City of Austin

Bicycle Plan

November 30, 2023

Appendices

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APPENDIX A: ATX WALK BIKE ROLL PROCESS SUMMARY

ATXWBR OVERVIEW

ATX Walk Bike Roll was a coordinated effort by the City of Austin's Public Works Department and the Transportation Department to update Austin's Sidewalks, Crossings, and Shared Streets Plan; Urban Trails Plan; and Bicycle Plan. These plans guide how the City builds urban trails, sidewalks, shared streets, pedestrian crossings, and bikeways and identifies where they are needed most. For more information about ATX Walk Bike Roll, visit: AustinTexas.gov/ATXWBR.

GUIDING DOCUMENTS

The ATX Walk Bike Roll process—from community engagement to writing the three plans—centered equity and inclusion to create a more just transportation decision-making process and build lasting partnerships across Austin. The process and this commitment to inclusion were guided by three documents:

1. EQUITY SCAN

The Equity Scan included a review of 20 recent planning initiatives in Austin and engaged 17 stakeholders from 12 organizations dedicated to equity, anti-displacement, public health, accessibility, and education. The goal was to understand, through the lens of community voices, how the City of Austin has incorporated equity into its plans, initiatives, processes, and outcomes, and where there are lessons to be learned. Conversations with local leaders highlighted priorities that ATX Walk Bike Roll should center, which were incorporated into the Public Outreach Plan and planning process. View Appendix A.1 for the Equity Scan.

2. EQUITY FRAMEWORK

The Equity Framework is a tool for accountability to guide decision-making during the ATX Walk Bike Roll process and afterwards during plan implementation. The development of the Equity Framework builds off past and ongoing work from the City's Equity Office and was informed by stakeholder guidance from the Equity Scan and the Public Outreach Plan. The Equity Framework also identifies approaches to defining and considering geographic areas with infrastructure disinvestment, lower access to opportunity, and/or concentrations of underserved populations. ATX Walk Bike Roll used the Equity Analysis Zones developed in 2021 by the Austin Transportation Department and an Advisory Team of community members. Equity Analysis Zones are areas in Austin that have higher concentrations of historically

marginalized populations and more barriers to achieving equitable outcomes.

These Equity Analysis Zones were developed using weighting data from the United States Census that reflect an area's social and economic vulnerability. The Equity Analysis Zones are classified into five categories from Least Vulnerable to Most Vulnerable. Throughout the planning process, input by residents within the Equity Analysis Zones was used to identify disparities in the existing and planned pedestrian networks, safe crossings, bike networks, and urban trails. Additionally, comparisons were made between Most Vulnerable/ Medium-High Vulnerable Equity Analysis Zones and the rest of the city to identify where resources should be prioritized. View Appendix A.2 for the Equity Framework.

3. PUBLIC OUTREACH PLAN

The Public Outreach Plan included steps for engaging the community as a whole and established a tailored strategy to engage focus populations (defined as Black, Hispanic/Latinx, and other People of Color, and those earning less than 80% of the median household income) about the challenges and opportunities facing historically underrepresented groups. View Appendix A.3 for the Public Outreach Plan.

MESSAGING, TOOLS, & TACTICS

We held two Virtual Open Houses:

The first Virtual Open House was held on Zoom on August 11, 2021, introducing the project and goals. The video presentation was posted online which was attended and later viewed by at least 729 people. The second Virtual Open House was hosted on an interactive webpage and open between September 7 and October 23, 2022, and focused on the project's three scenarios for how the City of Austin can continue building urban trails and bikeways. An estimated 11,900 people visited this virtual open house. Both meetings were posted online for ongoing viewing.

We sought input through three surveys:

- ☐ June 14 – September 26, 2021: 4,411 people gave their input, on a survey and/or poll asking what residents value about the city's pedestrian and bicycle pathways, and their main concerns and desires for the City's pedestrian and bicycle networks.
- ☐ January 18 - March 7, 2022: A Mapping Survey was launched online and on paper, including both English and Spanish options. 9,778 people viewed the mapping site and 4,542 people provided survey responses. 2,807 placed markers on the map to indicate challenges, gaps, and opportunities related to walking and biking in Austin.
- ☐ September 7 - October 23, 2022: 2,108 people provided survey responses to either online or paper surveys which proposed three scenarios for how the City of Austin can continue building the pedestrian network, urban trails, and bikeways, asked about policy ideas and how to prioritize pedestrian crossings.

The Community Ambassadors engaged focus populations:

In August and September 2021, Community Ambassadors reached 316 people and shared 600 social media surveys. They completed 125 event reports, which documented community events or conversations where they spoke to people about walking and biking in Austin.

Ambassadors used a wide range of engagement activities, including: one-on-one conversations, small group discussions, tabling at local events or along busy corridors and urban trails, emails, social media, video chats, distributing flyers to local Housing Authority of City of Austin (HACA) developments and schools, and hosting other candid conversations with focus populations (defined as Black, Hispanic/Latinx, and other People of Color, and those earning less than 80% of the median household income).We employed print, broadcast, news media, emails, and social media to spread information and increase awareness about the project:

Marketing tools included emails, flyers, social media ads, social media posts, newsprint ads, media advisories, email campaigns, interviews with journalists, video production, website updates, and the utilization of partner organization's communication channels.

We attended community events and gave presentations to community groups and Boards and Commissions:

In Phase 1, 130 tabling events and awareness activities, including two in-person events at the Mexican American Consulate and at the Boys and Girls Club of the Austin Area. We also made presentations about the project as part of six community group meetings. In Phase 3, we attended 12 tabling events, and presented at four boards and commissions and at three community groups.

We hosted Focus Groups: Six focus group discussions were held during Phase 1 with the objectives to present the project; understand stakeholders' interests, needs, and concerns; and facilitate deep-dive discussions about the project. 27 people participated in the Focus Group discussions, with group sizes ranging from 1 to 10 people.

HOW PUBLIC INPUT WAS USED TO DEVELOP THE PLANS

Strategies and Action Items

Community input highlighted the need to center equity, affordability, comfort, and connectivity in the plans. Specific concerns that came up repeatedly (especially amongst focus populations- defined as Black, Hispanic/Latinx, and other People of Color, and those earning less than 80% of the median household income) were expanded into plan goals, strategies, and action items.

Network Development

People were asked to identify where they'd like to see improvements to Austin's walking and biking routes. The data people provided guided changes to the Proposed Urban Trails Network and Proposed All Ages and Abilities Bike Network. Data on challenging crossings was used to help prioritize pedestrian crossing projects.

