

Streets for Transit

**Austin, TX Transit Improvement Projects
2018-2020**

Transit Enhancement Program | Transit Speed & Reliability Program



Program

Introduction

This report describes transit improvement projects completed in partnership between **Austin Transportation's** Transit Enhancement Program and **Capital Metro's** Transit Speed & Reliability Program from 2018-2020. Funding for the projects in this report is allocated through a **2018 interlocal agreement** between the City of Austin and Capital Metro, which commits \$3 million to the design and construction of projects to improve transit safety, speed, and reliability. Additionally, none of these transit projects would be possible without the collaboration and assistance of many, including Austin Transportation's **Signs & Markings** crews, traffic **signal engineers**, the City of Austin **2016 Bond** program, **Public Works** department, and multiple other regular project collaborators. Transit improvement projects include:

- **Spot improvements:** Low-cost, targeted changes at locations where buses experience delay along their routes. For example, realigning a curb and updating pavement markings at Sandra Muraida Way and Lamar Boulevard reduced area crashes by 83%.
- **Bus stop improvements:** Collaborative projects to improve conditions at existing stops or design new stops optimized for safety and multimodal access. For example, upgrading standard bus stops along sidewalks to "floating" stops that improve safety for all by separating people biking past a stop from buses and passengers.
- **Corridor improvements:** Series of coordinated improvements along multiple blocks of a street or bus route. For example, the City improved the visibility of the transit priority lanes that carry 60% of Capital Metro riders through downtown daily by installing eye-catching, bright red paint.

A series of incremental improvements add up to noticeable time savings for transit riders throughout the system. As a result of these projects, Austin's transit network is safer, bus riders are gaining back precious time, and Capital Metro is saving over \$1 million in annual operating expenses. The 30 projects described in this report:

- Constitute approximately **five miles** of improvements.
- Benefit approximately **83,000 weekday riders** (over 80% of weekday ridership.*)
- Improve operations for **44 bus routes** (over 50% of Capital Metro bus routes.)
- Include **14 active transportation improvements** for people walking or biking.

These projects deliver on the mission of Capital Metro's **Strategic Plan** and its "High Quality Customer Experience" Strategic Priority (*Provide intuitive, consistent, reliable, and safe service meeting the transportation needs of the community.*) They also support the **Austin Strategic Mobility Plan's** goal to reduce the number of people driving alone and achieve a "50/50" commute mode share by 2039. Most importantly, they improve safety and mobility for Austin residents and Capital Metro customers.

Speed and reliability of service are decisive factors in attracting and retaining transit riders and connecting people to opportunity. Austin Transportation and Capital Metro are committed to continuously improving transit as an affordable and attractive means of getting people where they want to go, when they want to get there, safely and cost-effectively. With the passage of **Proposition B** in November 2020, including \$19 million in funding for the Transit Enhancement Program, Austin residents and visitors can expect to see even more transit improvement projects in the years to come; and with them, a more sustainable, accessible, equitable and connected transportation system.

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**Bus volume and average weekday passenger data is from February 2020 (pre COVID-19) fixed route service data.*

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2018

2018 Projects

In June 2018, Capital Metro implemented **CapRemap**: the most significant change to the agency's bus network in its 30+ year history. The bus system overhaul came as the result of a multi-year planning effort, **Connections 2025**, and included:

- Increasing the number of frequent bus routes from 6 to 14
- Creating 10 new bus routes
- Replacing 14 bus routes with modifications to existing routes and/or new routes and
- Eliminating 2 bus routes.

Such a major change to Capital Metro's bus network required close coordination with the City of Austin to ensure buses could successfully navigate through new parts of town. Transit improvement projects completed in FY 2018 were largely focused on making the launch of CapRemap a success and delivering a more frequent, more reliable and better connected bus network. Many of these modifications prevented planned route alignments from being revised to be longer and less efficient.



Red River Street at East 45th Street

Spot improvements

1. East 45th Street and Red River Street

Route: 10

Background

- As part of CapRemap, Capital Metro's Route 10 was realigned north of UT to serve the Hyde Park, Mueller, Windsor Park and St. Johns neighborhoods on its way towards the Norwood Walmart and adjacent Transit Center.

Issues

- To successfully implement a new route alignment, buses would need to be able to make a right turn from northbound Red River St. to eastbound 45th St.
- Due to the existing configuration of travel lanes, corners and curb ramps at the intersection, buses were unable to navigate the turn safely and efficiently.

