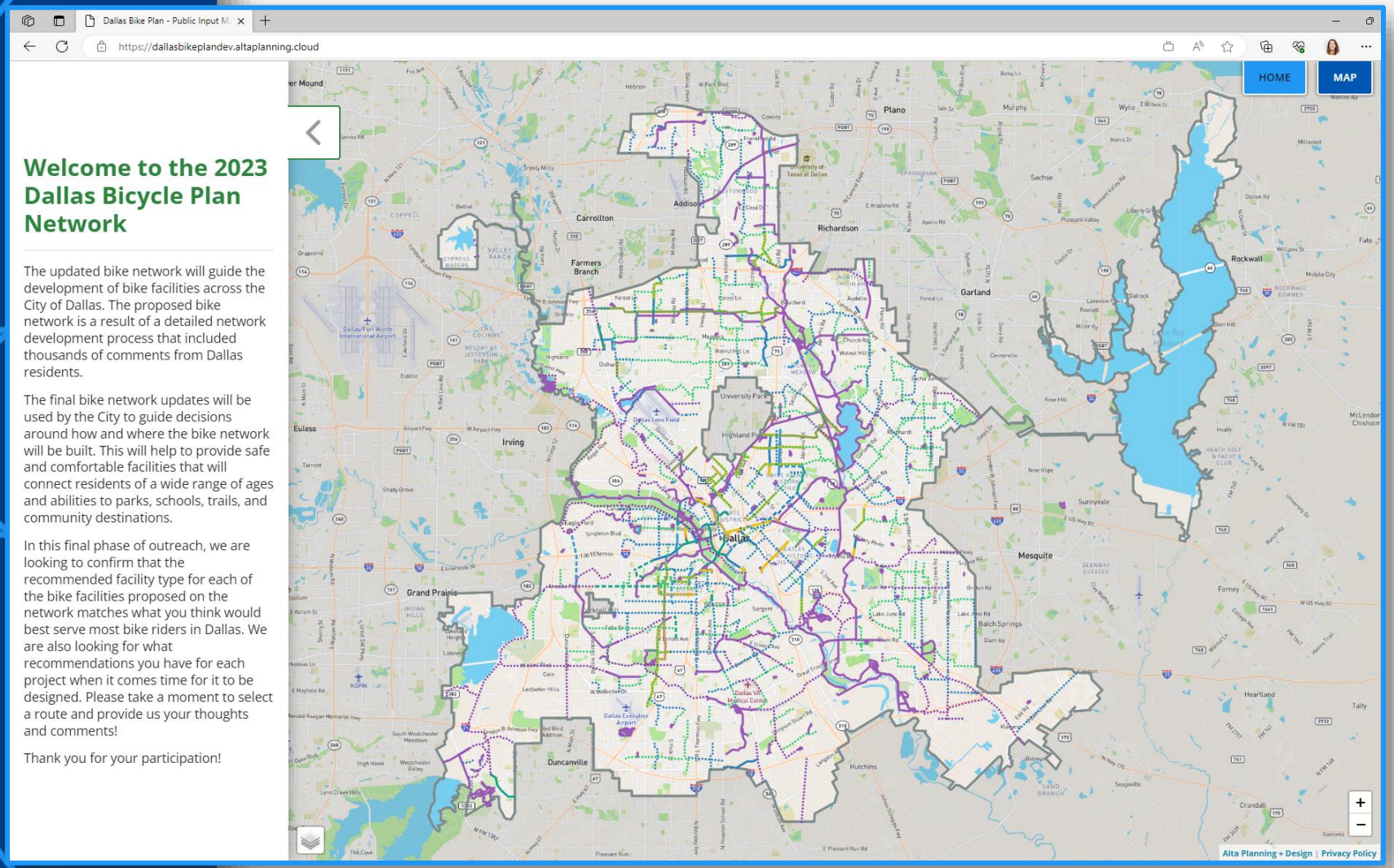


https://tinyurl.com/2023DBP

CHAPTER 3

BIKE NETWORK

Bike Network



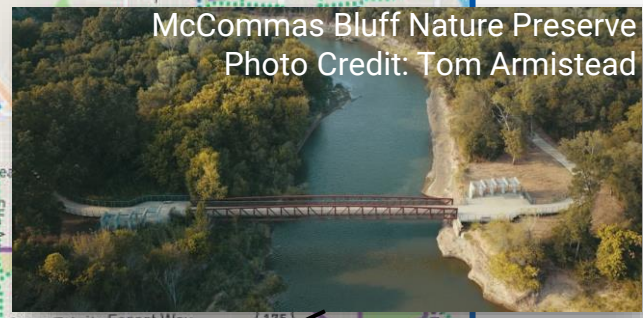
https://tinyurl.com/2023DBP-MAP

CHAPTER 3

BIKE NETWORK

Trinity Forest Trail, from Southeast to Northeast

White Rock Lake
Photo Credit: Marcus Tovar

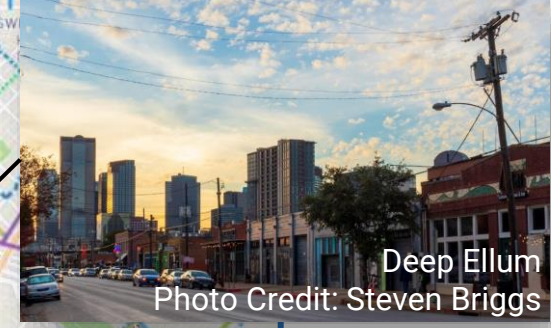


McCommas Bluff Nature Preserve
Photo Credit: Tom Armistead

CHAPTER 3

BIKE NETWORK

South Dallas/UNT to Downtown & Deep Ellum



Deep Ellum
Photo Credit: Steven Briggs

University of North Texas, Dallas Campus

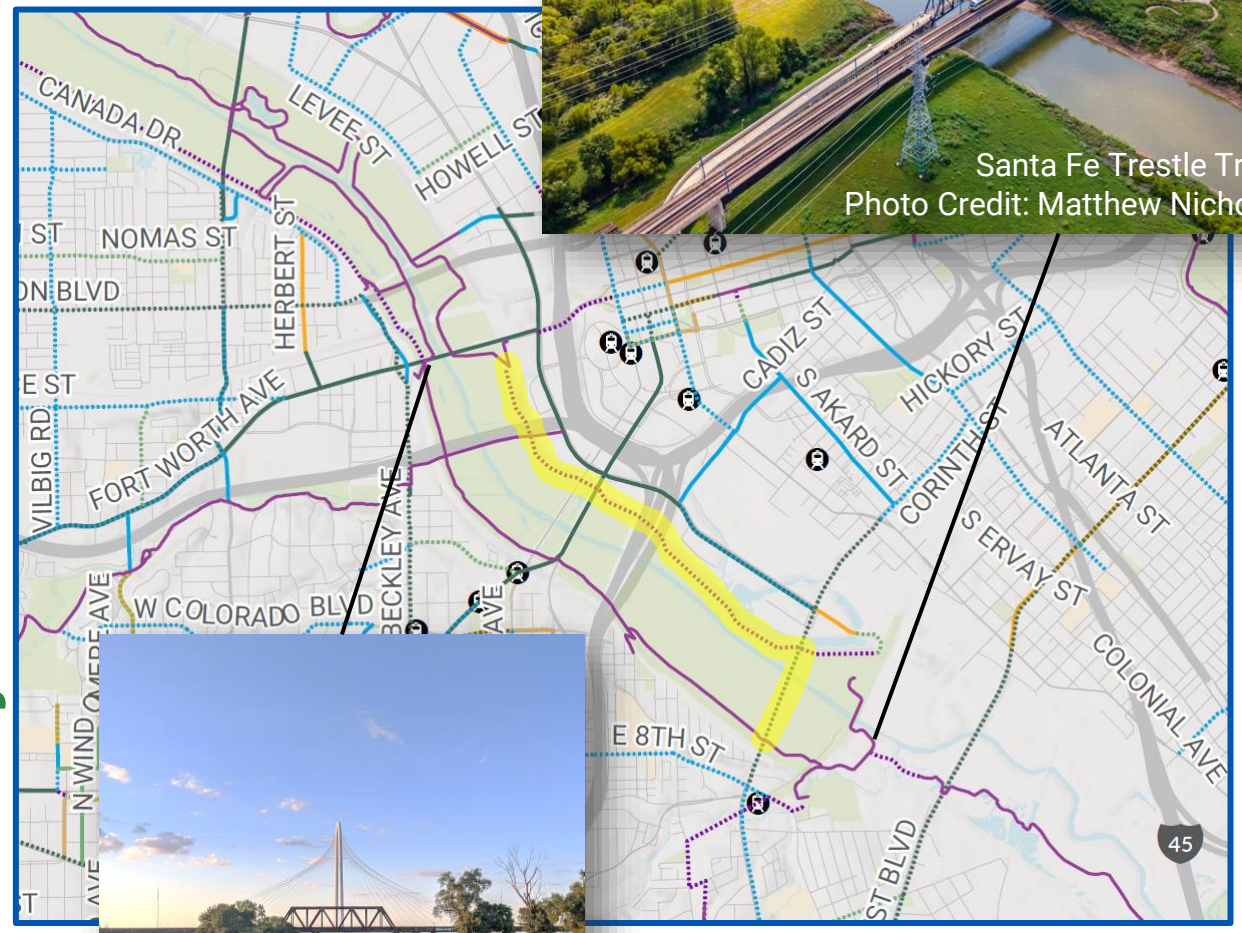
Alta Mesa Park

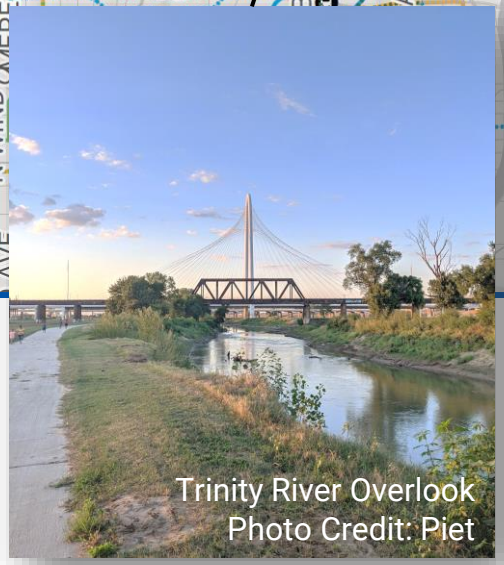
CHAPTER 3

BIKE NETWORK

Trinity River Greenbelt

Santa Fe Trestle Trail
Photo Credit: Matthew Nichols



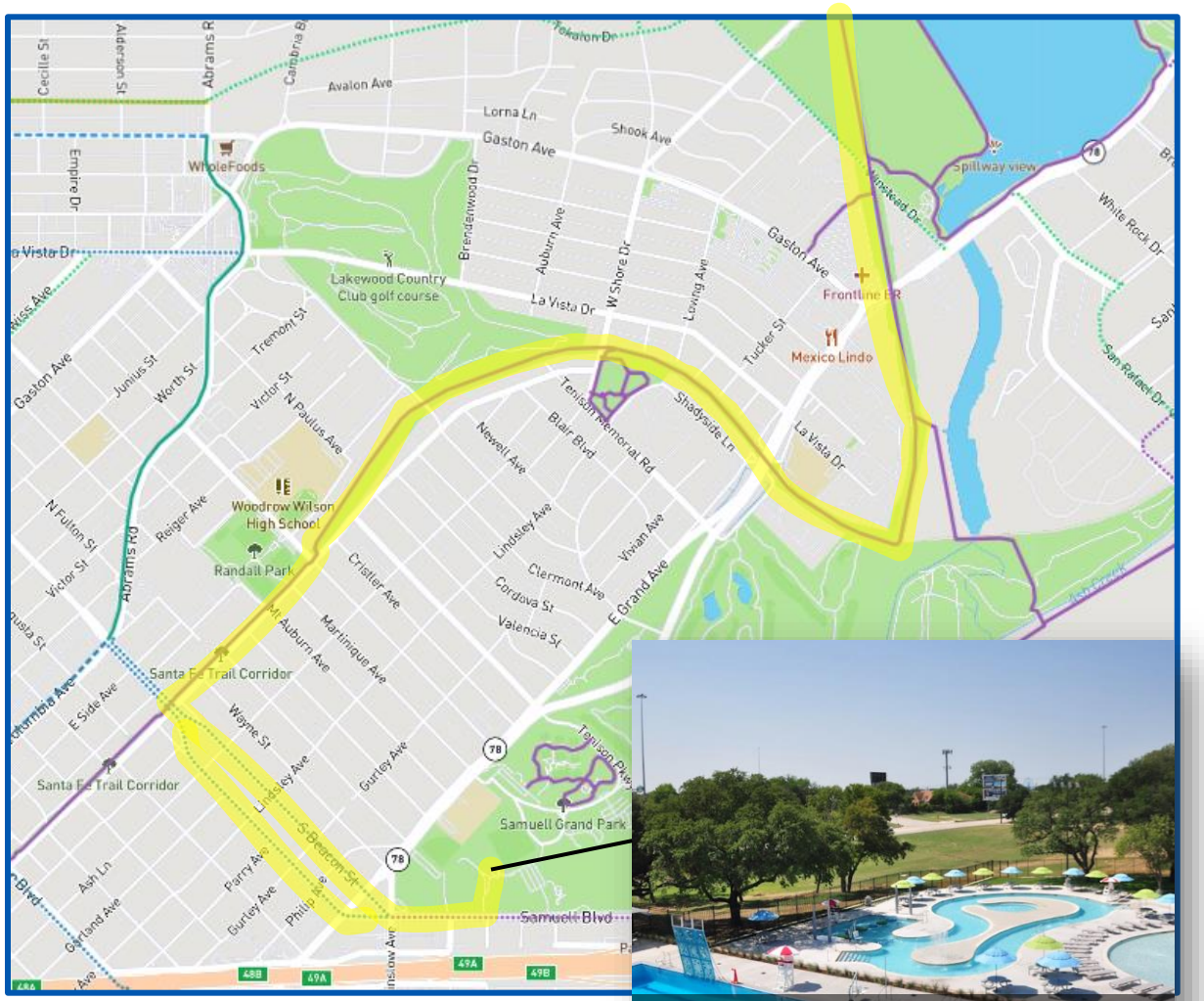


Trinity River Overlook
Photo Credit: Piet

CHAPTER 3

BIKE NETWORK

Beacon/Graham Bike Lanes & Samuell Blvd. Trail



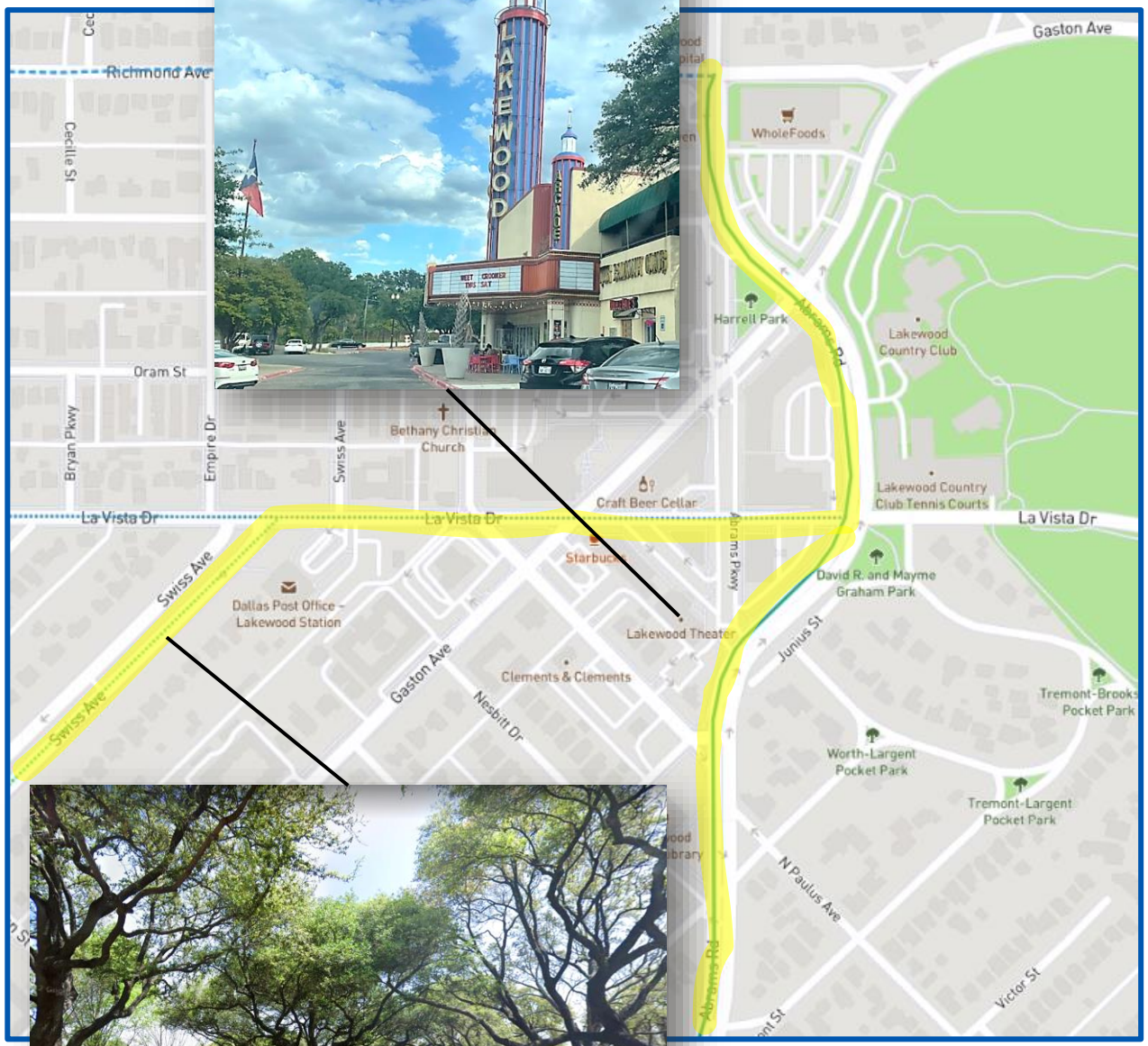
Cove Aquatic Center at Samuell Grand

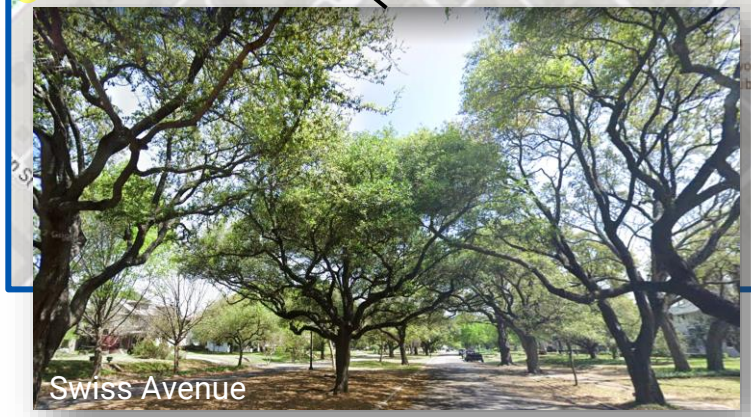
CHAPTER 3

BIKE NETWORK

La Vista, Lakewood, and Swiss

Bowlski's Lakewood Theater
Photo Credit: Ashton Greene





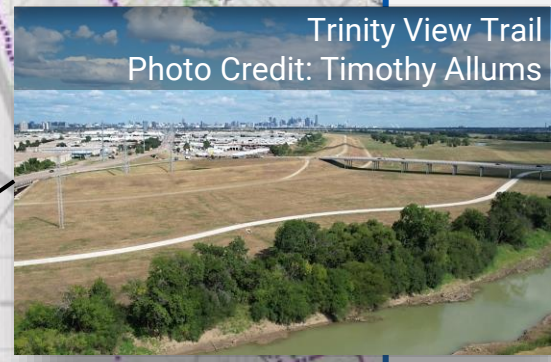
Swiss Avenue

CHAPTER 3

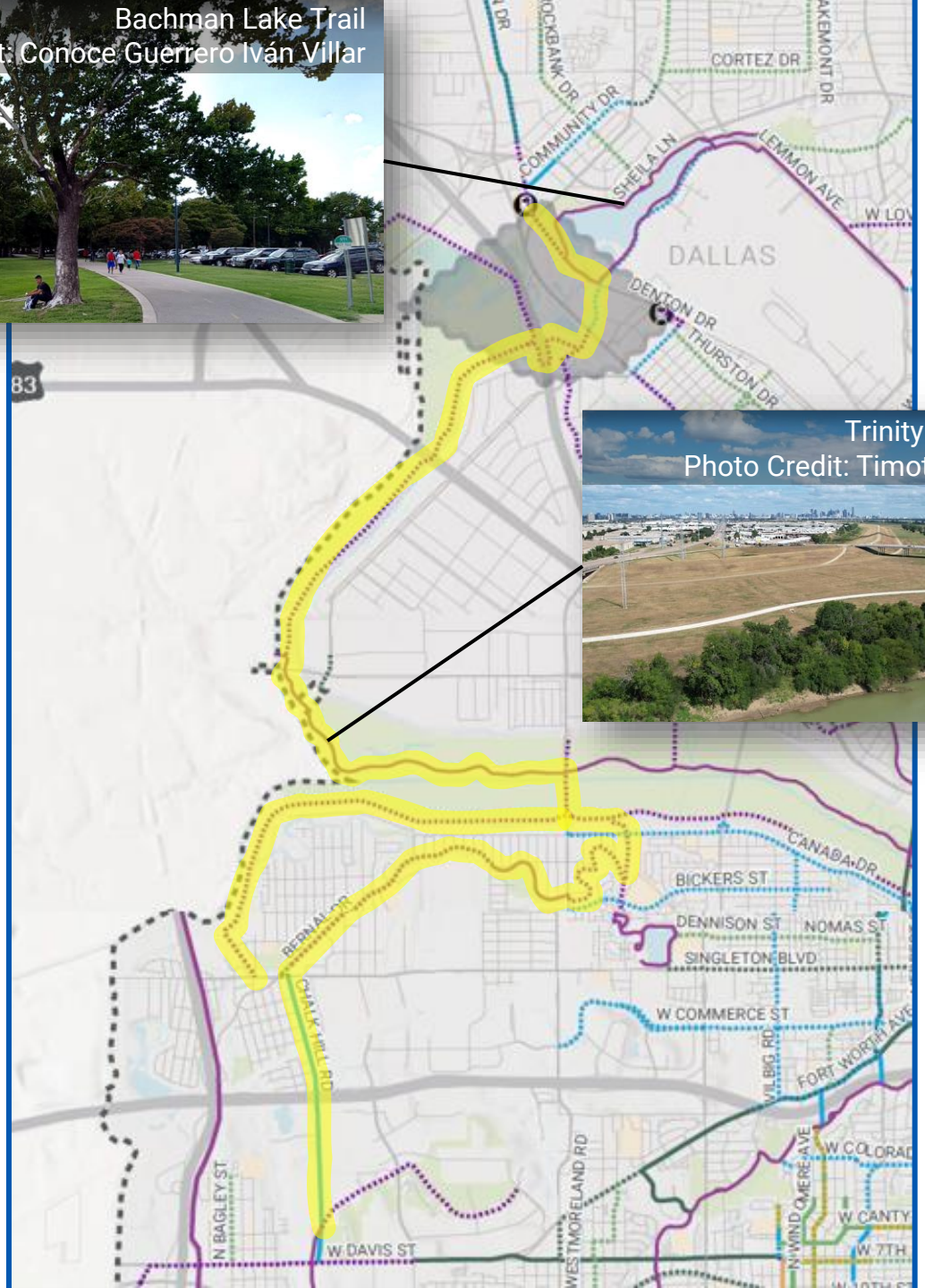
BIKE NETWORK

Trinity River Greenbelt, Elm Fork Greenbelt, and Bachman Lake

Bachman Lake Trail
Photo Credit: Conoce Guerrero Iván Villar



Trinity View Trail
Photo Credit: Timothy Allums



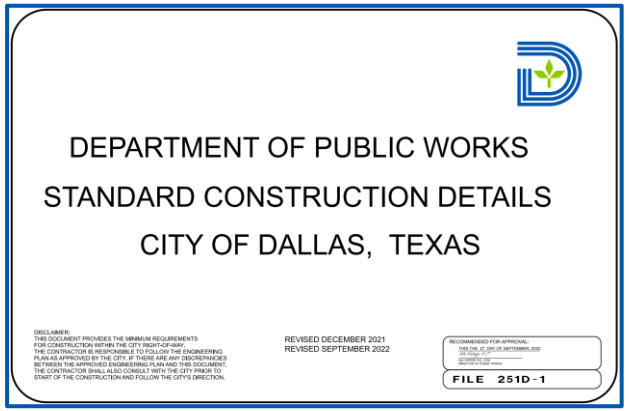
Any questions so far?

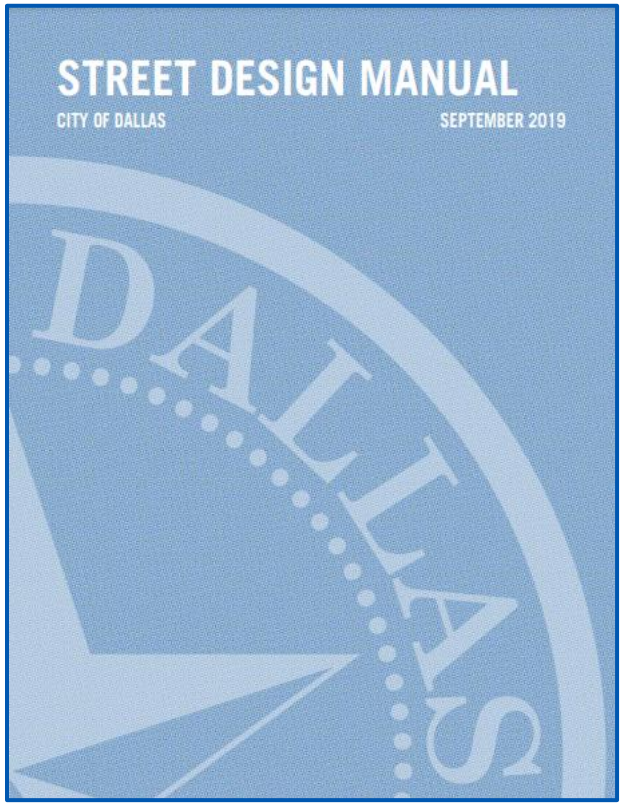
CHAPTER 4

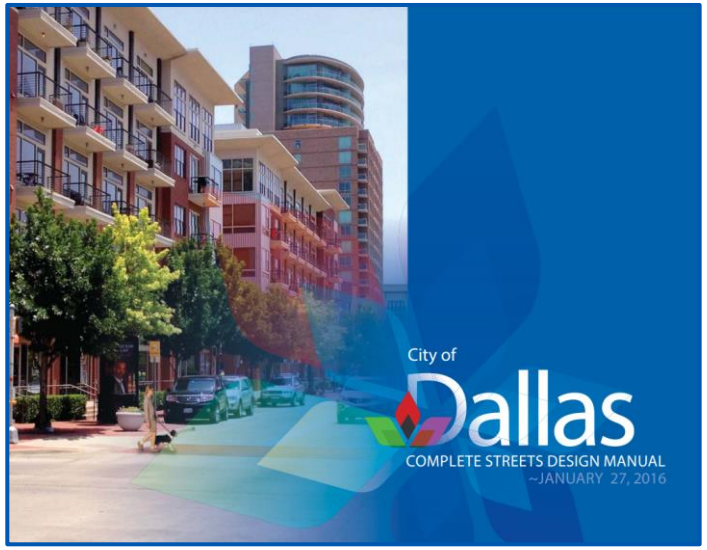
RECOMMENDED

Design Standards Updates

Review of Existing Dallas Bike Facility Standards, Guidelines, and Specifications







CHAPTER 4

RECOMMENDED

Design Standards Updates

Review of Existing Dallas Bike Facility Standards, Guidelines, and Specifications

SECTION	TITLE	RECOMMENDED CHANGE FOR STREET DESIGN MANUAL
3.2.6	Bicycle Provisions	1. Update bike facility classifications (Bike Boulevard, Visually Separated, Physically Separated, Trail). 2. Include a bike facility applicability matrix to guide facility type selection.

4.3.7.1	On-Street Elements; Bikeways and Facilities	1. Incorporate Sheet No. 5012 dated June 2021 for Bike Lane Pavement Markings into Section 4.3.7.1 for clarity of on-street bike lane/cycle track pavement marking.
		2. Figure 4.19 On-Street Shared Bike Route should be noted that shared lanes/sharrows are not a preferred bike facility type and require Department Director approval.
		3. Figure 4.20 On-Street Dedicated Bike Lanes and Facilities should be revised to better illustrate the pavement marking standards, signage, and the separation (including striping and physical barriers) between the vehicle travel lane and the bike facility.
		Elements to include the following:
		• Physical separator typology options:
		  ◦ Parking stops or similar low-profile physical separators
		  ◦ Prefabricated low profile walls
		  ◦ Concrete separators
		• The placement of physical separators close to the travel lane
		• The use of green pavement markings (to increase the awareness of bike riders travelling through intersections, across larger commercial driveways, or in other situations where deemed appropriate).
		• Consideration of the durability of pavement markings and physical separators for maintenance.

4.4.5.6	Intersections – Bicycle Treatments	Improved illustrations showing complete bike approach pavement markings and signage should replace Figure 4.29 Crossing Markings. Optional elements for consideration include: • Dashed line white or green pavement markings through the intersection • Bike keyholes placed between a through lane and the adjacent right turn lane, bus bay, or parking lane • Bike boxes may be appropriate for intersections of significant collector and arterial roadways that experience moderate to high levels of bike activity
6.1.4	Sidewalk, Pedestrian Walkway, and Bikeway Illumination Levels	Modify Table 6.3 Illuminance Values for Pedestrian Areas to include Bike Usage Areas. The rationale for including High, Medium and Low Bike Usage Areas is to better align the illumination standards with the City's Vision Zero policies.
Appendix A.4.6	Storm Drains	The City is encouraged to add bike-safe stormwater inlet and grate design standards into the Street Design manual. Considerations include the following: • Grate must be flush with the road surface • Grates with inlet bars must be perpendicular to the direction of bike travel, and should not have spacing greater than 4" • Use small hexagon or similar small spacing inlet face where appropriate • Where feasible, locate the entire grate in the gutter pan • Ensure there is no exaggerated warping/drop off towards the inlet opening that would pose an obstacle to a bike rider

CHAPTER 4

RECOMMENDED

Design Standards Updates

SECTION	TITLE	RECOMMENDED CHANGE FOR STREET DESIGN MANUAL
3.2.6	Bicycle Provisions	1. Update bike facility classifications (Bike Boulevard, Visually Separated, Physically Separated, Trail). 2. Include a bike facility applicability matrix to guide facility type selection.

4.3.7.1	On-Street Elements; Bikeways and Facilities	1. Incorporate Sheet No. 5012 dated June 2021 for Bike Lane Pavement Markings into Section 4.3.7.1 for clarity of on-street bike lane/cycle track pavement marking.
		2. Figure 4.19 On-Street Shared Bike Route should be noted that shared lanes/sharrows are not a preferred bike facility type and require Department Director approval.
		3. Figure 4.20 On-Street Dedicated Bike Lanes and Facilities should be revised to better illustrate the pavement marking standards, signage, and the separation (including striping and physical barriers) between the vehicle travel lane and the bike facility.
		Elements to include the following:
		• Physical separator typology options:
		  ◦ Parking stops or similar low-profile physical separators
		  ◦ Prefabricated low profile walls
		  ◦ Concrete separators
		• The placement of physical separators close to the travel lane
		• The use of green pavement markings (to increase the awareness of bike riders travelling through intersections, across larger commercial driveways, or in other situations where deemed appropriate).
		• Consideration of the durability of pavement markings and physical separators for maintenance.

4.4.5.6	Intersections – Bicycle Treatments	Improved illustrations showing complete bike approach pavement markings and signage should replace Figure 4.29 Crossing Markings. Optional elements for consideration include: • Dashed line white or green pavement markings through the intersection • Bike keyholes placed between a through lane and the adjacent right turn lane, bus bay, or parking lane • Bike boxes may be appropriate for intersections of significant collector and arterial roadways that experience moderate to high levels of bike activity
6.1.4	Sidewalk, Pedestrian Walkway, and Bikeway Illumination Levels	Modify Table 6.3 Illuminance Values for Pedestrian Areas to include Bike Usage Areas. The rationale for including High, Medium and Low Bike Usage Areas is to better align the illumination standards with the City's Vision Zero policies.
Appendix A.4.6	Storm Drains	The City is encouraged to add bike-safe stormwater inlet and grate design standards into the Street Design manual. Considerations include the following: • Grate must be flush with the road surface • Grates with inlet bars must be perpendicular to the direction of bike travel, and should not have spacing greater than 4" • Use small hexagon or similar small spacing inlet face where appropriate • Where feasible, locate the entire grate in the gutter pan • Ensure there is no exaggerated warping/drop off towards the inlet opening that would pose an obstacle to a bike rider

CHAPTER 4

RECOMMENDED

Design Standards Updates

Physical Separators

CHAPTER 4

RECOMMENDED

Design Standards Updates

Bus Stop Treatments

Source: City of Seattle, NACTO Urban Bikeway Design Guide

Example of a Floating Bus Stop

BENEFITS

Enhances bike rider safety from bus operations at the stop

Creates more room for bus riders as they are removed from the sidewalk onto a separate platform

Buses do not have to leave then re-enter travel flows

CHALLENGES

May require additional stormwater drainage modifications

Use more roadway right-of-way space when combined with a separated bike lane

Introduces conflicts between transit passengers and bike riders within the bike lane.

CHAPTER 4

RECOMMENDED

Design Standards Updates

Guidance of Bike Path Through Intersections

CHAPTER 4

RECOMMENDED

Design Standards Updates

Bike Facility Type Selection Guidance

FACILITY TYPES	BIKE FACILITY MINIMUM WIDTH	MAX POSTED SPEED*	MAX NUMBER OF LANES*	RECOMMENDED AADT VOLUME*	HIGHEST FUNCTIONAL CLASS**	APPROPRIATE FOR LOCAL TRANSIT ROUTE	MAX HEAVY TRUCK %	PREFERRED APPLICATION	CONSIDERATIONS
Bike Boulevard	N/A	25	2	<1,000	Local	Most Appropriate	<3%	Low-speed and low-volume local roads that provide bike facilities	1. May require signalized crossing of higher volume/speed roads. 2. Traffic calming measures are frequently recommended.
Visually Separated Bike Lane (buffered and unbuffered)	7 ft	40	4	2,500-5,000	Community Collector	Moderately Appropriate	<3%	1. Recommended when additional separation between the outside travel lane and bike riders is advisable 2. When on-street parking is permitted.	1. 3 ft buffer preferred 2. Provide intersection treatments that afford bike riders a defined crossing path.
Physically Separated Buffered Bike Lane / Cycle Track Separated Bike Lane (one-way)	8 ft	45	6	>5,000	Minor Arterial	Least*** Appropriate	<10%	Higher speed, higher volume roads	1. Availability of right-of-way 2. Style of physical separator 3. Addressing bike rider transition zones approaching large driveways, intersections, transit stops/stations
Physically Separated Buffered Bike Lane / Cycle Track (two-way)	12 ft	30	2	1,000-3,500	Community Collector	Most Appropriate	<3%	Urban core low-speed, low-volume streets	Bike signalization required due to contra-flow movements.
Trail / Shared-Use Path	12 ft (10 to 8 ft for limited distance constrained condition)	N/A	N/A	N/A	N/A	Least*** Appropriate	N/A	When off-road bike facilities are advisable to support longer trips and when right-of-way or easements are available.	Enhanced crossing treatments including signals (RRFBs, HAWKS, full signalization) for crossing higher volume and speed collector arterial roadways.

FACILITY TYPES	BIKE FACILITY MINIMUM WIDTH	MAX POSTED SPEED*	MAX NUMBER OF LANES*	RECOMMENDED AADT VOLUME*	HIGHEST FUNCTIONAL CLASS**	APPROPRIATE FOR LOCAL TRANSIT ROUTE	MAX HEAVY TRUCK %	PREFERRED APPLICATION	CONSIDERATIONS
Bike Boulevard	N/A	25	2	<1,000	Local	Most Appropriate	<3%	Low-speed and low-volume local roads that provide bike facilities	1. May require signalized crossing of higher volume/speed roads. 2. Traffic calming measures are frequently recommended.
Visually Separated Bike Lane (buffered and unbuffered)	7 ft	40	4	2,500-5,000	Community Collector	Moderately Appropriate	<3%	1. Recommended when additional separation between the outside travel lane and bike riders is advisable 2. When on-street parking is permitted.	1. 3 ft buffer preferred 2. Provide intersection treatments that afford bike riders a defined crossing path.
Physically Separated Buffered Bike Lane / Cycle Track Separated Bike Lane (one-way)	8 ft	45	6	>5,000	Minor Arterial	Least*** Appropriate	<10%	Higher speed, higher volume roads	1. Availability of right-of-way 2. Style of physical separator 3. Addressing bike rider transition zones approaching large driveways, intersections, transit stops/stations
Physically Separated Buffered Bike Lane / Cycle Track (two-way)	12 ft	30	2	1,000-3,500	Community Collector	Most Appropriate	<3%	Urban core low-speed, low-volume streets	Bike signalization required due to contra-flow movements.
Trail / Shared-Use Path	12 ft (10 to 8 ft for limited distance constrained condition)	N/A	N/A	N/A	N/A	Least*** Appropriate	N/A	When off-road bike facilities are advisable to support longer trips and when right-of-way or easements are available.	Enhanced crossing treatments including signals (RRFBs, HAWKS, full signalization) for crossing higher volume and speed collector arterial roadways.

