



**TRANSPORTATION  
DEPARTMENT**

# Bike Network Plan

**“Defining a network of safe and comfortable bike facilities to connect us to the places we want to go and people we want to see”**



# Why Do We Need the Bike Plan?

Safe infrastructure that separates motorists, bicyclists, and pedestrians is the most effective way to reduce crashes and crash severity.

In 2022, San Antonio was ranked the 16<sup>th</sup> deadliest city for cyclists in the Nation.

Source: National Highway Traffic Safety



**7.9%**

Of households in San Antonio do not have access to a vehicle.

Source: 2021 ACS 5-Year Estimates

San Antonio needs a low-cost mobility option that allow residents to access jobs, healthcare, education, and services.



Motorized vehicles are one of the largest contributors to greenhouse gas emissions in the US,

In San Antonio, private vehicles account for 90% of transportation emissions.

Source: San Antonio Climate Action and Adaptation Plan

Simply replacing short vehicle trips with walking and biking trips can helping the City to achieve its goal of net zero carbon emissions by 2050.

Bicycle investments provide numerous economic benefits for both the city and its residents.



Houses in areas with above-average walkability/bikeability are worth \$34,000 more on average

Lack of physical activity is associated with increased risk of many health problems, particularly obesity, diabetes, and heart disease.

San Antonio ranked

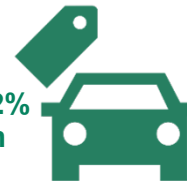
**27<sup>th</sup>**



in the Nation for asthma prevalence, emergency room visits for asthma, and deaths due to asthma.

San Antonians typically spend 22% of their income on transportation.

Source: 2023 Center for Neighborhood Technology

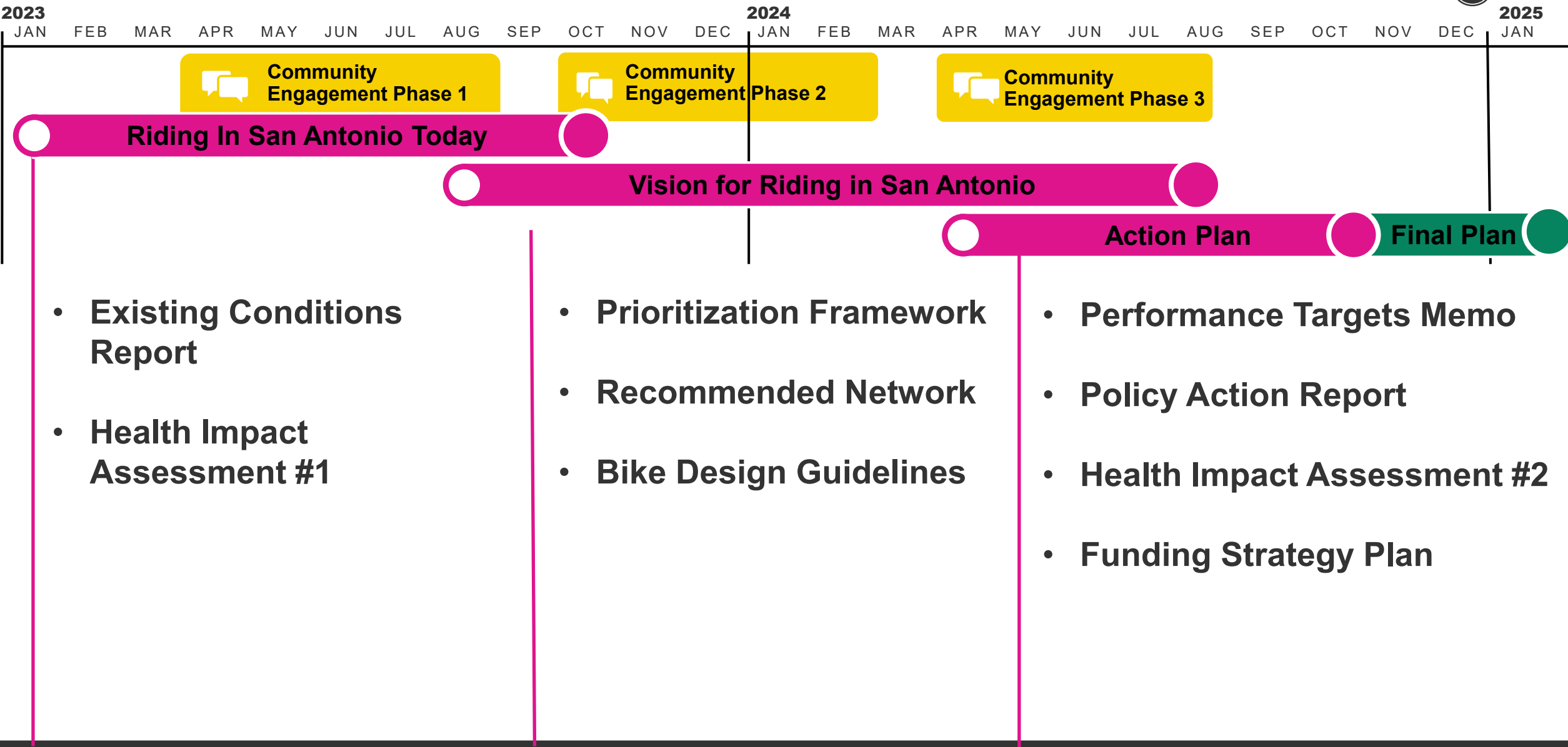


Providing more multimodal transportation options can save low-income San Antonians money and provide them budget for other expenses.