Improvements

- The intersection's **southeast corner** was **reconstructed** to accommodate bus right turns.
- Staff identified and constructed additional intersection modifications that not only improved bus operations but also addressed long-standing safety concerns for all street users, including:
 - Signal timing adjustments
 - Restriping/reconfiguring travel lanes
 - Creating dedicated left-turn lanes on three approaches to the intersection
 - New high-visibility crosswalks

Benefits

- Street user safety
- Transit speed and reliability

Impacts

- 70 buses per day
- 7,200 passengers per day
- \$356,000 saved in annual operating costs**

Funding partner

- City of Austin 2016 Mobility Bond Intersection Safety/ Vision Zero Program



Hogan Avenue and Montopolis Drive

Spot improvements

2. Hogan Avenue and Montopolis Drive

Route: 217

Issues

- To successfully implement a new route alignment, buses would need to be able to make a left turn from eastbound Hogan Ave. to northbound Montopolis Dr.
- Due to the high vehicle volumes and speeds on Montopolis Dr., buses were unable to navigate the turn safely and efficiently.

Improvements

- New **traffic signals** were installed at all four approaches to the intersection, allowing northbound buses to make a protected left turn at the intersection and improving predictability and safety for all street users.
- Two new **curb ramps** and four new **crosswalks** were installed in conjunction with the new signals

Benefits

- Street user safety
- Transit speed and reliability

Impacts

- 64 buses per day
- 1,500 passengers per day
- **\$356,000 saved in annual operating costs**



Spot improvements



West Martin Luther King Jr Boulevard at Guadalupe Street

Spot improvements

4. West Martin Luther King Jr. Boulevard and Guadalupe Street

Route: 18

Background

- Prior to CapRemap, Route 18 would deviate from its main alignment on Martin Luther King Jr. Blvd. and wind through three blocks along the southwest corner of the University of Texas at Austin campus before traveling south on Guadalupe St. In order to improve frequency, the route was streamlined and rerouted back to Martin Luther King Jr. Blvd.

Issues

- To successfully implement a **new route alignment**, buses would need to be able to make a left turn from westbound Martin Luther King Jr. Blvd. to southbound Guadalupe St.
- Due to the **configuration of travel lanes**, an existing **prohibition on left turns** for westbound traffic at the intersection and a nearby **slip lane**, buses were unable to make the turn

Improvements

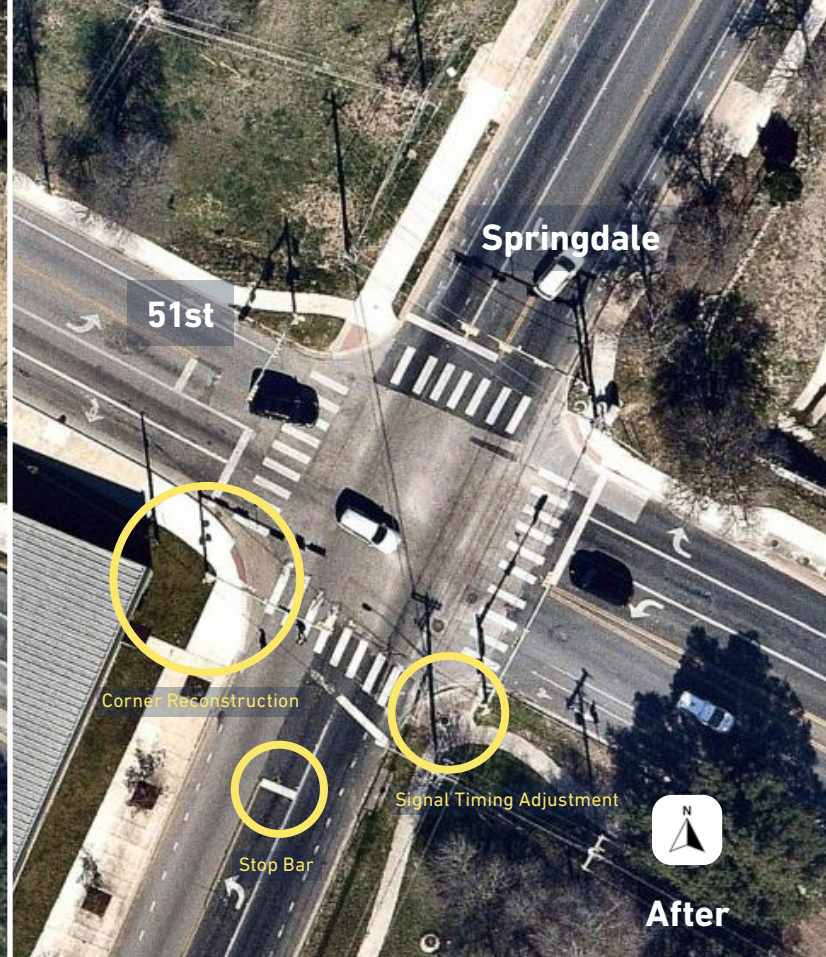
- A **permanent slip lane closure** prevented westbound vehicles on Martin Luther King Jr. Blvd. from making unprotected, mid-block turns onto southbound Guadalupe St.
- Travel lanes on Martin Luther King Jr. Blvd. were restriped to convert a segment of an existing unused street space to a **dedicated left turn lane** for westbound traffic.
- A new **dedicated left turn signal** was installed for westbound traffic at the intersection. The intersection's **signal timing** was adjusted accordingly.