** Reference Table 4.2 - Target Speed by Street Typology/Functional Classification; Dallas Street Design Manual.*
*** Referece Table 2.1 - Typical Characteristics of Funtional Classifications; Dallas Street Design Manual.*
**** When floating bus stops are not employed.*

Any questions so far?

CHAPTER 5

PLANNING & POLICIES REVIEW

Planning & Policies Review

The plans and policy documents reviewed:

2011 Bike Master Plan

Connect Dallas (Strategic Mobility Plan - 2021)

Dallas 360 Plan (2017)

Vision Zero Dallas Action Plan (2022)

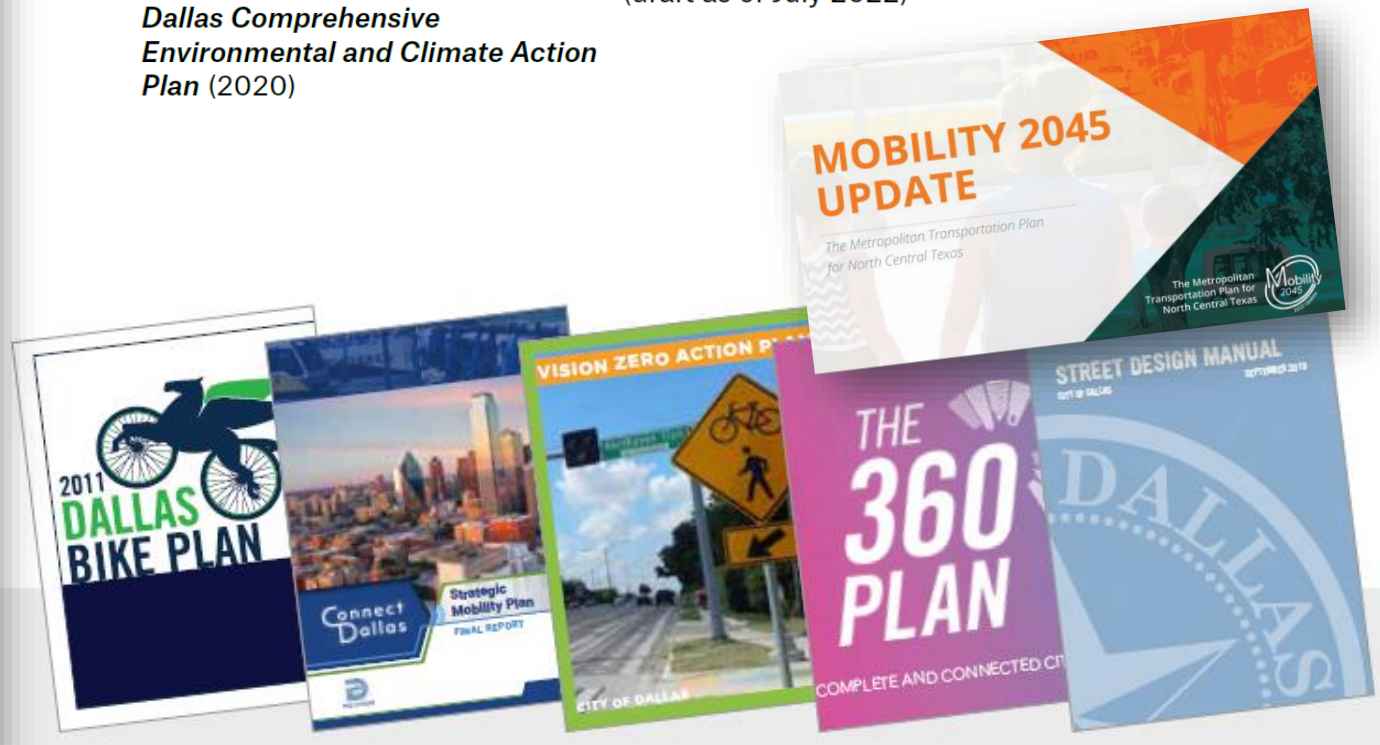
Dallas Comprehensive Environmental and Climate Action Plan (2020)

Dallas Development Code

Dallas Street Design Manual (2019)

Dallas Complete Streets Design Manual (2016)

Bike Signals Policy (draft as of July 2022)



CHAPTER 5

PLANNING & POLICIES REVIEW

Policy Recommendations

1. Enhance the coordination of staff across various departments and partner agencies

2. Require developers during permitting to reconstruct bike facilities and amenities directly affected by the development

3. Evaluate the use of green paint for all future on-road bike facilities

CHAPTER 5

PLANNING & POLICIES REVIEW

Policy Recommendations

4

Implement low-cost & quick-build modifications to provide short-term safety benefit before long-term projects are constructed

5

Evaluate all roadway resurfacing or reconstruction (and similar) projects for corresponding bike network projects.

CHAPTER 5

PLANNING & POLICIES REVIEW

Action Item #1

Moving forward, the City should use a standardized methodology for identifying, prioritizing, and implementing bike improvements consistent with this Plan's process

Action Item #2

Review and enhance the public messaging of Vision Zero and safety for all transportation modes.

Action Item #3

Bike lanes should be maintained as much if not more than the car lanes they're adjacent to.

Action Item #4

Continue to collaborate with partner department and agencies to further develop a cross-functional network of bike-friendly policies across jurisdictions and disciplines.

Any questions so far?

CHAPTER 6

IMPLEMENTATION & NEXT STEPS

Funding Opportunities

- Budget
- P3s
- Grants

CHAPTER 6

IMPLEMENTATION & NEXT STEPS

Funding Opportunities

Budget

P3s

Grants

Recommended
bike spend per resident
(based on national average)

$3.25 – $5.00 *(aspirational)*

Current Dallas spend

$1.92 / resident

$2.5M total annually

Recommended Dallas spend

$3.25 – $5.00 / resident

$4.24M – $6.52M total annually

CHAPTER 6

IMPLEMENTATION & NEXT STEPS

Funding Opportunities

Budget

P3

Grants

Public/Private Partnerships

Contractual agreements between a public agency and a private entity that allow for greater private participation in the delivery of projects

CHAPTER 6

IMPLEMENTATION & NEXT STEPS

Funding Opportunities

Budget

P3

Grants

	SHORT Term Project <2 Years	LONG Term Project >2 Years
Small Budget	Neighborhood Associations Community Improvement Districts Crowdsourcing Non-Profit Grants Impact Fees Infrastructure bonds Local taxes (General Fund) Local health departments Foundation grants Individual donors League of American Bicyclists Spark Grant People for Bikes Community Grant Program	Federal Transportation Funds Capital Inprovement budget funds State Programs: • Texas Department of Transportation • Recreaction Trails Program (Department of Natural Resources) • Community Development Block Grant (CDBG) • Highway Safety Improvements Program (HSIP) • Safe Routes to School (SRTS) • Safe Streets for All (SS4A) • Transportation Alternatives (TA) Set-Aside Program
Big Budget	Foundation grants Individual donors Community Improvement Districts Public-Private Partnerships Infrastructure bonds Local taxes (General Fund) League of American Bicyclists Spark Grant People for Bikes Community Grant Program	Federal Transportation Funds Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Reconnecting Communities Program (RCP) Safe Streets for All (SS4A) Thriving Communities Program (TCP)

CHAPTER 6

IMPLEMENTATION & NEXT STEPS

	SHORT Term Project <2 Years	LONG Term Project >2 Years
Small Budget	Neighborhood Associations Community Improvement Districts Crowdsourcing Non-Profit Grants Impact Fees Infrastructure bonds Local taxes (General Fund) Local health departments Foundation grants Individual donors League of American Bicyclists Spark Grant People for Bikes Community Grant Program	Federal Transportation Funds Capital Inprovement budget funds State Programs: • Texas Department of Transportation • Recreaction Trails Program (Department of Natural Resources) • Community Development Block Grant (CDBG) • Highway Safety Improvements Program (HSIP) • Safe Routes to School (SRTS) • Safe Streets for All (SS4A) • Transportation Alternatives (TA) Set-Aside Program
Big Budget	Foundation grants Individual donors Community Improvement Districts Public-Private Partnerships Infrastructure bonds Local taxes (General Fund) League of American Bicyclists Spark Grant People for Bikes Community Grant Program	Federal Transportation Funds Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Reconnecting Communities Program (RCP) Safe Streets for All (SS4A) Thriving Communities Program (TCP)

Funding Opportunities

ADMINISTRATION	ESTIMATED LOCAL MATCH	ELIGIBLE PROJECT CATEGORIES/TYPES	CONSIDERATIONS FOR COMPETITIVENESS
RAISE – Rebuilding American Infrastructure with Sustainability and Equity			
USDOT (applications are coordinated with NCTCOG)	Minimum 20% unless located in an Area of Persistent Poverty (APP), or located in a Historically Disadvantaged Community (HDC) Minimum RAISE grant award is $5M; no maximum	**Categories** **Planning Projects** – Planning, preparation (including NEPA), or design **Capital Projects** – Right-of-way acquisition and design. **Types** • Bike lanes (on road & separated) • Recreational trails • Shared use paths / transportation trails • Signs, signals, and signal improvements • Signing (route designation, directional, & wayfinding) • Traffic calming	❑ What connections does this project have to the broader network? Does this fill a significant gap in the current bike network? ❑ Does this project connect to transit? ❑ Can workforce elements be included (such as requiring work be performed by Dallas residents or reserving work for journey-level positions)? ❑ Does this project address a significant safety issue? ❑ Is this project in an Area of Persistent Poverty (APP) or a Historically Disadvantaged Community (HBC)? ❑ Does this project contribute to broader revitalization and economic development efforts?

CHA

IM[illegible]
& NEXT STEPS

CHAPTER 6

IMPLEMENTATION & NEXT STEPS

Phasing

Prioritization Criteria

STAKEHOLDER INPUT

Accounting for comments received by the BAC and TAC stakeholder committees.

CONSTRAINTS

Accounting for project complexity and planning-level opinions of probable construction cost for each project.

OPPORTUNITIES

Accounting for projects that coincide with previously programmed roadway improvements and projects that were specifically physically separated or trail facility types (a reflection of public input).

SAFETY

Accounting for the City's High Injury Network (HIN), previously recorded fatal and serious injury bicycle crashes, and a comparison of level of traffic stress (from existing conditions analysis) with intersections.

EXISTING CONDITIONS

Accounting for upgrades to protected/separated facility types for existing non-separated facilities on roads with high levels of traffic stress.

DEMAND

Accounting for high active trip potential areas (from existing conditions analysis) and projects that specifically provide connection to the existing trail network (a reflection of public input).

CONNECTIVTY

Accounting for new connections to the existing bike network and new/improved connections to DART rail transit.

EQUITY

Accounting for equity need areas (from existing conditions analysis).

PUBLIC INPUT

Accounting for favorable public reactions to proposed projects during Phase II engagement.

CHAPTER 6

IMPLEMEN
& NEXT STE

STAKEHOLDER INPUT

Accounting for comments received by the BAC and TAC stakeholder committees.

CONSTRAINTS

Accounting for project complexity and planning-level opinions of probable construction cost for each project.

OPPORTUNITIES

Accounting for projects that coincide with previously programmed roadway improvements and projects that were specifically physically separated or trail facility types (a reflection of public input).

SAFETY

Accounting for the City's High Injury Network (HIN), previously recorded fatal and serious injury bicycle crashes, and a comparison of level of traffic stress (from existing conditions analysis) with intersections.

EXISTING CONDITIONS

Accounting for upgrades to protected/separated facility types for existing non-separated facilities on roads with high levels of traffic stress.

DEMAND

Accounting for high active trip potential areas (from existing conditions analysis) and projects that specifically provide connection to the existing trail network (a reflection of public input).

CONNECTIVTY

Accounting for new connections to the existing bike network and new/improved connections to DART rail transit.

EQUITY

Accounting for equity need areas (from existing conditions analysis).

PUBLIC INPUT

Accounting for favorable public reactions to proposed projects during Phase II engagement.

CHAPTER 6

IMPLEMENTATION & NEXT STEPS

Short Term

5-Year Action Plan

15 PRIORITY CAPITAL PROJECTS

LOCATION	STARTING TERMINI	ENDING TERMINI	LENGTH (MI)	PROPOSED FACILITY TYPE	OPINION OF PROBABLE CONSTRUCTION COST (Cost Estimate)
Martin Luther King Jr / Cedar Crest Blvd	Fair Park	Stella Ave	3.7	Physically Separated	$1,910,956.00 - $2,336,864.00
Peak St	Cabell Dr	Parry Ave	1.9	Physically Separated	$971,408.00 - $1,080,506.00
Maple Ave	Empire Central	Throckmorton St	2.7	Visually Separated	$302,161.00
Community Dr	Northwest Hwy	Webb Chapel Ext	0.6	Visually Separated	$51,778.00
S Beacon St	Columbia Ave	East Grand Ave	0.7	Visually Separated	$51,600
Timberline Dr	Lombardy Ln	W Northwest Hwy	1.0	Bike Boulevard	$174,240.00
Pine St / Pine Spring Conn	Botham Jean Blvd	Lagow St	2.0	Visually Separated	$186,000.00
S Malcolm X Blvd	S Hall St	Else Faye Heggins St	2.3	Visually Separated	$216,632.00
Sylvan Ave	Canada Dr	Fort Worth Ave	1.1	Physically Separated	$667,512.00 - $819,096.00
N Beckley Ave	Woodall Rodgers Fwy	N. Zang Blvd	1.6	Physically Separated	$960,352.00 - $1,070,595.50
Lamar St	Continental Ave	Houston St	0.2	Physically Separated	$70,208.00 - $83,983.00
Ewing Ave	Clarendon Dr	Saner Ave	2.0	Visually Separated	$200,200.00
Kiest Blvd	Polk St	Cedar Crest Blvd	5.3	Physically Separated	$2,841,416.00
Meandering Way	Preston Ridge Trail	Cliff Brook Dr	0.3	Visually Separated	$29,767.00
W 7th Ave	N Rosemont Ave	Beckley Ave	1.5	Bike Boulevard	$156,200.00
				TOTAL	$9,601,038.50

LOCATION	STARTING TERMINI	ENDING TERMINI	LENGTH (MI)	PROPOSED FACILITY TYPE	OPINION OF PROBABLE CONSTRUCTION COST (Cost Estimate)
Martin Luther King Jr / Cedar Crest Blvd	Fair Park	Stella Ave	3.7	Physically Separated	$1,910,956.00 - $2,336,864.00
Peak St	Cabell Dr	Parry Ave	1.9	Physically Separated	$971,408.00 - $1,080,506.00
Maple Ave	Empire Central	Throckmorton St	2.7	Visually Separated	$302,161.00
Community Dr	Northwest Hwy	Webb Chapel Ext	0.6	Visually Separated	$51,778.00
S Beacon St	Columbia Ave	East Grand Ave	0.7	Visually Separated	$51,600
Timberline Dr	Lombardy Ln	W Northwest Hwy	1.0	Bike Boulevard	$174,240.00
Pine St / Pine Spring Conn	Botham Jean Blvd	Lagow St	2.0	Visually Separated	$186,000.00
S Malcolm X Blvd	S Hall St	Else Faye Heggins St	2.3	Visually Separated	$216,632.00
Sylvan Ave	Canada Dr	Fort Worth Ave	1.1	Physically Separated	$667,512.00 - $819,096.00
N Beckley Ave	Woodall Rodgers Fwy	N. Zang Blvd	1.6	Physically Separated	$960,352.00 - $1,070,595.50
Lamar St	Continental Ave	Houston St	0.2	Physically Separated	$70,208.00 - $83,983.00
Ewing Ave	Clarendon Dr	Saner Ave	2.0	Visually Separated	$200,200.00
Kiest Blvd	Polk St	Cedar Crest Blvd	5.3	Physically Separated	$2,841,416.00
Meandering Way	Preston Ridge Trail	Cliff Brook Dr	0.3	Visually Separated	$29,767.00
W 7th Ave	N Rosemont Ave	Beckley Ave	1.5	Bike Boulevard	$156,200.00
				TOTAL	$9,601,038.50

CHAPTER 6

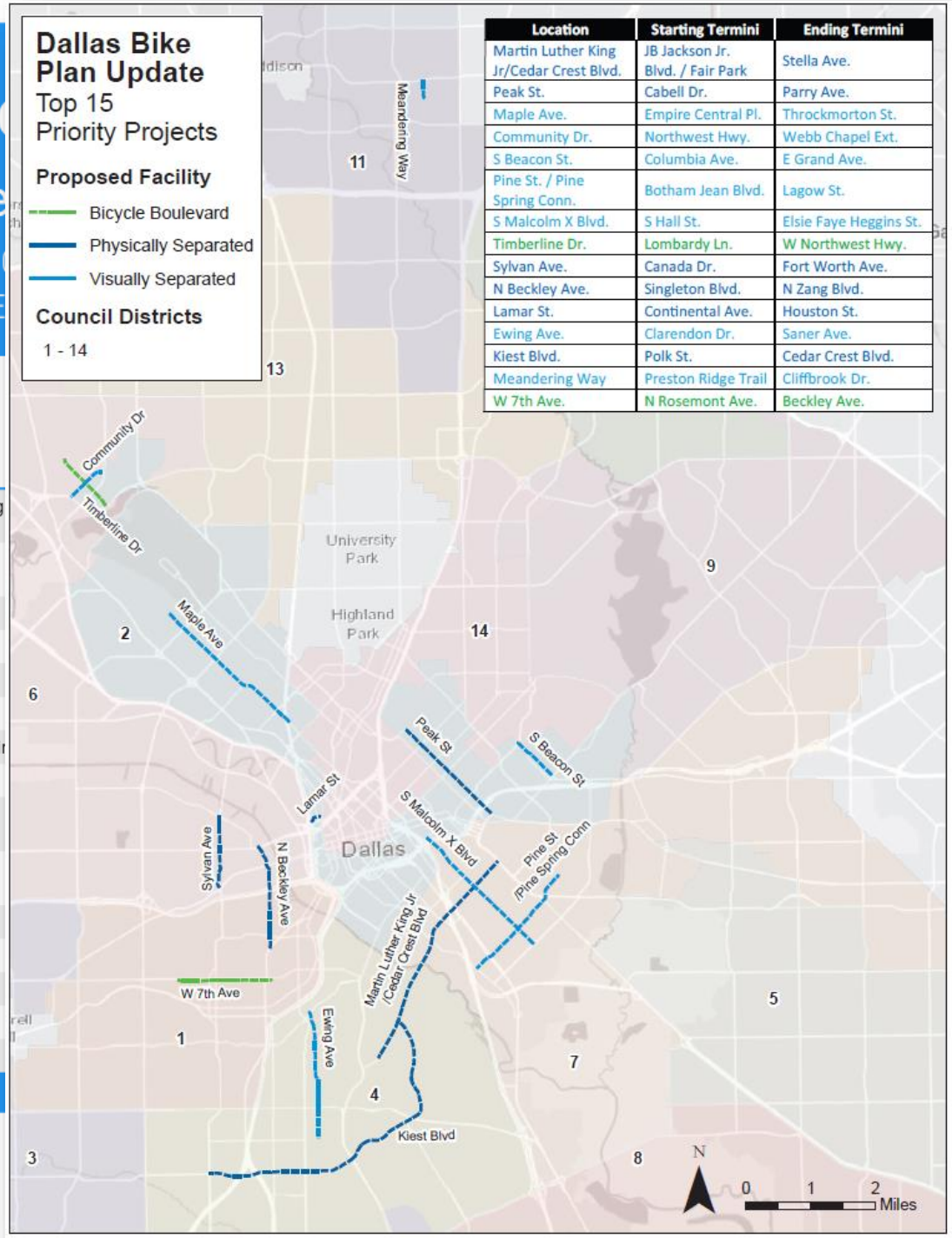
IMPLEMENTATION & NEXT STEPS

Sh

5-Ye

15 PRI

PROJE



Location	Starting Termini	Ending Termini
Martin Luther King Jr/Cedar Crest Blvd.	JB Jackson Jr. Blvd. / Fair Park	Stella Ave.
Peak St.	Cabell Dr.	Parry Ave.
Maple Ave.	Empire Central Pl.	Throckmorton St.
Community Dr.	Northwest Hwy.	Webb Chapel Ext.
S Beacon St.	Columbia Ave.	E Grand Ave.
Pine St. / Pine Spring Conn.	Botham Jean Blvd.	Lagow St.
S Malcolm X Blvd.	S Hall St.	Elsie Faye Heggins St.
Timberline Dr.	Lombardy Ln.	W Northwest Hwy.
Sylvan Ave.	Canada Dr.	Fort Worth Ave.
N Beckley Ave.	Singleton Blvd.	N Zang Blvd.
Lamar St.	Continental Ave.	Houston St.
Ewing Ave.	Clarendon Dr.	Saner Ave.
Kiest Blvd.	Polk St.	Cedar Crest Blvd.
Meandering Way	Preston Ridge Trail	Cliffbrook Dr.
W 7th Ave.	N Rosemont Ave.	Beckley Ave.

LOCATION	F PROBABLE CTION COST ost Estimate)
Martin Luther King Cedar Crest Blvd	,910,956.00 - $2,336,864.00
Peak St	$971,408.00 - $1,080,506.00
Maple Ave	$302,161.00
Community Dr	$51,778.00
S Beacon St	$51,600
Timberline Dr	$174,240.00
Pine St / Pine Sprir	$186,000.00
S Malcolm X Blvd	$216,632.00
Sylvan Ave	$667,512.00 - $819,096.00
N Beckley Ave	$960,352.00 - $1,070,595.50
Lamar St	- $83,983.00
Ewing Ave	$200,200.00
Kiest Blvd	$2,841,416.00
Meandering Way	$29,767.00
W 7th Ave	$156,200.00
	$9,601,038.50

CHAPTER 6

IMPLEMENTATION & NEXT STEPS

Implementation Recommendations

- Coordination with Public Works
- Interdepartmental & Interagency Staff-Led Working Group
- Resident-Led Working Group

CHAPTER 6

IMPLEMENTATION & NEXT STEPS

Measures for Successful Implementation

Any final quick questions?

Time for Q&A!

Gresham Smith

BICYCLE ADVISORY COMMITTEE (BAC)
Meeting #5 Summary & Discussion Notes

DALLAS BIKE PLAN
Gresham Smith Project No. 45505.00

Meeting Date:	March 14, 2023
Discussion:	Project Updates, Proposed Bicycle Network Review, Review of Candidate Priority Projects, and of Proposed Policy Recommendations.

MEETING SUMMARY:

1. **Opening and Meeting Introduction:** Gresham Smith Planner, Amanda Sapala, opened the meeting and reviewed the project process. She outlined the days meeting and noted that it was particularly important for the group to provide feedback during the days meeting.
2. **Project Updates:** Amanda provided a summary of the project team's progress. She noted the that efforts were under way in preparing the final plan for review.
3. **Updated Proposed Bicycle Network (Second Draft):** Amanda introduced the updated bicycle network and updated the committee on what changes have been made. Amanda then introduced Erin to review in detail the changes and processes for updating the second draft of the bicycle network.
4. **Candidate Priority Projects and Discussion:** Amanda reviewed the prioritization factors, variables, and scoring methodology for the top candidate priority projects. She provided and overview of how the scoring variables and scoring methodology was arrived at, noting that the prioritization factors were influenced by public engagement and input from city staff.

   Before reviewing the prioritization factors, Ms. Sapala invited the group to share their initial thoughts and opinions on the top 15 priority projects.

   Ryan noted that he was very appreciative of the work that has been done thus far on the project. He stated that the bicycle network and recommended projects looked good and that he was excited about the implementation process.

   Doug asked some questions regarding the prioritization process and what details and data were included in the prioritization factors. His questions were answered later in the presentation with no additional follow-up needed.

   John, Gabriel, and Lane, all noted that they had trouble viewing the map to review the proposed candidate priority projects and would like to see a more legible and zoomed in map for the proposed network, possibly a web version of the map. Amanda and the project team acknowledged this concern and committed to review alternative methods to present the map to allow greater legibility.

Amanda noted that the project team would need responses to the map by Friday, March 17th, to incorporate this feedback into the next round of project analysis.

After the initial round of questions, Amanda presented the top 15 priority projects and reviewed the prioritization factors, variables, and analysis process. She reviewed how input during the second round of public engagement and surveys influence the prioritization factors and how those factors were scored. She noted that the process needed to be systematic, quantifiable, and repeatable to ensure consistency over time and that the plan would be living and flexible to changes in priority from elected officials.

After the presentation, Phil discussed the process and noted that the prioritization process made sense and would be beneficial when discussing these projects with city staff and elected officials and thanked the project team for their work.

John discussed the high injury network and clarified that the High Injury Network used bike and pedestrian crash data and not vehicle crash data.

John then discussed the priority projects and asked why only the top 15 were being presented and what funding sources would be used to complete the project list.

Kathryn reviewed the process and purpose of the top 15 priority projects and explained that '15' was chosen to allow the project team to provide more detailed investigates these projects as a part of engagement plan and would allow the team to showcase the types of projects without running over the project budget. She also discussed that projects were not only chosen just to be included in a bond package but also part of the city's yearly capital improvements budget.

Lee asked questions regarding project funding and if projects would be funded city wide, or district by district. He also had some questions regarding projects not being equally and equitably distributed. He noted that 5-6 council districts may not contain any projects at all and that it may be difficult to get council buy in without projects in every District. He asked for a map with the projects overlayed on top of council Districts. Lee also stated that facilities should be built where the ridership is and not a "build it, and they will come mindset" and that "priority projects should be applied city wide funding".

Phillip asked for City Staff and the Gresham Smith team to further elaborate and drive home the point for why these routes should be approved and funded when discussing the projects with Council.

Amanda reviewed the next steps for the project and the remaining pieces for the bike plan document.

Kathryn clarified that the next meeting is planned to be a combined BAC/TAC meeting and that much of the information included in the plan has already been reviewed by the BAC committee and the final plan will be compilation of that information and the final network and priority projects list.

5. **Proposed Policy Recommendations:**

This section was not discussed during the meeting, as time did not allow. Any remaining questions from the BAC members regarding any proposed policies or policy changes will be conducted via email or at the final joint meeting.

Prepared by: Andrew Williams
Transportation Planner, Gresham Smith

DALLAS BIKE PLAN UPDATE
BICYCLE ADVISORY COMMITTEE

Meeting Date:	Tuesday, March 14, 2023
Meeting Time:	10:30 AM – 11:30 AM CST
Meeting Location:	Virtual – Microsoft Teams (see email invite)
Project Manager:	Jessica Scott, AICP, LCI – City of Dallas Department of Transportation
Meeting Facilitator:	Amanda Sapala, AICP – Gresham Smith
Presentation By:	Erin David, AICP – Alta

MEETING #6 AGENDA

1. Project Updates
2. Updated Proposed Bicycle Network (Second Draft)
3. Candidate Priority Projects
4. Proposed Policy Recommendations

Dallas Bike Plan

Bicycle Advisory Committee

March 14, 2023

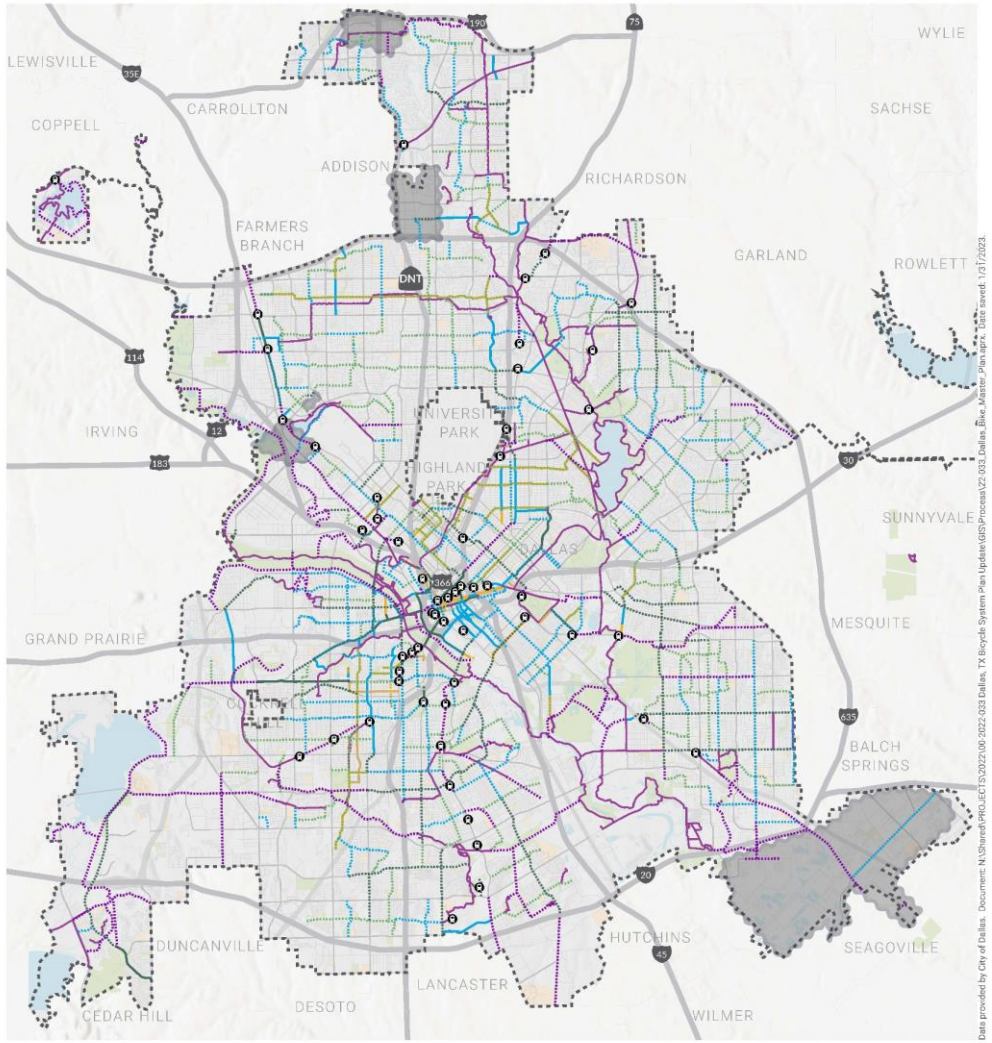
Purpose of Bicycle Advisory Committee

MEETING SCHEDULE

1. Objectives, Scope of Work, Project Schedule, and Public Engagement Plan (April 2022)
2. Review of Existing Conditions; Guiding principles/framework for developing the new bike network; Vision & Goals SWOT exercise. (May 2022)
3. Review Bike Network Development Framework. (September 2022)
4. Draft Bicycle Network (October 2022)
5. **Second Draft Network & Candidate Priority Projects (March 2023)**

Bike Network Development

SECOND DRAFT NETWORK



DRAFT NETWORK REVISIONS

DALLAS BICYCLE PLAN UPDATE

Central Planning Area Extent

alta Gresham Smith

Network Recommendations
- Visually Separated
- Bicycle Boulevard
- Physically Separated
- Trail
- Bicycle Route
- Remove/ Consolidate Route
- Further Study Needed

Existing and Funded Bike Facilities
- Visually Separated
- Physically Separated
- Trail
- Bicycle Route
- Rail Stations
- Water
- Schools
- Parks
- Dallas City Limits

0 2 4 MILES

N

Network Changes

- Incorporated additional planned and funded projects from partner agencies (e.g., Dallas County)

- Revisions based on feasibility assessment, including volumes, roadway width, and available right-of-way
  - Change frequently results in selection of parallel corridor or modification to facility type

- Review and incorporation of public feedback
  - Support for routes/network
  - Requests that were already addressed through guidance provided by City/TAC/BAC
  - General connections without specific routes

Bike Network Prioritization

SELECTING THE TOP 15 PROJECTS

Prioritization Factors

- Stakeholder Input
- Constraints
- Opportunities
- Safety
- Existing Conditions
- Demand
- Connectivity
- Equity
- Public Input

Factor 1
Stakeholder Input

- Variable 1a: TAC Request
- Variable 1b: BAC Request

Factor 2 Constraints

- Variable 2a: Complexity
- Variable 2b: Opinion of Probable Construction Cost

Factor 3 Opportunities

- Variable 3a: Goes-With Planned Roadway Improvement
- Variable 3b: Physically Separated Facility or Trail Facility

Factor 4
Safety

- Variable 4a: Segment is on Vision Zero HIN
- Variable 4b: Segment experienced previous fatality/severe injury
- Variable 4c: Provides connection through/across high Level of Traffic Stress (LTS 3 or 4) intersecting roadway

Factor 5
Existing Conditions

- Variable 5a: Upgrade of an existing non-separated facility on LTS 3 or 4 to a protected/separated facility type

Factor 6 Demand

- Variable 6a: Segment passes through high active trip potential area
- Variable 6b: Specifically connects to existing trail network

Factor 7
Connectivity

- Variable 7a: Connects to existing bike facility
- Variable 7b: Improves or creates new, low-stress connection to transit

Factor 8
Equity

- Variable 8a: Segment passes through equity need area

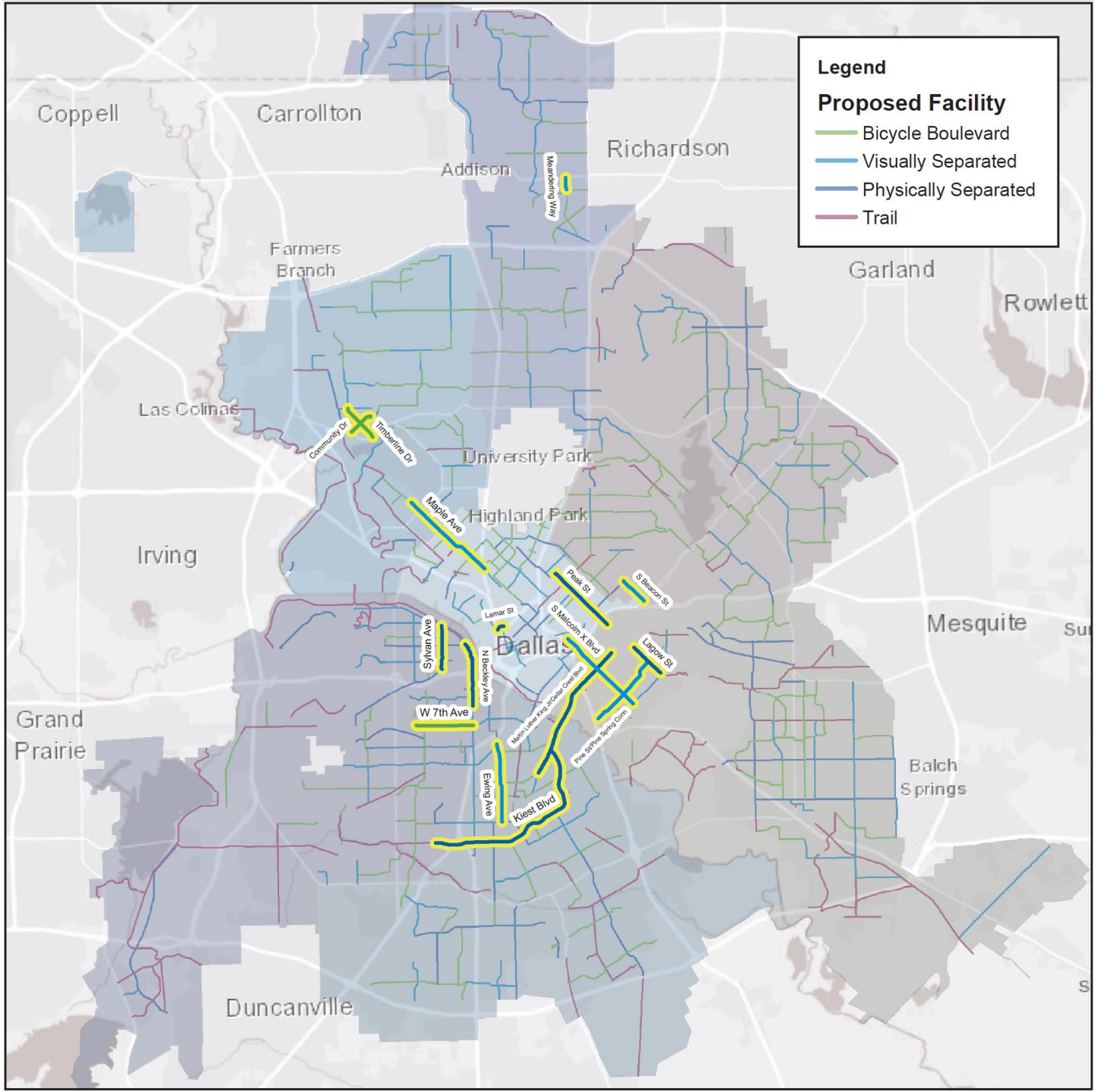
Factor 9
Public Input

- Variable 9a: Favorable Public Reaction

PROPOSED PRIORTY PROJECTS FOR BOND FUNDING

PRIORITY RANK	ID	LOCATION	FACILITY TYPE
1	18	Martin Luther King Jr/Cedar Crest Blvd	Physically Separated
2	72	Peak St	Physically Separated
3	295	Maple Ave	Visually Separated
3	398	Lagow St	Physically Separated
6	578	Community Dr	Visually Separated
7	315	S Beacon St	Visually Separated
10	163	Timberline Dr	Bicycle Boulevard
10	38	Pine St/Pine Spring Conn	Visually Separated
10	142	S Malcolm X Blvd	Visually Separated
10	254	Sylvan Ave	Physically Separated
10	308	N Beckley Ave	Physically Separated
10	687	Lamar St	Physically Separated
17	19	Ewing Ave	Visually Separated
17	265	Kiest Blvd	Physically Separated
17	419	Meandering Way	Visually Separated
26	392	W 7th Ave	Bicycle Boulevard