Scenarios

Three urban trails and bikeways scenarios (which were oriented around different ways of prioritizing network expansion) and three sidewalks and shared streets scenarios (which explored building different proportions of sidewalks and shared streets) were presented to the public for feedback. Input on these scenarios shaped overall plan direction regarding targets and strategy development.

Project Prioritization

Through surveys and Community Ambassador input, participants told us what considerations should be used when projects are prioritized. This input was used to create or update data-driven prioritization methods for the urban trails and bikeways plans and to better emphasize equity as a prioritization factor.

Partnerships and Actions Beyond ATX Walk Bike Roll

Public input identified the need for action around equity, anti-displacement efforts, and affordability that go beyond the purview of the Austin Public Works and Transportation Departments. These issues and actions were collected for consideration in a future update of the Austin Strategic Mobility Plan and by other City departments.

The following goals were articulated in the Public Engagement Plan.

1. Implement a process that carries out the recommendations and guidance outlined in the project's Equity Framework and results in participation that exceeds the racial/ethnic and income demographic makeup of the city.
2. Prioritize engagement with stakeholders from historically underrepresented and underserved populations by collaborating with community organizations with access and credibility to these populations. Value this expertise through incentives and/or compensation for time.
3. Create awareness of ATX Walk Bike Roll and associated Plan Updates, the public input needed, and the overall update process.
4. Present information in a manner that respects native languages and is culturally appropriate.
5. Provide a variety of methods for public participation that are accessible in terms of language, technology literacy, location, and time so that people from focus population groups may easily participate in the process.
6. Gain substantive insights from the public input process that establishes a vision for each of the Plan Updates and guides the technical elements of the updates.

As described in the Phase Summaries below, goals #2 through #6 were met. Regarding Goal #1, the Community Ambassador program and other targeted efforts resulted in deep and broad engagement with people from historically underrepresented groups and annual household income under $50,000. However, as shown in Table 1 and 2, participation from People of Color and people with lower incomes did not exceed the racial/ethnic or income makeup of Austin. Although this goal was not met, demographic questions asked as part of outreach activities allowed the project team to review responses from the focus population separately (defined as Black, Hispanic/ Latinx, and other People of Color, and those earning less than 80% of the median household income), to review differences and elevate input received from those respondents.

Racial/Ethnic Identity Groups	City of Austin	Phase I Engagement	Phase II Engagement	Phase III Engagement
Asian	7.6%	4%	4.5%	6%
Black or African American	7.8%	4%	1.5%	4%
Hispanic/Latinx	33.9%	16%	12%	21%
Native/Indigenous	0.7%	0.7%	0.3%	1%
Self-Described	3.6%	1.3%	12.2%	2%
White	72.6%	55%	60%	51%
Prefer not to say (+Skipped Question)	N/A	19.2%	12%	15%

TABLE 1. RACIAL IDENTITIES OF PARTICIPANTS IN ATX WALK BIKE ROLL ENGAGEMENT

(NOTE: This is estimated, since we did not collect demographic data on every single person who engaged in the process. However, we did so when possible, so the data below reflects the best information available about the participants in the process. This is collected demographic information collected from the Community Ambassador outreach efforts and the surveys, combined.)

Yearly Household Income	City of Austin	Phase I Survey	Phase II Survey	Phase III Survey
Less than $50000 ($0 - $49000)	30.9%	12.18%	7.96%	12.86%
More than $50000 ($50000-$150000+)	69.2%	58.81%	63.69%	67.28%
Prefer not to answer	N/A	29.02%	28.35%	19.87%

TABLE 2. YEARLY HOUSEHOLD INCOME OF SURVEY PARTICIPANTS

(NOTE: This is estimated, since we did not collect demographic data on every single person who engaged in the process. However, we did so when possible, so the data below reflects the best information available about the participants in the process.)

PLAN KICKOFF

Equity Scan & Equity Framework

Engagement

PHASE 1

Aug–Sept 2021

Preferences & Needs

We asked:

- "How you get around Austin and how you'd prefer to get around."
- "What are your concerns or frustrations?"
- "What is comfortable/uncomfortable?"

How we engaged:

- Plan Ambassadors
- Virtual Open House
- Online Surveys
- Focus Groups
- Online Public Meeting

PHASE 2

Jan–March 2022

Opportunities & Barriers

We asked:

- "Where are there barriers?"
- "Where do you want new connections?"
- "Where are challenging crossings?"

How we engaged:

- Plan Ambassadors
- Online Input Map
- Pop-Up Events

PHASE 3

Sept–Oct 2022

Scenarios & Policy Concepts

We asked:

- "Which approach to building networks and prioritizing projects do you like?"
- "What major policy changes should the City consider?"

How we engaged:

- Plan Ambassadors
- Virtual Open House
- Online Surveys
- Pop-Up Events

PLAN PUBLIC REVIEW

PHASE SUMMARIES

ATX Walk Bike Roll engagement was organized around three primary phases, illustrated in the graphic to the left and further described on the following pages.

PHASE 1: PREFERENCES AND NEEDS

From August through September of 2021, Phase 1 of engagement sought to connect with residents – particularly those that have been historically underrepresented in past City planning efforts (Black, Hispanic/Latinx, and other People of Color, and those earning less than 80% of the median household income) – to raise awareness about ATX Walk Bike Roll and collect insight on how urban trails, sidewalks, pedestrian crossings, and on- street bicycle infrastructure impacts quality of life.

The objectives of Phase 1 were to:

- ☐ Raise awareness of ATX Walk Bike Roll
- ☐ Document the experiences of residents when using active transportation infrastructure
- ☐ Share ATX Walk Bike Roll's purpose, goals, challenges, and the planning process
- ☐ Create trust and build relationships with focus populations, guided by the Equity Framework
- ☐ Understand how residents currently get around Austin, their concerns about active transportation, and what improvements they'd like to see.
- ☐ Use public input to guide the development of scenarios for bikeways, trails, and sidewalks in Phase 3

Phase 1 of ATX Walk Bike Roll sought to create new industry best practices for prioritizing the lived experiences of underrepresented communities in planning efforts. Phase 1 engagement activities included surveys, small group events, and a pre- recorded virtual public meeting. Some Phase 1 activities also had to be adapted to the changing circumstances of the COVID-19 pandemic.

To center diverse populations in the engagement process, Phase 1 Public Outreach activities had a wide reach. Focused strategies — including Community Ambassador outreach, focus groups, and collaboration with community organizations that center equity in their mission and programs — successfully boosted engagement among Black, Hispanic/Latinx, and other People of Color, and those earning less than 80% of the median household income. Broader methods like the online survey and the virtual public meeting disproportionately represented high-income and White populations. This emphasized the importance of focused strategies, particularly the Community Ambassador Program, as vital to reaching low-income communities and communities of color.