Benefits

- Street user safety
- Transit speed and reliability

Impacts

- 67 buses per day
- 1,200 passengers per day
- **\$356,000 saved in annual operating costs**



Spot improvements

5. East 51st Street and Springdale Road

Route: 300

Background

- As part of CapRemap, Capital Metro's Route 300 was realigned to operate on 51st St., connecting eastside riders to new developments on that corridor, including the Mueller HEB, before continuing north along Cameron Rd. towards St. Johns Blvd. and the Crestview Transit Center.

Issues

- To successfully implement a **new route alignment**, buses would need to be able to make a right turn from eastbound 51st St. to southbound Springdale Rd.
- Due to the existing **configuration of travel lanes** and **corners** at the intersection, buses were unable to navigate the turn safely and efficiently.

Improvements

- The intersection's **southwest corner** was **reconstructed** to accommodate bus right turns.
- The **stop bar** for the dedicated left turn lane on northbound Springdale Rd. was **restriped** a few feet south to provide space for turning southbound buses to clear the intersection when northbound traffic is stopped.
- The intersection's **signal timing** was adjusted to ensure that conflicting movements don't occur at the intersection when buses need to turn.

Benefits

- Transit speed and reliability

Impacts

- 67 buses per day
- 7,000 passengers per day

Spot improvements

6. Briarcliff Boulevard and Cameron Road

Route: 337

Background

- As part of CapRemap, the new Route 337 was designed to connect customers in northeast Austin to health care, employment and educational opportunities in north central and west Austin, as well as connect those customers to MetroRail and major north/south bus routes in the city.

Issues

- To successfully launch a planned **new bus route**, buses would need to be able to make a right turn from westbound Briarcliff Blvd. to northbound Cameron Rd.
- Due to the existing **configuration of travel lanes** and the **acute angle of the northeast corner** of the intersection, buses were unable to navigate the turn safely and efficiently.

Improvements

- The intersection's **northeast corner** was **reconstructed** to accommodate bus right turns.
- The **stop bar** for the dedicated left turn lane on southbound Cameron Rd. was **restriped** a few feet north to provide space for turning northbound buses to clear the intersection when southbound traffic is stopped.

Benefits

- Transit speed and reliability

Impacts

- 53 buses per day
- 2,000 passengers per day

Spot improvements

7. East Rundberg Lane and Georgian Drive

Route: 324

Background

- As part of CapRemap, the new Route 337 was designed to connect the Austin Community College Highland campus and adjacent MetroRail station to neighborhoods along Georgian Dr. and Rundberg Ln. as well as destinations like the Rundberg HEB, North Austin YMCA, Quail Creek Neighborhood Park, and Northcross Shopping Center.

Issues

- To successfully implement a **new bus route**, buses would need to be able to make a right turn from eastbound Rundberg Ln. to southbound Georgian Dr.
- Due to the existing **configuration of travel lanes** at the intersection, buses were unable to navigate the turn safely and efficiently.
- Due to the **location of traffic detectors** in the pavement under the existing dedicated left turn lane on northbound Georgian Dr., moving the lane's painted stop bar back was not a viable option for accommodating right turning buses at the intersection.

Improvements

- Travel lanes on Georgian Dr. were restriped to shift the street's centerline three feet east and narrow its northbound lane widths. These changes allow for turning southbound buses to clear the intersection when northbound traffic is stopped.