PROPOSED PRIORTY PROJECTS



Next Steps

CUT SHEETS, COSTS, FUNDING, PHASING, & IMPLEMENTATION

Timeline & Next Steps

Draft Final Network & Priority Projects

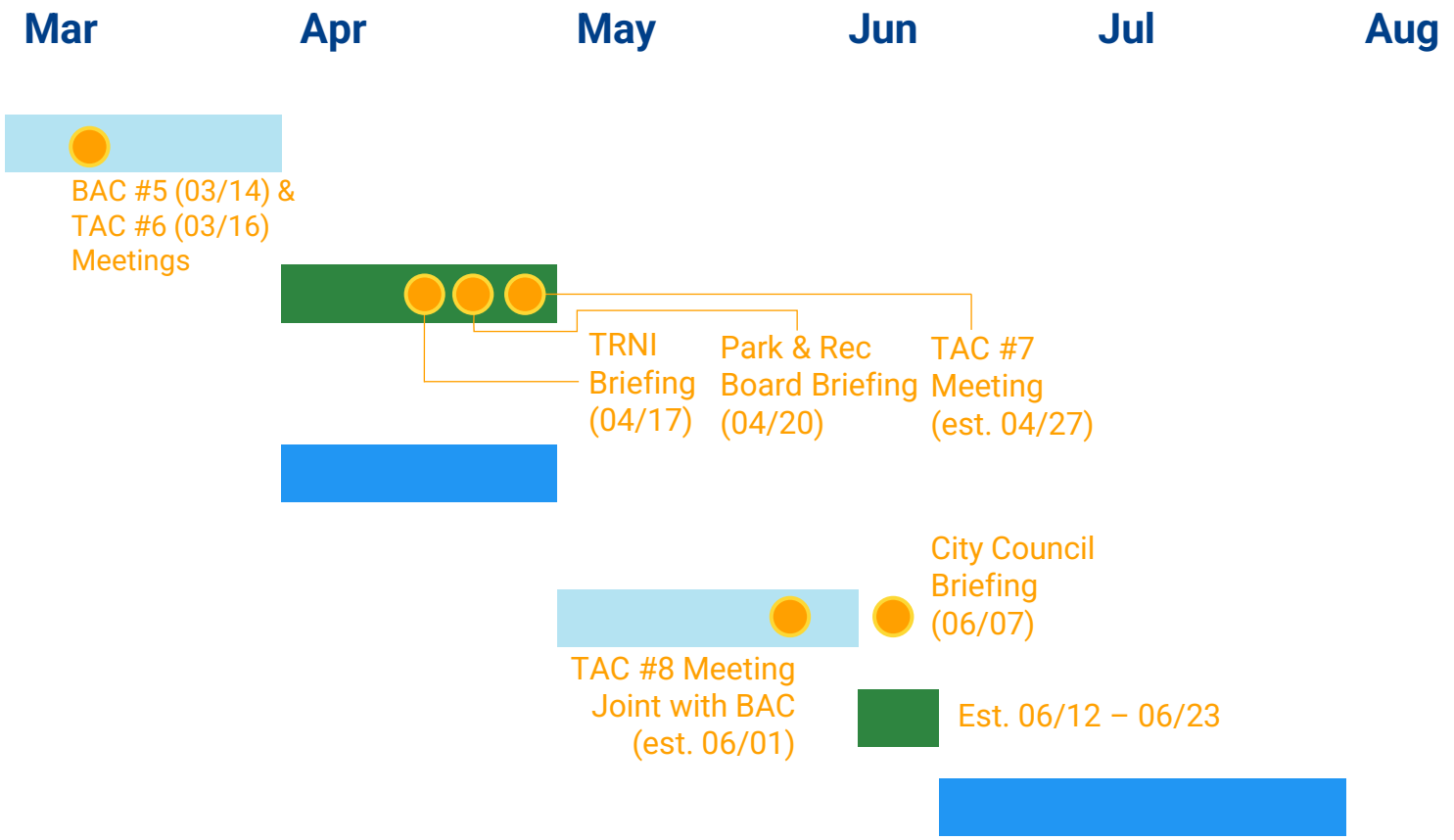
Project Cut Sheets & Cost Estimates

Funding Analysis, Phasing & Implementation Recommendations

Draft Plan

Phase III Virtual Engagement

Final Plan



Gresham Smith

TECHNICAL ADVISORY COMMITTEE (TAC)
Meeting #6 Summary & Discussion Notes

DALLAS BIKE PLAN
Gresham Smith Project No. 45505.00

Meeting Date:	March 16, 2023
Discussion:	Project Updates, Proposed Bicycle Network Review, Review of Candidate Priority Projects, and of Proposed Policy Recommendations.

MEETING SUMMARY:

1. **Opening and Meeting Introduction:** Gresham Smith Planner, Amanda Sapala, opened the meeting and reviewed the project progress. She outlined the days meeting and noted that it was particularly important for the group to provide feedback during the priority project discussion portion of the meeting.

2. **Project Updates:** Amanda provided a summary of the project team's progress. She noted the that efforts were under way in preparing the final plan for review.

3. **Updated Proposed Bicycle Network (Second Draft):** Amanda introduced the updated bicycle network and updated the committee on what changes have been made. Amanda then introduced Erin to review in detail the changes and processes for updating the second draft of the bicycle network.

   After Erin reviewed the updated network, Tim asked about the public engagement events and whether the input from those events had been considered for the updated network. Both Erin and Jessica confirmed that the comments received during the engagement process were reviewed and analyzed for their appropriateness to be included into the network. Erin reviewed that some routes suggested may have not met the criteria established to be included as a new facility.

4. **Candidate Priority Projects and Discussion:** Amanda reviewed the prioritization factors, variables, and scoring methodology for the top 15 priority project candidates. She provided and overview of how the scoring variables and scoring methodology was arrived at, noting that the prioritization factors were influenced by public engagement and input from city staff.

   Tonya asked about the opportunities category and whether interagency projects and funding programs had been considered for the priority project list. Amanda noted that yes this was considered, and the project team used all available data provided to be included in the prioritization process. However, this data was limited to the cities work plan and maintenance schedules. Amanda also noted that if Tonya had data regarding upcoming projects from her department, to share that information and it will be reviewed against the current list of projects.

   Jessica noted that due to limited time in the days meeting, to write down all questions to be forwarded to the project team for a response.

Kevin noted concerns about the implementation process and the city's current process for corridor improvement plans. Jessica noted that this was also a concern and that there was work being done within the department to improve and expedited these processes.

Patricio asked for additional mapping information to allow him to review with his team.

Kevin also noted trouble interpreting the map and the mapping symbols. Erin reviewed the mapping symbology and clarified that the dashed lines were the proposed facility types.

5. **Proposed Policy Recommendations:**

This section was not discussed during the meeting, as time did not allow. Any remaining questions from the BAC members regarding any proposed policies or policy changes will be conducted via email or at the final joint meeting.

6. Meeting Wrap Up

Amanda reviewed the upcoming project schedule and discussed project next steps.

Lawrence asked for an additional map listing the priority ranking of the project to be included.

Kevin noted that Martin Luther King was a project that his department was seeking funding for and expecting to apply to available grant funding. He asked that Amanda provide the project scoring methodology and information as that will help for the funding application process.

Jared had questions regarding SM Wright and the available ROW. He noted that the sidewalks are currently being widened. And noted that this new condition creates a better connection from downtown, heading south and creating a connection to Good Latimer. He also noted that there would be an opportunity to create a new connection for a bike trail along this corridor. Erin agreed to review this connection with her team.

Kevin noted that he was not seeing some of the comments provided during the previous comment and engagement period that he was not finding in the new network and wasn't sure if those comments were received. Amanda agreed to follow up with Kevin and review previous comments captured.

Prepared by: Andrew Williams
Transportation Planner, Gresham Smith

DALLAS BIKE PLAN UPDATE
TECHNICAL ADVISORY COMMITTEE

Meeting Date:	Thursday, March 16, 2022
Meeting Time:	3:00 – 4:00 PM CST
Meeting Location:	Virtual – Microsoft Teams (see email invite)
Project Manager:	Jessica Scott, AICP, LCI – City of Dallas Department of Transportation
Meeting Facilitator:	Amanda Sapala, AICP – Gresham Smith
Presentation By:	Erin David, AICP – Alta

MEETING #6 AGENDA

1. Project Updates
2. Updated Proposed Bicycle Network (Second Draft)
3. Candidate Priority Projects
4. Proposed Policy Recommendations

Dallas Bike Plan

Technical Advisory Committee

March 16, 2023

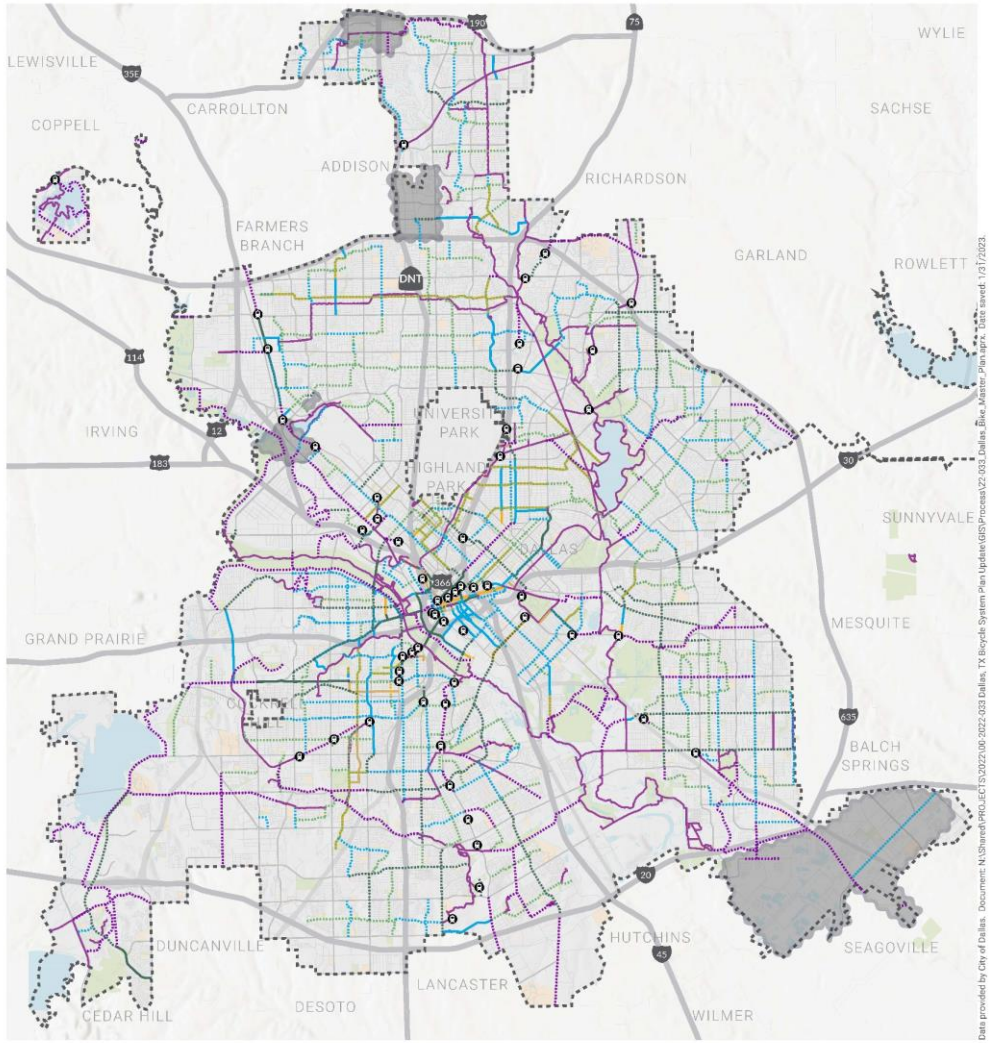
Purpose of Technical Advisory Committee

MEETING SCHEDULE

1. Project introduction. Review criteria for project development. (May 2022)
2. Review prioritization framework & principles. Provide input & recommendations. (July 2022)
3. Review bike network development framework. (August 2022)
4. Review proposed bicycle facility types (September 2022)
5. Review proposed bicycle network (November 3, 2022)
6. **Review second draft network & proposed prioritization. (March 2023)**
7. Review draft design standards. (April 2023)
8. Review draft plan. (June 2023)

Bike Network Development

SECOND DRAFT NETWORK



DRAFT NETWORK REVISIONS

DALLAS BICYCLE PLAN UPDATE

Central Planning Area Extent

alta Gresham Smith

Network Recommendations
- Visually Separated
- Bicycle Boulevard
- Physically Separated
- Trail
- Bicycle Route
- Remove/ Consolidate Route
- Further Study Needed

Existing and Funded Bike Facilities
- Visually Separated
- Physically Separated
- Trail
- Bicycle Route
- Rail Stations
- Water
- Schools
- Parks
- Dallas City Limits

0 2 4 MILES

N

Network Changes

- Incorporated additional planned and funded projects from partner agencies (e.g., Dallas County)

- Revisions based on feasibility assessment, including volumes, roadway width, and available right-of-way
  - Change frequently results in selection of parallel corridor or modification to facility type

- Review and incorporation of public feedback
  - Support for routes/network
  - Requests that were already addressed through guidance provided by City/TAC/BAC
  - General connections without specific routes

Bike Network Prioritization

SELECTING THE TOP 15 PROJECTS

Prioritization Factors

- Stakeholder Input
- Constraints
- Opportunities
- Safety
- Existing Conditions
- Demand
- Connectivity
- Equity
- Public Input

Factor 1
Stakeholder Input

- Variable 1a: TAC Request
- Variable 1b: BAC Request

Factor 2 Constraints

- Variable 2a: Complexity
- Variable 2b: Opinion of Probable Construction Cost

Factor 3 Opportunities

- Variable 3a: Goes-With Planned Roadway Improvement
- Variable 3b: Physically Separated Facility or Trail Facility

Factor 4
Safety

- Variable 4a: Segment is on Vision Zero HIN
- Variable 4b: Segment experienced previous fatality/severe injury
- Variable 4c: Provides connection through/across high Level of Traffic Stress (LTS 3 or 4) intersecting roadway

Factor 5
Existing Conditions

- Variable 5a: Upgrade of an existing non-separated facility on LTS 3 or 4 to a protected/separated facility type

Factor 6 Demand

- Variable 6a: Segment passes through high active trip potential area
- Variable 6b: Specifically connects to existing trail network

Factor 7
Connectivity

- Variable 7a: Connects to existing bike facility
- Variable 7b: Improves or creates new, low-stress connection to transit

Factor 8
Equity

- Variable 8a: Segment passes through equity need area

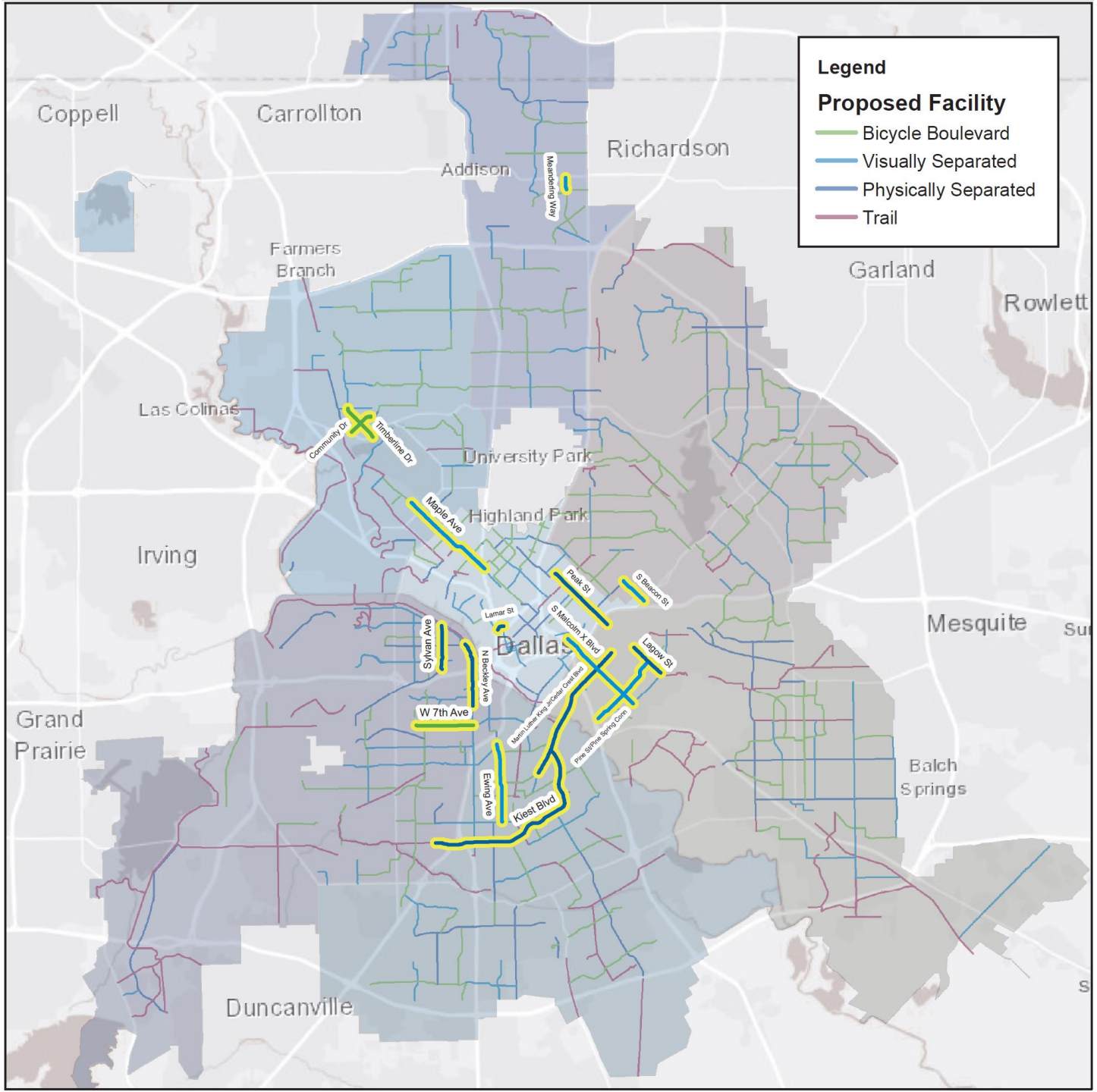
Factor 9
Public Input

- Variable 9a: Favorable Public Reaction

PROPOSED PRIORTY PROJECTS FOR BOND FUNDING

PRIORITY RANK	ID	LOCATION	FACILITY TYPE
1	18	Martin Luther King Jr/Cedar Crest Blvd	Physically Separated
2	72	Peak St	Physically Separated
3	295	Maple Ave	Visually Separated
3	398	Lagow St	Physically Separated
6	578	Community Dr	Visually Separated
7	315	S Beacon St	Visually Separated
10	163	Timberline Dr	Bicycle Boulevard
10	38	Pine St/Pine Spring Conn	Visually Separated
10	142	S Malcolm X Blvd	Visually Separated
10	254	Sylvan Ave	Physically Separated
10	308	N Beckley Ave	Physically Separated
10	687	Lamar St	Physically Separated
17	19	Ewing Ave	Visually Separated
17	265	Kiest Blvd	Physically Separated
17	419	Meandering Way	Visually Separated
26	392	W 7th Ave	Bicycle Boulevard

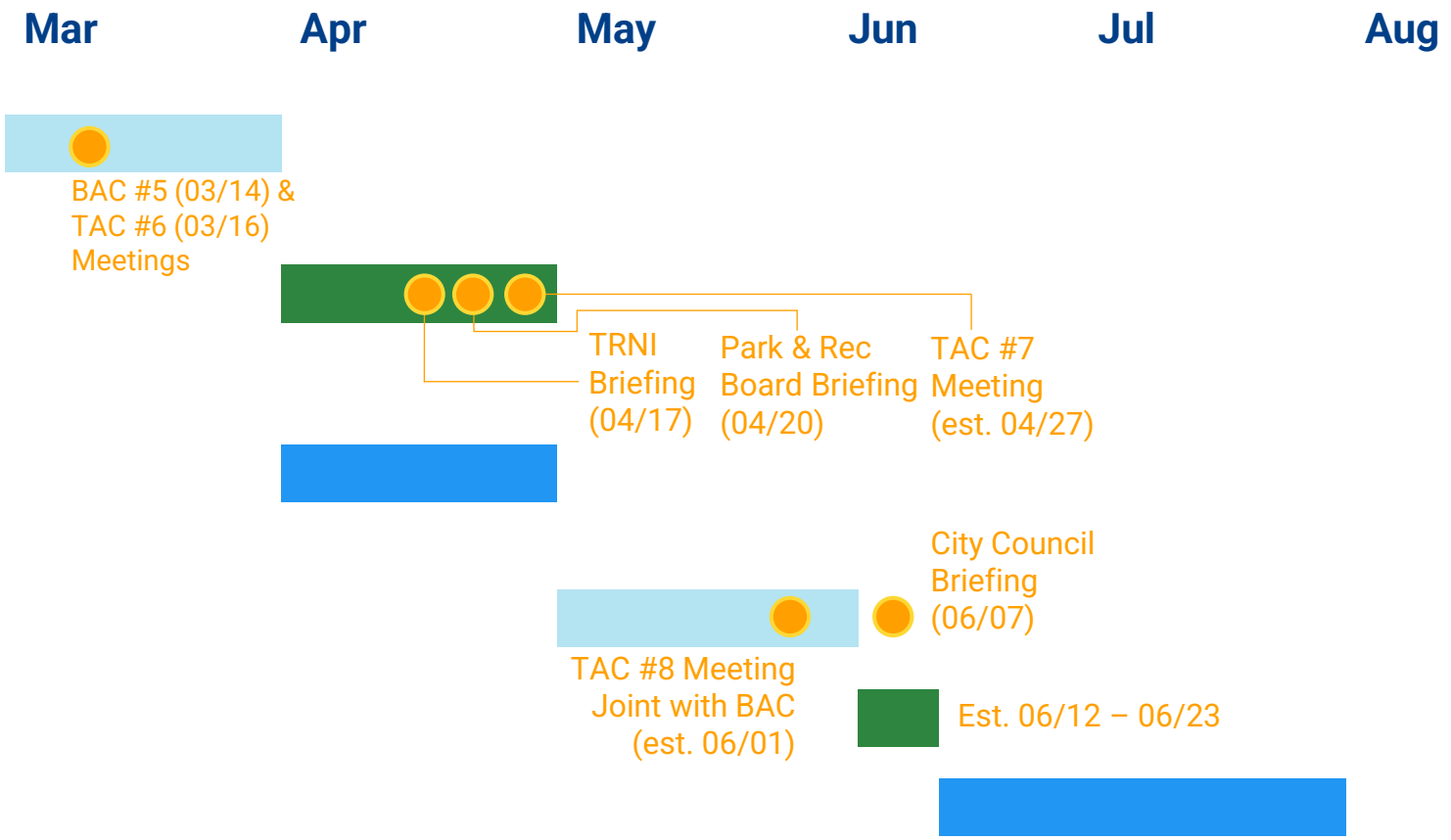
PROPOSED PRIORTY PROJECTS



Next Steps

CUT SHEETS, COSTS, FUNDING, PHASING, & IMPLEMENTATION

Timeline & Next Steps



Purpose of Technical Advisory Committee

MEETING SCHEDULE

1. Project introduction. Review criteria for project development. (May 2022)
2. Review prioritization framework & principles. Provide input & recommendations. (July 2022)
3. Review bike network development framework. (August 2022)
4. Review proposed bicycle facility types (September 2022)
5. Review proposed bicycle network (November 3, 2022)
6. **Review second draft network & proposed prioritization. (March 2023)**
7. Review draft design standards. (est. April 2023)
8. Review draft plan. (June 2023)

Gresham Smith

TECHNICAL ADVISORY COMMITTEE (TAC)
Meeting #7 Summary & Discussion Notes

DALLAS BIKE PLAN
Gresham Smith Project No. 45505.00

Meeting Date:	April 27, 2023
Discussion:	Review of Design Standards and Guideline Recommendations
	Attendance: Jessica Scott, Kathryn Rush, Greg Kern, Amanda Sapala, Andrew Williams, Kevin Kokes, Patricio Gallo, Lawrence Agu III, Eugene Edward Jr., Reema Elsaad, Haytham Hassan, Christopher Lutz, Joseph Marchione, Sherrelle Russel, Jared White, Kierra Williams, Cameron Anderson, Aurobindo Majumdar, David Nevarez, Kimberly Smith, Derek White,

MEETING SUMMARY:

1. **Opening and Meeting Introduction and Project Update:** Gresham Smith Planner, Amanda Sapala, opened the meeting and reviewed the project progress. She outlined the days meeting and noted that it was particularly important for the group to provide feedback during the priority project discussion portion of the meeting and noted that the days meeting was the seventh of eight meetings, and the topic of discussion is bicycle-friendly design standards in the city of Dallas. Amanda provided a summary of the project team's progress. She noted the that efforts were under way in preparing the final plan for review.

2. **Interactive Polling Questions:**

   Amanda asked participants to get ready with their cell phones or a second monitor as they will be using live polling questions. Amanda Sapala explained that they will be looking at design standards from various angles focusing on safety, comfort, and function, not just for cyclists but for all interdepartmental agencies with jurisdiction over the City of Dallas right of way. The participants were then asked to participate in a live poll to indicate their department representation, and a series of questions were asked about whether they knew about the city of Dallas's street design manual and the complete streets design manual.

   All participants noted that they were familiar with the Complete Streets Design Manual, but fewer were familiar with the traffic management toolkit and the standard construction details.

3. **Review of Existing Design Standard Resources:**

   Amanda reviewed various resources available for designing bike-friendly streets in the city of Dallas, referencing the Street Design Manual, which provides guidance and illustrations for different types of bike treatments and bike design applications, including intersection treatments, signal timing, and bicycle-friendly amenities like bike racks and bike shelters.

   Amanda also discussed the Standard Construction Details for the city of Dallas and the Traffic Management Toolkit available on the Dallas Department of Transportation's website. The complete streets design manual provides tables to help designers prioritize their decision-making with regard to limited right-of-way widths and recommended widths for different complete streets arrangements. The manual also includes a bike

network facilities table that guides decision-making and appropriate safety mitigation and level of treatment based on contextual street types and functional class. Chapter five of the complete streets design manual offers in-depth information on street zone design elements and bicycle-friendly St. treatments.

4. **Proposed Design Standard & Guideline Recommendations:**

During this portion, the group discussed the need for bike detection, green paint (material uses to indicate separation), integration with transit, tactical urbanism testing, bike parking, intersections, street sweeping, leaning rails. Participants were asked how they think design resources could be better integrated into the bike facility design process for the city and for consultants.

Some of the suggestions from participants included incorporating the design standards into the code, making it a requirement to use the standards as part of consulting contracts, developing specific work instructions for designing any road in Dallas, creating a City of Dallas Bike Plan Review checklist to be provided during the design phase. The project team aims to identify these needs and opportunities for design standards updates and provide new or revised design guidelines for the street design manual, based on the bike plans, facility types, and updated best practices within the industry for bicycle design standards that maximize safety and comfort.

The group discussed the use of color in bike lanes and how it can draw attention to them. While some cities use colors throughout the entire bike lane, others use it sparingly in areas they want to highlight. The use of color is beneficial, but maintenance is a concern. One of the speakers suggests incorporating markings into the concrete to make them last longer, but the maintenance of these markings must be considered in the long term. The discussion then shifted to the use of pavers and the maintenance issues that arise when a section of the facility needs to be repaired. Jared White and Christopher Lutz discussed the use of pavers in their projects, Chris noted we was no longer using pavers in his projects and instead using stamped bricks.

Jared and Patricio also discussed the need for bike facilities to be fully integrated with transit.

Lawrence also discussed using tactical urbanism, testing, and messaging campaigns to ensure project success, citing projects in other states that were built but then removed because residents were not engaged in the process and did not like the end result.

The group discussed issues related to bike lane design, including separating bike lanes from vehicle lanes, and predicting conflicts at intersections. They also mention a program that reduces parking requirements in exchange for bike racks but noted that it is not very efficient. The group briefly discusses cool ideas they've seen in other cities, such as bike leaning rails at intersections, and Kathryn suggests designing bike lanes to discourage parking in them and minimize the need for parking enforcement.

5. **Meeting Wrap Up:**

Amanda wrapped up the meeting by going over the overall project schedule and reviewing next steps for the internal project team with the group. She then thanked everyone for their time.

Prepared by: Andrew Williams
Transportation Planner, Gresham Smith

DALLAS BIKE PLAN UPDATE
TECHNICAL ADVISORY COMMITTEE

Meeting Date:	Thursday, April 27, 2023
Meeting Time:	3:00 – 4:00 PM CST
Meeting Location:	Virtual – Microsoft Teams (see email invite)
Project Manager:	Jessica Scott, AICP, LCI – City of Dallas Department of Transportation
Meeting Facilitator:	Amanda Sapala, AICP – Gresham Smith

MEETING #7 AGENDA

1. Interactive Polling Questions
2. Review of Existing Design Standard Resources
3. Proposed Design Standard & Guideline Recommendations
4. Discussion

Dallas Bike Plan

Technical Advisory Committee

April 27, 2023

Purpose of Technical Advisory Committee

MEETING SCHEDULE

1. Project introduction. Review criteria for project development. (May 2022)
2. Review prioritization framework & principles. Provide input & recommendations. (July 2022)
3. Review bike network development framework. (August 2022)
4. Review proposed bicycle facility types (September 2022)
5. Review proposed bicycle network (November 3, 2022)
6. Review second draft network & proposed prioritization. (March 2023)
7. **Review draft design standards. (April 2023)**
8. Review draft plan. (June 2023)
   *Note: Joint with Bicycle Advisory Committee (BAC)

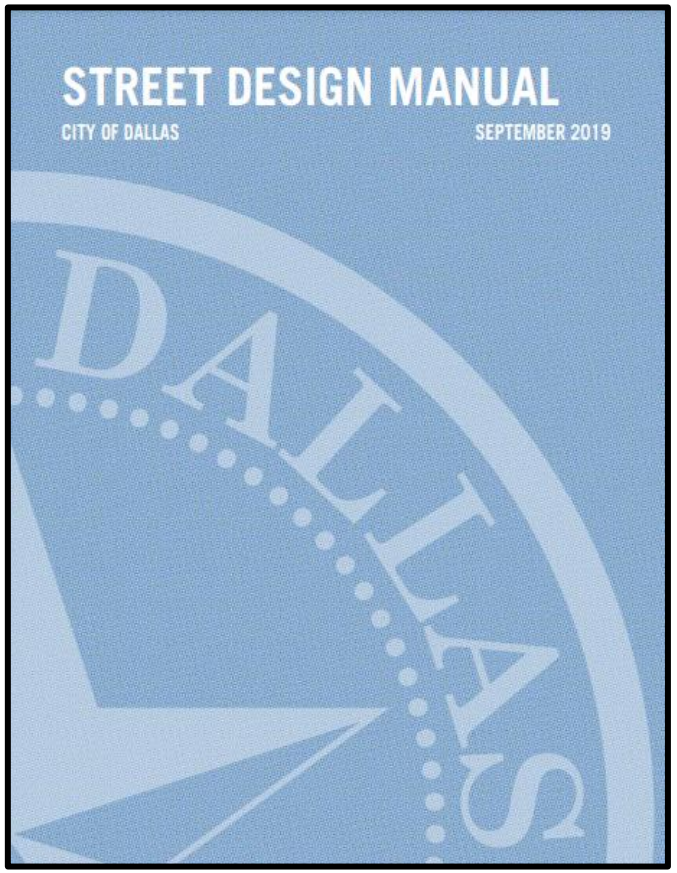
Design Standards

FOR SAFETY + COMFORT + FUNCTION

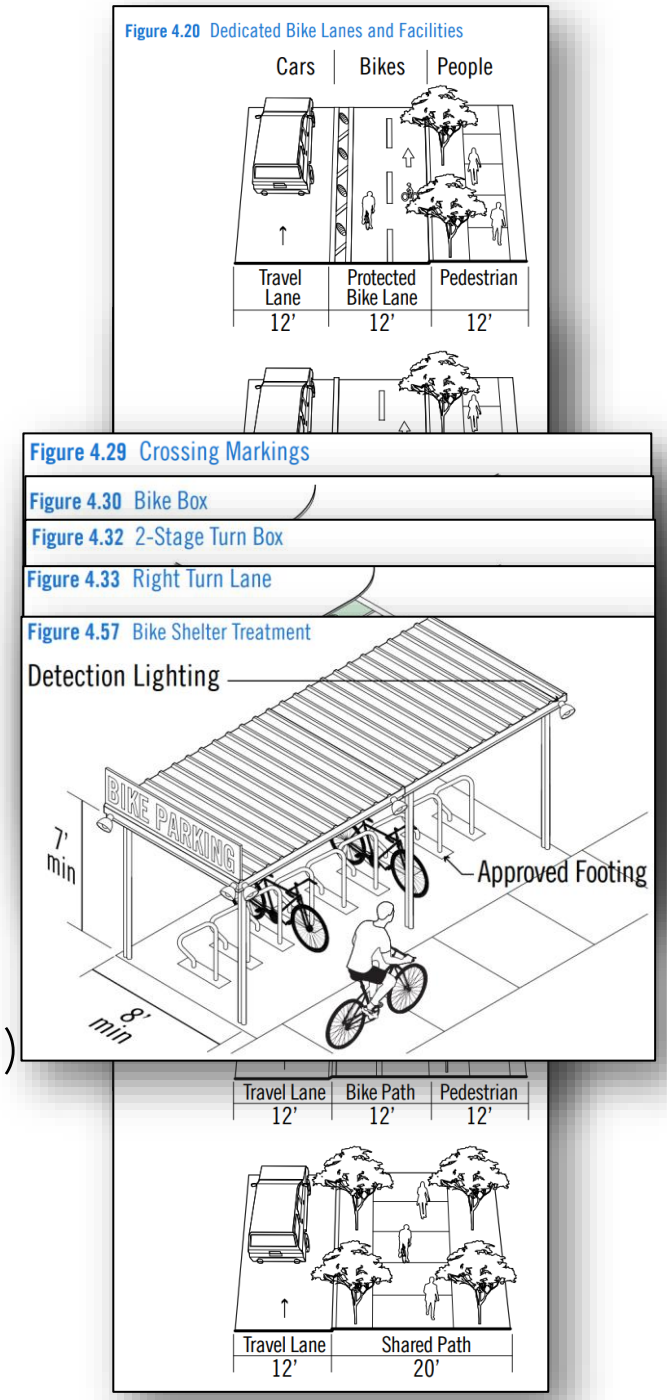
Let’s start with a live poll!