Community Ambassadors were much more successful in reaching focus populations (defined as Black, Hispanic/Latinx, and other People of Color, and those earning less than 80% of the median household income) compared to broader engagement methods like surveys and public meetings. Because of the successes of Community Ambassadors, the Public Outreach Plan was restructured to extend their work into Phases 2 and 3 of engagement efforts and strategies were modified to prioritize efforts designed to achieve better demographic representation to calls for engagement.

Across engagement efforts in Phase 1,

participants from focus population communities expressed confusion and/or planning fatigue because of the simultaneous outreach efforts addressing upcoming transit investments in Austin. Phases 2 and 3 sought to improve on this by enhancing coordination and synchronization of messaging between the efforts, clarifying distinctions between various transportation-related projects, and sharing engagement results between projects.

More detail on outreach and a summary of public input is in Appendix A.4 Phase 1 Summary.

PHASE 2: OPPORTUNITIES AND BARRIERS

Phase 2 engagement took place from January through March of 2022. A map-based outreach approach was utilized to record feedback from community members. This informed prioritization models in alignment with our Equity Framework to ensure that implementation plans match demonstrated need.

Feedback, preferences, and concerns from focus populations in Phase 1 were examined and elevated as the project moved into this Phase of engagement. Increased investment was given to the Community Ambassador program which transitioned from being managed by the consultant team to being managed by City of Austin staff in January.

Objectives for Phase 2 engagement were to:

- ☐ Explore themes and priorities heard from Phase 1
- ☐ Identify important gaps in the urban trail and bikeway networks, locations of barriers, opportunities for new urban trail or bikeway connections, and places where crossing the street is challenging
  - Envision opportunities to improve connections to transit
- ☐ Gather preferences on active transportation programs like Smart Trips and Shared Streets
- ☐ Understand what is and is not working as it relates to facility maintenance
- ☐ Digest specific displacement concerns in order to craft a responsive plan for action in collaboration with ongoing anti-displacement efforts in Austin

Phase 2 engagement activities included Social Pinpoint/Online Mapping Tool available in English and Spanish; paper maps and paper surveys utilized by Ambassadors; tablet-based access to the online mapping tool delivered by Ambassadors; pop up events, shared street pop- up events hosted by Austin staff and supported by Ambassadors; and continued Ambassador reports.

Community Ambassadors were equipped with tablets to encourage community members without easy access to a computer to take the digital survey. However, technological barriers and internet access issues prevented tablets from being a successful outreach tool. Nevertheless, through conversations and the use of paper maps, Community Ambassadors were able to continue receiving feedback.

Community Ambassadors also began functioning as project advisors providing feedback on design guidance in March. That feedback was invaluable. The engagement plan was modified to allow Community Ambassadors to continue to engage with community members and to formally utilize Community Ambassadors as advisors to the project and sponsor team. The online

survey tool was also promoted through Austin's traditional communication channels. 9,778 people viewed the site and 3,319 people provided input or upvoted comments. Participants left a total of 2,807 markers on the map and completed 4,542 survey responses. The survey metrics included responses to the demographics survey as well as to questions about the markers dropped on the map.

This survey effectively captured network gaps and challenges for people with technological access and skills but required internet access, technological knowledge, and larger screens to easily drag, drop, and draw desired connections on computers, phones, or tablets. To mitigate skewed results the project team again examined and prioritized responses from people in focus populations weighting those responses more heavily.

More detail on outreach and a summary of public input is in Appendix A.5 Phase 2 Summary.

PHASE 3: SCENARIOS AND POLICY CONCEPTS

September and October of 2022 focused on presenting major plan elements for public feedback. Community members were asked to rate their level of support for three Urban Trails and Bikeways and Sidewalk and Shared Street scenarios. Phase 3 also asked if participants supported transportation policies that were meant to reduce transportation costs in an equitable way and address hidden subsidies that currently favor automobiles above other transportation options.

The objectives of Phase 3 were to gather feedback to shape:

- ☐ Network plans for urban trails and bikeways
- ☐ How large a role shared streets should play in Austin's future pedestrian network
- ☐ Prioritization methods for urban trails, bikeways, and pedestrian crossings
- ☐ Transportation policies to improve equitable outcomes from infrastructure investments

Phase 3 presented a key moment to make major decisions about where to direct new investment in walking, biking, and rolling infrastructure. The options presented in the Phase 3 survey were created using input from Phases 1 and 2. The Phase 3 survey, offered in English and Spanish, was available online and as a paper version, and used non-technical language and images to convey complex concepts. A shortened paper version of the survey focused on key issues and was used at tabling events in focus population communities.

Community profiles were written using past input to convey the challenges and opportunities that low-income residents and/or communities of color shared to a broad audience.

In conveying the transportation realities faced by these focus populations, all survey participants could better understand how

planning decisions might impact the lives of various residents. These community profiles were also used throughout Phase 3 tabling efforts and within our information packets as a way to humanize data. Profiles were born out of conversations with Community Ambassadors who questioned the efficacy of highly curated presentations complete with new terms and concepts. These were used to guide the creation of options for how to prioritize investments.

The next engagement opportunity to provide feedback involved gathering input on a series of sidewalk, bikeways, and urban trails implementation scenarios. Participants gave input on their level of support for each scenario and provided input on elements they did and did not like about each proposal. Policy considerations were also included with the desire to gain input on broad and important issues not solely transportation related, including affordability and displacement, climate resiliency and other key issues raised by focus populations over the first two engagement rounds.

The project team recognized that all Phases of engagement were significantly oversampling predominately white and wealthy residents. This was addressed in three ways.

1. Responses from low-income respondents and from People of Color were examined more closely.
2. Concerns and opportunities raised in Community Ambassador reports became central in decision making.
3. Community Ambassadors were enlisted as advisors in decision making.

These sources of information influenced the design of policy recommendations to address the many overlapping concerns that the focus populations expressed across all Phases of engagement.

More detail on what we did and a summary of key themes from the input received is in Appendix A.6 Phase 3 Summary.

LOOKING AHEAD TO NEXT STEPS

ATX Walk Bike Roll sought to move beyond community engagement and into community partnerships. Understanding and acknowledging past harmful policies—in Austin generally and by the transportation profession specifically—enabled project staff to work with historically marginalized community members (defined as Black, Hispanic/ Latinx, and other People of Color) to test new approaches rooted in cultural responsiveness. historically marginalized community members engaged throughout this process also expressed an expectation that these sentiments be backed by action to ensure that key concerns are addressed and prioritized moving forward.