Benefits

- Transit speed and reliability

Impacts

- 35 buses per day
- 1,400 passengers per day

Spot improvements

8. East St. Johns Avenue and Bennett Avenue

Route: 337

Issues

- To successfully implement a **new bus route**, buses would need to be able to make a right turn from eastbound St. Johns Ave. to southbound Bennett Ave.
- Due to the existing **configuration of travel lanes** at the intersection, buses were unable to navigate the turn safely and efficiently.

Improvements

- After evaluating traffic volumes and motor vehicle turning patterns at the intersection, staff determined that the existing dedicated left turn lane on northbound Bennett Ave. was not necessary.
- **Travel lanes** on Bennett Ave. were **restriped** to eliminate the dedicated left turn lane. This change allows turning southbound buses to clear the intersection when northbound traffic is stopped.

Benefits

- Transit speed and reliability

Impacts

- 53 buses per day
- 2,000 passengers per day

Spot improvements

9. Govalle Avenue and Webberville Road

Route: 300

Background

- As part of CapRemap, Route 300's path through East Austin was realigned to streamline routing and serve the Austin Community College Eastview Campus.

Issues

- To successfully implement a new route alignment, buses would need to be able to make a left turn from westbound Govalle Ave. to southbound Webberville Rd.
- Due to the high vehicle volumes and speeds on Webberville Rd., buses were unable to navigate the turn safely and efficiently.

Improvements

- After evaluating traffic volumes and motor vehicle turning patterns at the intersection, staff determined an all-way stop was warranted.
- Two new **stop signs** were installed on Webberville Rd. at the north and southbound approaches to the intersection. This change allows southbound buses to make a protected left turn and improves predictability and safety for all street users.

Benefits

- Street user safety
- Transit speed and reliability

Impacts

- 67 buses per day
- 7,000 passengers per day



Berkman Drive at Tom Miller Street

Bus stop improvements

10. Berkman Drive and Tom Miller Street

Route: 335

Background

- The launch of a **new bus route** necessitated new bus stops along Berkman Dr.
- Staff identified Berkman Dr. and Tom Miller St. as a strategic location to site bus stops for the new route, given the intersection's proximity to housing, retail and parkland.

Issues

- **Existing on-street parking and bike lanes** necessitated a creative design solution in order to install bus stops at the intersection.

Improvements

- **On-street parking spaces** were **removed** to create space for floating northbound and southbound bus stops.
- **Floating bus stops** reduce opportunities for conflict between people biking past a stop and buses arriving at a stop by providing physical separation between street users.

Benefits

- Street user safety
- Transit speed and reliability

Impacts

- 66 buses per day
- 770 passengers per day
- 9 daily boardings and alightings southbound
- 21 daily boardings and alightings northbound



St. Johns Avenue at Guadalupe Street

Bus stop improvements

11. St. Johns Avenue and Guadalupe Street

Route: 300

Issues

- The **narrow street width** of St. Johns Ave. made designing new bus stops at Guadalupe St. to be ADA accessible and to accommodate existing bike lanes a challenge.

Improvements

- **Shared use paths** were installed at the eastbound and westbound approaches to the intersection prior to installation of the new bus stops. This creative design solution expanded the footprint of the existing sidewalks and kept the existing bikeways intact while minimizing opportunities for conflicts between people walking, people biking, and passing buses.

Benefits

- Street user safety
- Accessibility
- Transit speed and reliability
- Multimodal connectivity

Impacts

- 67 buses per day
- 63 daily boardings and alightings westbound
- 52 daily boardings and alightings eastbound



East 38th Street at Duval Street

Corridor improvements

12. 38th and 38th ½ Streets (Guadalupe Street to Red River Street)

Route: 335

Issues

- The launch of a **new bus route** necessitated new bus stops along 38th St. and 38th ½ St.
- Staff anticipated that the streets' **high traffic volumes** and **narrow widths** would lead to long queues of cars forming behind stopped buses.

Improvements

- Four bus stops between Guadalupe St. and Red River St. were designed as **pull-out stops**. Pull-out stops allow buses to fully exit a shared travel lane when arriving at a bus stop.
- A **queue jump signal** was installed at 38th St. and Duval St. The signal reduces bus delay by giving buses dedicated time to re-enter the shared westbound travel lane on 38th St. after pulling over to serve a bus stop.

Benefits

- Transit speed and reliability
- Traffic congestion relief

Impacts

- 66 buses per day
- 770 passengers per day

2019

Spot improvements

13. Campbell Street and West 6th Street

Route: 4

Issues

- Due to the existing **configuration of travel lanes** on northbound Campbell St., buses struggled to make a left turn at the intersection without conflicting with approaching cars, resulting in transit delay.