Visit www.menti.com and use code 9277 0549

Existing Resources



2.4.7 - Woonerf Streets (p. 25)
3.2.6 - Bicycle Provisions (p. 38-39)
4.3.6 - Traffic Calming Elements (p. 83-84)
4.3.7.1 - Bikeways and Facilities (p. 84-85)
4.4.5.6 - Bicycle [Intersection] Treatments (p. 104-106)
Note: 4.4.5.6.I Dedicated Bicycle Signals, cross-referenced with
4.4.5.2.E - Signal Timing (p. 100)
4.5.6.4 - Bicycle Racks (p. 137)
4.5.6.5 - Bicycle Shelters (p. 138)
6.1.4 - Bikeway Illumination Levels (p. 170)



Existing Resources

DEPARTMENT OF PUBLIC WORKS

STANDARD CONSTRUCTION DETAILS

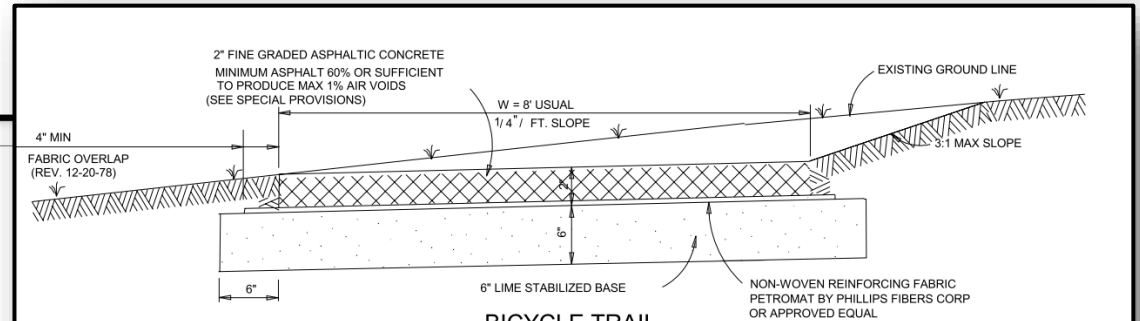
CITY OF DALLAS, TEXAS

REVISED APRIL 1997
UPDATED SEPT. 2002

RECOMMENDED FOR APPROVAL:
THIS THE _____ DAY OF _____, 1997.
ASSISTANT DIRECTOR OF PUBLIC WORKS & TRANSPORTATION

APPROVED:
THIS THE _____ DAY OF _____, 1997.
DIRECTOR OF PUBLIC WORKS & TRANSPORTATION

FILE 251D-1



BICYCLE TRAIL

TYPICAL ASPHALT SECTION

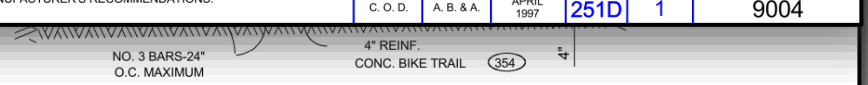
CONSTRUCTION PROCEDURES: **

1. PREPARE LIME STABILIZED BASE 25#/S.Y. (5%) USUAL.
2. SHOOT PRIME COAT 0.10 GAL./S.Y. RC-70. ALLOW TO CURE.
* 3. APPLY 0.25 GAL./S.Y. AC-10 BINDER.
4. IMMEDIATELY SPREAD FABRIC AND BROOM OR ROLL INTO ASPHALT
* 5. LAY 2" LIFT OF ASPH. CONC. IN ONE APPLICATION IMMEDIATELY IF POSSIBLE. (SEE SPECIAL PROVISION)
6. QUANTITIES OF ASPHALT AND LIME MAY BE VARIED AS DIRECTED BY THE ENGINEER AT TIME OF CONSTRUCTION.

* CATONIC EMULSION CRS-2 MAY BE USED, BUT FABRIC CAN NOT BE LAID UNTIL EMULSION CURES. QUANTITY MUST BE ADJUSTED TO PROVIDE SUFFICIENT RESIDUAL ASPHALT TO SATURATE THE REINFORCING FABRIC.

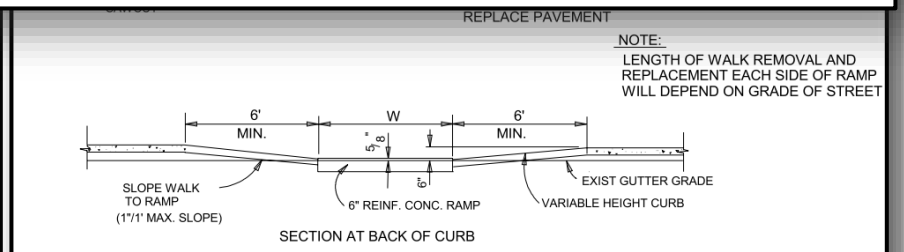
* * ASPHALT MAY VARY ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

MISCELLANEOUS DETAILS					
BICYCLE PATHS					
DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION					
CITY OF DALLAS, TEXAS					
DESIGN	DRAWN	DATE	FILE	NO.	PAGE NO.
C. O. D.	A. B. & A.	APRIL 1997	251D	1	9004



BICYCLE TRAIL

TYPICAL CONCRETE SECTION



BIKE PATH RAMP AT PAVED STREET

(WALK ABUTTING CURB)

BIKE PATH RAMP AT PAVED STREET

(NO WALK ABUTTING CURB)

Existing Resources

- DEPARTMENT OF TRANSPORTATION
- NEIGHBORHOOD TRAFFIC MANAGEMENT
- TOOLKIT
- MAKE A REQUEST
- FAQS

Traffic Management Toolkit

Overview

Cities can reduce traffic speeds by using traffic management techniques. Certain speed controls alter the configuration of a roadway, and others change how people psychologically respond to a street. Traffic management measures are grouped into four categories: horizontal deflection, vertical deflection, street width reduction, and routing restriction.

Horizontal deflection hinders the ability for a motorist to drive in a straight line by creating a horizontal shift in the roadway. This shift forces a motorist to slow the vehicle in order to comfortably navigate the measure.

Vertical deflection creates a change in the height of the roadway which forces a motorist to slow down to maintain an acceptable level of comfort.

Street width reduction narrows the width of a vehicle travel lane. As a result, a motorist slows the vehicle in order to maintain an acceptable level of comfort and safety. The measure can reduce the distance a pedestrian walks to cross a street, reducing exposure to pedestrian/vehicle conflicts.

Routing restriction prevents particular vehicle movements at an intersection and is intended to eliminate some portions of cut-through traffic.

CONTACT INFO

Department of Transportation
1500 Marilla Street, L1BS
Dallas, Texas 75201
Phone: (214) 670-6904
Fax: (214) 670-3292

dallascityhall.com

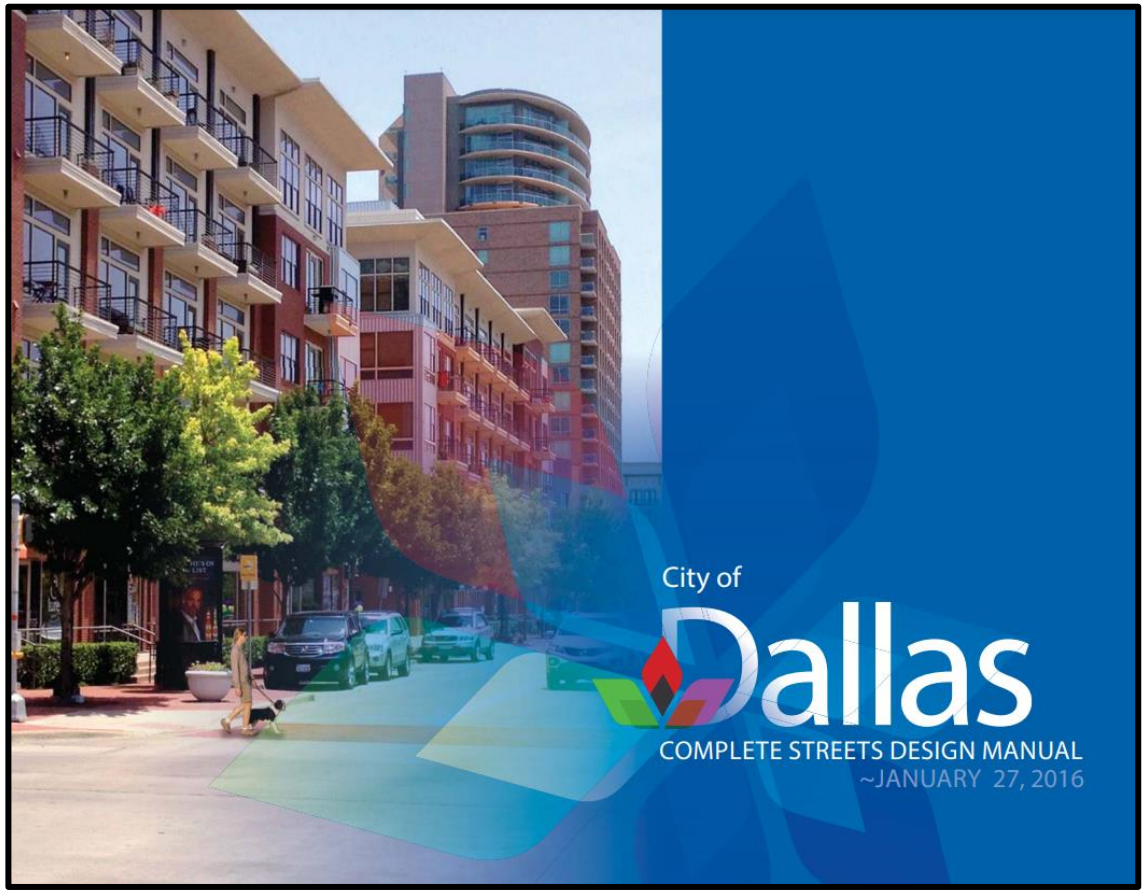
Speed Cushions

Speed cushions are similar to speed humps, but have wheel cut-out openings to allow large vehicles like buses to pass unaffected while reducing car speeds.

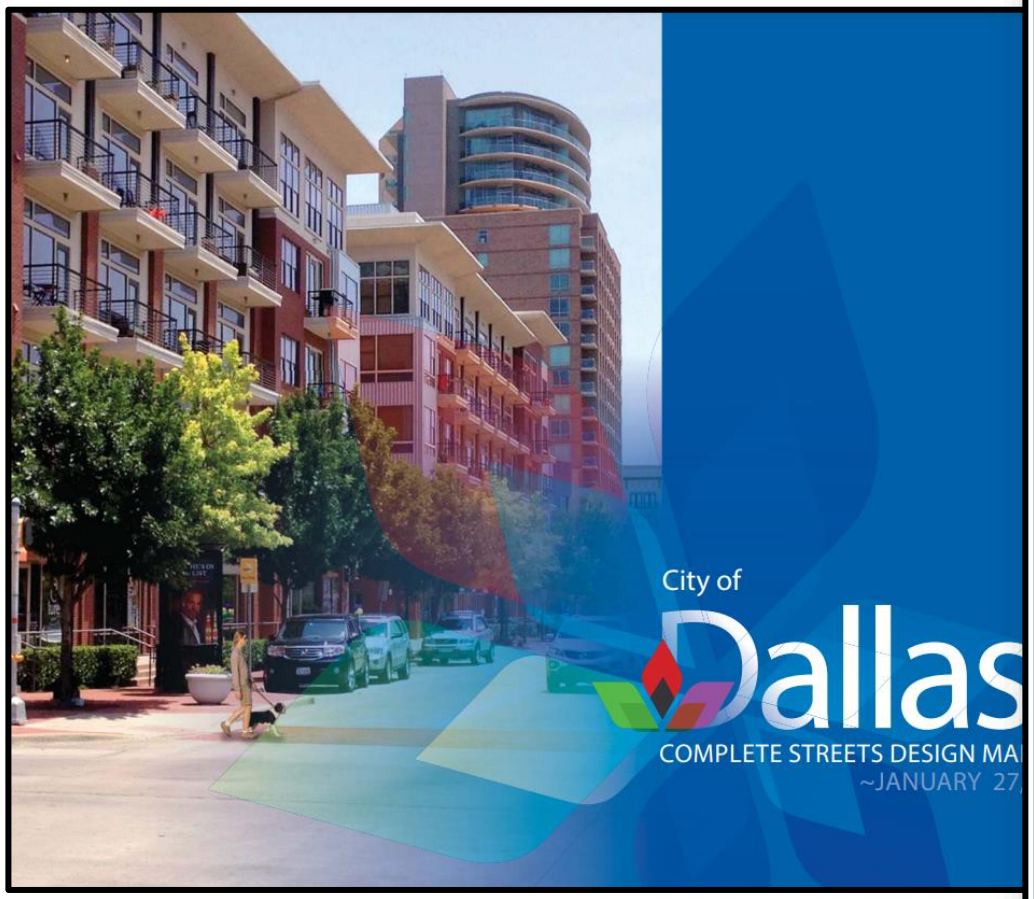
Speed Tables

Speed tables are similar to speed humps, but have a flat top, typically 6 to 9 meters long. When speed tables are combined with pedestrian crossings, at the intersection or mid-block, they are called raised crossings.

Existing Resources



Existing Resources



Ch. 3 Complete Streets Policy Framework

Trade-Offs in Limited Right-of-Way Priorities Chart

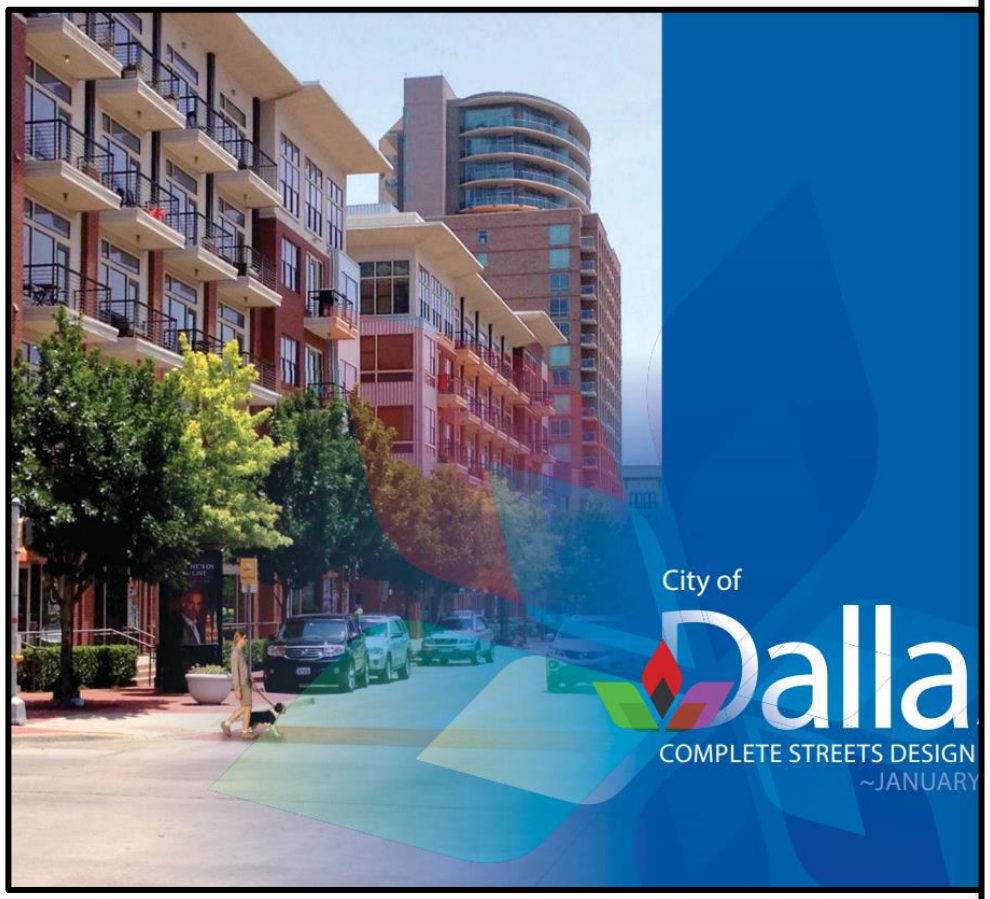
Contextual Street Types and Functional Classifications	Pedestrian Zone: Frontage Zone (private)	Pedestrian Zone: Sidewalk Clear Zone	Pedestrian Zone: Buffer/Furnishing/Curb Zone	Street Zone: Parking Zone	Street Zone: Travelway Zone	Street Zone: Median Zone
Mixed Use Streets						
Principal Arterial		1	2	5	4	3
Minor Arterial		1	2	3	4	5
Collector		1	2	3	4	5
Minor/Local		1	2	3	4	5
Commercial Streets						
Principal Arterial		1	3	5	1	4
Minor Arterial		1	4	5	2	3
Collector		1	3	4	2	5
Minor/Local		1	4	3	2	5
Residential Streets						
Principal Arterial		1	2	5	3	4
Minor Arterial		1	4	2	5	3
Collector		1	4	2	3	5
Minor/Local		1	4	2	3	5
Industrial Streets						
Principal Arterial		2	3	4	1	5
Minor Arterial		2	3	4	1	5
Collector		2	3	4	1	5
Minor/Local		2	3	4	1	5
Parkways						
Principal Arterial		2	4	5	3	1
Minor Arterial		2	4	5	3	1
Collector		2	4	5	3	1
Minor/Local		5	1	4	3	2

High Priority
Medium Priority
Low Priority

General Notes:

1. The numbers rank various zones between 1 and 5, with one being the highest priority and 5 being the lowest. The priority level is intended to guide width choices (low priority means minimum width, high priority means desired width).
2. Refer to the On-Street Bike and Transit Facility Priorities Chart later in this chapter for additional guidance on the travelway zone.
3. The Parking and Median Zones are not essential on all streets. A low priority ranking for these zones implies that they may be eliminated. A high priority implies that it is desirable to include them even if minimum dimensions are used.
4. The Frontage Zone priorities shown in this chart reflect the importance of using the public right-of-way for this zone. A low priority implies that the Frontage Zone should be incorporated on private property. A high priority implies that allowing this zone to expand into the right-of-way is an important consideration.
5. For streets within a 1/4 mile radius of train stations as shown on the Vision Maps, the Sidewalk Clear Zone and the Buffer/Furnishing Zone should be given a High Priority.
6. This chart is intended to be used as a starting point for engaging the community in setting design priorities during the corridor planning stage of the Complete Streets process.

Existing Resources

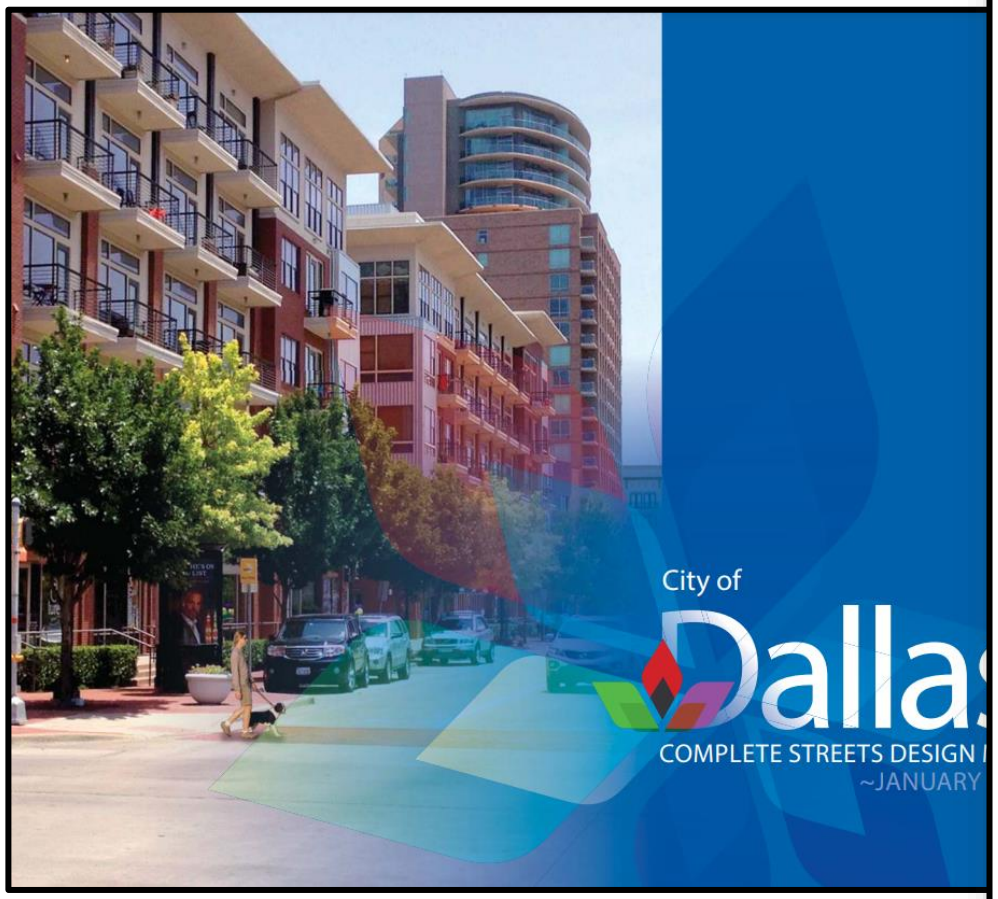


Ch. 3 Complete Streets Policy Framework

RECOMMENDED WIDTH CHART FOR DALLAS COMPLETE STREETS ELEMENTS

	Mixed-Use Streets		Commercial Streets		Residential Streets[1]		Industrial Streets		Parkways	
Recommended Designation	Min	Pref	Min	Pref	Min	Pref	Min	Pref	Min	Pref
Pedestrian Zone[2]										
Frontage zone:[3]										
Frontage zone[3]	-	-	-	-	-	-	-	-	-	-
Sidewalk clear zone:[4]										
Sidewalk clear zone	6'	8'- 15'	5'	6'- 10'	5'	5'- 10'	5'	5'- 7'	5'	8'- 10'
Buffer/furnishing zone:										
Buffer with street tree	6'	8'	6'	10'	6'	10'	6'	10'	6'	20'
Buffer (adjacent to on-street parking)[5]	2'	6'	2'	6'	2'	7'	2'	7'	-	-
Buffer (adjacent to travel lane, on-street parking not permitted)[5]	5'	8'	5'	10'	5'	10'	5'	7'	5'	20'
Curb zone:[6]										
Curb zone width[6]	6"	1'- 2'	6"	1'- 2'	6"	1'- 2'	6"	1'- 2'	6"	1'- 2'
Street Zone										
Parking zone:[7]										
Parallel parking	7'	8'	-	-	7'	8'	7'	8'	-	-
Back-in angled parking[8]	15'	22'	-	-	15'	22'	15'	22'	-	-
Flex lane[9]	12'	15'	-	-	-	-	-	-	-	-
Travelway zone–lanes on thoroughfares:										
General purpose inside travel lane[10]	10'	11'	10'	11'	9'	10'	11'	12'	10'	11'
Inside travel lane (adjacent to bicycle lane and parking lane)	10'	10'	-	-	10'	10'	11'	12'	-	-
Inside travel lane (adjacent to bicycle lane and curb, parking not permitted)	10'	10'	10'	11'	10'	10'	11'	12'	10'	12'
Left-turn lane	9'	10'	10'	10'	9'	10'	10'	11'	10'	10'
Two-way left turn lane	10'	12'	10'	12'	9'	12'	11'	12'	-	-
Shared use lane (adjacent to on-street parking, includes streetcars)[10, 11]	10'	12'	-	-	10'	10'	11'	12'	-	-
Shared use lane (adjacent to curb, parking not permitted,)[10, 11]	10'	12'	10'	12'	10'	10'	11'	12'	10'	12'
Travelway zone–lanes on local (non-thoroughfare plan) streets:[12]										
Two-directional two-lane roadway (curb to curb width, parking permitted)	26'	26'- 36'	-	-	26'	26'	36'	36'	-	-
Two-directional two-lane roadway (curb to curb width, parking not permitted)	18'	18'	20'	20'	18'	18'	22'	22'	18'	18'
Travelway zone–bicycle facilities:[2]										
Paved shoulder (with curb)	-	-	-	-	5'	8'	5'	8'	5'	8'
Paved shoulder (without curb)	-	-	-	-	4'	8'	4'	8'	4'	8'
Bicycle lane (parking permitted)	5'	6'	5'		5'	6'	5'	6'	-	-
Bicycle lane (parking not permitted, curb and gutter present)	5'	5'	5'	6'	5'	5'	5'	5'	5'	6'
Bicycle lane/paved shoulder (parking not permitted, no curb and gutter)	-	-	4'	8'	4'	5'	4'	5'	4'	8'
Buffered bicycle lane (includes buffer)	7'	9'	7'	12'	7'	12'	7'	12'	7'	12'
Cycle track (one-way, includes buffer)	8'	10'	8'	10'	8'	10'	8'	10'	8'	13'
Cycle track (two-way, includes buffer)	11'	13'-18'	13'	13'-18'	13'	13'-18'	13'	13'-18'	13'	13'-18'
Travelway zone–transit lanes:										
Bus-only lanes	11'	12'	11'	12'	11'	12'	11'	12'	11'	12'
Bus and bicycle-only lanes	11'	14'-16'	11'	14'-16'	11'	14'-16'	11'	14'-16'	11'	14'-16'
Median zone:										
Pedestrian refuge	6'	-	6'	-	6'	-	6'	-	6'	-
Continuous with landscaping[13]	6'	15'	6'	15'	6'	15'	10'	15'	6'	20'
Continuous without landscaping	4'	15'	4'	15'	4'	15'	4'	15'	4'	20'

Existing Resources



Ch. 3 Complete Streets Policy Framework

Design Element Priorities Chart

	Pedestrian Zone															Street Zone										Intersection Zone									
				Street Furniture										Wayfinding																					
	Wide Sidewalks	Shared Use Paths	Trees and Greenscape (Buffer Zone)	Seating	Bicycle Parking Facilities	Bollards	Newspaper Racks	Recycling/Garbage Cans	Transit Stops	Limited Curb Cuts and Driveways	Plazas/PocketParks/Parklets	Sidewalk Cafes	Pedestrian Lighting	Information Kiosks	Pedestrian Signage	Bicycle Signage	Slip Streets	Couplets	Shared Streets (Woonerfs)[4]	Trees and Greenscape (Median)	On-street Parking	Road/Lane Diet[5]	Chicanes	Midblock Pedestrian Crossings	Special Pavement Treatment/Speed Tables[4]	Street Lighting	Multimodal Intersection Design	Curb Extensions/Bulbouts	Modern Roundabouts	Traffic Circles	Crossing Islands[2]	Special Pavement Treatment/Speed Tables	Special Pedestrian Signals	Special Bicycle Treatments[3]	Special Transit Treatments
Contextual Street Type Overlays																																		
Mixed-Use Streets	■		■	■	■	■	■	■		■	■	■	■	■	■			■			■	■		■	■	■	■		■	■	■	■		
Commercial Streets	■		■		■	■					■		■				■		■		■		■	■	■		■	■	■	■		■		
Residential Streets	■		■	■								■	■				■	■			■	■	■		■	■	■	■	■	■	■	■		
Industrial Streets	■		■		■							■						■	■			■	■	■		■			■	■	■				
Parkways	■	■	■	■	■						■	■	■				■		■		■				■		■			■		■			
Bike and Transit Network Overlays																																		
Bike Network Overlay					■				N/R	■						■						■					■						■	N/R
Transit Network Overlay[1]	■	N/R	■		■				■					■	■	N/R			■			■	■		■		■			■	■		N/R	■

General Notes:

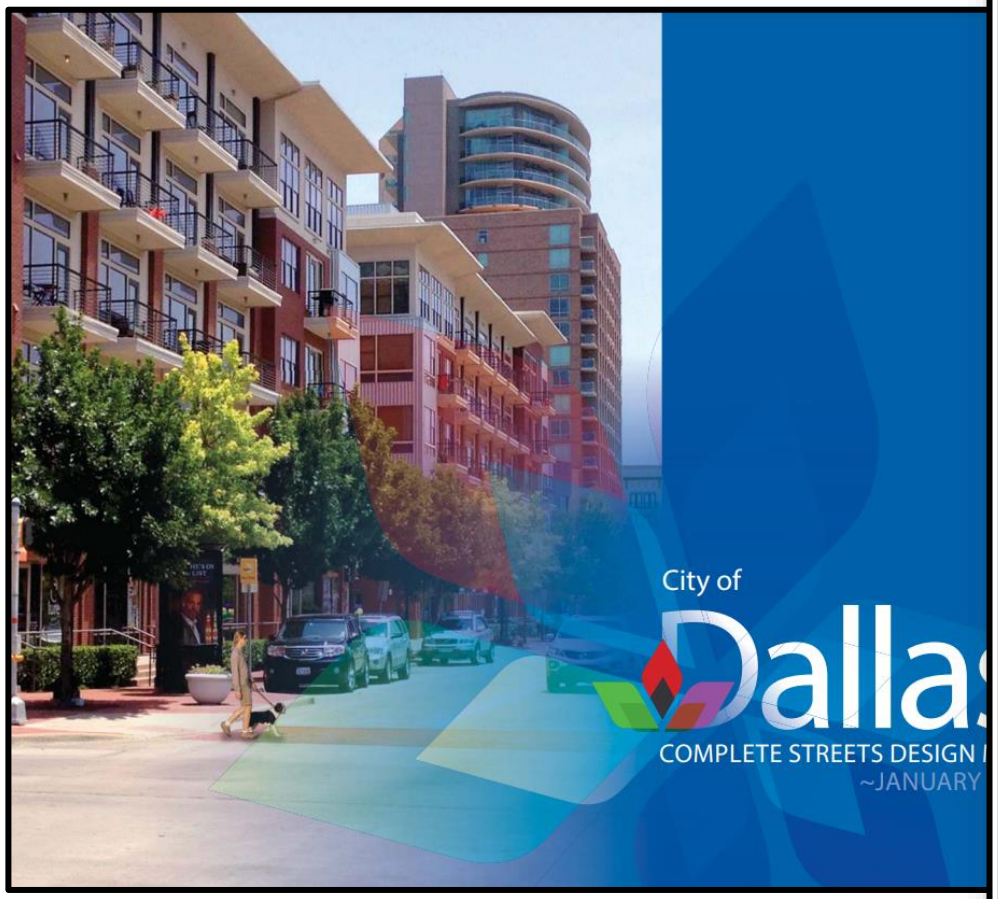
- Guidance for choice of bicycle facilities and transit facilities within the travelway based on Complete Street type is provided in the Bike and Transit Network Facility Priorities Chart.
- The guidance in this chart for Bike Network and Transit Network Streets should be considered in conjunction with the underlying contextual street types on which they are overlaid.
- More detailed design guidance on each design element is provided in Chapters 4, 5, and 6.
- Incorporation of Green Street and iSWM techniques to reduce stormwater run-off and improve energy efficiency are a primary consideration for all street types in all zones.

■	Primary Consideration
■	Secondary Consideration
	Optional Consideration
■	Not Desirable
N/R	Not Relevant

Specific Notes:

1. The guidance in this chart for transit network streets also applies to all street types that are located within a 1/4-mile radius of DART rail stations.
2. The guidance in this chart assumes that crossing islands are only relevant on divided roadways.
3. Note that bicycle boxes as a special bike treatment at intersections are a primary consideration on streets with dedicated bike facilities and more than two lanes of traffic. See Chapter 6 for more detailed guidance.
4. Shared Streets and Special Pavement Treatments may be appropriate on streetcar corridors.
5. Road diets require a traffic impact analysis to assess the impacts on the roadway network.

Existing Resources



Ch. 3 Complete Streets Policy Framework

BIKE AND TRANSIT NETWORK FACILITY PRIORITIES CHART

Contextual Street Types and Functional Classification	Bike Network Facilities: Signed Route Only (No Lane Markings)	Paved Shoulders (Signed Route)	Bike Boulevards	Shared Bicycle Lane Markings[2]	Bicycle Lanes	Buffered Bicycle Lanes / Offset Bicycle Lanes[4]	Cycle Track (One-Way or Two-Way)[5]	Transit Network Facilities: Shared Lanes[3]	Priority Transit Lanes[6]	Transit Ways
Mixed Use Streets										
Principal Arterial				Need Site Specific Review	Acceptable	Preferred	Acceptable	Acceptable	Preferred	Acceptable
Minor Arterial				Acceptable	Preferred	Acceptable	Acceptable	Acceptable	Preferred	Acceptable
Collector			Need Site Specific Review	Acceptable	Preferred	Acceptable	Acceptable	Preferred	Acceptable	Acceptable
Minor/Local	Acceptable		Acceptable	Preferred	Acceptable	Acceptable	Acceptable	Preferred		
Commercial Streets										
Principal Arterial				Need Site Specific Review	Acceptable	Preferred	Acceptable	Acceptable	Preferred	Acceptable
Minor Arterial				Need Site Specific Review	Acceptable	Preferred	Acceptable	Acceptable	Preferred	Acceptable
Collector				Acceptable	Preferred	Acceptable	Acceptable	Preferred	Acceptable	Acceptable
Minor/Local	Acceptable			Preferred	Acceptable	Acceptable	Acceptable	Preferred		
Residential Streets										
Principal Arterial		Acceptable		Need Site Specific Review	Acceptable	Preferred	Acceptable	Acceptable	Preferred	Acceptable
Minor Arterial		Acceptable		Acceptable	Preferred	Acceptable	Acceptable	Acceptable	Preferred	Acceptable
Collector	Acceptable	Acceptable	Need Site Specific Review	Preferred	Acceptable	Acceptable	Acceptable	Preferred	Acceptable	Acceptable
Minor/Local	Acceptable	Acceptable	Acceptable	Preferred	Acceptable	Acceptable	Acceptable	Preferred		
Industrial Streets										
Principal Arterial		Acceptable		Need Site Specific Review	Acceptable	Preferred	Acceptable	Acceptable	Preferred	Acceptable
Minor Arterial		Acceptable		Need Site Specific Review	Acceptable	Preferred	Acceptable	Acceptable	Preferred	Acceptable
Collector		Acceptable		Acceptable	Preferred	Acceptable	Acceptable	Preferred	Acceptable	Acceptable
Minor/Local	Acceptable	Acceptable		Preferred	Acceptable	Acceptable	Acceptable	Preferred		
Parkways										
Principal Arterial		Acceptable		Need Site Specific Review	Acceptable	Preferred	Acceptable	Acceptable	Preferred	Acceptable
Minor Arterial		Acceptable		Acceptable	Preferred	Acceptable	Acceptable	Acceptable	Preferred	Acceptable
Collector		Acceptable	Need Site Specific Review	Acceptable	Preferred	Acceptable	Acceptable	Preferred	Acceptable	Acceptable
Minor/Local		Acceptable	Acceptable	Preferred	Acceptable	Acceptable	Acceptable	Preferred		

	Preferred
	Acceptable
	Need Site Specific Review
	Not Desired

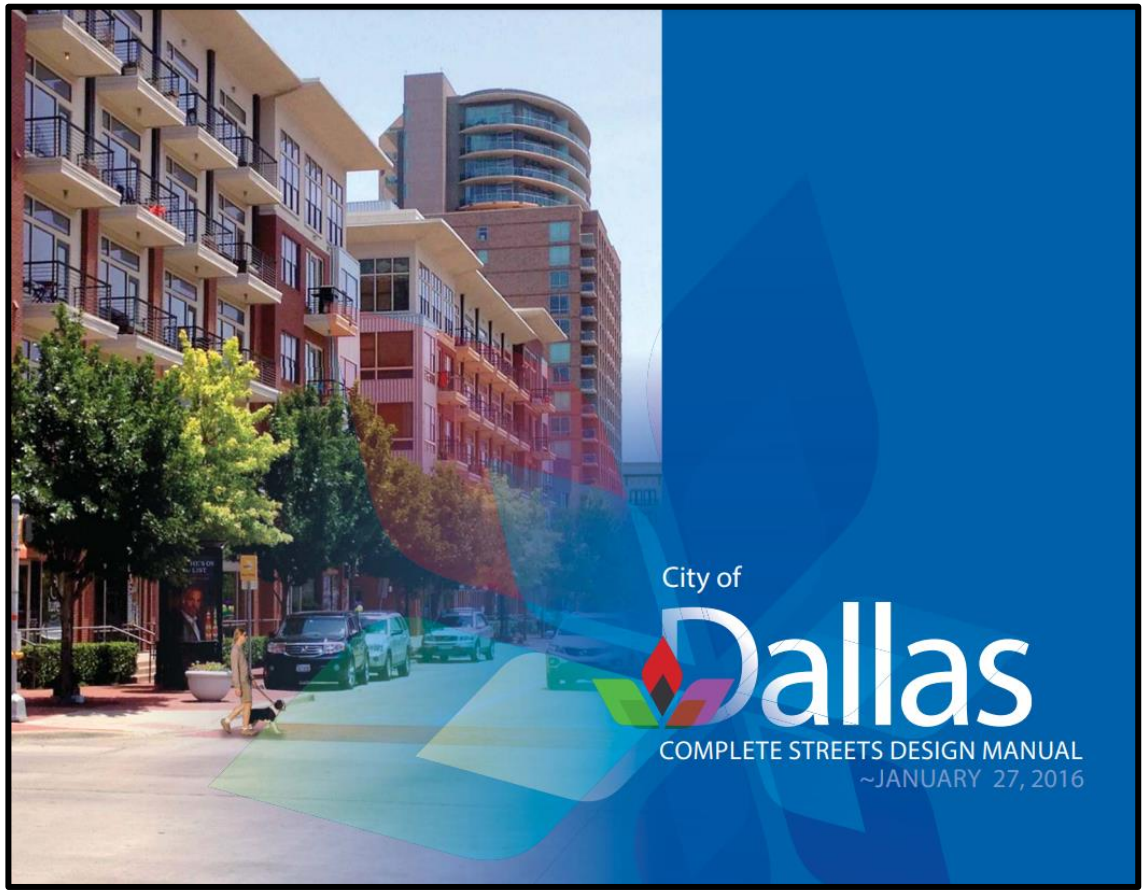
General Notes:

- This chart is intended as a quick reference during the corridor planning stage to guide choices of bike and transit facility types within the travelway zone for Complete Streets projects on streets included in the Bike Network and Transit Network Overlay Vision Map.
- This chart should be used in conjunction with the Priorities Chart for Trade-Offs in Limited Right of Way.
- The guidance in this chart is based on the recommended target speed ranges for each contextual street type and functional class identified in the Target Speed Chart. Note that the Operational Speed must also be considered in situations where the desired target speed is not achievable through design measures within the scope of a street improvement project.
- Refer to the Dallas Bike Plan for facility type recommendations for specific bike network streets.
- Refer to Chapter 5 and the Dallas Bike Plan for definitions and design guidance for the various bicycle and transit facility types included in this chart.