Across Phases we acknowledged when engagement methods failed to uphold the commitment to equitable engagement and listened to focus population voices to influence adaptation. When majority populations (people who are white, wealthier, and historically had and currently have more power in decision making) were "... to move beyond community engagement and into community partnerships." oversampled in engagement, increased weight was given to the voices of focus populations. This was done in the examination of survey results and in spending resources to listen to the long form narratives reflecting the stories, realities, and lived experiences of focus populations. We also reflected on common transportation experiences faced by focus

populations as an educational tool, to better inform individual participants' feedback.

The voices of focus populations clearly described the interconnectedness of issues like housing affordability, sustainability, personal safety, and land use planning. Though the focus of the work of ATX Walk Bike Roll is active transportation, we recognize how interconnected the success of these plans are with those other topics. The community is calling for departments to break through rigid agency silos and collaborate with other City departments that address housing, utilities, and public health, to further conversations about how policy and programming can create a more just city.

Austin is experiencing an affordability crisis. As neighborhoods become more expensive, families and individuals are pushed to areas with less connectivity. An improved active transportation network across the city would help mitigate these factors, and it no longer would be a luxury to live in an area with great connectivity. Recognizing how these concerns have historically manifested in Austin's built landscape, the prioritization approach shifted to elevate projects around existing corridors with long term, stable affordable housing to ensure long standing residents can stay in place.

As the three plans developed during ATX Walk Bike Roll are adopted and move to implementation, the following key considerations for future efforts are essential to continue upholding commitments to equity in action:

VALUING LIVED EXPERIENCE

Valuing and prioritizing expertise that comes with lived experience is an important component to successful planning and implementation. Continuing to evaluate future decisions through the lens of focus populations will be necessary for the long-term success of ATX Walk Bike Roll. The Community Ambassadors were an asset in this area. They were more skilled at and capable of reaching people from focus populations than any other outreach efforts because of pre- established relationships and deeper levels of trust.

They were able to bring their own lived expertise:

- ☐ influencing how the City's planning team thought through implementation priorities,
- ☐ helping the planning team better tailor language and communicate more clearly,
- ☐ leading informal cultural and active transportation education for City staff,
- ☐ providing honest and candid feedback, and
- ☐ remaining a steady voice for planning efforts to better align with equity goals. Austin would be well served by employing Community Ambassadors to continue in that role through implementation and beyond to other projects.

DESIGNING TOOLS FOR ALL

Language and access are two key themes that consistently surfaced throughout outreach. Someone's access to the internet, ability to speak a certain language, or understanding of highly technical language should not limit their ability to share their thoughts on public issues. All materials, surveys, and outreach content should account for these considerations to ensure that those who have been historically left out of planning processes are included and at the center of outreach efforts.

COMPENSATION AND COORDINATION

Learning from Phase 1, outreach efforts with the potential to drastically increase diverse representation may have faltered because communities who have faced historic disinvestment are continually asked to share input without compensation. ATX Walk Bike Roll is just one of many ongoing efforts occurring in Austin. This may mean many community leaders from focus populations have been repeatedly engaged and answered similar questions creating engagement fatigue. To recognize this labor, transparency about when and how their responses will be used is critical and should also be supported with compensation for their participation. The significant impact of our ATX Walk Bike Roll Community Ambassadors highlights the need for similar programs to become citywide engagement standards, with adequate compensation for time and labor.

Further coordination between projects and departments is critical to make sure feedback gathered is shared across time, projects, and departments so people are not over surveyed.

INTEGRATING ACTIVE TRANSPORTATION AND ANTI- DISPLACEMENT EFFORTS

While centered on walk, bike, and roll infrastructure, many of the responses across the three project Phases tied these issues to concerns for housing affordability and anti-displacement. As such, it is critical that active transportation improvements are not viewed or implemented in silos, but rather build on the integrated work that has already begun directing improvements to sidewalk networks, urban trails and bikeways with community preservation efforts. As Austin becomes increasingly unaffordable, particularly for Black people, Hispanic/Latinx people, other People of Color, and low-income residents of all races and ethnicities, it is critical that new investment is accompanied by strategies to allow focus populations to age in place, and access is improved so people can get to the places they need to go.

EMBRACING MULTIPLE APPROACHES

Relying on a robust set of tools for engagement allows residents multiple ways to get involved. Engagement approaches like public meetings and tabling should be located in places familiar to focus populations and promoted through channels utilized by focus population communities. Less formal approaches led by trusted community members, like Community Ambassadors, allows people from focus population communities to engage as part of a typical day in candid conversations with friends, loved ones, while waiting on a bus or using transit, or folding laundry in the laundromat. These methods allow people to provide input who don't necessarily feel driven to respond to conventional outreach channels.

APPENDIX B: DEFINITIONS

ACRONYMS

AAA: All Ages and Abilities

AAA Bicycle Priority Network: All Ages and Abilities Bicycle Priority Network

ASMP: Austin Strategic Mobility Plan

DEFINITIONS

2014 Bicycle Plan, the 2014 Plan: Names used to refer to the previous 2009 Bicycle Plan.

2023 Bicycle Plan, the 2023 Plan, The Plan: Names used throughout the document to refer to this plan.

All Ages and Abilities Bicycle Priority Network: A bicycle network that would appeal to people of all ages and abilities, such as the very young and very old. The network is composed of protected bicycle lanes, neighborhood bikeways, and urban trails. Reference to the All Ages and Abilities Bicycle Priority Network refers to a network of these three types of facilities that could be realistically and cost effectively implemented within the next five years and within the context of existing traffic volumes, on-street parking demands and construction feasibility.

Bicycle: A device that a person may ride and that is propelled by human power and has two tandem wheels, at least one of which is more than 14 inches in diameter. (Texas Transportation Code, Chapter 541. Definitions, Subchapter C)

Bicycle boulevard: See "Neighborhood bikeway".

Bicycle friendly (bikeable): Descriptive term that describes policies, places and practices which provide safe, comfortable, and convenient opportunities for people of all ages and abilities to ride bicycles.

Bicycle lane (conventional bicycle lane, bike lane): An area within the roadway specifically designated for the use of bicycles which is delineated from motor vehicle traffic lanes by a painted line.

Bicycle network: A network of bicycle routes, including protected bicycle lanes, urban trails (multi-use paths), bikeways, neighborhood bikeways (bicycle boulevards), buffered bicycle lanes, bicycle lanes, wide shoulders, designated wide curb lanes, and designated shared lanes.