Improvements

- The **stop bar** for the dedicated left turn lane on northbound Campbell St. was **restriped** a few feet south and **on-street parking spaces** were **removed** to accommodate bus left turns.

Benefits

- Transit speed and reliability

Impacts

- 67 buses per day
- 1,900 passengers per day



Western Trails at Pack Saddle Pass

Spot improvements

14. Western Trails Boulevard and Pack Saddle Pass

Routes: 30, 105, 300, 311, 315, 318, 803

Background

- Prior to the opening of Capital Metro's Westgate Transit Center, multiple bus routes traveled southbound on Pack Saddle Pass to their termination point on westbound Western Trails Boulevard.

Issues

- Due to the existing **configuration of travel lanes** on westbound Western Trails Blvd., buses struggled to make a right turn at the intersection without conflicting with approaching cars, resulting in transit delay.

Improvements

- After evaluating traffic volumes and motor vehicle turning patterns at the intersection, staff determined that the existing dedicated left turn lane on eastbound Western Trails Blvd. was not necessary.
- **Travel lanes** on Western Trails Blvd. were **restriped** to eliminate the dedicated left turn lane. This change allows turning southbound buses to clear the intersection when northbound traffic is stopped.

Benefits

- Transit speed and reliability

Impacts

- 302 buses per day
- **17,300 passengers per day** (almost 20% of Capital Metro's average daily ridership)

Spot improvements

15. Howard Lane Transit Detection

Routes: 1, 325, 801

Background

- Buses travelling from Capital Metro's Tech Ridge Park & Ride take a left turn from northbound Centerline Pass onto westbound Howard Ln.

Issues

- During peak hours, buses exiting the Tech Ridge Park & Ride experienced delays due to **lengthy queues** of westbound vehicles heading toward I-35, as well as **vehicles blocking the intersection** at Howard Ln. and Centerline Dr.

Improvements

- Austin Transportation added **aerial vehicle detection cameras** at two area intersections to monitor vehicle congestion and allow signals to communicate with each other in order to make automatic signal adjustments based on the level of congestion observed. The cameras were installed to detect if the queue lengths at Centerline Pass and Howard Ln. exceed acceptable thresholds. If the threshold is exceeded, the Centerline Pass signal should notify the next signal to the west, located at IH-35 and Howard Ln., of the issue downstream. The IH-35 at Howard Ln. signal would then give additional time to the westbound movement, helping to clear the intersection at Centerline Pass and provide space for buses to travel through that intersection and onto Howard Ln.

Benefits

- Bus travel times and speeds have remained unchanged since installation of the cameras. Staff will continue to monitor and evaluate for improvement.

Impacts

- 198 buses per day
- **17,300 passengers per day** (almost 20% of Capital Metro's average daily ridership)



Sandra Muraida Way at North Lamar Boulevard

Spot improvements

16. Sandra Muraida Way and Lamar Boulevard

Routes: 3, 803

Background

- Northbound buses traveling through downtown Austin must access West Cesar Chavez St. by turning right onto Sandra Muraida Way using a ramp from North Lamar Blvd.

Issues

- The **existing intersection configuration** was confusing for drivers and challenging for buses to navigate safely and efficiently. Capital Metro buses experienced **multiple crashes** at this location.

Improvements

- The **median curb** along the north side of Sandra Muraida Way was **moved** a few feet north and **redesigned** to be mountable to accommodate bus right turns.
- The travel lane and yield bar **pavement markings** on Sandra Muraida Way were **refreshed** to be more visible and clear to all drivers.

Benefits

- Street user safety
- Transit speed and reliability

Impacts

- 132 buses per day
- 9,500 passengers per day
- After the project was completed, Capital Metro saw an **83% decline in crashes** in the area.



Trinity Street at East 4th Street

Spot improvements

17. Trinity Street and East 4th Street & Comal Street and East 7th Street

Route: 451

Issues

- Construction of the permanent MetroRail Downtown Station required Capital Metro to temporarily end train service at the Plaza Saltillo Station three quarters of a mile to the east.
- To bridge the gap between rail stations, Capital Metro planned to create a temporary shuttle, Route 451, that would circulate passengers reliably between the Plaza Saltillo and Downtown stations throughout the day.

Improvements

- On Comal St. between 6th St. and 7th St., **travel lanes** were **restriped** and **on-street parking spaces** were **removed** to accommodate bus right turns.
- On Trinity St. between 4th St. and 5th St. **parking spaces** were **removed** to provide space for shuttle buses to pull up to the curb when serving the Downtown Station.