# Purpose of the Bike Network Plan

- Enhance our transportation system to provide connectivity
- Provide facility guidance that prioritizes safety for all users on the roads
- Provide guidance during the development process
- Help program improvements over the next two decades

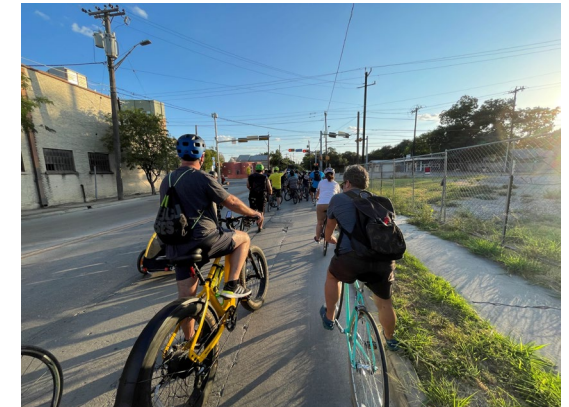
# Plan Timeline and Components





# Public Engagement

- **Three phases** of public engagement
- **Over 3,600** survey responses were received
- **43 Engagement Events**



# Stakeholder Engagement

## Four Stakeholder Committees -

Met four times each to guide the plan's development, provide input on policies, and ensure partners are in the know about the plan's progress:

- **Internal Advisory Committee (IAC)**
- **Technical Advisory Committee (TAC)**
- **Mobility Working Group (MWG)**
- **Health Impact Assessment Committee (HIAWG)**

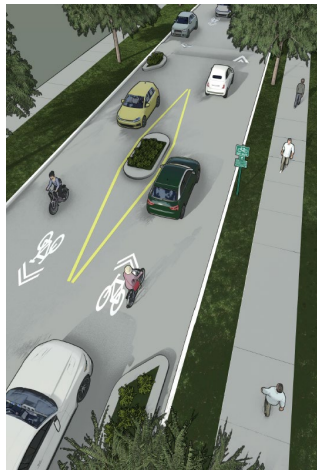


### The BNP held 5 stakeholder roundtables:

- Developers
- Disability Advocacy Organizations
- Partner Cities
- School Districts
- Research Institutions