Bicycle plan implementation charter: A document issued by the Bicycle Program/Active Transportation Program that formally authorizes the existence of the Bicycle Plan and provides the Bicycle Program/Active Transportation Program Manager with the authority to apply organizational resources to project

activities. A charter will be produced for each city department outlining the action items in this Bicycle Plan which rely on resources from that department.

Bicycle Playground: A professionally designed facility focusing either on miniature streetscape mockups for road riding instruction (also known as "traffic gardens") or an off-road skills-developing track with obstacle features, like rollers, platforms, banked turns, tunnels, etc.

Bicycle route: A segment of the bicycle network with appropriate directional and informational markers as designated by the appropriate jurisdiction. These markers specify bicycle route numbers.

Bicycle system: The combination of the bicycle network, integrated transit, and end-of-trip or support facilities, such as bicycle parking, showers and changing facilities.

Bicyclist (cyclist): A person operating a bicycle, often phrased as a person on a bicycle or a person riding a bicycle.

Bikeway (bicycle path, separated bikeway): An area not within the roadway specifically designated for the use of bicycles.

Central City: Area defined by the Bicycle Program/Active Transportation Program, bound roughly by Oltorf Street to the south, Pleasant Valley Road to the east, FM 2222 to the north, and MoPac to the west. Includes the 2000 Travis County Census Tracts 1.01, 2.01, 2.03, 2.04, 3.01, 3.02, 4.01, 4.02, 5.00, 6.01, 6.03, 6.04, 7.00, 8.01, 8.02, 8.03, 8.04, 9.01, 9.02, 10.00, 11.00, 12.00,13.03, 13.04, 13.05, 14.01, 14.02, 14.03, 16.02, 16.03, 16.04, 16.05, 16.06, 19.01, 19.11, 23.04, 23.15, 23.16.

Climbing lane: An area within the roadway specifically designated for the use of bicycles (a bicycle lane) only on the uphill direction of a roadway.

Complete bicycle facility recommendations: Recommendations for all streets in the plan, not filtered by near term feasibility. These recommendations may take many decades or more to realize. Recommendations are based on speed, volume criteria and other contextual factors.

Complete street: A street that is designed and operated to enable safe access for users of all ages and abilities and all modes, including, but not limited to people travelling by foot, bicycle, transit, and motor vehicle. All users should be able to safely move along and across a complete street.

Electric bicycle: A bicycle that

> (a) is designed to be propelled by an electric motor, exclusively or in combination with the application of human power;
>
> (b) cannot attain a speed of more than 20 miles per hour without the application of human power; and
>
> (c) does not exceed a weight of 100 pounds.

(Texas Transportation Code, Chapter 541. Definitions, Subchapter C)

End-of-trip facilities: Supportive facilities for bicycling, such as bicycle parking or shower and changing facilities.

Lane reconfiguration (lane conversion, road diet, lane diet or rightsizing project): A type of roadway conversion project

where the number or type of travel lanes are reconfigured. Lane reconfigurations are most commonly done to improve safety and multimodal access.

Motorist: A person operating a motor vehicle.

Motor vehicle: While e-bicycle and scooters have motors, in this plan this term refers to automobiles.

Multi-use path: See "shared use path".

Natural-surface trail (single track, nature trail, unpaved trail): A natural surface (i.e., existing dirt/clay) path through a forest, field, park, etc., typically singletrack width, appropriate for both hiking and mountain bike use.

Neighborhood bikeway (neighborhood greenway, bicycle boulevard): A street on which bicycling and walking are prioritized through techniques including, but not limited to, traffic calming, motor vehicle traffic diversion, reconfiguration of stop signs to favor the corridor, placemaking and crossing improvements at busy cross streets.

Pedestrian: A person on foot (Texas Transportation Code, Chapter 541. Definitions, Subchapter A).

Protected bicycle lane (protected bike lane, cycle track): A protected bicycle lane is an exclusive bike facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane. A protected bicycle lane is physically separated from motorized traffic and distinct from the sidewalk. Protected bicycle lanes have different forms, but all share common elements—they provide space that is intended to be exclusively or primarily used for bicycles and are separated from motor vehicle travel lanes, parking lanes, and sidewalks. In situations where on-street parking is allowed protected bicycle lanes are located to the curbside of the parking (in contrast to conventional bicycle lanes).

Road diet: See "lane reconfiguration".

Protected intersection: (Dutch, setback, or offset intersections): Intersection design that keeps bicycles physically separate from motor vehicles up until the intersection, providing a high degree of comfort and safety for people of all ages and abilities.

Shared lane: Any travel lane that is 14 feet wide or less that may be legally used by bicycles regardless of whether such facility is specifically designated as a bicycle route. The lane width is measured from the lane stripe to the edge of the gutter pan.

Shared lane marking (sharrow): A marking on the roadway that indicates where within a shared lane or wide curb lane a bicyclist should be positioned.

Shared use path (multi-use path): Shared use paths are either hard-surface or loose-surface trails designed for the use of pedestrians, bicyclists and people using other non-motorized forms of transportation for both transportation and recreational use.

Singletrack trail: An unpaved trail, usually only wide enough for one user at a time.

Traffic calming: The combination of mainly physical measures that reduce motor vehicle speeds and potentially volumes to improve conditions for all street users.

Traffic garden: A youth-oriented instructional facility featuring a miniature cityscape for teaching road riding skills in a controlled environment.

Wide curb lane: A right-most through traffic lane that is greater than 14 feet wide, measured from the lane stripe to the edge of the gutter pan. A person on a bicycle and motor vehicle may potentially share the lane side by side (if in accordance with the City of Austin's Vulnerable Road Users Law, § 12-1-35).

Wide shoulder: Shoulders that are the width of a motor vehicle or greater, often on rural highways, that improve emergency vehicle access, improve roadway safety, and provide for non-motorized use such as bicycle travel.

Urban Trail: Urban Trails are hard-surface trails designed for use by people walking, bicycling, and rolling for both transportation and recreational use. Urban Trail priorities are set by the Urban Trails Program and guided by the Urban Trails Plan.