Specific Notes:

1. Bike Network Facilities may also include shared use paths that would typically be located within the pedestrian zone. Refer to the Design Element Priorities Chart for guidance on shared use paths based on Complete Streets type.
2. Shared Bicycle Lane Markings are not desirable on streets with target speeds exceeding 30 mph or on Shared Lanes with rail transit. Shared Lane Markings on two-lane roadways require special site-specific review relative to traffic volume and speeds.
3. Shared Lanes for buses may also include Shared Bicycle Lane Markings if the target speed does not exceed 30 mph.
4. Buffered Bicycle Lanes or Offset Bicycle Lanes are preferred in situations where bicycle lanes are provided adjacent to designated on-street parking.
5. Cycle Tracks are preferred for bike routes on heavily-travelled roadways with target speeds exceeding 40 mph and where space is available to provide a physical separation.
6. Priority Transit lanes are not desirable on two-lane roadways.

Existing Resources



Ch. 5 Street Zone Design Elements


Complete Streets provide the opportunity to avoid traffic congestion and increase the overall capacity of the transportation network.


5. STREET ZONE DESIGN ELEMENTS

The organization and distribution of right-of-way has a profound effect on safety, roadway capacity, and how comfortable and convenient transportation modes are relative to each other. In the past, the Thoroughfare Plan was the primary driver of roadway design in Dallas. The focus was on moving motor vehicles safely and efficiently. A Complete Streets approach takes a more comprehensive view of the street and all users. In a Complete Streets zone, the space typically between curbs supports adjacent land uses and balances the efficiency of motor vehicle travel with considerations for pedestrians, bicyclists, and transit users.

The example cross sections in Chapter 2 identify primary and secondary priorities within the cross section for each street type. Since there is significant variation in how each street cross section can be configured, these priorities are intended to help direct decisions with respect to roadway design, particularly in constrained rights-of-way where ideal widths cannot be met. This chapter provides further design guidance on specific elements within the traveled way.

Street Zone

Street Zone

Street Zone

Chapter Five - Street Zone Design Elements

JANUARY 2016 DALLAS COMPLETE STREETS DESIGN MANUAL | 139


Chapter Five - Street Zone Design Elements

TRAFFIC CALMING ELEMENTS

Safe Speeds

The streets in Dallas will be designed to limit the excessive speeds of vehicles. Managing vehicular speed is particularly important on streets where pedestrian and bicycle use is desired. In crashes involving these more vulnerable users, vehicular speed at the point of impact is directly related to pedestrian or bicyclist survival. For example, a pedestrian who is hit by a motor vehicle traveling at 20 mph has a 95% chance of survival, whereas a pedestrian hit by a motor vehicle traveling at 40 mph has a 15% chance of survival. Studies have also shown that motor vehicle crashes decline where roadway speed is reduced. In addition, drivers are far more likely to yield to pedestrians at crosswalks when speeds are lower.

Mixed use and residential streets in Dallas should be designed for a target design speed of 25 mph. The context of an individual street should factor into whether or not adjustments to this base design speed are appropriate. Target design speed will be lower at intersections and crossings. Transportation Planning and Street Operations should take the lead on determining target design speeds during the corridor planning stage of the Complete Streets design process in the context of the community vision.

For major roadway construction and reconstruction projects, the geometric design of the roadway should be such that excessive speeds feel uncomfortable. This can be accomplished through a creative approach to roadway

A speed table will encourage drivers to slow down and be more alert to pedestrians and bicyclists.

We have a few more questions!

Visit www.menti.com and use code 9277 0549

The Task at Hand…

1. Identify needs & opportunities for design standards updates

2. Provide new or revised design guidelines for Street Design Manual
   - *Based on bike plan facility types*
   - *Based on updated best practices*

Street Design Manual Draft Recommendations - Discussion

What We See Needed So Far

- **3.2.6 Bike Provisions**
  - Update bike facility classifications
  - Include bike facility applicability matrix to guide facility type selection
- **4.3.7.1 On-Street Elements; Bikeways & Facilities**
  - Incorporate Sheet No. 5012 dated June 2021 for Bike Lane Pavement Markings into Section 4.3.7.1 for clarity of on-street bike lane/cycle track pavement marking.
  - Figure 4.19 On-Street Shared Bicycle Route should be noted that shared lanes/Sharrows are *not* a preferred bicycle facility type and require Department Director approval.
  - Figure 4.20 On-Street Dedicated Bicycle Lanes and Facilities should be revised to better illustrate the pavement marking standards, signage, and the separation (including striping and physical barriers) between the vehicle travel lane and the bike facility.
- **4.4.5.6 Intersections – Bicycle Treatments**
  - Improved illustrations that show complete bike approach pavement markings and signage should replace Figure 4.29 Crossing Markings.
- **6.1.4 …Bikeway Illumination Levels**
  - Modify Table 6.3 Illuminance Values for Pedestrian Areas to include Bike Usage Areas.
- **Appendix A.4.6 Storm Drains**
  - Add bike-safe stormwater inlet and grate design standards.

What We See Is Still Missing

- Separator types for visually separated and physically separated facilities
- Improved guidance for bike signals in Section 4.4.5.6.

What Else Do We Need?

Next Steps

CUT SHEETS, COSTS, FUNDING, PHASING, & IMPLEMENTATION

&

DRAFT MASTER PLAN

Timeline & Next Steps

Draft Final Network & Priority Projects

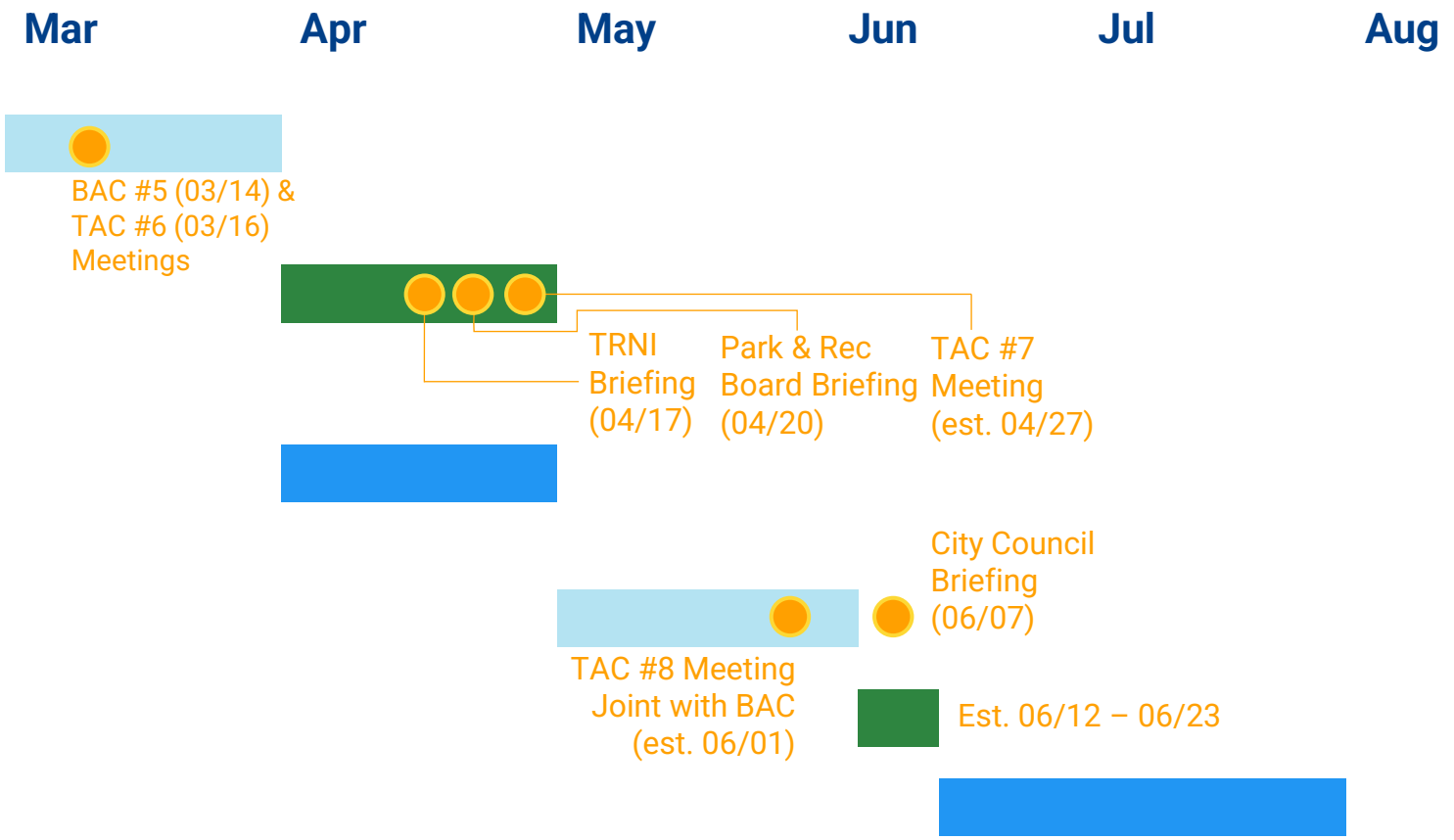
Project Cut Sheets & Cost Estimates

Funding Analysis, Phasing & Implementation Recommendations

Draft Plan

Phase III Virtual Engagement

Final Plan



Purpose of Technical Advisory Committee

MEETING SCHEDULE

1. Project introduction. Review criteria for project development. (May 2022)
2. Review prioritization framework & principles. Provide input & recommendations. (July 2022)
3. Review bike network development framework. (August 2022)
4. Review proposed bicycle facility types (September 2022)
5. Review proposed bicycle network (November 3, 2022)
6. Review second draft network & proposed prioritization. (March 2023)
7. Review draft design standards. (April 2023)
8. **Review draft plan. (June 2023)**

What department or agency are you representing today?

8 Answers

DALLAS BIKE PLAN UPDATE

City of Dallas - Park and Recreation Department

DART - Service Planning

DDOT

NCTCOG

DDOT

DDOT

Planning and Urban Design

Pbw

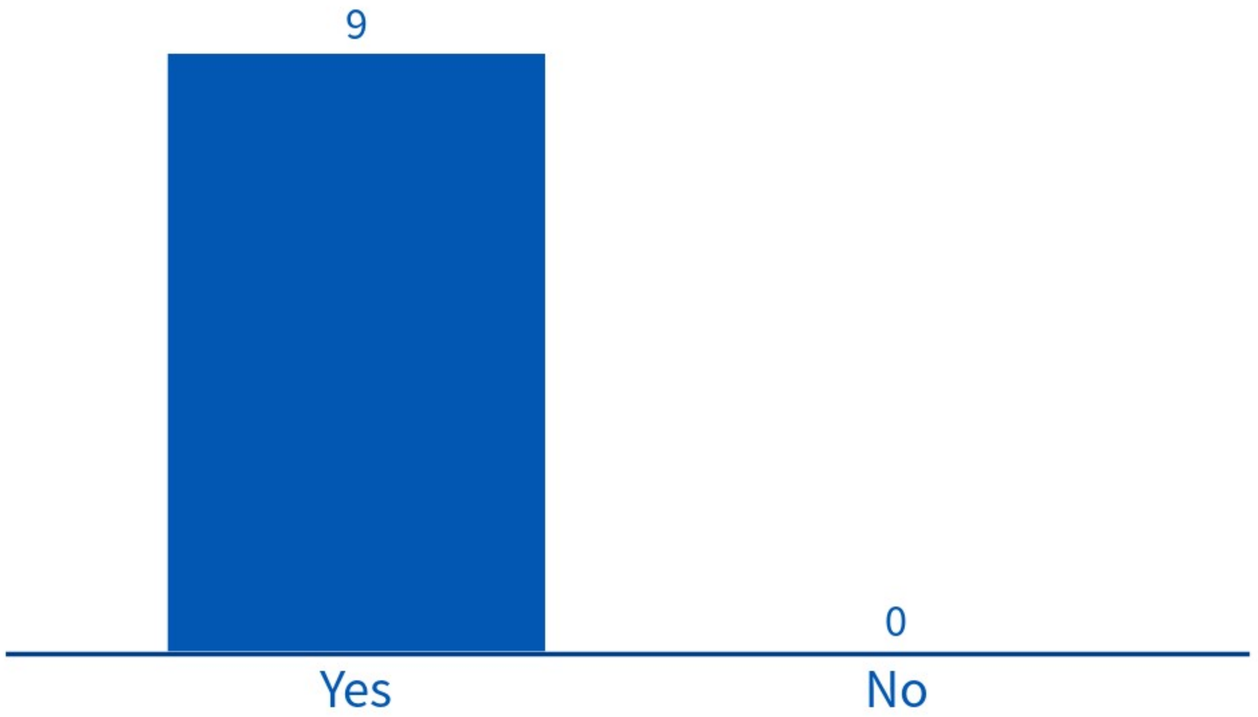
8

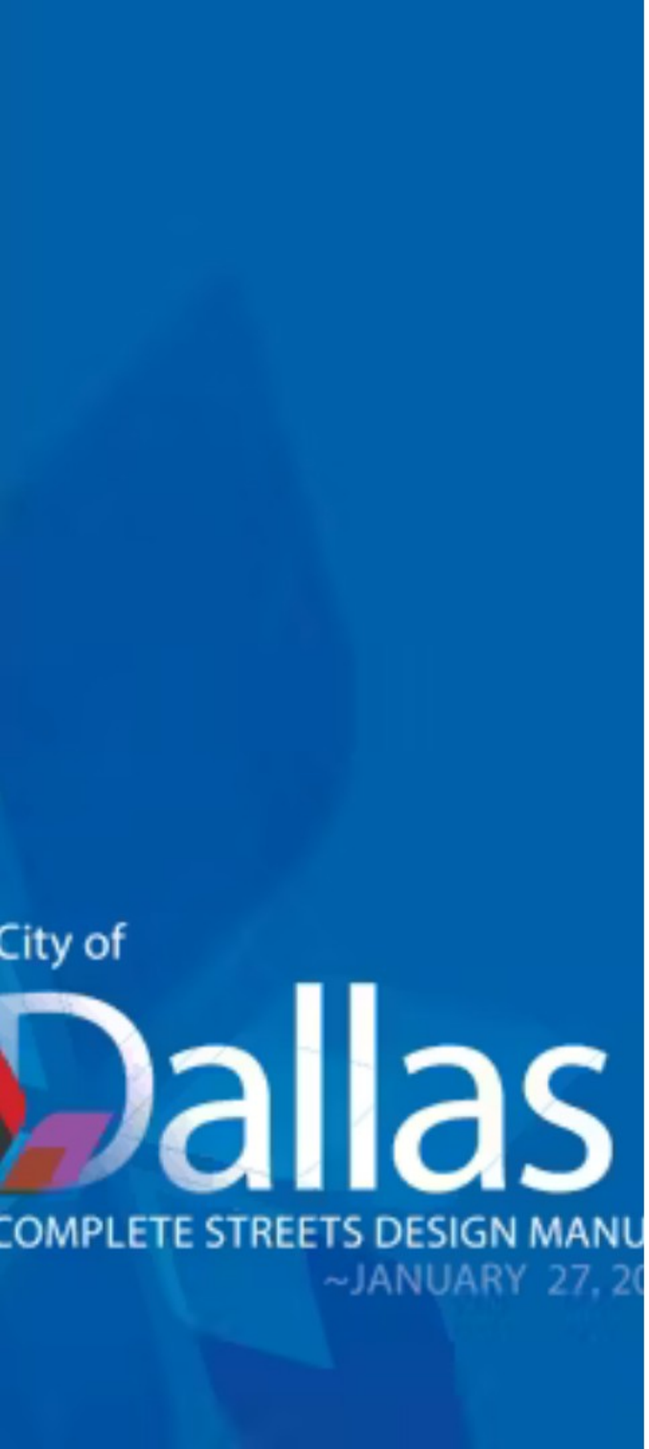
STREET DESIGN

CITY OF DALLAS

Before the meeting agenda and homework were sent out, did you know the City of Dallas has a Street Design Manual?

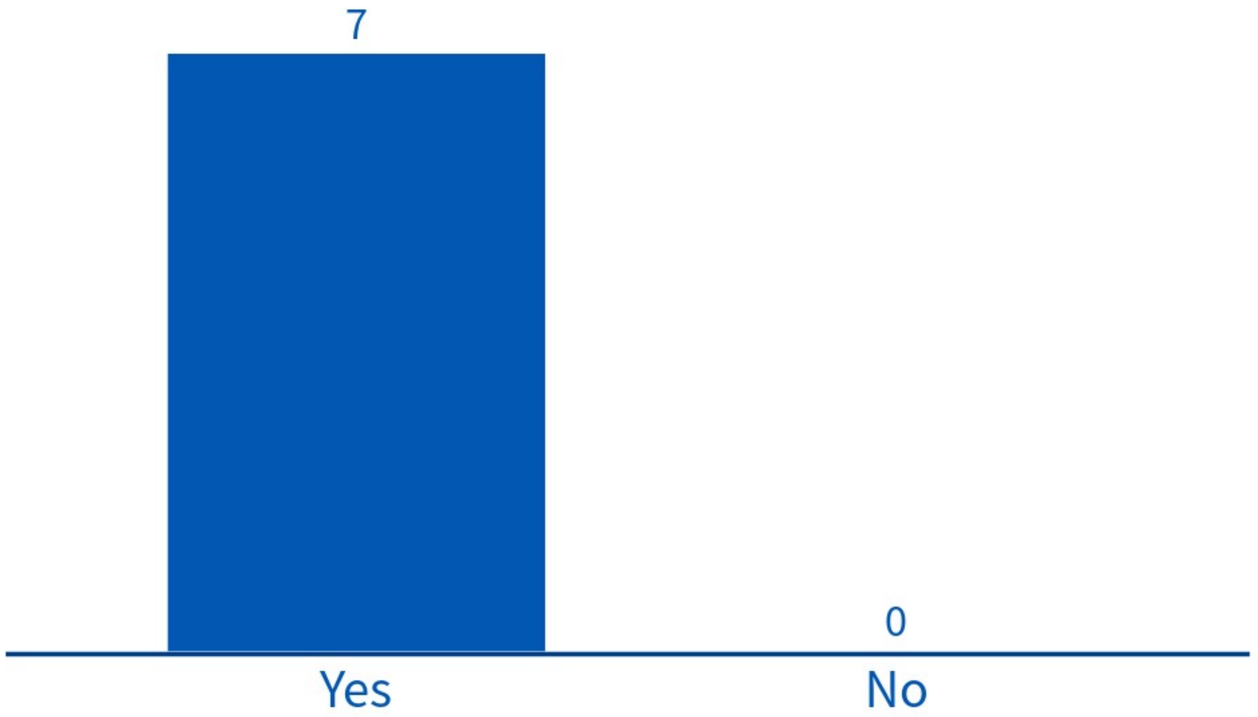
DALLAS BIKE PLAN UPDATE





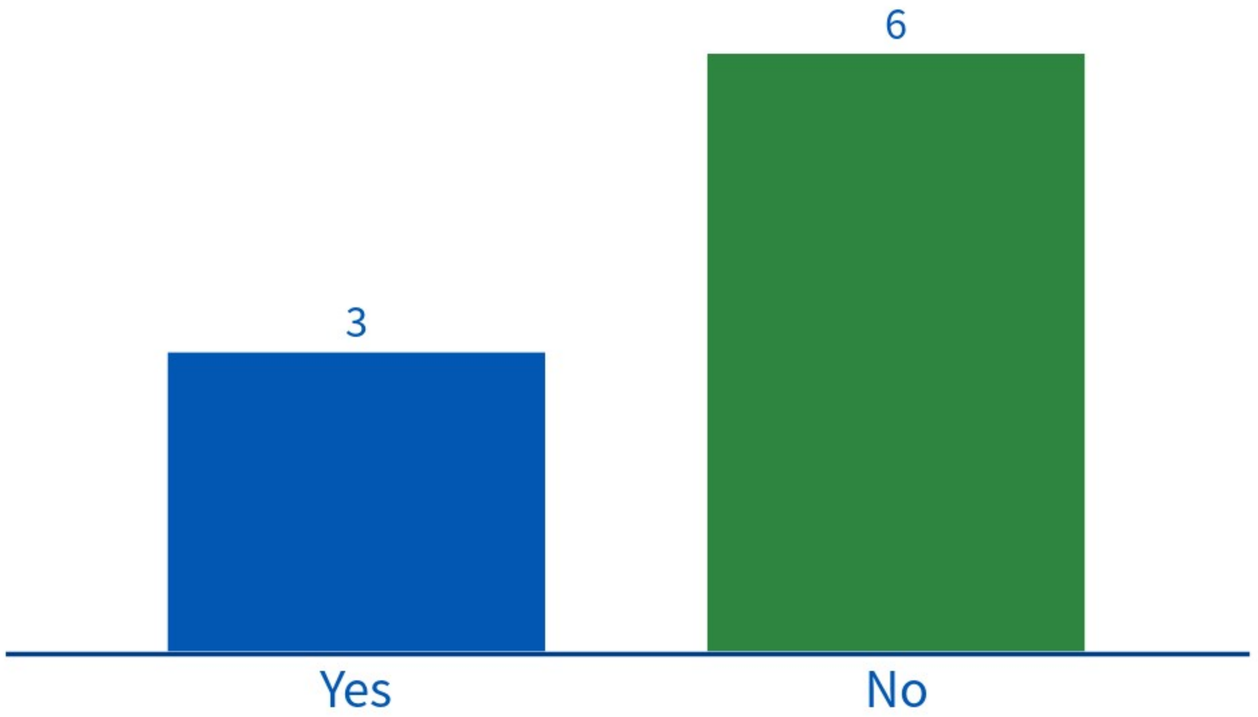
Before the meeting agenda and homework were sent out, did you know the City of Dallas has a Complete Streets Design Manual?

DALLAS BIKE PLAN UPDATE



Before the meeting agenda and homework were sent out, did you know the City of Dallas has a Traffic Management Tool Kit?

DALLAS BIKE PLAN UPDATE



Traffic Management Toolk

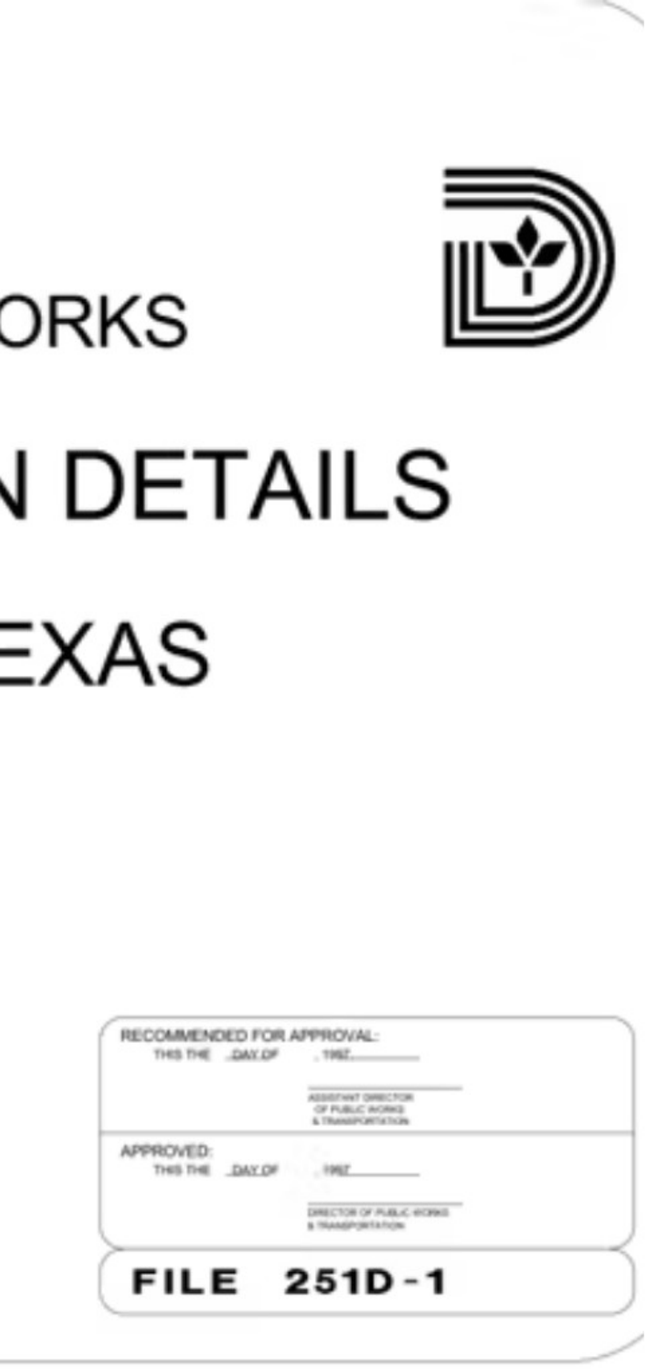
Overview

Cities can reduce traffic speeds by using traffic ma
configuration of a roadway, and others change hov
measures are grouped into four categories: horizo
routing restriction.

Horizontal deflection hinders the ability for a mot
roadway. This shift forces a motorist to slow the ve

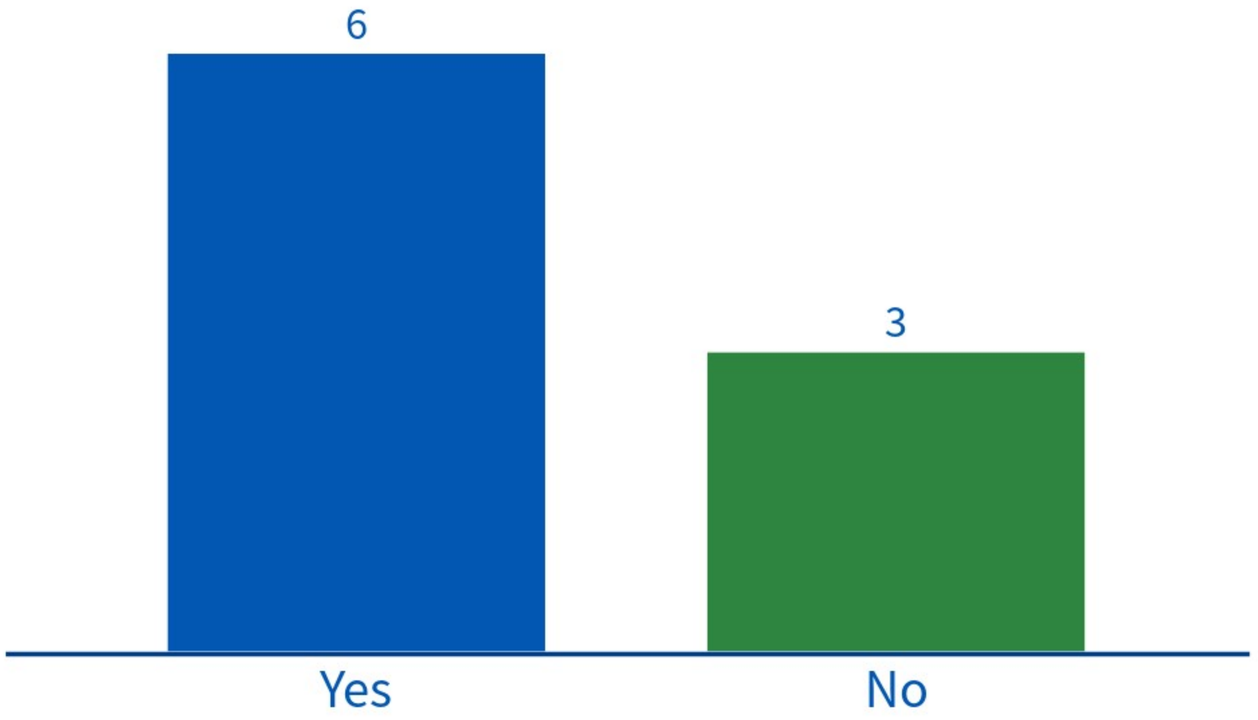
Vertical deflection creates a change in the height
an acceptable level of comfort.

Street width reduction narrows the width of a vel
maintain an acceptable level of comfort and safety

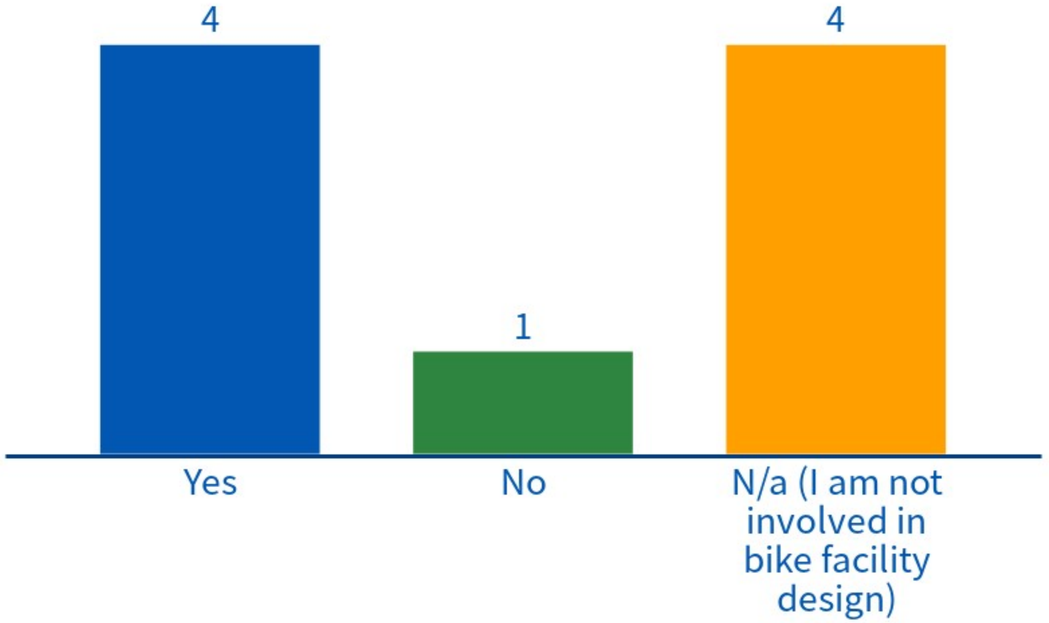


Before the meeting agenda and homework were sent out, did you know the City of Dallas has Standard Construction Details for bike facilities?

DALLAS BIKE PLAN UPDATE

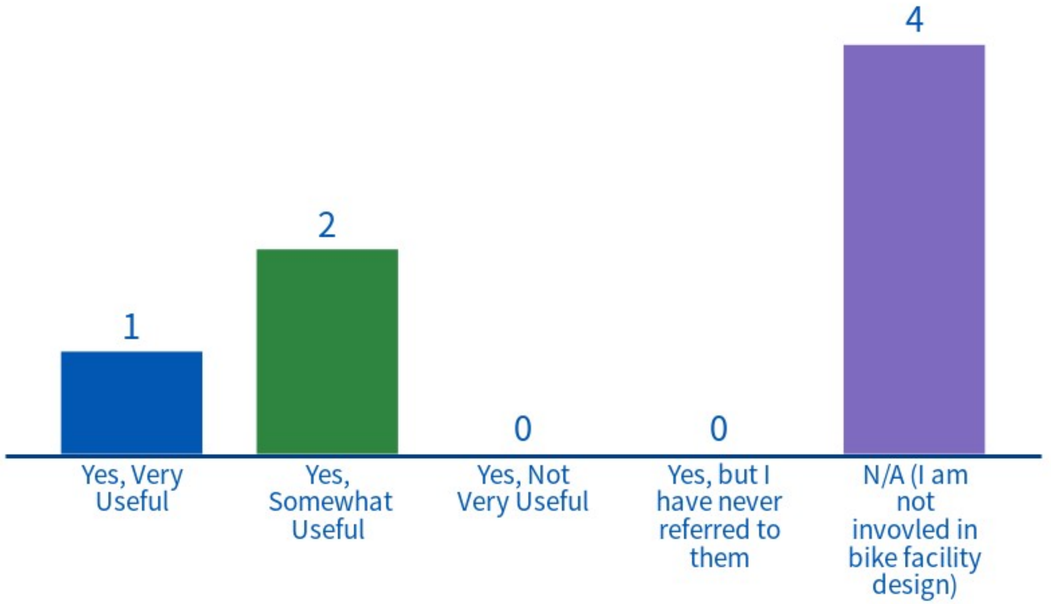


Do you use these design standards when designing bike facilities, or direct your staff or consultants to use them?



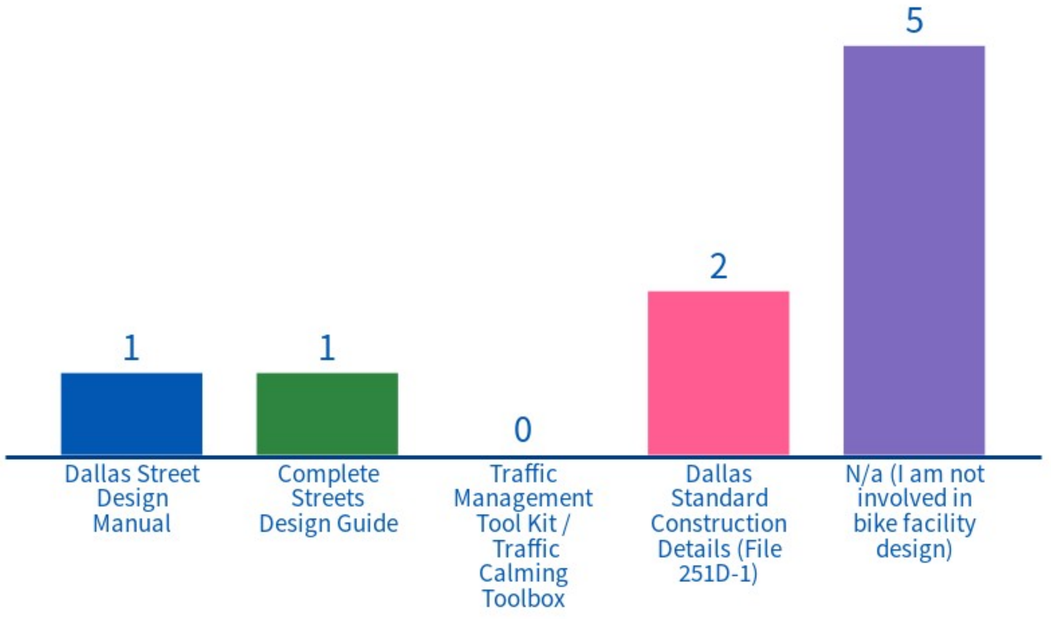
Have you, yourself, been involved in the design of bike facilities at the City? If so, how useful were these design standards resources for you?

DALLAS BIKE PLAN UPDATE

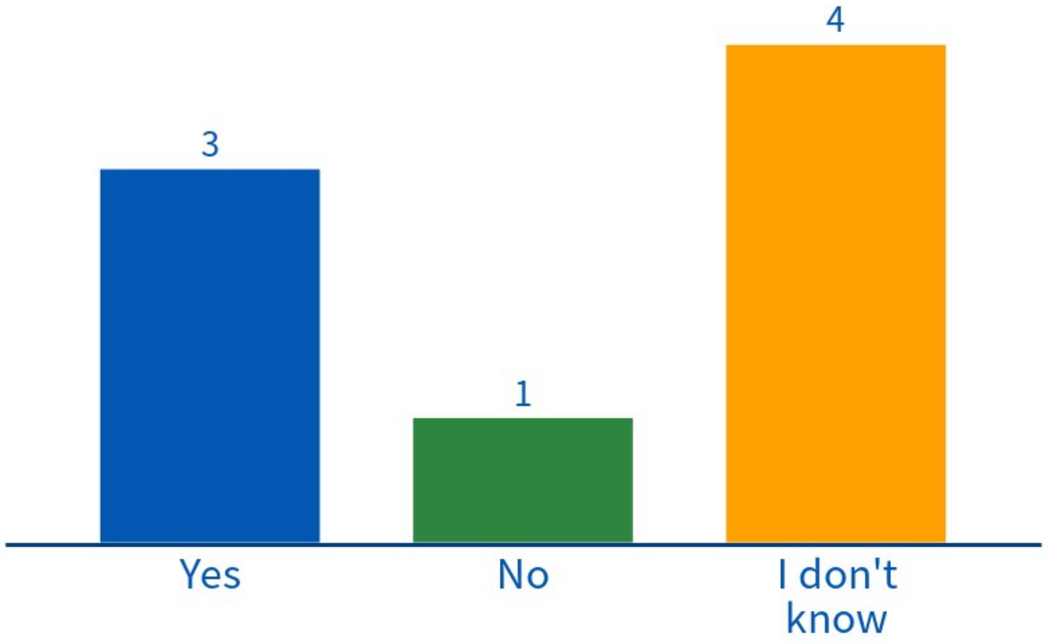


Which of these have you used when designing bike facilities or directing staff or consultants to design bike facilities. Select all that apply.