# Existing Bike Network



**Bike  
Boulevard**



**Traditional  
Bike Lane**



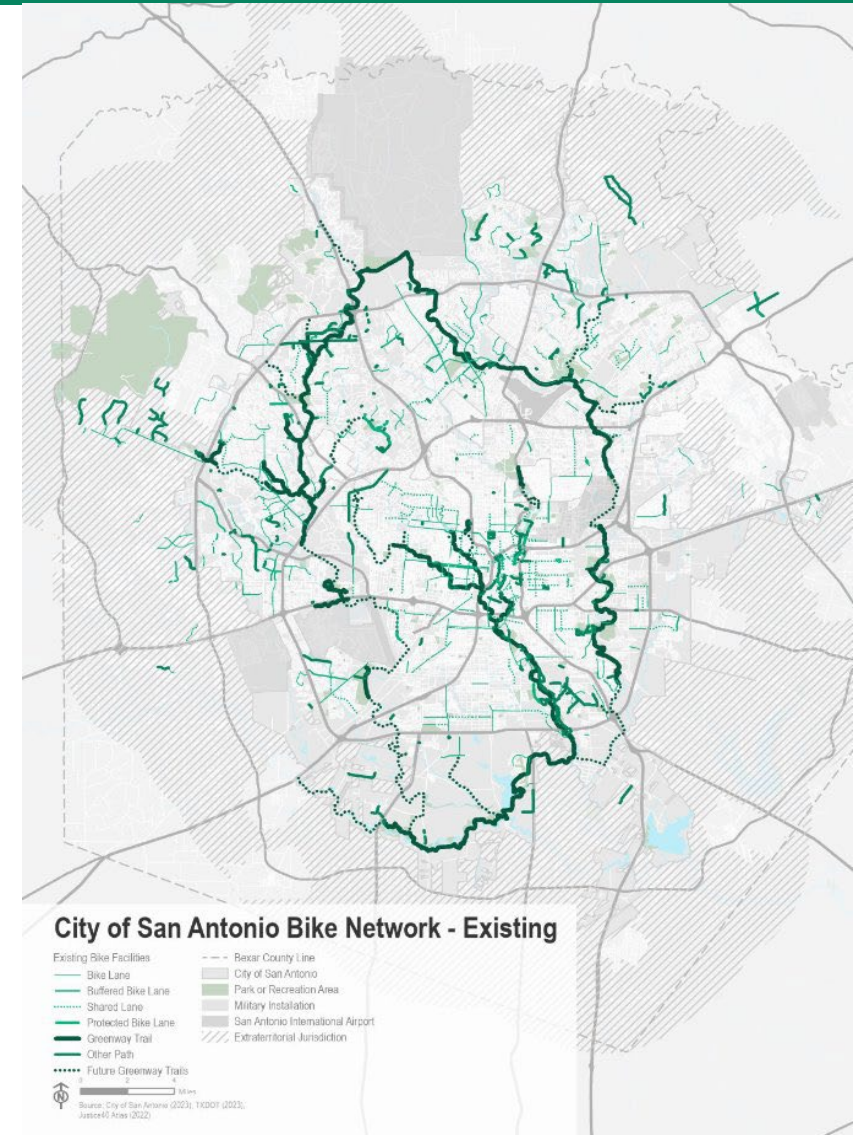
**Buffered  
Bike Lane**



**Protected  
Bike Lane**



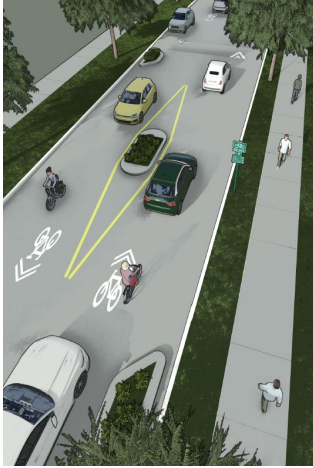
**Shared  
Use Path**





# Recommended Bike Facility Designs

- San Antonio's bicycle facility guidance is context-sensitive.



**Bike  
Boulevard**



**Traditional  
Bike Lane**



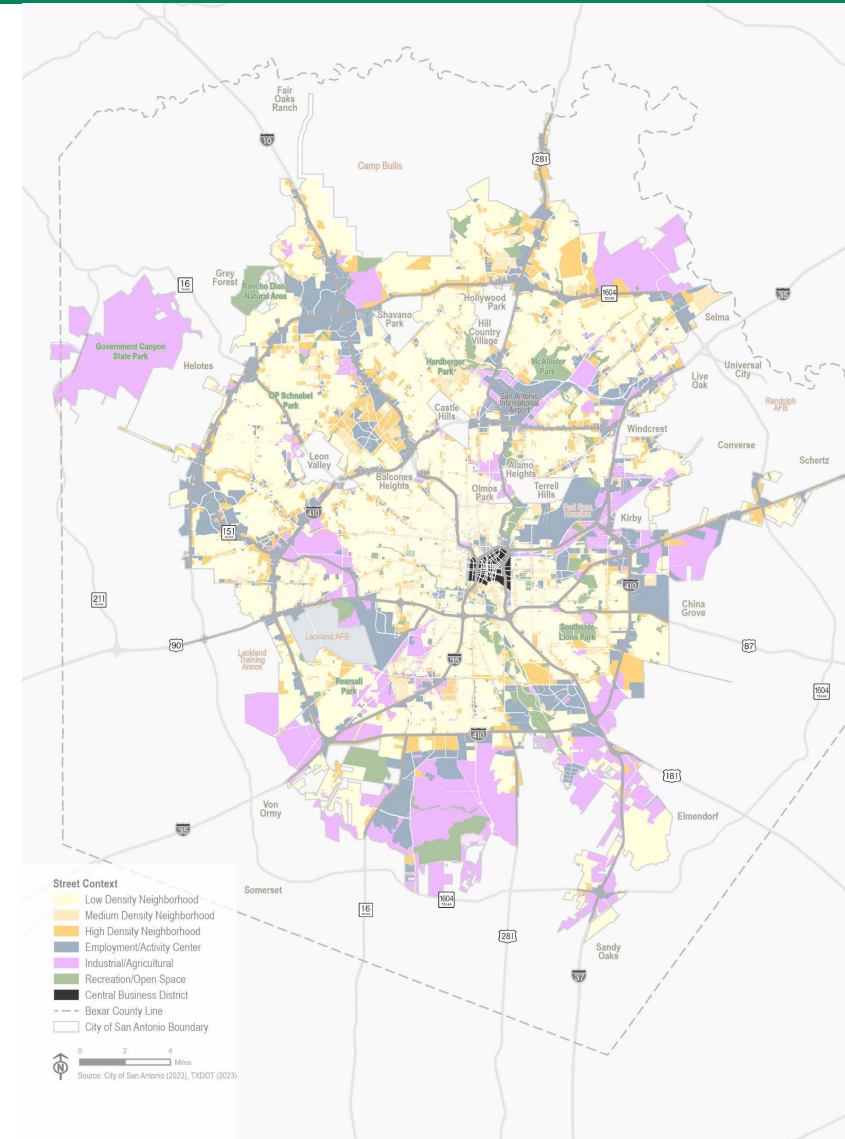
**Buffered  
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**Protected  
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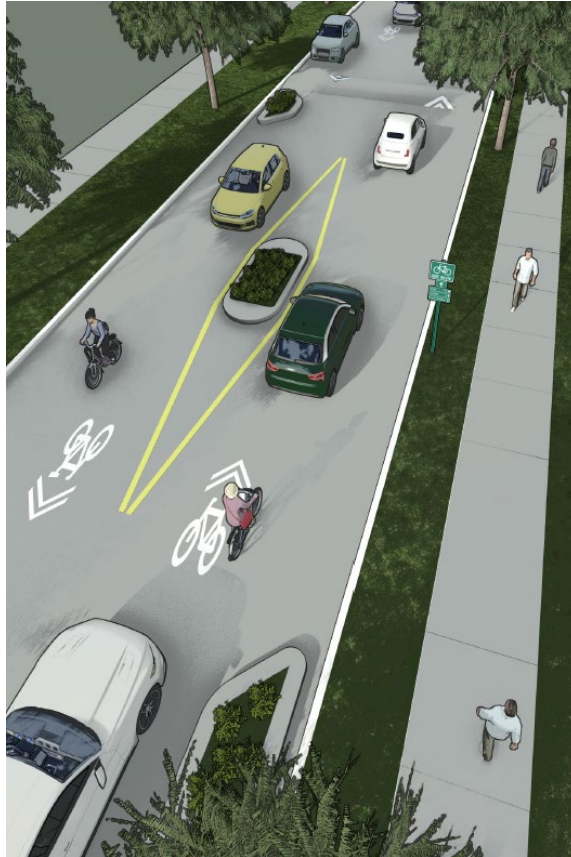