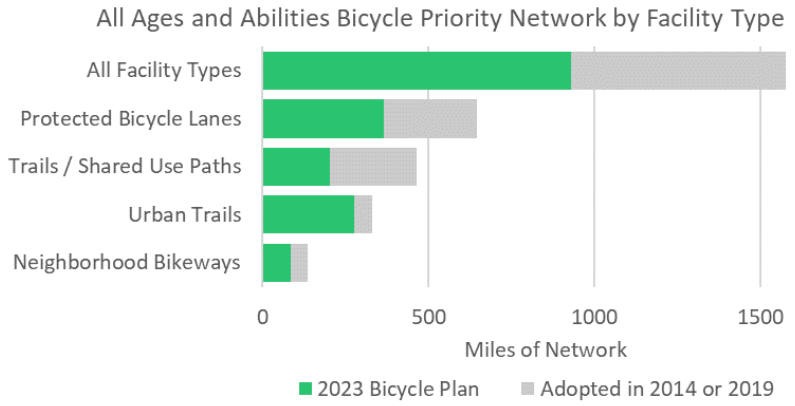
APPENDIX C: AAA BICYCLE PRIORITY NETWORK DETAILS AND COST ESTIMATE

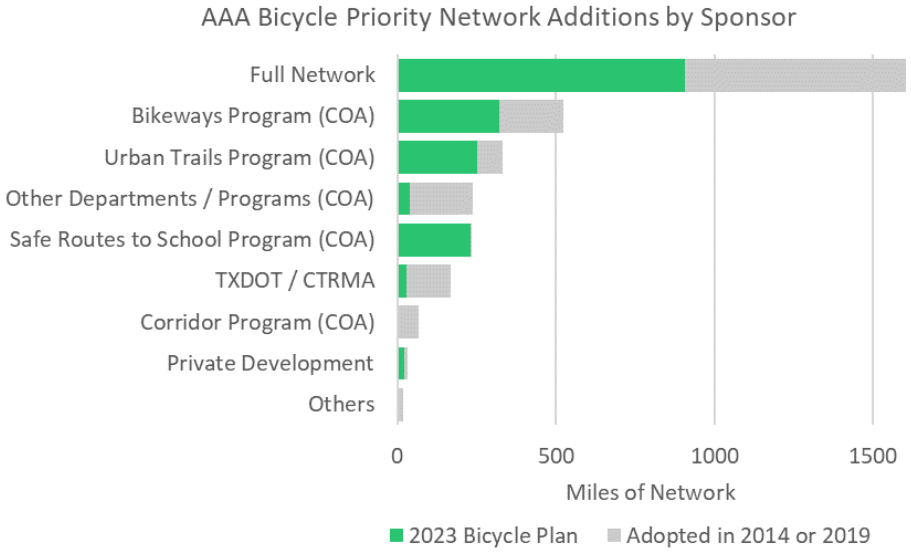
SUMMARY OF AAA BICYCLE PRIORITY NETWORK ADDITIONS

The ATXWBR planning effort added 600 on-street miles to the AAA Bicycle Network

- ☐ ½ of these miles were needs identified by the Safe Route to School Plans
- ☐ ½ focused on equity and connections to neighborhood and city-wide destinations and connections to nature

The AAA Network is being built by many partners. The chart below shows the new network additions by each program / entity during this plan cycle.





COST ESTIMATE FOR AAA BICYCLE PRIORTY NETWORK

The unfunded cost of the All Ages and Abilities Bicycle Network is $1.15 billion. This planning level cost estimate assumes high quality levels of buildout as seen on recent projects like Teri Lane and Shoal Creek Boulevard, which use a mix of quick build techniques on segments and full-build protected intersections in concrete.

It is notable that protected bicycle lanes and neighborhood bikeways make up 74% of the network mileage yet only 32% of the cost of $370 million. Trails and Shared Use Paths which include bridges and underpasses make up 23% of the network mileage but account for 68% of the cost of $783 million due to the higher cost per mile. The project prioritization for bikeway funds includes a cost factor so projects that have a lower cost per mile will be elevated in priority as one of many factors (Equity, Destinations and Travel Demand, Connectivity and Safety). More detail can be found in Chapter 2 Bikeway System, section Project Prioritization.

Facility Type (Simple)	Length (mi)	Cost per Mile (million)	Total Cost (million)	Share of Length	Share of Cost
Neighborhood Bikeways	122.0	$0.6	$73.2	15%	6%
Protected Bicycle Lanes	426.5	$0.6	$255.6	53%	22%
Protected Bicycle Lanes - Two-way	68.4	$0.6	$40.5	8%	4%
Trail - Bridge or Underpass	1.6	$22.0	$35.1	0%	3%
Trails - Low Water Crossing	0.0	$8.0	$0.4	0%	0%
Trails / Shared Use Paths	186.8	$4.0	$747.3	23%	65%
Totals	**805.5**		**$1,151.9**		

Notes:

- Includes projects that would use future flexible City of Austin Bikeway bond resources.
- Excludes Urban Trails.
- Excludes projects sponsored by other entities or programs (e.g., Corridor Program, TxDOT, CTRMA, Cap Metro, Counties)
- Excludes facilities outside of the City's jurisdiction.
- Excludes projects that are already funded (Phase is complete, in construction, or have estimated end dates / are funded).
- Facility types are simplified while maintain differentiation in costs.
- Facility types have been assessed at a planning level and are subject to change as part of project development and further feasibility study.

COST ESTIMATE OF AAA BICYCLE PRIORTY NETWORK FULL-BUILD QUALITY GOALS

The Plan also includes annual goals for AAA Bicycle Priority Network Buildout at full-build quality (see Ch2, section A Phased Approach: Quick Build vs. Full Build Quality). The following chart estimates the cost of 5 miles of concrete protected bicycle lanes, 5 protected intersections, and 10 high quality bus stops to be a total cost of $9.2 million per year.

Item at Full-Build Quality	Quantity	Unit Cost	Unit	Total Cost (millions)	Notes
Protected Bicycle Lanes	5	$840,000	Per Mile	$4.2	Assumes barriers on both sides of street
Protected Intersections	5	$800,000	Each	$4.0	
Bus Stops	10	$100,000	Each	$1.0	
Total				**$9.2**	

The table below summarizes the existing network's build quality for context.