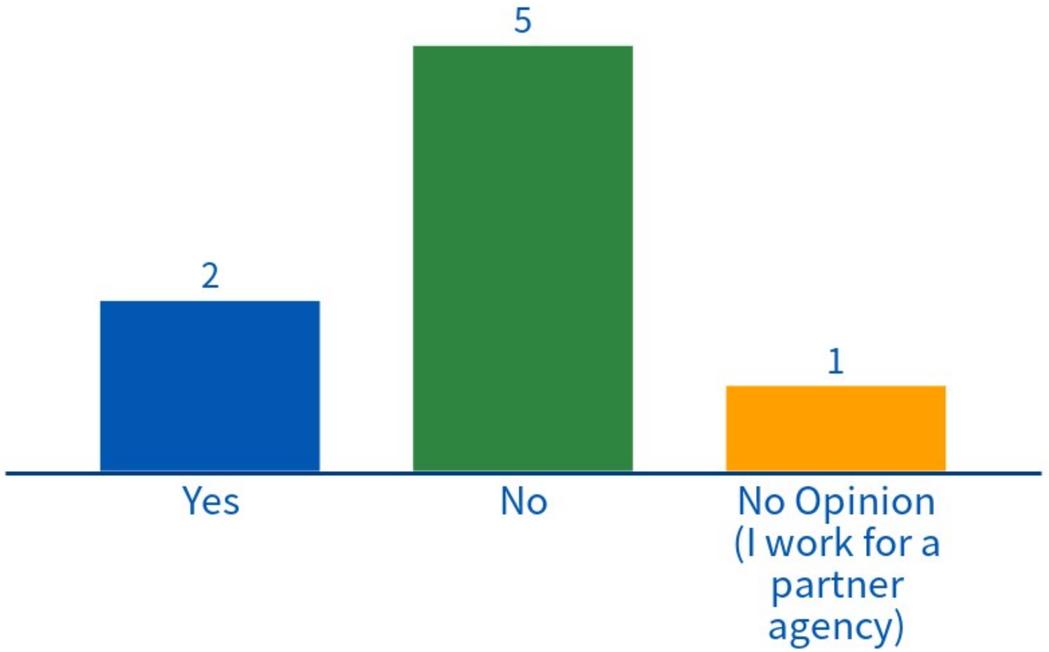
DALLAS BIKE PLAN UPDATE



Do you think these existing design standards resources, thus far, have been useful for City staff who design bike facilities internally?



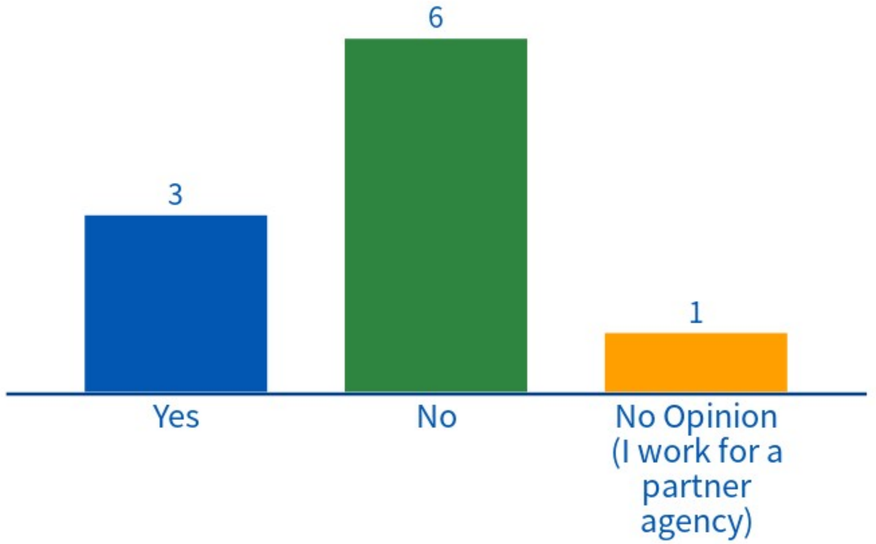
Do you think you think City consultants designing bike facilities use these standards during the design process and follow them well?



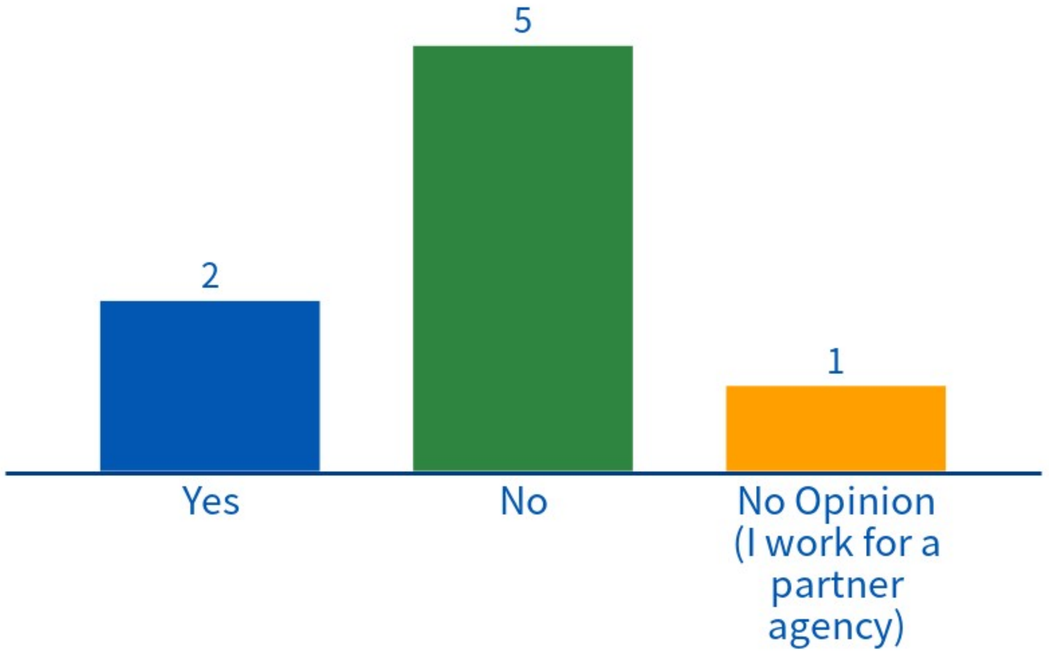
DALLAS
BIKE PLAN
UPDATE

PAUSE FOR PART 2

Do you think City staff/consultants involved in the design of bike facilitie are well-versed and trained regarding the contents of these resources?



Do you think City staff/consultants are well-versed and trained regarding national design standards for bike facilities?



Why do you think these design standards resources might be underutilized?

9 Answers

DALLAS BIKE PLAN UPDATE

No enforcement

General lack of understanding/design experience of consultants for bike facilities

Need to hire consultants with demonstrated experience designing bike facilities

May need to specify in consultant contracts they use these resources

Personal preference based upon prior knowledge and a lack to adapt to change.

It should be a coordination with the neighbor cities

No Clear implementation steps

Little communication

It should be a standard almost like regular roads

How do you think using these design standards resources could be better integrated into the bike facility design process? (for City & consultants)

5 Answers

DALLAS BIKE PLAN UPDATE

Incorporating into code

City of Dallas Bike Plan Review Checklist to be provided during the design phase

As previously noted, include requirements to use the standards as part of consultant contracts

Bike facility design and these documents need to be taken more seriously when designing roadways

Need to develop specific work instructions when designing any road in Dallas to acknowledge it was considered

Street Design Manual Draft Recommendations - Discussion

What We See Needed So Far

- **3.2.6 Bike Provisions**
  - Update bike facility classifications
  - Include bike facility applicability matrix to guide facility type selection
- **4.3.7.1 On-Street Elements; Bikeways & Facilities**
  - Incorporate Sheet No. 5012 dated June 2021 for Bike Lane Pavement Markings into Section 4.3.7.1 for clarity of on-street bike lane/cycle track pavement marking.
  - Figure 4.19 On-Street Shared Bicycle Route should be noted that shared lanes/Sharrows are *not* a preferred bicycle facility type and require Department Director approval.
  - Figure 4.20 On-Street Dedicated Bicycle Lanes and Facilities should be revised to better illustrate the pavement marking standards, signage, and the separation (including striping and physical barriers) between the vehicle travel lane and the bike facility.
- **4.4.5.6 Intersections – Bicycle Treatments**
  - Improved illustrations that show complete bike approach pavement markings and signage should replace Figure 4.29 Crossing Markings.
- **6.1.4 …Bikeway Illumination Levels**
  - Modify Table 6.3 Illuminance Values for Pedestrian Areas to include Bike Usage Areas.
- **Appendix A.4.6 Storm Drains**
  - Add bike-safe stormwater inlet and grate design standards.

What We See Is Still Missing

- Separator types for visually separated and physically separated facilities
  - Garland ex: (Toronto) taller than curb/shorter than jersey
- Improved guidance for bike signals in Section 4.4.5.6.

What Else Do We Need?

- Bike detection
- Green paint? Pavers/retro-reflective, stamped/stained concrete
- Integration with transit
- Tactical urbanism testing
- Bike parking (vague)
- Intersections (right-turning vehicles)
- Parking enforcement (discourage parking encroaching)
- Street sweeping
- Leaning rails

DALLAS BIKE PLAN UPDATE
JOINT TECHNICAL & BICYCLE ADVISORY COMMITTEE MEETING

Meeting Date:	Thursday, June 15, 2023
Meeting Time:	3:00 – 4:00 PM CST
Meeting Location:	Virtual – Microsoft Teams (see email invite)
Project Manager:	Jessica Scott, AICP, LCI – City of Dallas Department of Transportation
Meeting Facilitator:	Amanda Sapala, AICP – Gresham Smith

TAC #8 / BAC #6 MEETING AGENDA

1. Review of Project Milestones
2. Review of Project Vision & Purpose
3. Overview of Draft Plan
    a. Methodology
    b. Draft Final Bike Network
    c. Design Standards
    d. Policy Recommendations
    e. Implementation (including Funding & Phasing)
4. Discussion
5. Phase III Community Engagement Preview

Gresham Smith

JOINT TECHNICAL & BICYCLE ADVISORY COMMITTEE (TAC)/(BAC)
TAC Meeting #8/ BAC Meeting #6 Summary & Discussion Notes

DALLAS BIKE PLAN
Gresham Smith Project No. 45505.00

Meeting Date: June 15, 2023
Discussion: Review of Draft Plan and Bike Network

TAC #8/BAC#6 MEETING SUMMARY:

1. **Review of Project Milestones:** Gresham Smith Planner, Amanda Sapala, opened the meeting with an overview of the days plan and the draft plan. She then unveiled and reviewed the Draft Dallas Bike Plan Update and walked through the document, reviewing the executive summary and following chapters. She reviewed the vision statement and the bike plan network, the design standards and guidelines, and the policy recommendations and implementation with the group, outlining the key pieces of information.
2. **Review of Project Vision & Purpose:**

   Amanda reviewed the project vision and purpose before moving on to the review of the document.
3. **Overview of Draft Plan:**

   Amanda reviewed the plan and walked two committees through the organization of the document. Discussion of the draft plan is captured in the discussion section of these notes.
4. **Discussion:**

   This portion of the meeting was used to discuss the draft plan and any concerns that group members may have.

   1. Susan noted some errors with some dates and text within the document. Kathryn responded by sharing that all BAC and TAC members would receive a web-based pdf version of the document to add comments and view other comments and revisions.
   2. Susan asked if Vision Zero planning efforts were being considered as part of the update.
      a. Amanda noted that Vision Zero efforts were considered, and recommendations were made to increase bike safe education for drivers and bike riders, in addition to other Vision Zero program elements.
   3. Johnathan B. asked if the planning policy review and recommendations included policies addressing disruption to existing infrastructure by public works and if it included a list of standards to comply with.
      a. Greg reviewed with Johnathan and noted that the team would discuss in detail to ensure an answer to that question.
      b. John discussed recommendations for policies and procedures that public works would need to follow to ensure that facilities still comply with certain standards.

c. Johnathan provided a local example on North Polk Street between 10th and Davis. He stated that the Public Works utility group is doing work on a roadway with newly paved and marked bike lanes. This work disrupted the bike lanes and now there are uneven surfaces along these bike lanes.
d. Gus noted that Council is aware of the challenges and the need for additional interdepartmental coordination. He reviewed that the budget for the pavement markings group is limited and that contractors doing work for the city are not repairing facility to the design standards. He continued that as more high-density development is permitted; bike lanes are being interrupted by construction traffic. Mud and other dirt and debris from development traffic is causing damage to pavement markings and further stressing pavement budget funds.

4. John Eichman asked if the recommendations included a timeframe for the full build out of the proposed network and if the city council approves budget increases to the level recommended, how many years would it take to implement the network?
    a. Amanda reviewed that the bike plan update provides cost estimates at a planning level to allow for the budget to be adjusted for the availability of budget dollars and roadway needs.
    b. Gus reviewed and noted that the city must triage priorities and have a preliminary plan to work on the prioritization on the projects and the resources available.
5. Philip asked a question regarding the goals of the bike plan update project and if council will be considering the plans, policies, and recommendations as a single package to council or if policies will be broken out as separate recommendations.
    a. Kathryn reviewed that she would like policy language to be solidified and presented to council for their consideration.
6. Lawrence asked about shared paths/sharrows and about the policy for designating these facilities on roadways at a certain speed.
    a. Amanda noted that the sharrows were not recommended as a preferred facility type. It should be considered as a suite of interactions and not just a sharrow alone and the plan highlights the need for additional traffic management, branding, and wayfinding elements when incorporating sharrows for bike boulevards. Additionally, Amanda reviewed a matrix detailing the recommended characteristics and maximum speeds for various facility types included in the plan.
7. Patricio noted that normally City of Dallas Public Works coordinates with DART on projects that impacts DART's bus stops, recommends any stop location, potential relocation if needed to ensure ADA accessibility. He asked that he and his team be included in any future committees to ensure that coordination is ongoing for projects that may impact bike infrastructure.

5. **Phase III Community Engagement Review:**

Amanda reviewed next steps with the team, reviewing messaging and the upcoming engagement efforts and scavenger hunt. Amanda highlighted the scavenger hunt activities and review the upcoming virtual town hall engagement event.

Prepared by: Andrew Williams
Transportation Planner, Gresham Smith

Dallas Bike Plan

Technical Advisory Committee

with special guests,

Bicycle Advisory Committee

June 15, 2023

Purpose of Technical Advisory Committee

MEETING SCHEDULE

1. Project introduction. Review criteria for project development. (May 2022)
2. Review prioritization framework & principles. Provide input & recommendations. (July 2022)
3. Review bike network development framework. (August 2022)
4. Review proposed bicycle facility types (September 2022)
5. Review proposed bicycle network (November 3, 2022)
6. Review second draft network & proposed prioritization. (March 2023)
7. Review draft design standards. (April 2023)
8. **Review draft plan. (June 2023)**
   ***Note: Joint with Bicycle Advisory Committee (BAC)**

DRAFT PLAN

WITHOUT FURTHER ADO, & WE ARE ON A ROLL!

DALLAS BIKE PLAN UPDATE

2023

Contents

EXECUTIVE SUMMARY

1. Introduction
2. Methodology for Updating the Bike Network
3. Bike Network
4. Recommended Design Standards
5. Policy Recommendations
6. Implementation & Next Steps

CHAPTER 1

INTRODUCTION

Vision

The Dallas Bike Plan update envisions a bike network that is unique to our city—one that is safe, accessible, and comfortable—and also provides the avenue for Dallas to become world class for biking. This plan update will focus on developing a safe and connected bike network that serves the different types of people who have to, choose to, and want to bike.

CHAPTER 1

INTRODUCTION

Goals

Update the Bike Network to reflect existing conditions, priority destinations or connections, and desired facility types comfortable for a wide range of ages and abilities.

Update design standards for bike facilities based upon identified national, state, and local best practices.

Create a prioritized and phased implementation plan that identifies "quick win" priority bike facilities and establishes priorities for future capital improvement programs. The focus should be on what can be built within the next five years.

Set a path for incorporating the Dallas Bike Plan in the City's guiding policies, plans, and codes.

CHAPTER 1

INTRODUCTION

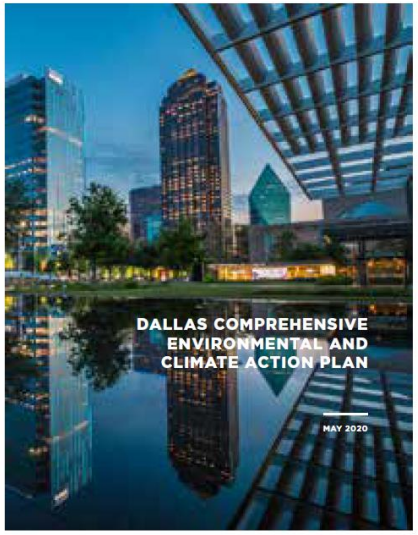
Achievements since the 2011 Bike Plan

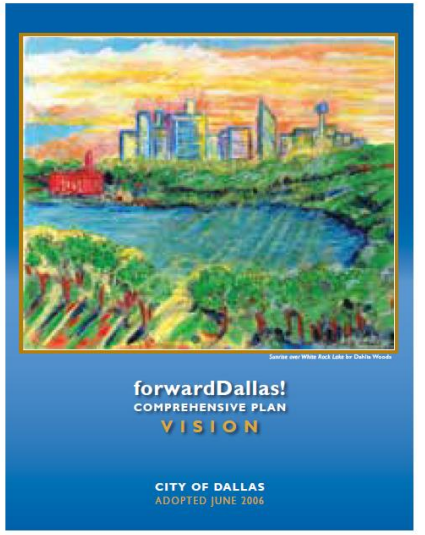
- From 0 mi → to **84 mi of on-street bike lanes**
- From 130 mi → to **174 mi of trails & off-street bike facilities** *(existing & funded)*
- The City has passed landmark plans & manuals:
  - Complete Street Design Manual (2016)
  - Downtown 360 Plan (2017)
  - Street Design Manual (updated 2019)
  - Comprehensive Environmental & Climate Action Plan (CECAP) (2020)
  - Connect Dallas Strategic Mobility Plan (2021)
  - Racial Equity Plan (2022)

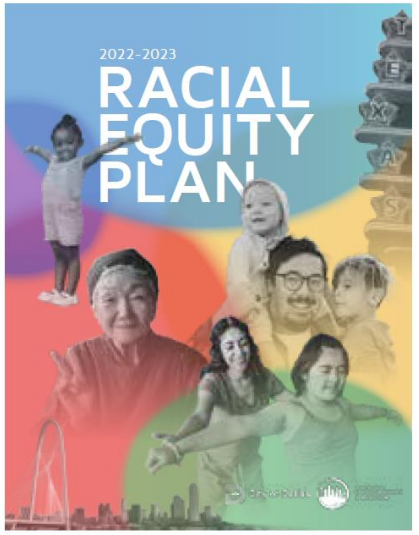
CHAPTER 1

INTRODUCTION

Planning Framework







SINGLE OCCUPANT VEHICLE TRAVEL MODE SHIFT

88% to 79% in 2030

88% to 62% in 2050

- ☑ **4.2.2.2** Update the Bike Plan
- ☑ **4.2.2.3** Use "Context Sensitive Design" standards

"More progress, fewer plans"

*"…a lack of updated infrastructure in Dallas, **primarily historically disadvantaged communities**"*

CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Existing Conditions Analysis

1 The City's Existing Bike Network

Facility Type	Existing Length (Miles)	Funded Length (Miles)
Shared Roadway (Sharrow)	46	53
Bike Lane	8	7
Buffered Bike Lane	11	9
Cycle Track	8	2
Trail	147	53

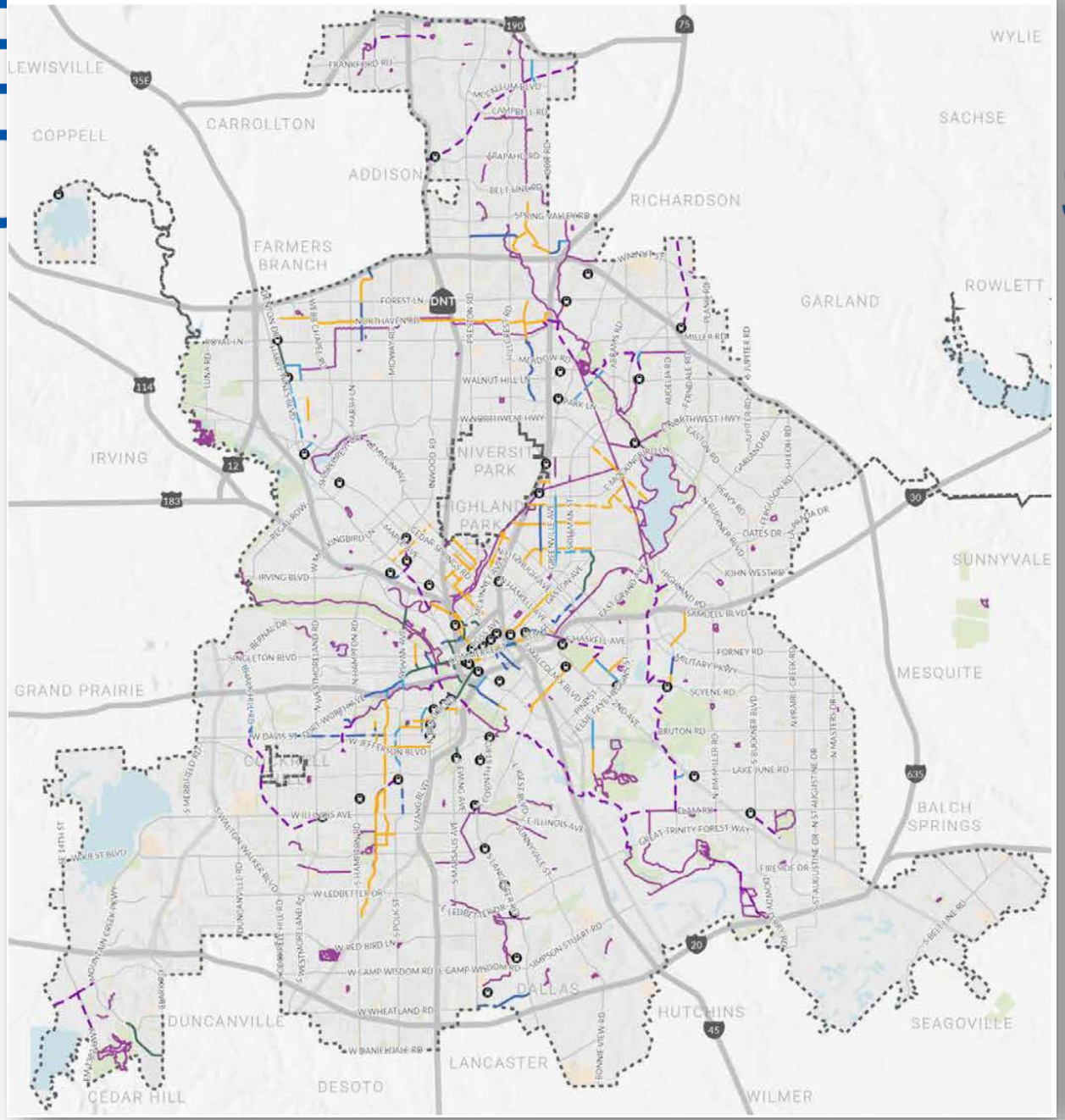
The disconnected bikeway network is further divided by highways, which serve as barriers to active travel.

CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Figure 2.1 Existing and Funded Bikeways in Dallas



CHAPTER 2

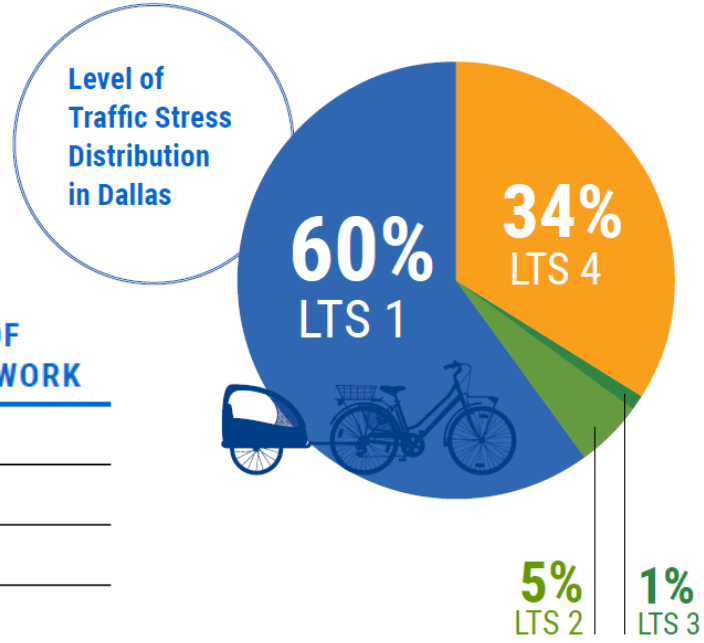
METHODOLOGY

for Updating the Bike Network

Existing Conditions Analysis

2 Level of Traffic Stress

LEVEL OF TRAFFIC STRESS	PERCENT OF ROADWAY NETWORK
LTS 4 – Highest Stress	34%
LTS 3	1%
LTS 2	5%
LTS 1 – Lowest Stress	60%

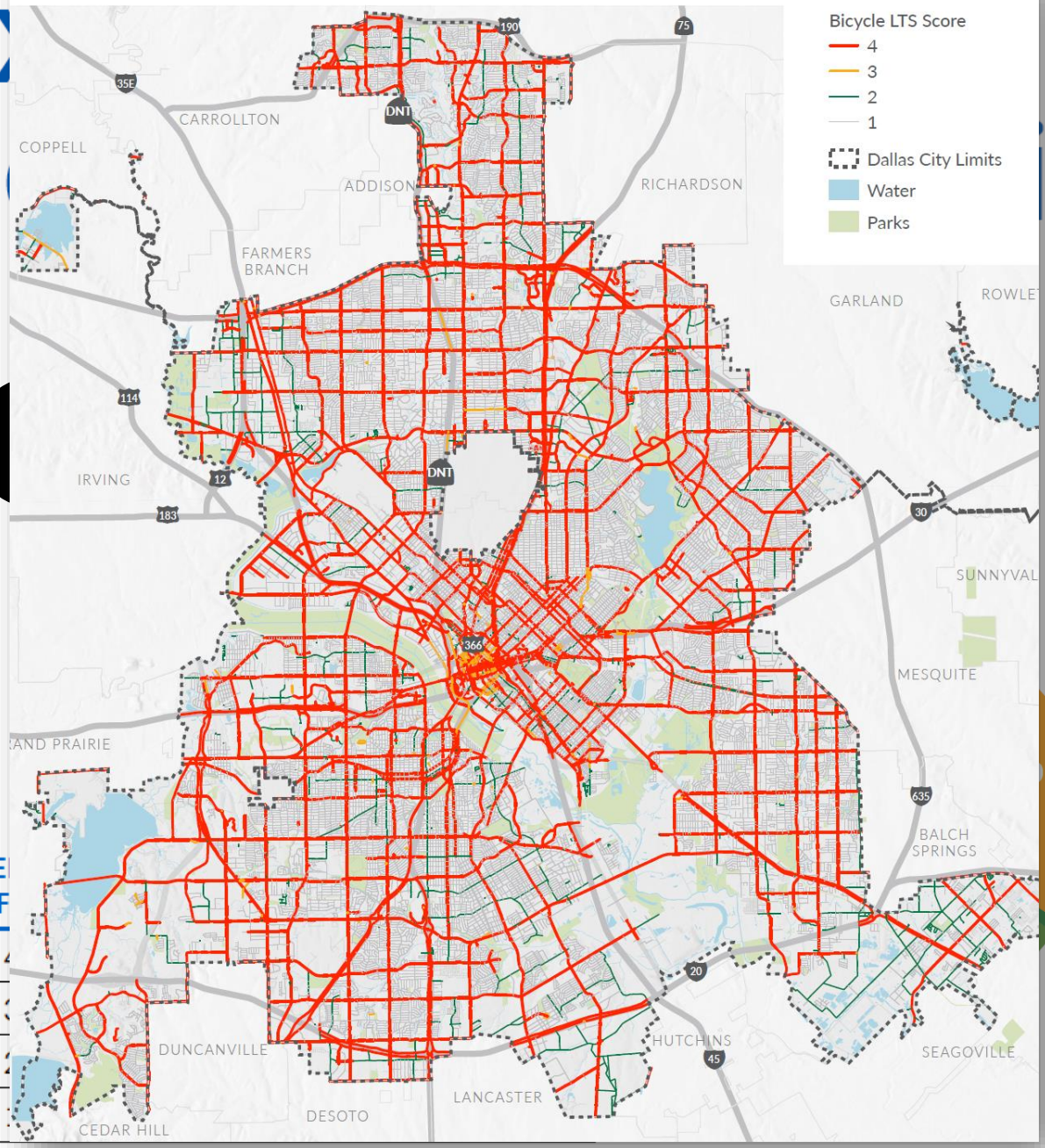


CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Figure 2.2 Level of Traffic Stress



LEVE
TRAF

LTS 4

LTS 3

LTS 2

LTS 1

1%
LTS 3

CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Existing Conditions Analysis

3 Safety

PLANNING AREA	NUMBER OF FATALITIES	NUMBER OF SEVERE INJURIES
Northwest	2	9
Northcentral	0	7
Northeast	0	24
Central	3	22
Southwest	1	18
Southcentral	3	6
Southeast	5	22

Most severe, or fatal bike-involved collisions have occurred on streets without bike facilities.

CHAPTER 2

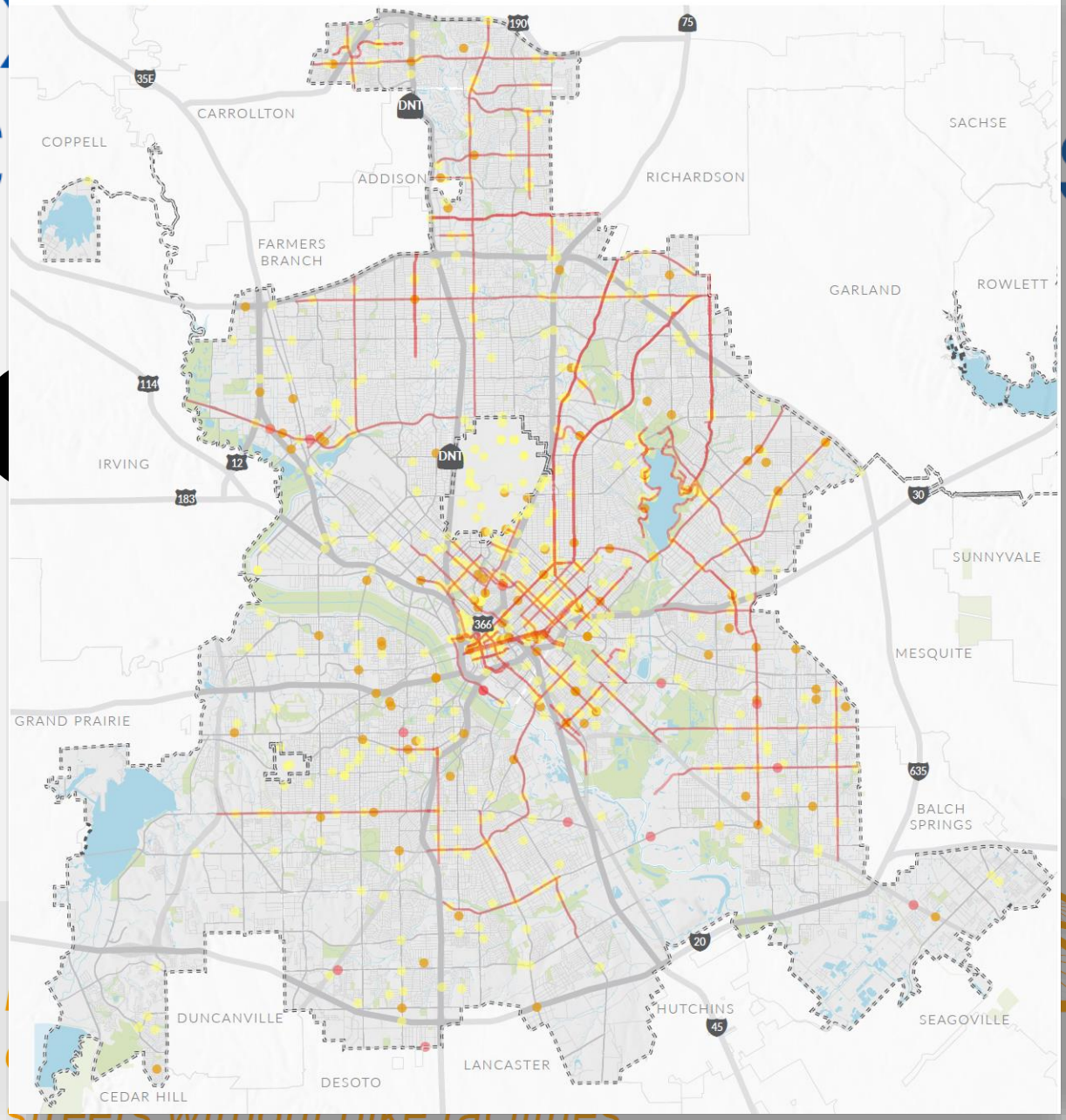
METHODOLOGY

for Updating the Bike Network

Ex

C S

Figure 2.3 Safety - Bicycle Collisions 2014-2019



Streets without bike facilities.

CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Existing Conditions Analysis

4 Active Trip Demand

Fifty percent of all car trips in the US are three miles or less

Short trips make up at least 40% of trips in most areas of Dallas.