**Shared  
Use Path**



# Special Facility Considerations

## Bike Boulevard

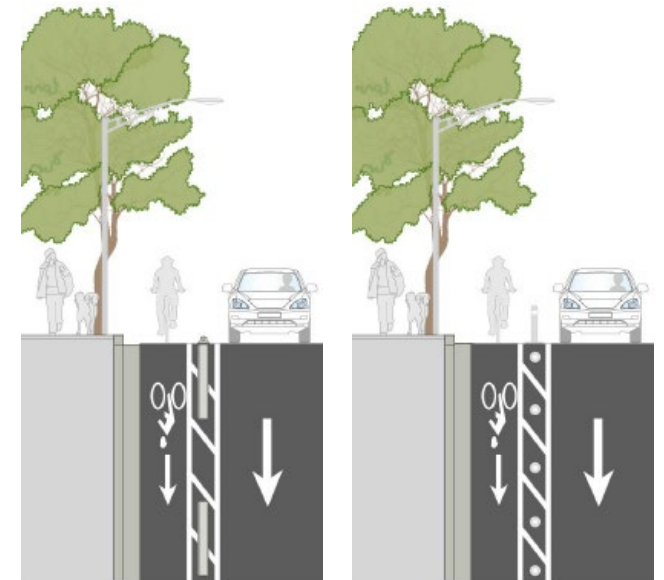


*Slow-speed neighborhood streets where bikes & cars can share space safely*

## Protected Bike Lane



*On-street bike lanes that feature protective barriers between bikes & car traffic*