	Build Quality (miles)		
Facility Type	Existing (All Build Qualities)	Existing (Full Build)	Full Build Annual Goal
All Facility Types	**258**	**174**	
Protected Bicycle Lanes	96	12	5
Trails / Shared Use Paths	99	99	
Urban Trails (Priority Tiers 1-3)	55	55	
Neighborhood Bikeways	7	7	

	Build Quality (count)		
Facility Type	Existing (All Build Qualities)	Existing (Full Build)	Full Build Annual Goal
Protected Intersections Total	**43**	**31**	
Protected Intersection Full*	16	12	5
Protected Intersection Full (Shared Use) *	8	8	
Enhanced Bus Stops	25	25	10

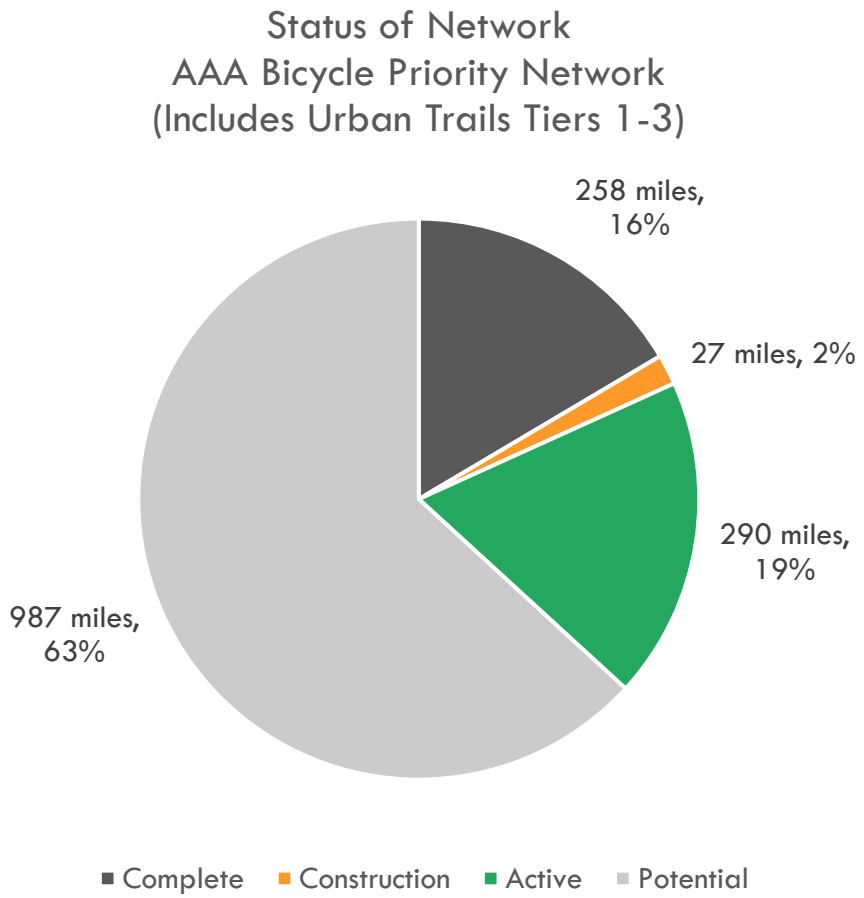
About Protected Intersection Types

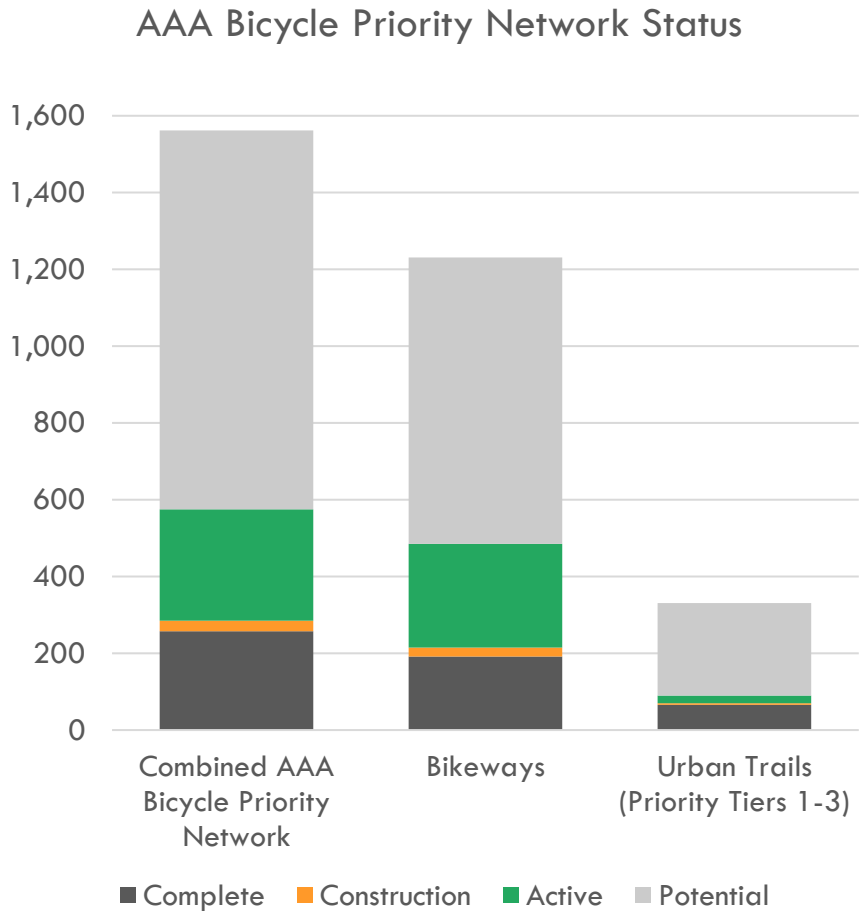
*Several types of protected intersections are tracked for performance monitoring purposes.

- ☐ **Full** – These are true protected intersections that include all bicycle approaches and maintains separate pedestrian and bicycle / scooter space.
- ☐ **Full (Shared Use)** – Protected intersection influenced design that does not maintain fully separate pedestrian and bicycle / scooter space but rather uses shared use paths.