CHAPTER 2

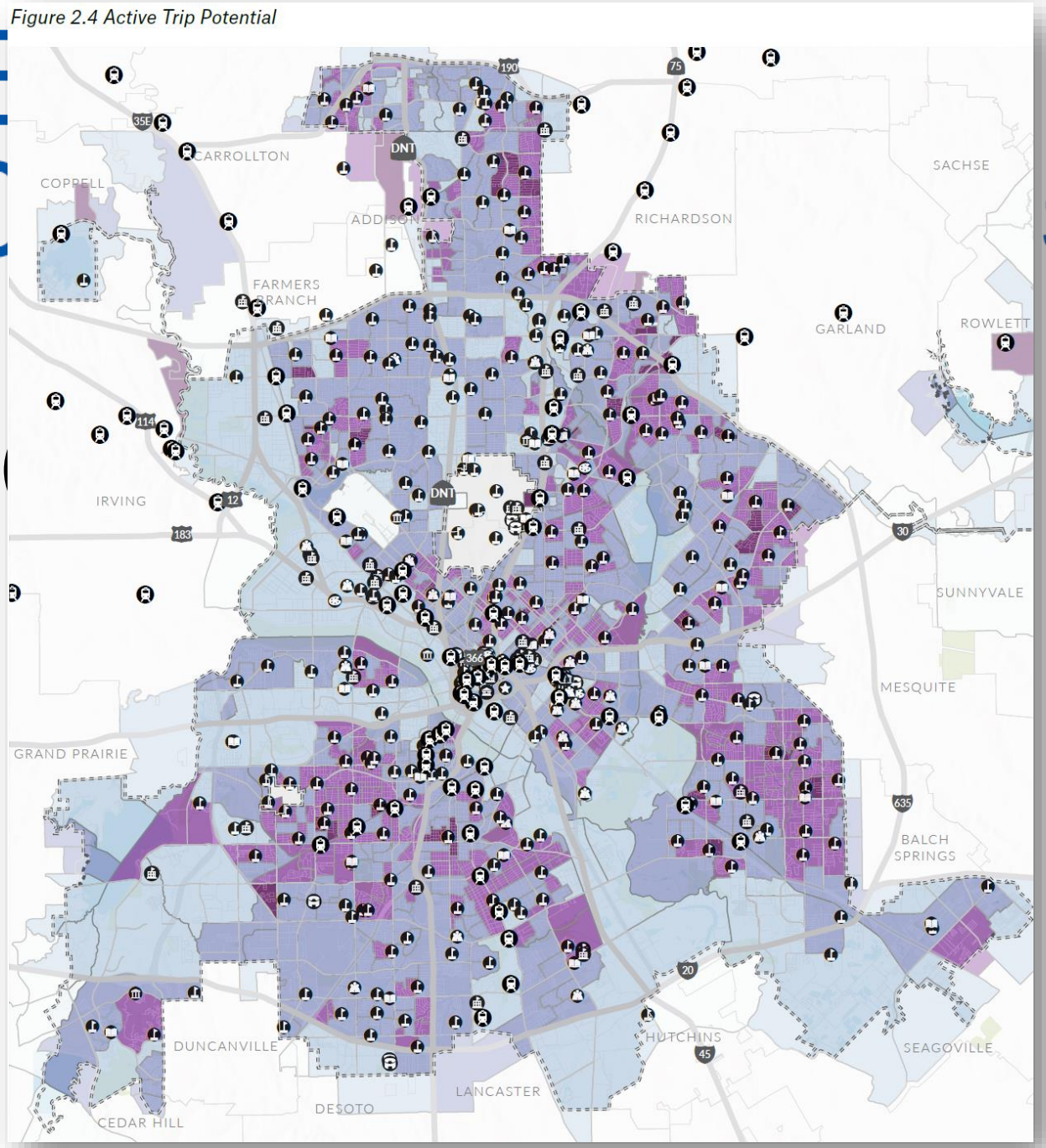
METHODOLOGY

for Updating the Bike Network

E

C S

Figure 2.4 Active Trip Potential



CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Existing Conditions Analysis

5 Equity & Public Health

Opportunity + Accessibility

Environmental Justice

Health

Affordability (Cost of Living)

Vulnerability

CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Existing Conditions Analysis

5 Equity & Public Health

KEY TAKEAWAYS

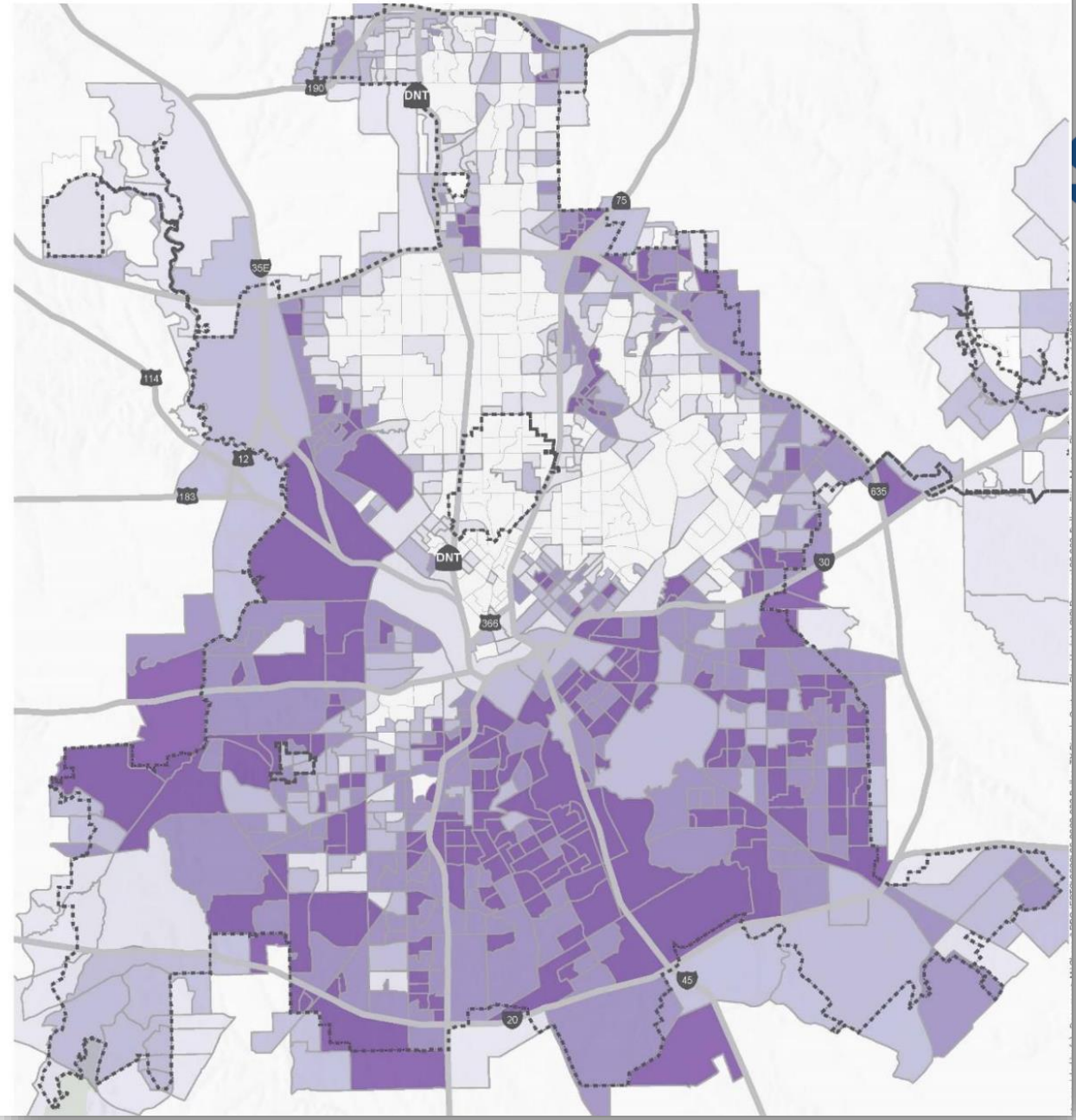
- High-need areas are most often near highways
- Poorest health outcomes in South Dallas
- Disproportionate number of bike-involved fatalities & severe-injury bike collisions in highest-need areas and areas with poorest health outcomes
- Limited bike connections to DART transit
- South Dallas also has fewest existing bike facilities

CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Figure 2.5 Equity Analysis



CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Existing Conditions Analysis

6 Pedestrian & Transit Multimodal Facilities

OUR ASSESSMENT

- **Sidewalk gap analysis**
- **Transit connection analysis**

CHAPTER 2

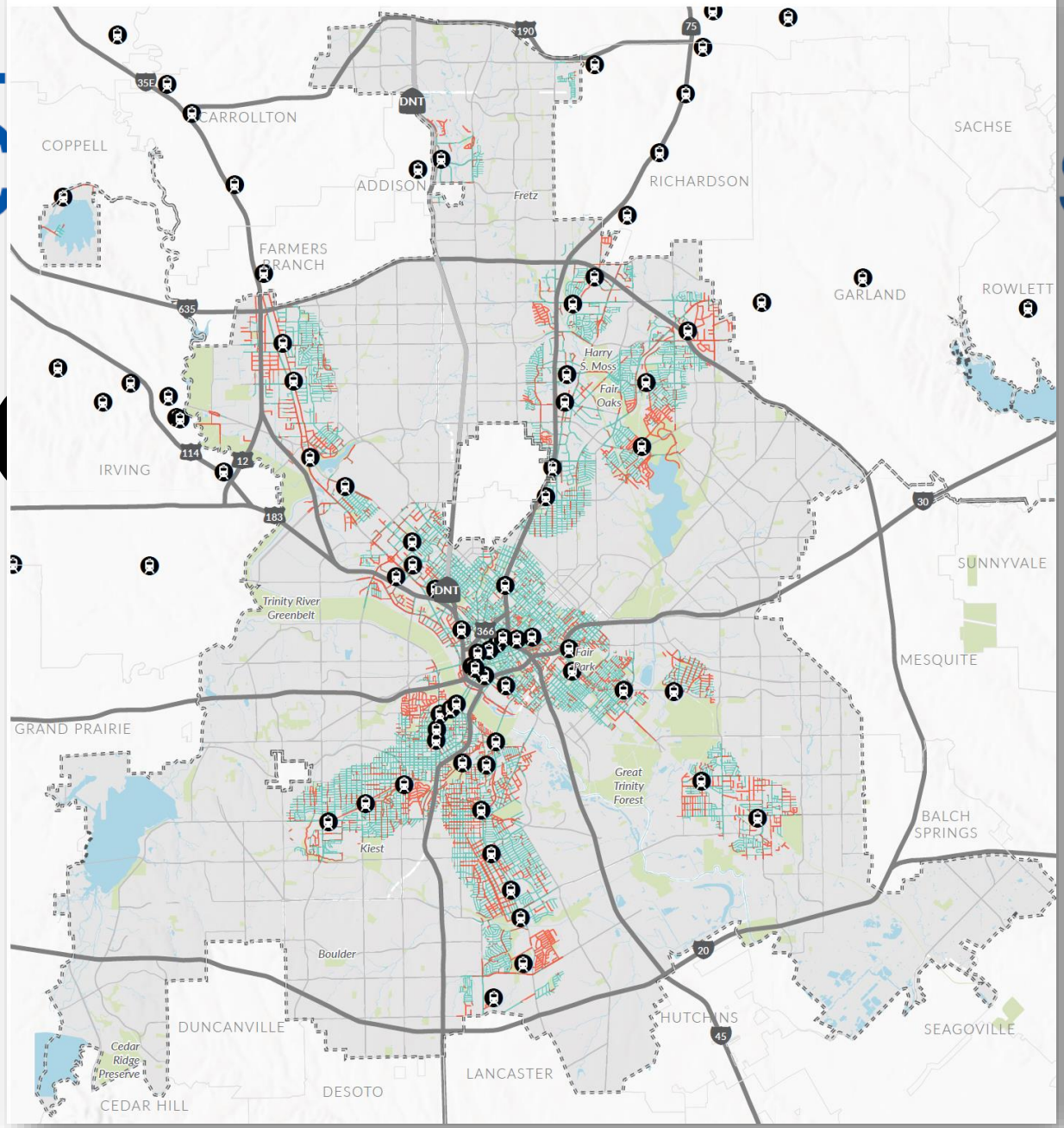
METHODOLOGY

for Updating the Bike Network

E

C S

Figure 2.7 Multimodal Facilities



CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Engagement

PHASE I VIRTUAL ENGAGEMENT

Summer 2022

PHASE II OPEN HOUSES

Fall 2022

PHASE III VIRTUAL ENGAGEMENT

Summer 2023

BICYCLE ADVISORY COMMITTEE

TECHNICAL ADVISORY COMMITTEE

CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Engagement Phase I

Summer 2022

Quantitative Responses

87% of respondents were in support of bike-friendly policy change

more than 60% of survey respondents mentioned conflicts with cars, fears for safety, and lack of access to bike facilities as barriers to biking in Dallas

35% of online map comments described a location with a challenge/barrier to biking

13% of comments highlight specific locations that need improvement

85% of respondents were willing to take a longer route to avoid heavy traffic

5% of comments mentioned crashes or dangerous and scary conditions

CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Engagement Phase II

Fall 2022

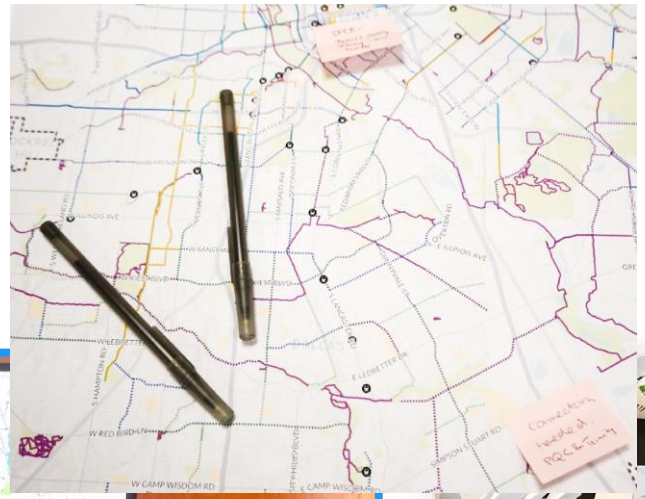
CHAPTER 2

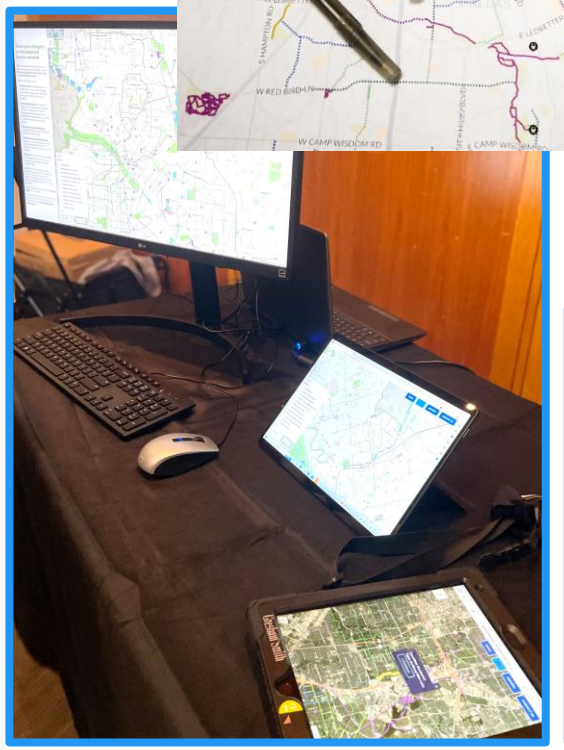
METHODOLOGY

for Updating the Bike Network

Engagement Phase II

Fall 2022





CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Engagement

BICYCLE ADVISORY COMMITTEE

04/06/22: Project Overview, Purpose of BAC, & Public Involvement Plan

05/17/22: Existing Conditions Analysis, Bike Network Guiding Principles, Vision & Goals SWOT

09/30/22: Review of Bike Network Development Framework

10/18/22: Draft Bicycle Network, Fall Engagement Strategies

03/14/23: Project Updates, Proposed Bike Network Review, Review of Candidate Priority Projects & Proposed Policy Recommendations

TECHNICAL ADVISORY COMMITTEE

04/28/22: Project Overview, TAC Purpose, & Criteria for Project Development

07/13/2\22: Existing Conditions, Prioritization Principles & Discussion

08/16/22: Summer Engagement Update, Network Development & Bike Facility Considerations

09/22/ 22: Project Updates & Bike Facility Type Workshop

11/03/22: Proposed Bike Network Review & Fall Engagement Updates

03/16/23: Second Draft Bike Network, Candidate Priority Projects & Policy Recommendations

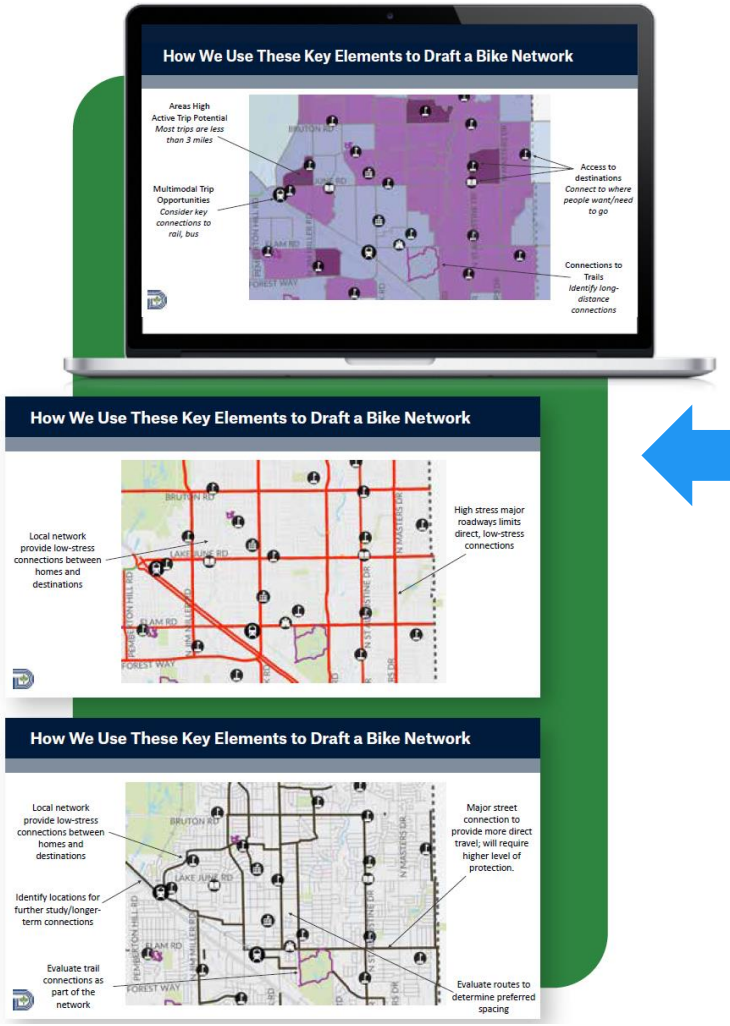
04/27/2023: Review Existing & Proposed Design Standards

CHAPTER 2

METHODOLOGY

for Updating the Bike Network

Network Development Process



Key Elements for Defining the Bike Network

- Connections to Existing & Future Trails
- Low-Stress Routes
- Access to Destinations
- Connections to Areas of High Active Trip Potential
- Interconnectivity & Directness
- Bike Rider Safety & Comfort

CHAPTER 3

BIKE NETWORK

Facility Types

BIKE BOULEVARDS


Speed Management


Intersection Priority

Berkeley, CA Example

VISUALLY SEPARATED


Conventional Bike Lane


Conventional Bike Lane


Bishop Avenue


Parking Side Buffer


Travel Side Buffer


North Polk Street

PHYSICALLY SEPARATED


One Way, Parking Buffer


Two Way


Forth Worth Avenue

TRAILS


Katy Trail


Great Trinity Forest Trail


White Rock Lake Trail

The network development framework approach elements are summarized as follows:

1. Adding lower stress bike routes to the bike network (and introducing the bike boulevard facility type)
2. Considering separation and safety for bike routes that are along major roadways
3. Connecting areas of high active trip potential
4. Providing direct bike routes to support bike travel of all distances
5. Expanding bike access to destinations
6. Increasing bike connections to the robust existing and proposed City-wide trail network

CHAPTER 3

BIKE NETWORK

Bike Network

536 miles

Total of Improvements or Additions to the Bike Network

175
Miles of Bike Boulevards

140
Miles of Visually Separated On-street Bike Lanes

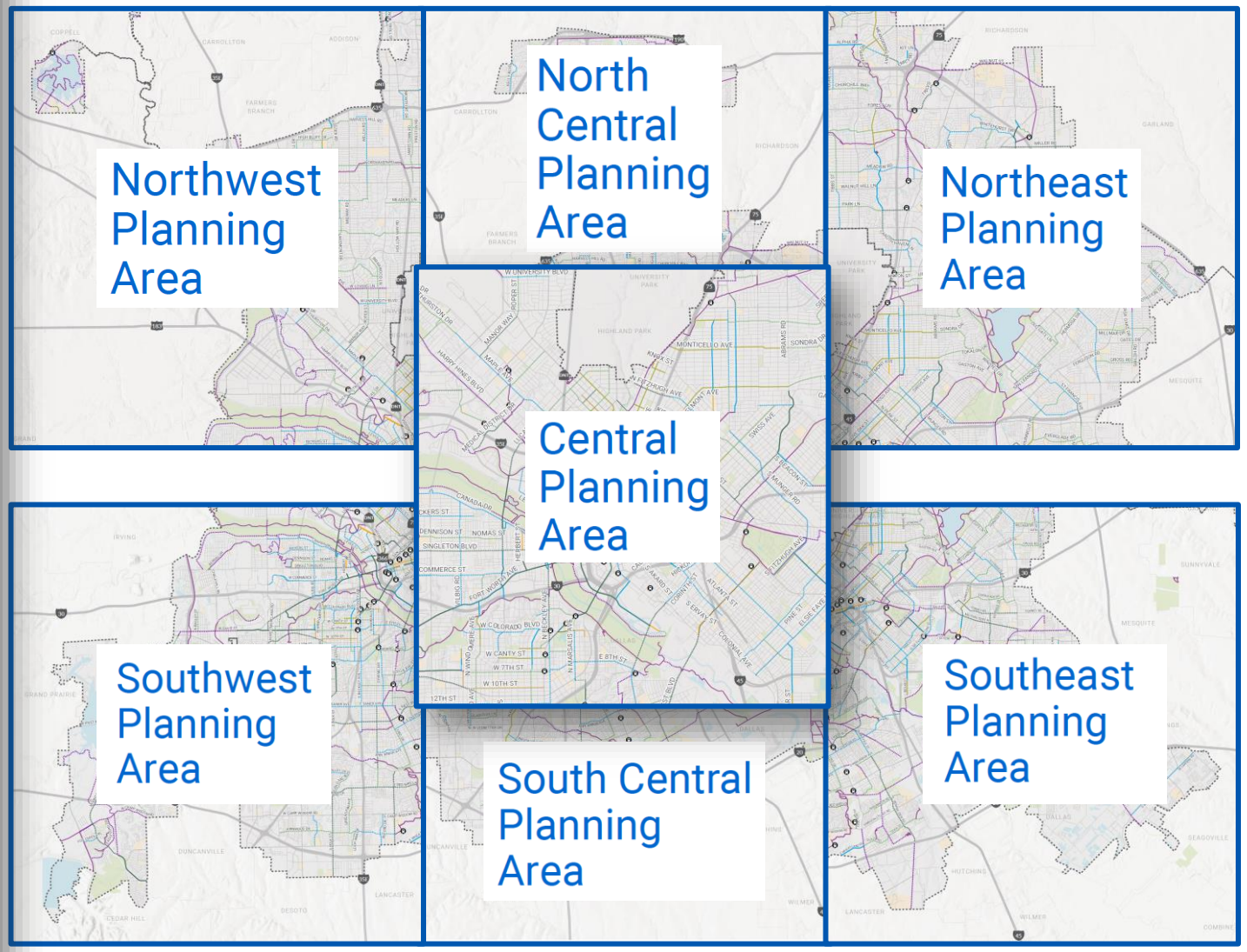
91
Miles of Physically Separated On-street Bike Lanes

130
Miles of Trails

CHAPTER 3

BIKE NETWORK

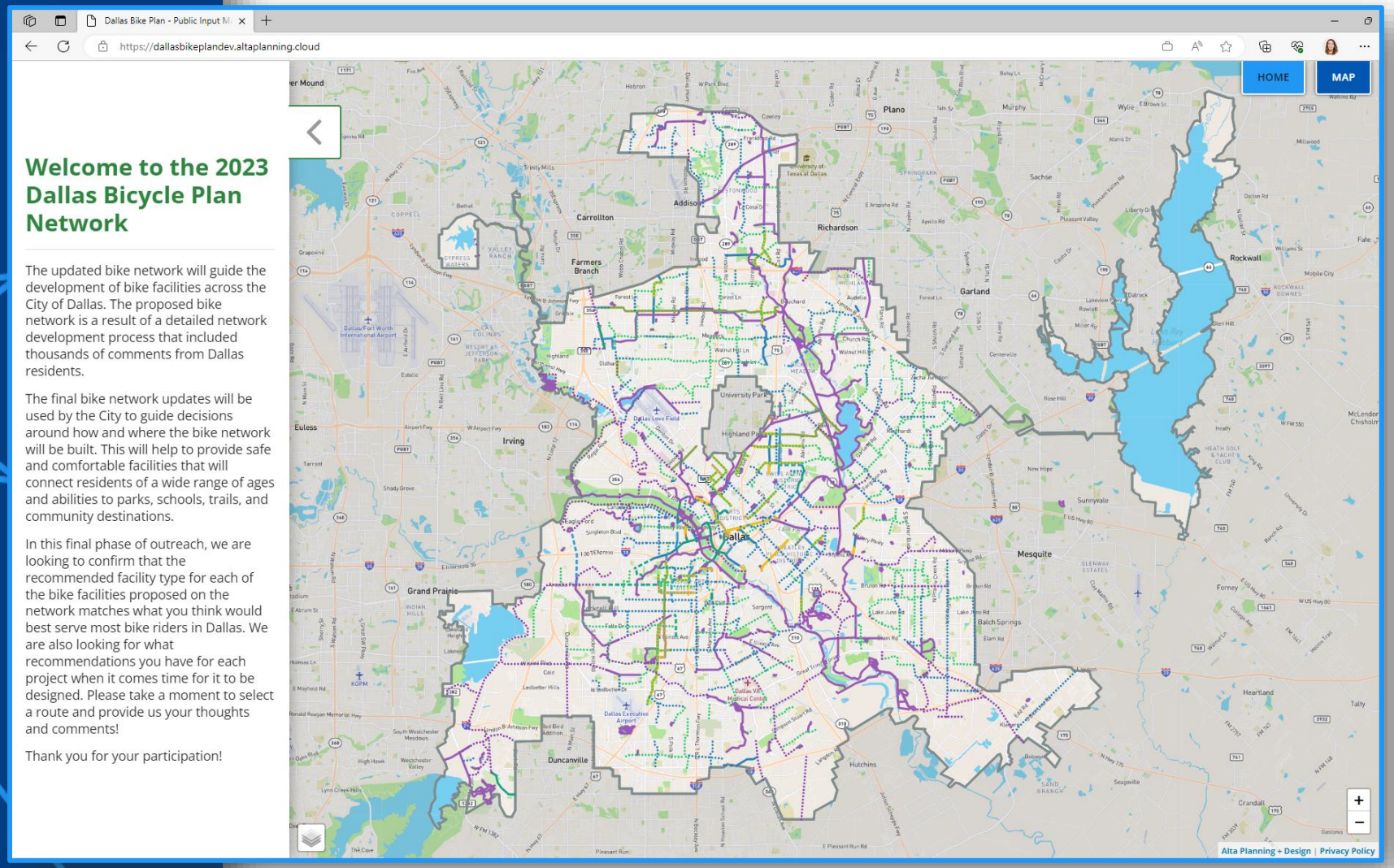
Bike Network



CHAPTER 3

BIKE NETWORK

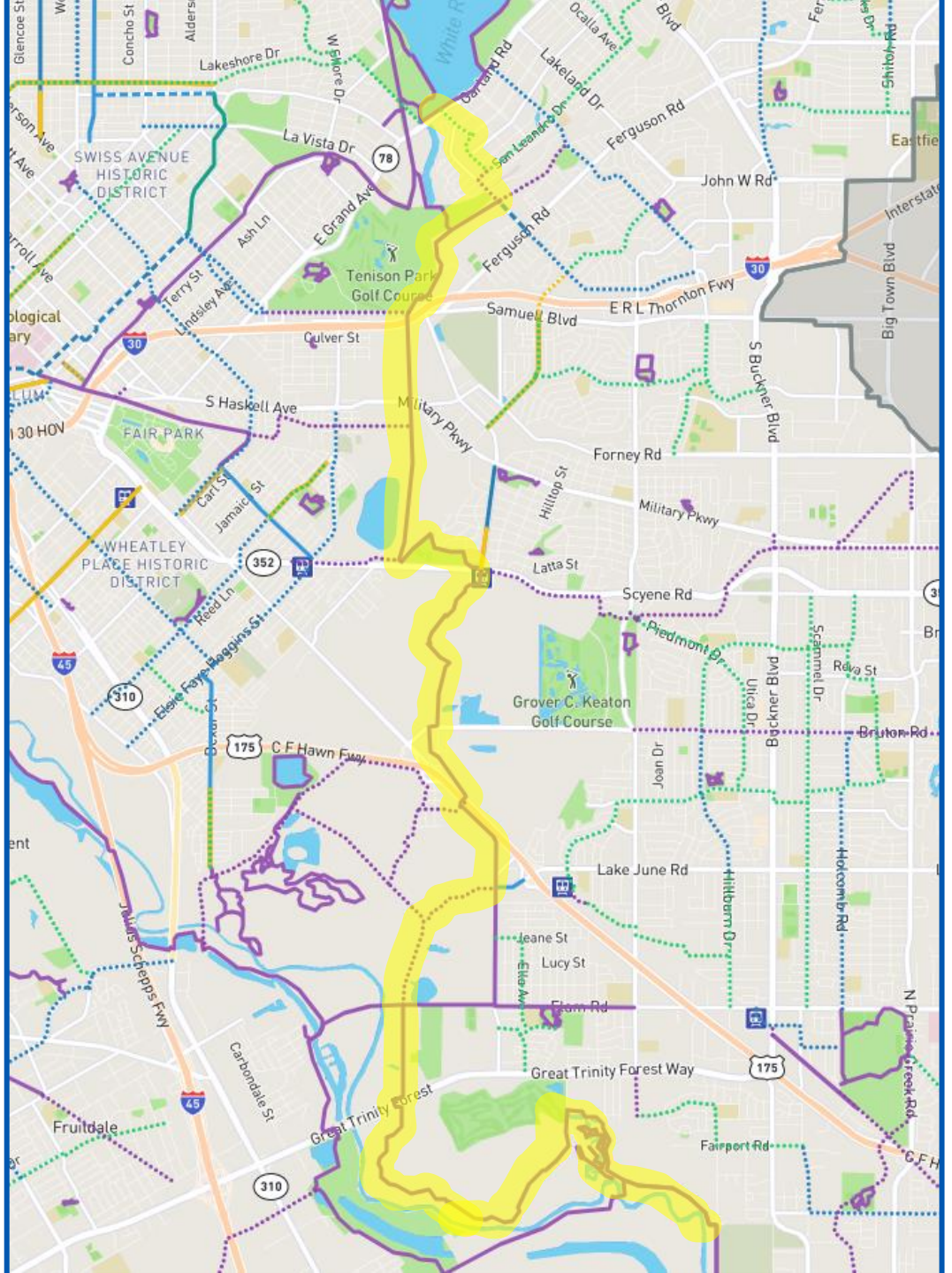
Bike Network



CHAPTER 3

BIKE NETWORK

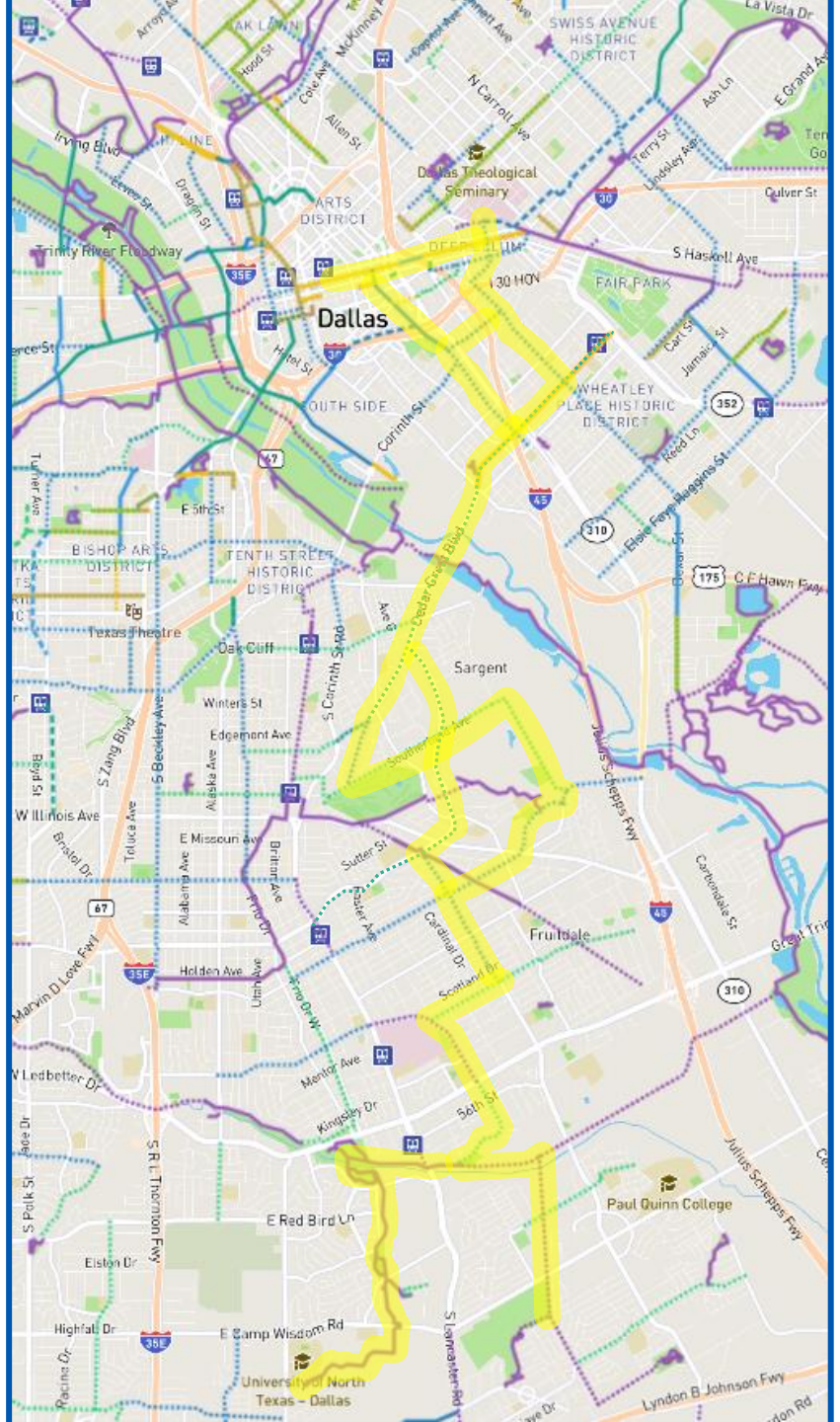
Trinity Forest Trail, from Southeast to Northeast



CHAPTER 3

BIKE NETWORK

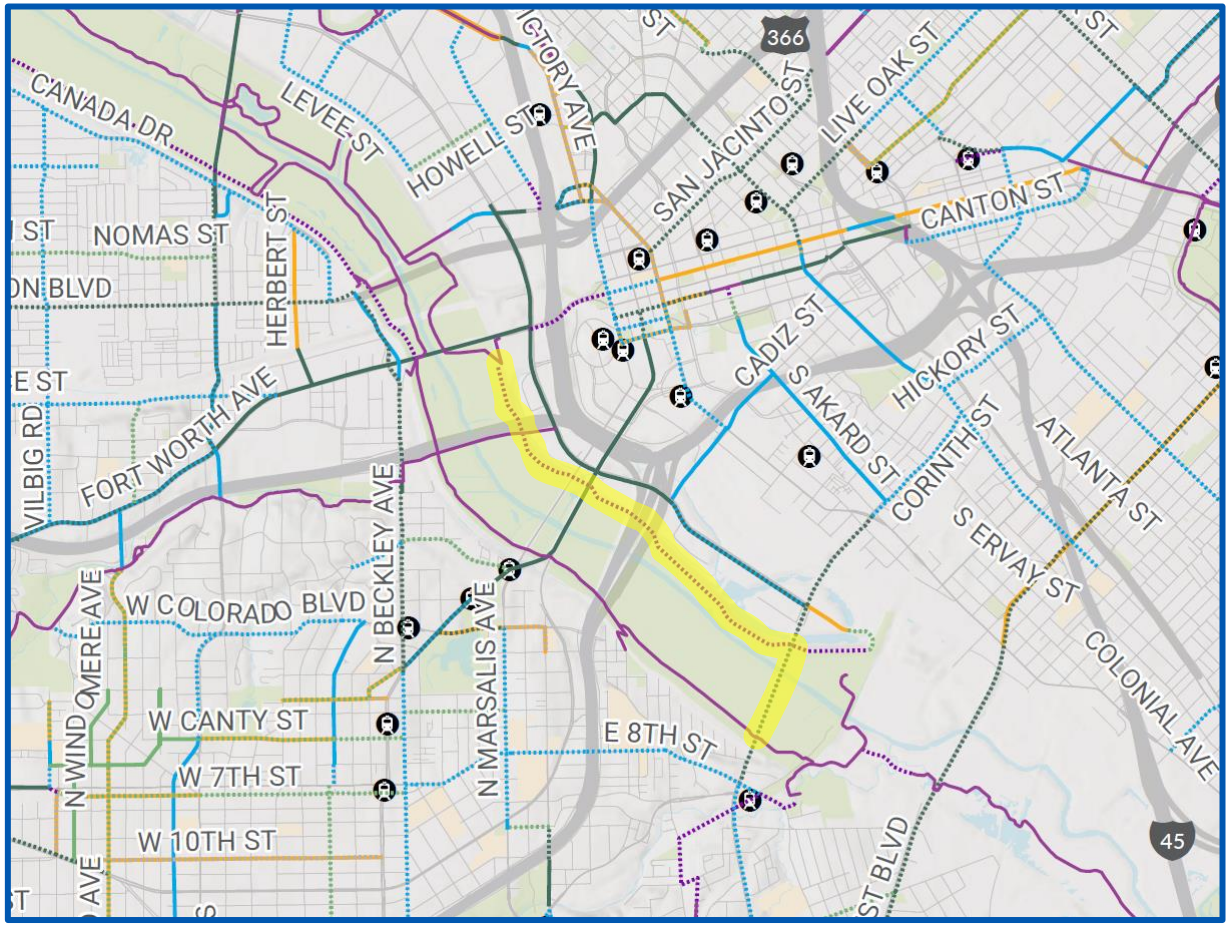
South Dallas/UNT to Downtown & Deep Ellum