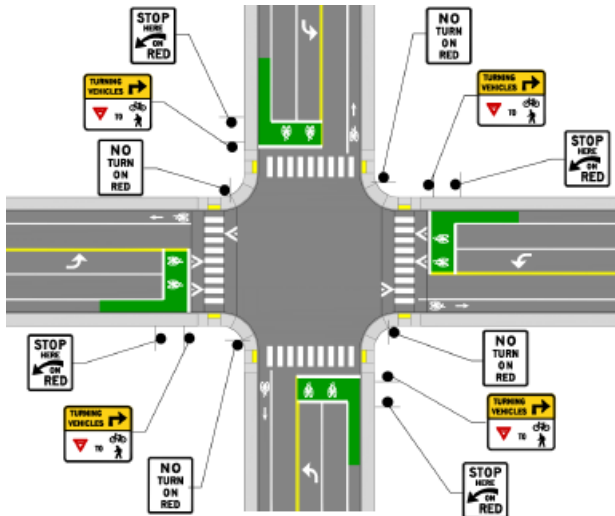
*Parking Stops*

*Flex Posts*



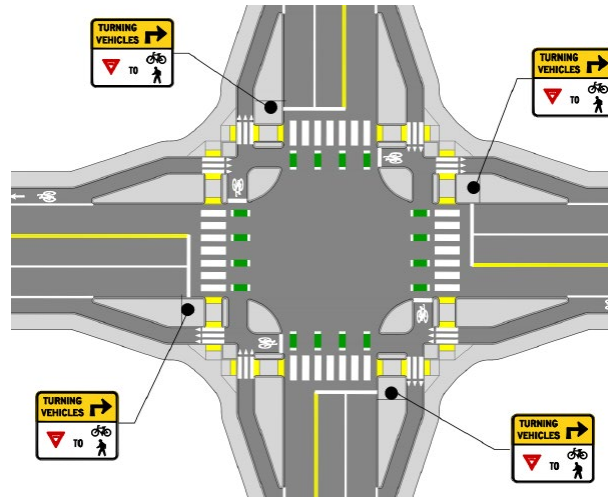
# Intersections Designs

## Bike Boxes



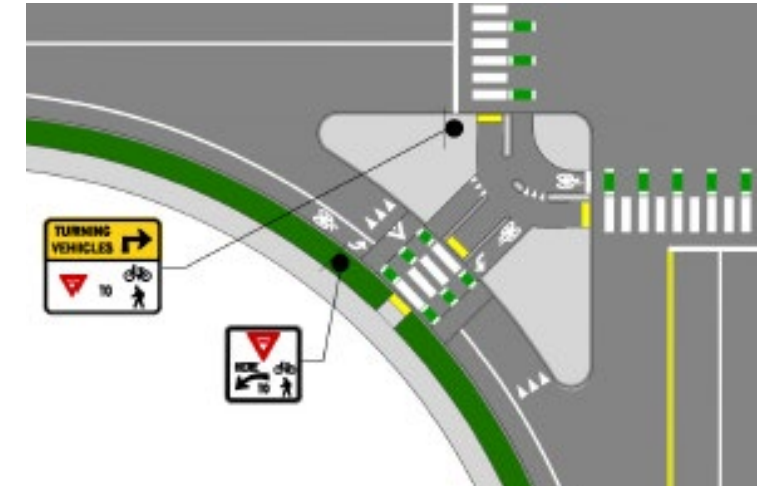
*Bike boxes provide designated spaces for people biking to queue in front of vehicles and/or transition to left-turn lanes at red lights.*

## Protected Intersections



*The best practice in safe bike intersections - dedicated and protected bike path to traverse through the intersection.*

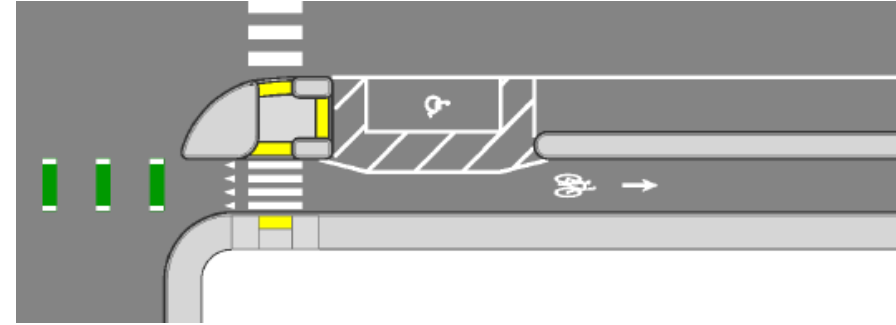
## Slip Lane Redesigns



*Slip lanes may encourage higher right-turning speeds, which can reduce driver reaction time in the same area that people walking and biking must cross the intersection.*

# Special Guidance

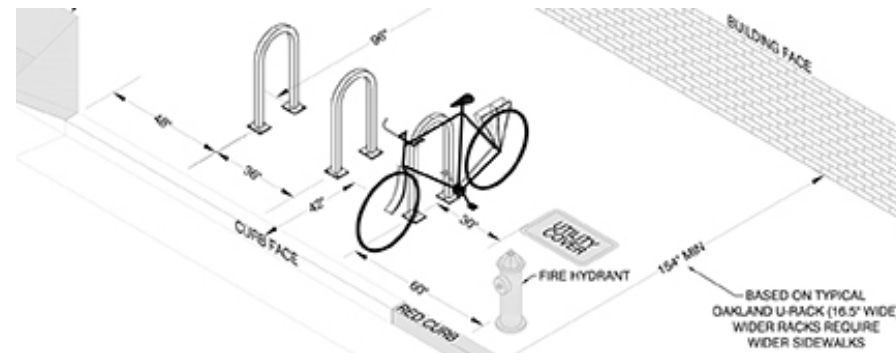
## ADA-compliant parking with Bike Lanes