AAA NETWORK STATUS

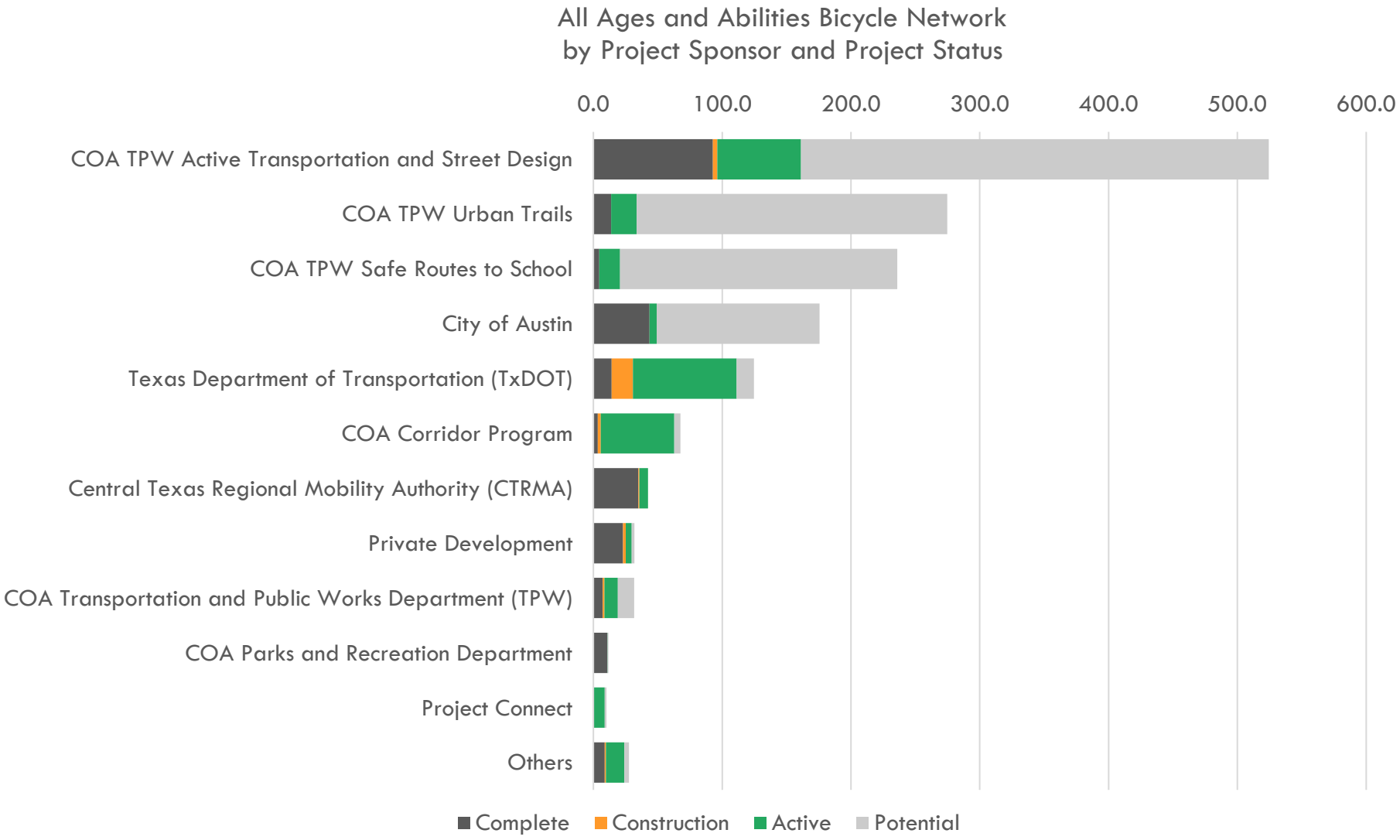
The following charts show the buildout status of the AAA Bicycle Priority Network.





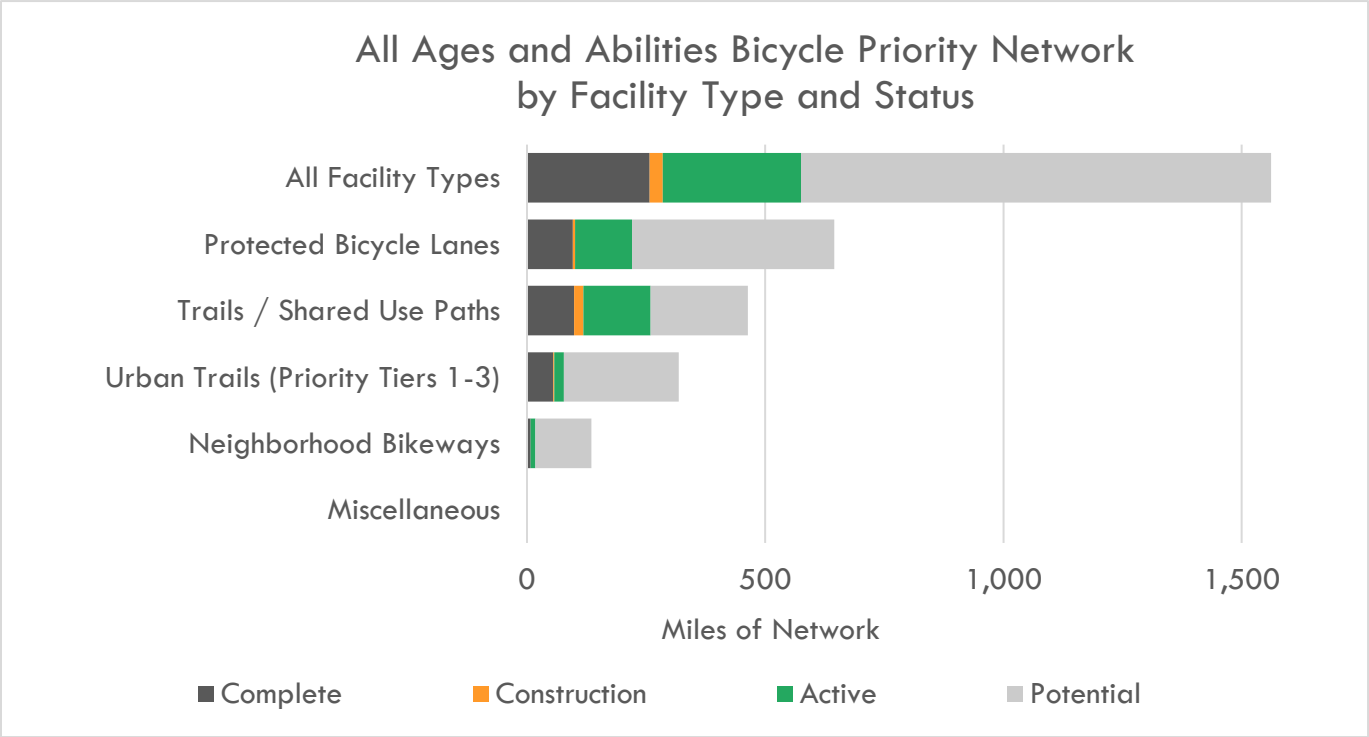
AAA BICYCLE PRIORITY NETWORK BY PROJECT SPONSOR

The following chart shows the breakdown of the network by project sponsor, or the entity responsible for developing individual projects. The chart includes the breakdown in mileage of project of each status (complete, construction, active, potential).



AAA NETWORK BY FACILITY TYPE

The following chart shows the composition of the AAA Bicycle Priority Network by Facility Type.



The same information in chart form.

Facility Type	Complete	Construction	Active	Potential	Total
All Facility Types	**258**	**27**	**290**	**987**	**1,562**
Protected Bicycle Lanes	96	5	120	424	645
Trails / Shared Use Paths	99	19	141	204	464
Urban Trails (Priority Tiers 1-3)	55	3	20	241	318
Neighborhood Bikeways	7	0	10	117	135
Miscellaneous	0	0	0	0	0