CHAPTER 3

BIKE NETWORK

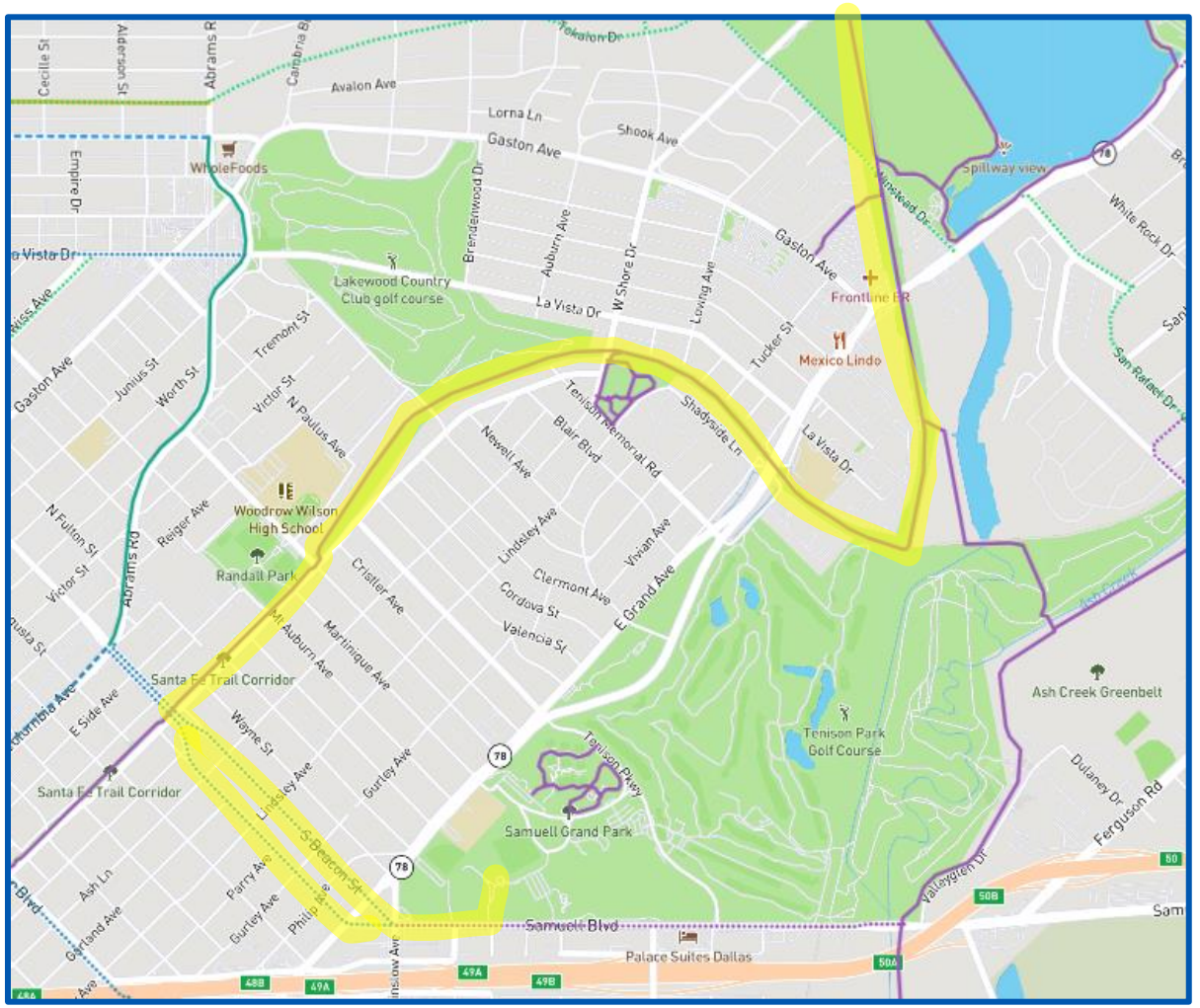
Trinity River Greenbelt



CHAPTER 3

BIKE NETWORK

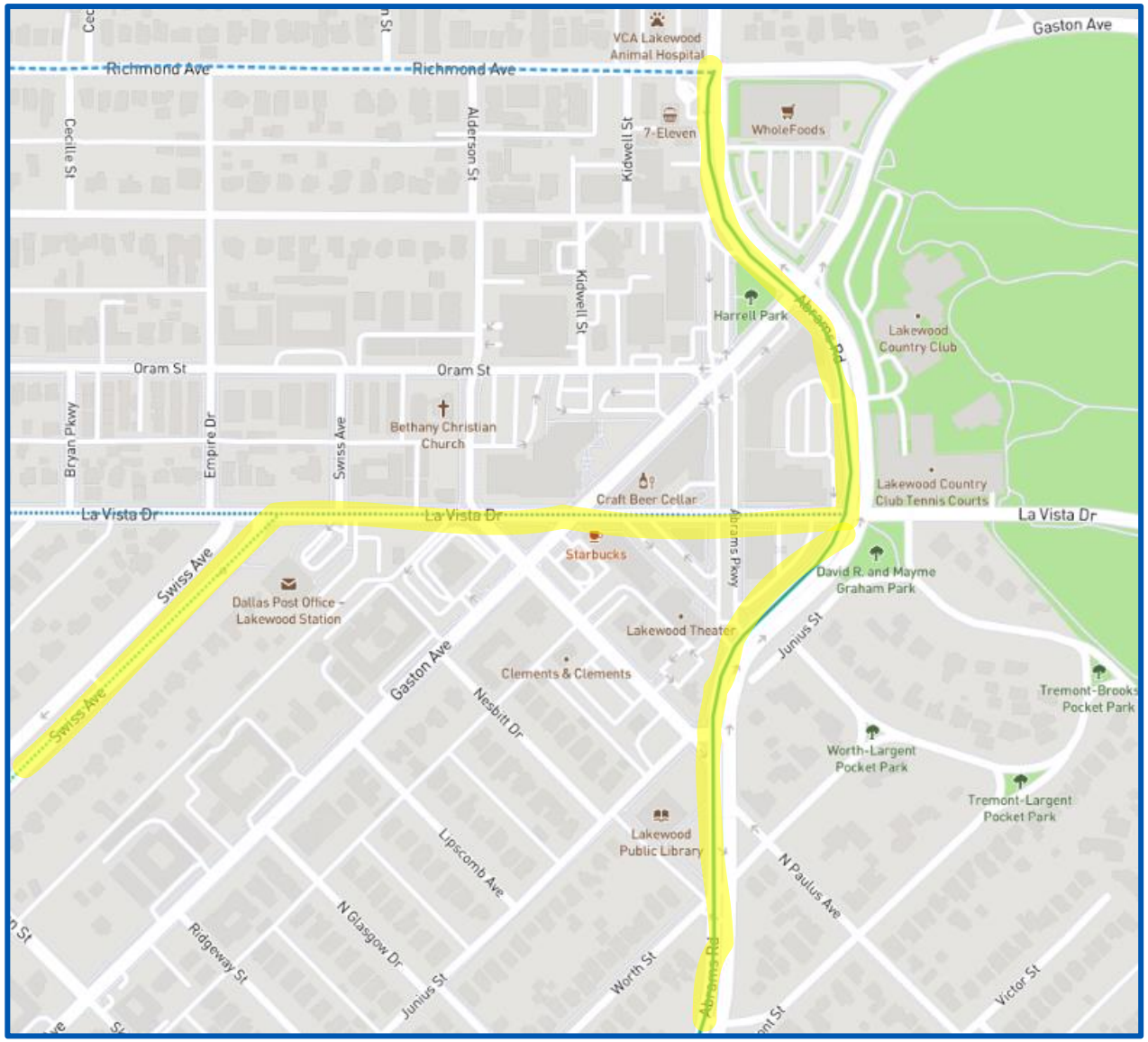
Beacon/Graham Bike Lanes & Samuell Blvd. Trail



CHAPTER 3

BIKE NETWORK

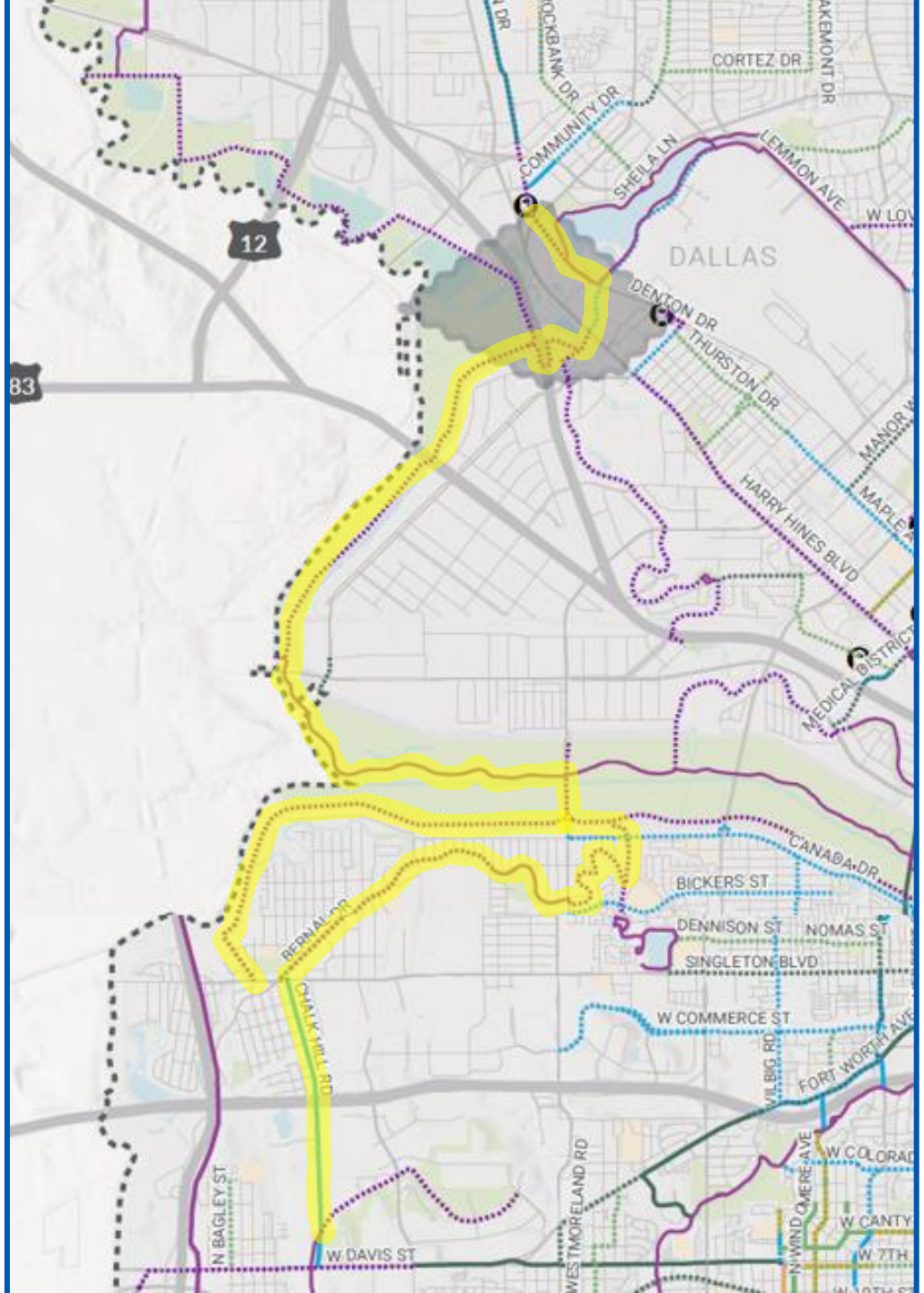
La Vista, Lakewood, and Swiss



CHAPTER 3

BIKE NETWORK

Trinity River Greenbelt, Elm Fork Greenbelt, & Bachman Lake

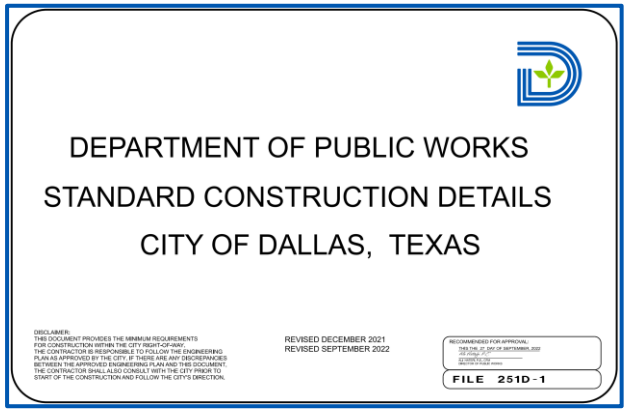


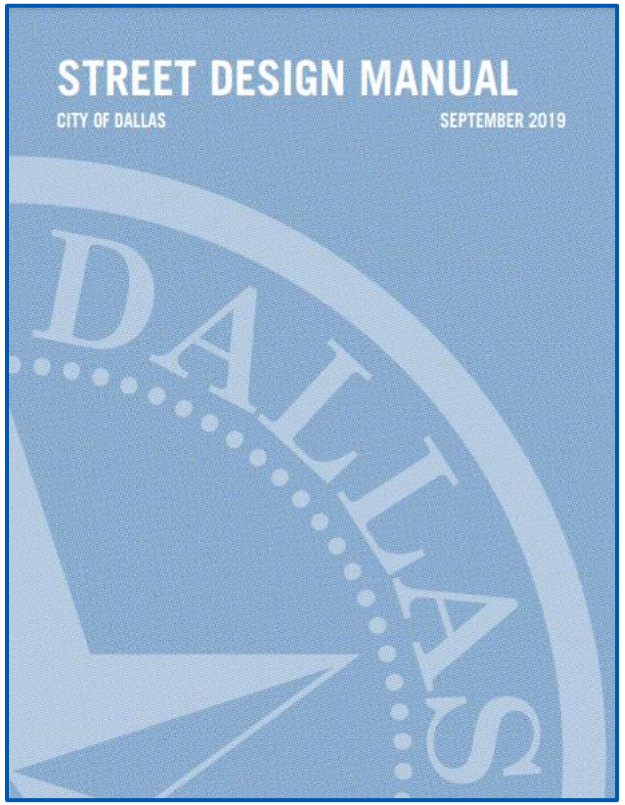
CHAPTER 4

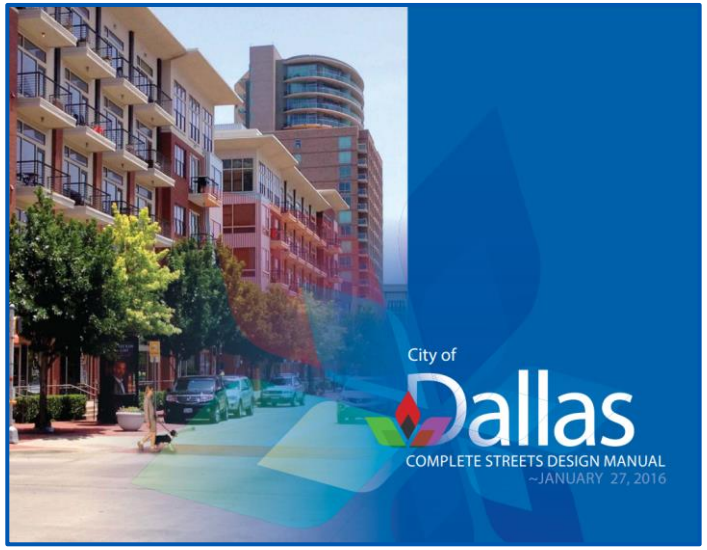
RECOMMENDED

Design Standards Updates

Review of Existing Dallas Bike Facility Standards, Guidelines, and Specifications







CHAPTER 4

RECOMMENDED

Design Standards Updates

Review of Existing Dallas Bike Facility Standards, Guidelines, and Specifications

SECTION	TITLE	RECOMMENDED CHANGE FOR STREET DESIGN MANUAL
3.2.6	Bicycle Provisions	1. Update bike facility classifications (Bike Boulevard, Visually Separated, Physically Separated, Trail). 2. Include a bike facility applicability matrix to guide facility type selection.

4.3.7.1	On-Street Elements; Bikeways and Facilities	1. Incorporate Sheet No. 5012 dated June 2021 for Bike Lane Pavement Markings into Section 4.3.7.1 for clarity of on-street bike lane/cycle track pavement marking.
		2. Figure 4.19 On-Street Shared Bike Route should be noted that shared lanes/sharrows are not a preferred bike facility type and require Department Director approval.
		3. Figure 4.20 On-Street Dedicated Bike Lanes and Facilities should be revised to better illustrate the pavement marking standards, signage, and the separation (including striping and physical barriers) between the vehicle travel lane and the bike facility.
		Elements to include the following:
		• Physical separator typology options:
		  ◦ Parking stops or similar low-profile physical separators
		  ◦ Prefabricated low profile walls
		  ◦ Concrete separators
		• The placement of physical separators close to the travel lane
		• The use of green pavement markings (to increase the awareness of bike riders travelling through intersections, across larger commercial driveways, or in other situations where deemed appropriate).
		• Consideration of the durability of pavement markings and physical separators for maintenance.

4.4.5.6	Intersections – Bicycle Treatments	Improved illustrations showing complete bike approach pavement markings and signage should replace Figure 4.29 Crossing Markings. Optional elements for consideration include: • Dashed line white or green pavement markings through the intersection • Bike keyholes placed between a through lane and the adjacent right turn lane, bus bay, or parking lane • Bike boxes may be appropriate for intersections of significant collector and arterial roadways that experience moderate to high levels of bike activity
6.1.4	Sidewalk, Pedestrian Walkway, and Bikeway Illumination Levels	Modify Table 6.3 Illuminance Values for Pedestrian Areas to include Bike Usage Areas. The rationale for including High, Medium and Low Bike Usage Areas is to better align the illumination standards with the City's Vision Zero policies.
Appendix A.4.6	Storm Drains	The City is encouraged to add bike-safe stormwater inlet and grate design standards into the Street Design manual. Considerations include the following: • Grate must be flush with the road surface • Grates with inlet bars must be perpendicular to the direction of bike travel, and should not have spacing greater than 4" • Use small hexagon or similar small spacing inlet face where appropriate • Where feasible, locate the entire grate in the gutter pan • Ensure there is no exaggerated warping/drop off towards the inlet opening that would pose an obstacle to a bike rider

CHAPTER 4

RECOMMENDED

Design Standards Updates

Physical Separators

CHAPTER 4

RECOMMENDED

Design Standards Updates

Bus Stop Treatments

Source: City of Seattle, NACTO Urban Bikeway Design Guide

Example of a Floating Bus Stop

BENEFITS

Enhances bike rider safety from bus operations at the stop

Creates more room for bus riders as they are removed from the sidewalk onto a separate platform

Buses do not have to leave then re-enter travel flows

CHALLENGES

May require additional stormwater drainage modifications

Use more roadway right-of-way space when combined with a separated bike lane

Introduces conflicts between transit passengers and bike riders within the bike lane.

CHAPTER 4

RECOMMENDED

Design Standards Updates

Guidance of Bike Path Through Intersections

CHAPTER 4

RECOMMENDED

Design Standards Updates

Bike Facility Type Selection Guidance

FACILITY TYPES	BIKE FACILITY MINIMUM WIDTH	MAX POSTED SPEED*	MAX NUMBER OF LANES*	RECOMMENDED AADT VOLUME*	HIGHEST FUNCTIONAL CLASS**	APPROPRIATE FOR LOCAL TRANSIT ROUTE	MAX HEAVY TRUCK %	PREFERRED APPLICATION	CONSIDERATIONS
Bike Boulevard	N/A	25	2	<1,000	Local	Most Appropriate	<3%	Low-speed and low-volume local roads that provide bike facilities	1. May require signalized crossing of higher volume/speed roads. 2. Traffic calming measures are frequently recommended.
Visually Separated Bike Lane (buffered and unbuffered)	7 ft	40	4	2,500-5,000	Community Collector	Moderately Appropriate	<3%	1. Recommended when additional separation between the outside travel lane and bike riders is advisable 2. When on-street parking is permitted.	1. 3 ft buffer preferred 2. Provide intersection treatments that afford bike riders a defined crossing path.
Physically Separated Buffered Bike Lane / Cycle Track Separated Bike Lane (one-way)	8 ft	45	6	>5,000	Minor Arterial	Least*** Appropriate	<10%	Higher speed, higher volume roads	1. Availability of right-of-way 2. Style of physical separator 3. Addressing bike rider transition zones approaching large driveways, intersections, transit stops/stations
Physically Separated Buffered Bike Lane / Cycle Track (two-way)	12 ft	30	2	1,000-3,500	Community Collector	Most Appropriate	<3%	Urban core low-speed, low-volume streets	Bike signalization required due to contra-flow movements.
Trail / Shared-Use Path	12 ft (10 to 8 ft for limited distance constrained condition)	N/A	N/A	N/A	N/A	Least*** Appropriate	N/A	When off-road bike facilities are advisable to support longer trips and when right-of-way or easements are available.	Enhanced crossing treatments including signals (RRFBs, HAWKS, full signalization) for crossing higher volume and speed collector arterial roadways.

CHAPTER 5

PLANNING & POLICIES REVIEW

Planning & Policies Review

The plans and policy documents reviewed:

2011 Bike Master Plan

Connect Dallas (Strategic Mobility Plan - 2021)

Dallas 360 Plan (2017)

Vision Zero Dallas Action Plan (2022)

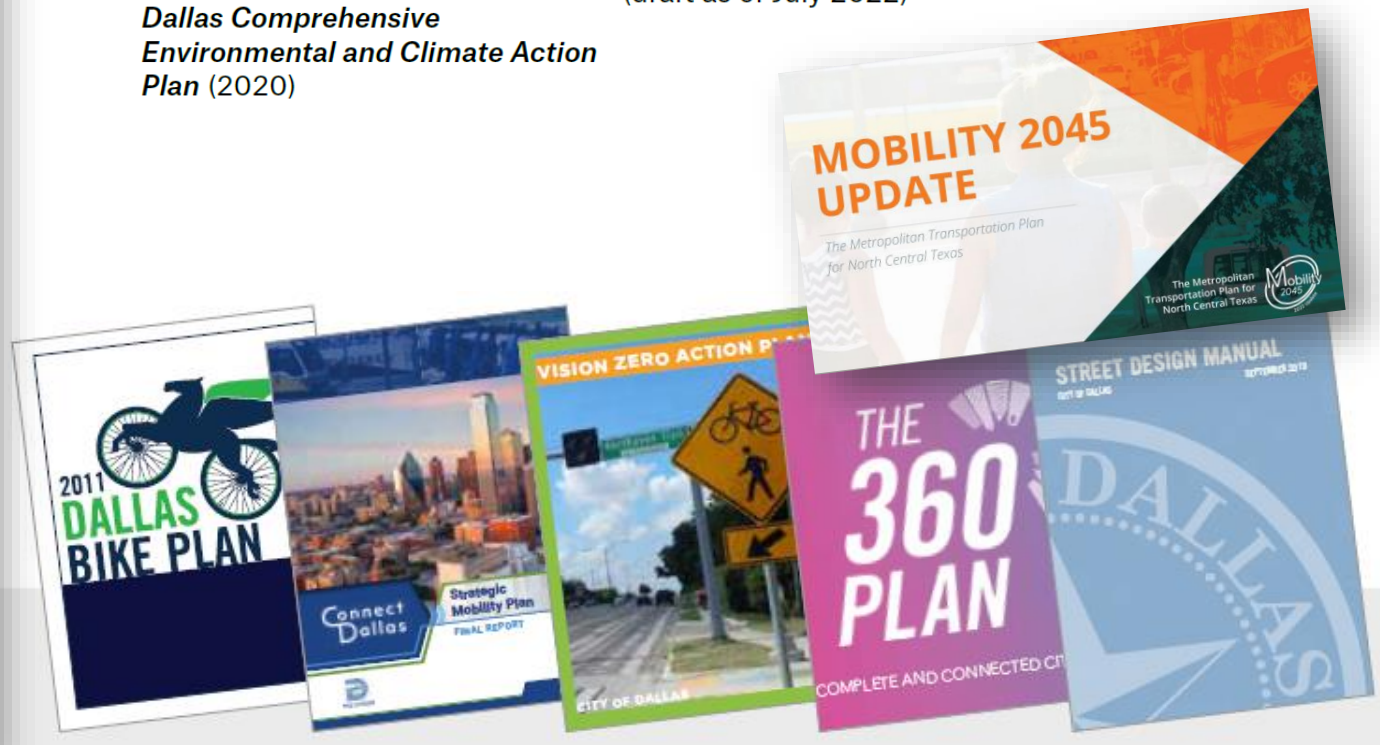
Dallas Comprehensive Environmental and Climate Action Plan (2020)

Dallas Development Code

Dallas Street Design Manual (2019)

Dallas Complete Streets Design Manual (2016)

Bike Signals Policy (draft as of July 2022)



CHAPTER 5

PLANNING & POLICIES REVIEW

Policy Recommendations

1. Enhance the coordination of staff across various departments and partner agencies

2. Require developers during permitting to reconstruct bike facilities and amenities directly affected by the development

3. Evaluate the use of green paint for all future on-road bike facilities

4. Implement low-cost & quick-build modifications to provide short-term safety benefit before long-term projects are constructed

CHAPTER 5

PLANNING & POLICIES REVIEW

Action Item #1

Moving forward, the City should use a standardized methodology for identifying, prioritizing, and implementing bike improvements consistent with this Plan's process

Action Item #2

Review and enhance the public messaging of Vision Zero and safety for all transportation modes.

Action Item #3

Bike lanes should be maintained as much if not more than the car lanes they're adjacent to.

Action Item #4

Continue to collaborate with partner department and agencies to further develop a cross-functional network of bike-friendly policies across jurisdictions and disciplines.

CHAPTER 6

IMPLEMENTATION & NEXT STEPS

Funding Opportunities

Budget

P3s

Grants

Recommended
bike spend per resident
(based on national average)

$3.25 – $5.00 *(aspirational)*

Current Dallas spend

$1.92 / resident

$2.5M total annually

Recommended Dallas spend

$3.25 – $5.00 / resident

$4.24M – $6.52M total annually

CHAPTER 6

IMPLEMENTATION & NEXT STEPS

Funding Opportunities

Budget

P3

Grants

Public/Private Partnerships

Contractual agreements between a public agency and a private entity that allow for greater private participation in the delivery of projects

CHAPTER 6

IMPLEMENTATION & NEXT STEPS

Funding Opportunities

Budget

P3

Grants

	SHORT Term Project <2 Years	LONG Term Project >2 Years
Small Budget	Neighborhood Associations Community Improvement Districts Crowdsourcing Non-Profit Grants Impact Fees Infrastructure bonds Local taxes (General Fund) Local health departments Foundation grants Individual donors League of American Bicyclists Spark Grant People for Bikes Community Grant Program	Federal Transportation Funds Capital Inprovement budget funds State Programs: • Texas Department of Transportation • Recreaction Trails Program (Department of Natural Resources) • Community Development Block Grant (CDBG) • Highway Safety Improvements Program (HSIP) • Safe Routes to School (SRTS) • Safe Streets for All (SS4A) • Transportation Alternatives (TA) Set-Aside Program
Big Budget	Foundation grants Individual donors Community Improvement Districts Public-Private Partnerships Infrastructure bonds Local taxes (General Fund) League of American Bicyclists Spark Grant People for Bikes Community Grant Program	Federal Transportation Funds Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Reconnecting Communities Program (RCP) Safe Streets for All (SS4A) Thriving Communities Program (TCP)

CHAPTER 6

IMPLEMENTATION & NEXT STEPS

Funding Opportunities

ADMINISTRATION	ESTIMATED LOCAL MATCH	ELIGIBLE PROJECT CATEGORIES/TYPES	CONSIDERATIONS FOR COMPETITIVENESS
RAISE – Rebuilding American Infrastructure with Sustainability and Equity			
USDOT (applications are coordinated with NCTCOG)	Minimum 20% unless located in an Area of Persistent Poverty (APP), or located in a Historically Disadvantaged Community (HDC) Minimum RAISE grant award is $5M; no maximum	**Categories** **Planning Projects** – Planning, preparation (including NEPA), or design **Capital Projects** – Right-of-way acquisition and design. **Types** • Bike lanes (on road & separated) • Recreational trails • Shared use paths / transportation trails • Signs, signals, and signal improvements • Signing (route designation, directional, & wayfinding) • Traffic calming	❑ What connections does this project have to the broader network? Does this fill a significant gap in the current bike network? ❑ Does this project connect to transit? ❑ Can workforce elements be included (such as requiring work be performed by Dallas residents or reserving work for journey-level positions)? ❑ Does this project address a significant safety issue? ❑ Is this project in an Area of Persistent Poverty (APP) or a Historically Disadvantaged Community (HBC)? ❑ Does this project contribute to broader revitalization and economic development efforts?

Grants

CHAPTER 6

IMPLEMENTATION & NEXT STEPS

Phasing

Prioritization Criteria

STAKEHOLDER INPUT

Accounting for comments received by the BAC and TAC stakeholder committees.

CONSTRAINTS

Accounting for project complexity and planning-level opinions of probable construction cost for each project.

OPPORTUNITIES

Accounting for projects that coincide with previously programmed roadway improvements and projects that were specifically physically separated or trail facility types (a reflection of public input).

SAFETY

Accounting for the City's High Injury Network (HIN), previously recorded fatal and serious injury bicycle crashes, and a comparison of level of traffic stress (from existing conditions analysis) with intersections.

EXISTING CONDITIONS

Accounting for upgrades to protected/separated facility types for existing non-separated facilities on roads with high levels of traffic stress.

DEMAND

Accounting for high active trip potential areas (from existing conditions analysis) and projects that specifically provide connection to the existing trail network (a reflection of public input).

CONNECTIVTY

Accounting for new connections to the existing bike network and new/improved connections to DART rail transit.

EQUITY

Accounting for equity need areas (from existing conditions analysis).

PUBLIC INPUT

Accounting for favorable public reactions to proposed projects during Phase II engagement.

CHAPTER 6

IMPLEMENTATION & NEXT STEPS

Short Term

5-Year Action Plan

15 PRIORITY CAPITAL PROJECTS

LOCATION	STARTING TERMINI	ENDING TERMINI	LENGTH (MI)	PROPOSED FACILITY TYPE	OPINION OF PROBABLE CONSTRUCTION COST (Cost Estimate)
Martin Luther King Jr / Cedar Crest Blvd	Fair Park	Stella Ave	3.7	Physically Separated	$1,910,956.00 - $2,336,864.00
Peak St	Cabell Dr	Parry Ave	1.9	Physically Separated	$971,408.00 - $1,080,506.00
Maple Ave	Empire Central	Throckmorton St	2.7	Visually Separated	$302,161.00
Community Dr	Northwest Hwy	Webb Chapel Ext	0.6	Visually Separated	$51,778.00
S Beacon St	Columbia Ave	East Grand Ave	0.7	Visually Separated	$51,600
Timberline Dr	Lombardy Ln	W Northwest Hwy	1.0	Bike Boulevard	$174,240.00
Pine St / Pine Spring Conn	Botham Jean Blvd	Lagow St	2.0	Visually Separated	$186,000.00
S Malcolm X Blvd	S Hall St	Else Faye Heggins St	2.3	Visually Separated	$216,632.00
Sylvan Ave	Canada Dr	Fort Worth Ave	1.1	Physically Separated	$667,512.00 - $819,096.00
N Beckley Ave	Woodall Rodgers Fwy	N. Zang Blvd	1.6	Physically Separated	$960,352.00 - $1,070,595.50
Lamar St	Continental Ave	Houston St	0.2	Physically Separated	$70,208.00 - $83,983.00
Ewing Ave	Clarendon Dr	Saner Ave	2.0	Visually Separated	$200,200.00
Kiest Blvd	Polk St	Cedar Crest Blvd	5.3	Physically Separated	$2,841,416.00
Meandering Way	Preston Ridge Trail	Cliff Brook Dr	0.3	Visually Separated	$29,767.00
W 7th Ave	N Rosemont Ave	Beckley Ave	1.5	Bike Boulevard	$156,200.00
				TOTAL	$9,601,038.50

CHAPTER 6

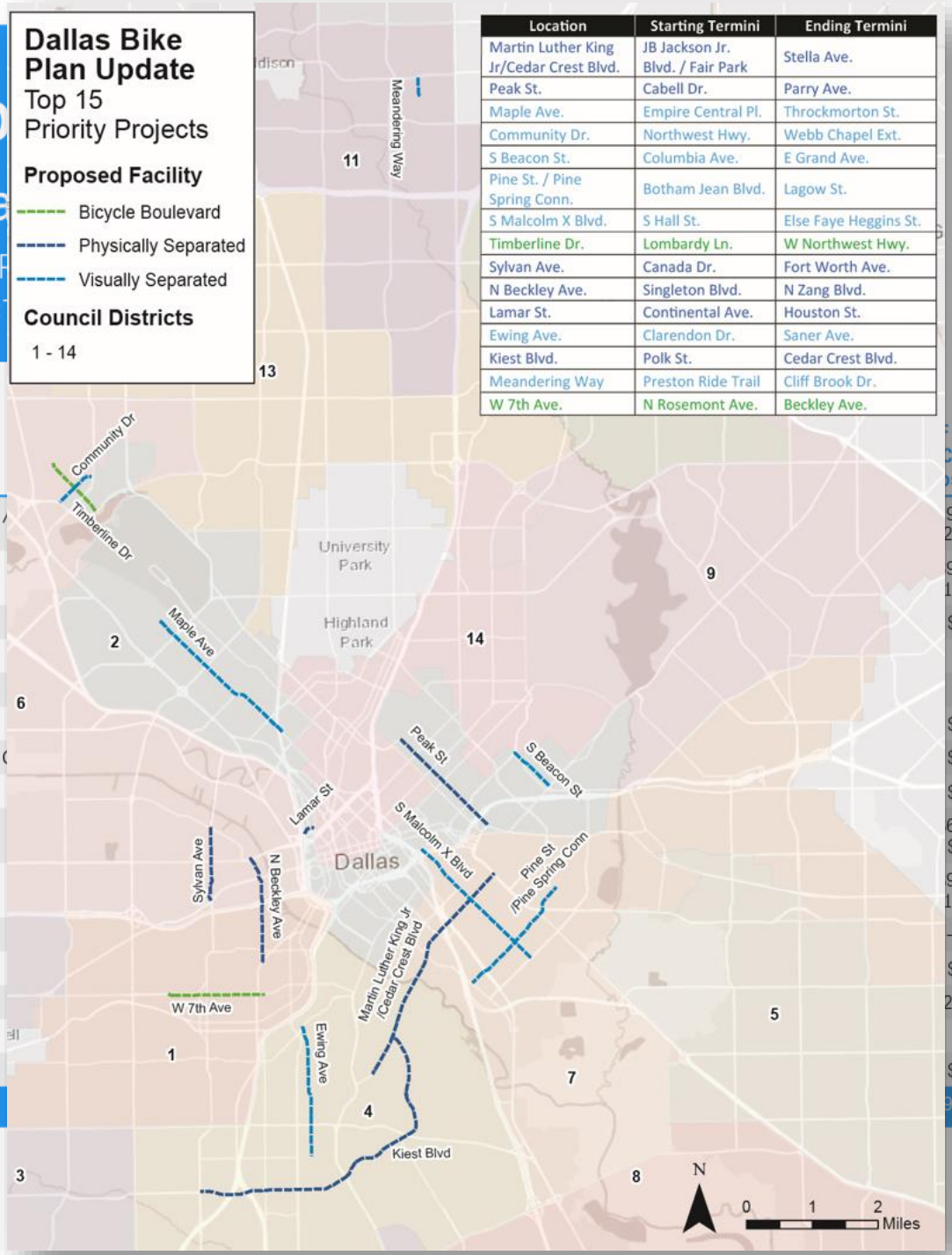
IMPLEMENTATION & NEXT STEPS

Sho

5-Yea

15 PRIOR

PROJECT



Location	Starting Termini	Ending Termini
Martin Luther King Jr/Cedar Crest Blvd.	JB Jackson Jr. Blvd. / Fair Park	Stella Ave.
Peak St.	Cabell Dr.	Parry Ave.
Maple Ave.	Empire Central Pl.	Throckmorton St.
Community Dr.	Northwest Hwy.	Webb Chapel Ext.
S Beacon St.	Columbia Ave.	E Grand Ave.
Pine St. / Pine Spring Conn.	Botham Jean Blvd.	Lagow St.
S Malcolm X Blvd.	S Hall St.	Else Faye Heggins St.
Timberline Dr.	Lombardy Ln.	W Northwest Hwy.
Sylvan Ave.	Canada Dr.	Fort Worth Ave.
N Beckley Ave.	Singleton Blvd.	N Zang Blvd.
Lamar St.	Continental Ave.	Houston St.
Ewing Ave.	Clarendon Dr.	Saner Ave.
Kiest Blvd.	Polk St.	Cedar Crest Blvd.
Meandering Way	Preston Ride Trail	Cliff Brook Dr.
W 7th Ave.	N Rosemont Ave.	Beckley Ave.

LOCATION	PROBABLE CTION COST st Estimate)
Martin Luther King Jr / Cedar Crest Blvd	910,956.00 - 2,336,864.00
Peak St	971,408.00 - 1,080,506.00
Maple Ave	$302,161.00
Community Dr	$51,778.00
S Beacon St	$51,600
Timberline Dr	$174,240.00
Pine St / Pine Spring C	$186,000.00
S Malcolm X Blvd	$216,632.00
Sylvan Ave	667,512.00 - $819,096.00
N Beckley Ave	960,352.00 - 1,070,595.50
Lamar St	- $83,983.00
Ewing Ave	$200,200.00
Kiest Blvd	2,841,416.00
Meandering Way	$29,767.00
W 7th Ave	$156,200.00
	9,601,038.50

CHAPTER 6

IMPLEMENTATION & NEXT STEPS

Implementation Recommendations

- Coordination with Public Works
- Interdepartmental & Interagency Staff-Led Working Group
- Resident-Led Working Group

CHAPTER 6

IMPLEMENTATION & NEXT STEPS

Measures for Successful Implementation

Any questions?

Next Steps

PHASE III ENGAGEMENT & PLAN/NETWORK REFINEMENT

Timeline & Next Steps