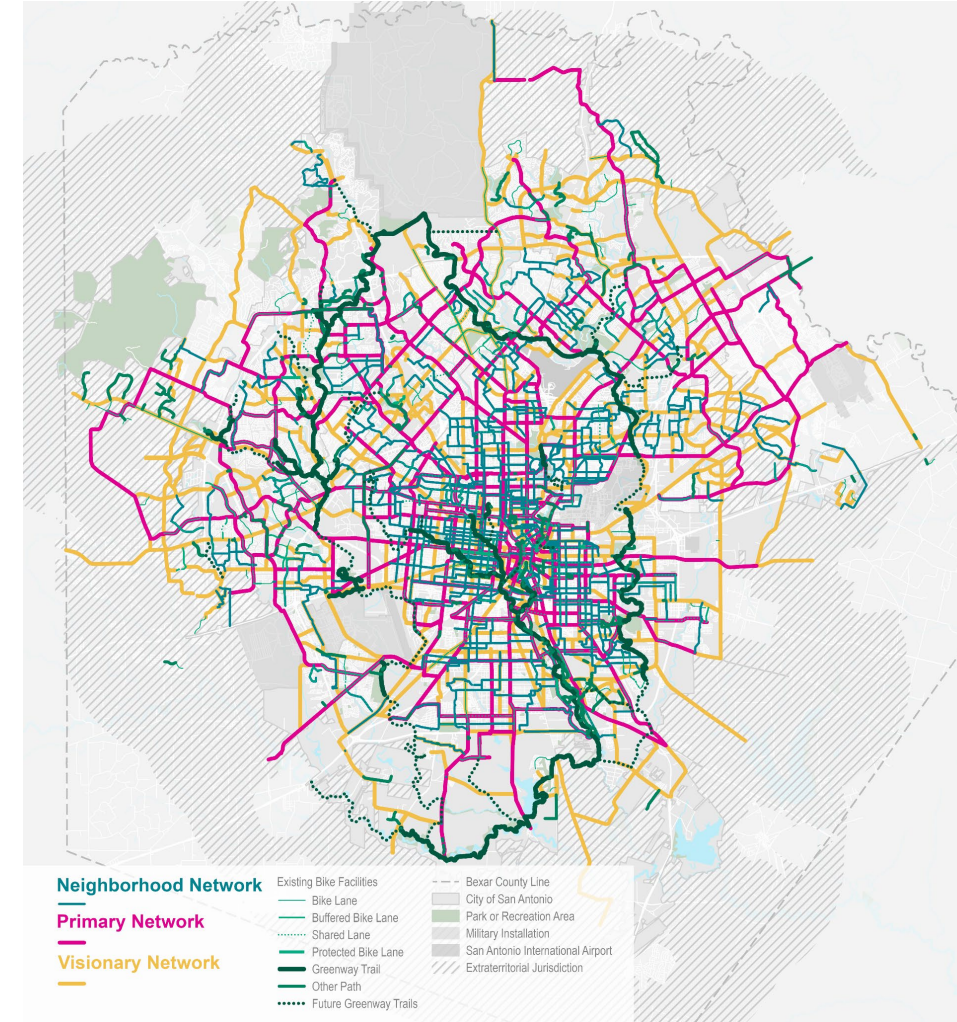
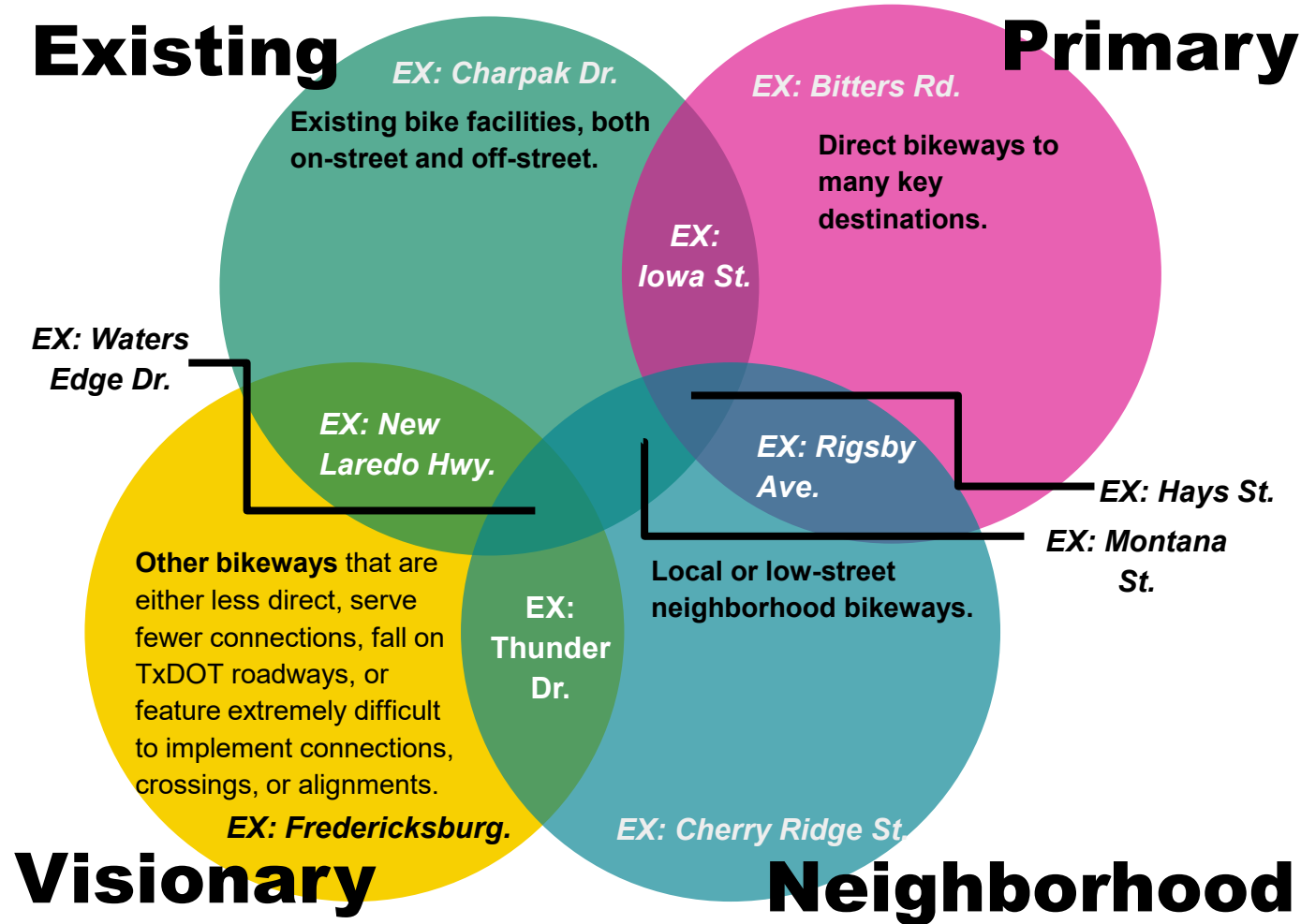
## Bus Stops with Bike Lanes



## Bike Parking Guidance



# Recommended Bike Network



Note: Network includes both existing and proposed facilities. Facilities can be associated with more than one network type.



# Project Tiers

	Priority Score one standard deviation above the mean	Priority Score above mean	Priority Score below mean	Priority Score one standard deviation below the mean
Very Feasible	1	1	2	3
Feasible	1	2	3	4
Less Feasible	2	3	4	4

	Timeframe	Tier Description
<b>Tier 1</b>	1 – 5 years	Very high priority projects that should be completed in the near term with minimal feasibility concerns that can be quickly deployed.
<b>Tier 2</b>	3 – 10 years	Lower priority projects that also have minimal feasibility concerns or Priority Projects with more constraints
<b>Tier 3</b>	5 – 15 years	Projects with serious feasibility concerns that are not a very high priority, but due to changing circumstances could become feasible or a higher priority.
<b>Tier 4</b>	10 – 25 years	Long-term visionary needs that should be implemented as opportunities arise.

Note: *Projects* are network facilities that are proposed for implementation or upgrade.

# Improved Connectivity

District	Most Improved Destination Type	Current Access within a 15-minute low stress bike ride	Improved Access (Implementation of all Tier 1 & 2 Projects)
1	Universities & Research Institutions	33%	69%
2	Employment Centers	58%	89%
3	Employment Centers	46%	75%
4	Healthcare Centers	0%	19%
5	Universities & Research Institutions	8%	60%
6	Grocery Stores	37%	67%
7	Healthcare Centers	15%	36%
8	K-12 Schools	39%	67%
9	Healthcare Centers	4%	19%
10	Employment Centers	38%	68%

# Implementation

- Occurs during the normal development process
- Occurs during our normal street maintenance process
- Occurs during our Bond process
- Implementation is incremental that eventually leads to overall connectivity

# Funding Opportunities for Bike Facilities

## Local Traditional Funding

**Bike Facilities - Dedicated** (\$1 mil. annually)

**Vision Zero - Dedicated** (\$1 mil. annually)

**Municipal bond cycle** (\$1 bil. every 5 years)

**Infrastructure Maintenance Program (IMP)**  
(\$150 mil. annually)

## State Formula Funding

Congestion Mitigation and Air Quality (CMAQ)

Transportation Alternatives (TA)

Surface Transportation Block Grant (STBG)

Metropolitan & Urban Area Corridors

Supplemental Transportation Programs

Strategic Priority

## Federal Discretionary Funding

Safe Streets and Roads for All (SS4A)

Reconnecting Communities Pilot (RCP) Program

Multimodal Project Discretionary Grant (MPDG) Program

Active Transportation Infrastructure Investment  
Program (ATIIP)

Rebuilding American Infrastructure with  
Sustainability and Equity (RAISE)

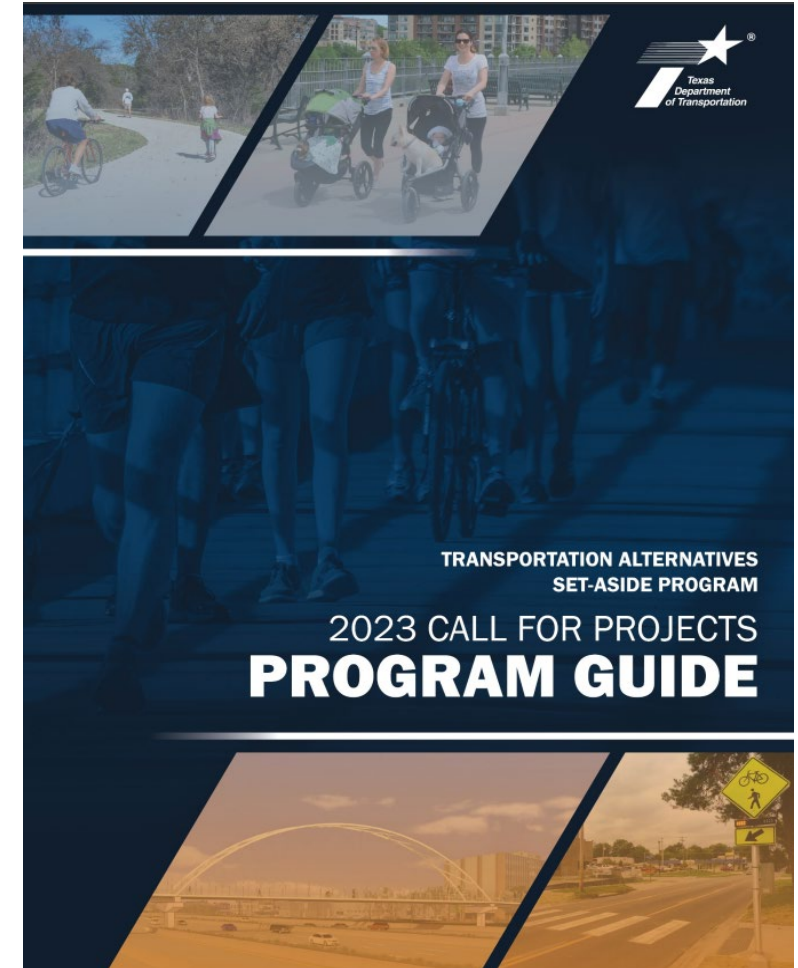
## Other Funding Sources

Texas Parks & Wildlife Department (TPWD)  
Recreational Trail Grants

City Council Offices Neighborhood Access Mobility  
Programs (NAMP)

Tax Increment Reinvestment Zone (TIRZ)

Bexar County Community Development Block  
Grants (CDBG)



# Recommended Bike Policies

## Policy Recommendations on Using Bike Infrastructure

- Helmet Laws
- Riding on Sidewalks
- Parking Obstructing Bicycle Lanes
- Idaho Stops
- Safe Passing
- Bicycle Security
- Pedicab Permitting and Operations

## Policy Recommendations on Deploying Bike Infrastructure

- Complete Streets
- Right of Way Acquisition
- Right of Way Maintenance
- Utility Relocation
- Roadway Reallocation
- Setting Speed Limits
- Prima Facie Speed Limits
- Traffic Study Requirements
- Cyclist Visibility

# Performance Metrics and Targets



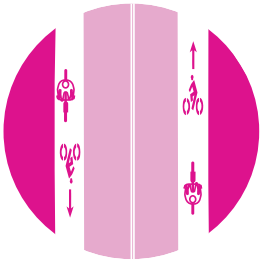
**Safety**



**Community  
Engagement**



**Bike  
Counts**



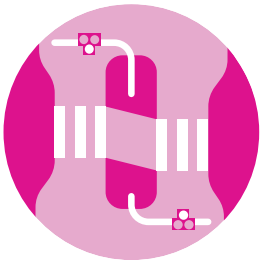
**Roads  
Improved**



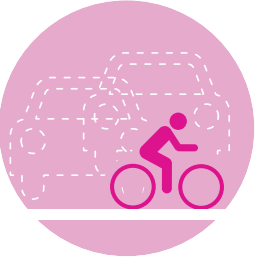
**Policies  
Implemented**



**Bike/Bus  
Trips**



**Intersections  
Improved**



**Commute  
Mode Change**



**Health  
Outcomes**



# Recommendation

- **December 11, 2024: Planning Commission recommended Approval**
- **Staff recommends approval of the Bike Network Plan**

# **Thank You!**

**City Council Meeting**

**January 30, 2025**