Benefits

- Transit speed and reliability

Impacts

- 65 buses per day
- 570 passengers per day



West 5th Street at Walsh Street

Corridor improvements

18. West 5th Street (West Lynn Street to Baylor Street) Shared Bus/Bike Lane – Phase 1

Routes: 4, 663, 980, 981, 985

Background

- In late 2018 the Central Texas Regional Mobility Authority (CTRMA) opened the MoPac Express lane, an 11-mile variable priced toll lane on Loop 1 (MoPac) between Parmer Ln. and Cesar Chavez St. Capital Metro redesigned its MetroExpress bus routes to take advantage of the speed and reliability benefits that the toll lane offered. Three MetroExpress commuter bus routes now use the MoPac Express lane to travel from North Austin to downtown.

Issues

- After exiting the express lane, MetroExpress buses traveling downtown encountered significant delays when **mixing with general purpose traffic** along 5th St., especially during peak periods.

Improvements

- A new **shared bus and bicycle lane** was installed on 5th St. between West Lynn St. and Baylor St.
- Additional project elements included the elimination of a bus stop at Walsh St. to improve overall stop spacing along 5th St., construction of a new **far-side bus stop** on 5th St. at Pressler St., pavement markings, signage, and installation of **dedicated bus and bicycle signals** at Baylor St.

Benefits

- Transit speed and reliability

Impacts

- 155 buses per day
- 4,800 passengers per day
- AM travel time decreased 34%
- PM travel time decreased 52%



Guadalupe Street at Martin Luther King Jr Boulevard

Corridor improvements

19. Guadalupe Street Contraflow Lane – Phase 1

Routes: 1, 3, 18, 19, 20, 105, 410, 481, 663, 801, 803, 980, 981, 982, 987, 990

Background

- Guadalupe and Lavaca Streets through downtown Austin are the highest-volume transit corridors in Capital Metro's system, carrying over 35,000 passengers per weekday.

Issues

- Buses regularly encountered significant **delays** when traveling northbound through the intersection of Lavaca St. and Martin Luther King Jr. Blvd., especially during the PM peak period.

Improvements

- A new **bus-only contraflow lane** was installed on Guadalupe St. between 18th St. and Martin Luther King Jr. Blvd.
- Additional project elements included a **traffic signal** at Lavaca St. and 18th St., a **protected bike lane** on 18th St., a **shared use path** on the east side of Guadalupe St. and a **transit signal** at Guadalupe St. and Martin Luther King Jr. Blvd.

Benefits

- Street user safety
- Transit speed and reliability

Impacts

- 565 buses per day
- 35,400 passengers per day** (Almost 40% of Capital Metro's daily average ridership.)

Funding partner

- City of Austin 2016 Mobility Bond Corridor Mobility Program

2020

Spot improvements

20. East Cesar Chavez Street and Pleasant Valley Road

Routes: 4, 17

Issues

- Westbound Route 4 buses must make a right turn from westbound Cesar Chavez St. to northbound Pleasant Valley Rd. Buses were unable to navigate the turn efficiently due to the existing **configuration of travel lanes** at the intersection, resulting in **delay** for turning Route 4 buses, Route 17 buses waiting to go straight, and for trailing general purpose traffic on Cesar Chavez St.

Improvements

- The **stop bars** for the southbound travel lanes on Pleasant Valley Rd. were **restriped** a few feet north to provide space for turning northbound buses to clear the intersection when southbound traffic is stopped.
- The **crosswalks** at the intersection were **repainted** to be more visible and clear to all Drivers.

Benefits

- Transit speed and reliability
- Traffic congestion relief

Impacts

- 132 buses per day
- 3,370 passengers per day



Loyola Lane at Manor Road

Spot improvements

21. Loyola Lane and Manor Road

Route: 337

Issues

- Westbound Route 337 buses must make a right turn from southbound Manor Rd. to westbound Loyola Ln. Buses were unable to navigate the turn efficiently due to the existing **configuration of travel lanes** at the intersection, resulting in **delay** for turning buses and trailing general purpose traffic on Manor Rd.

Improvements

- In conjunction with the installation of a shared use path along Manor Rd., the intersection's **northwest corner** was **reconstructed** to accommodate bus right turns.
- The **stop bar** for the dedicated left turn lane on eastbound Loyola Ln. was **restriped** a few feet west to provide space for turning westbound buses to clear the intersection when eastbound traffic is stopped.

Benefits

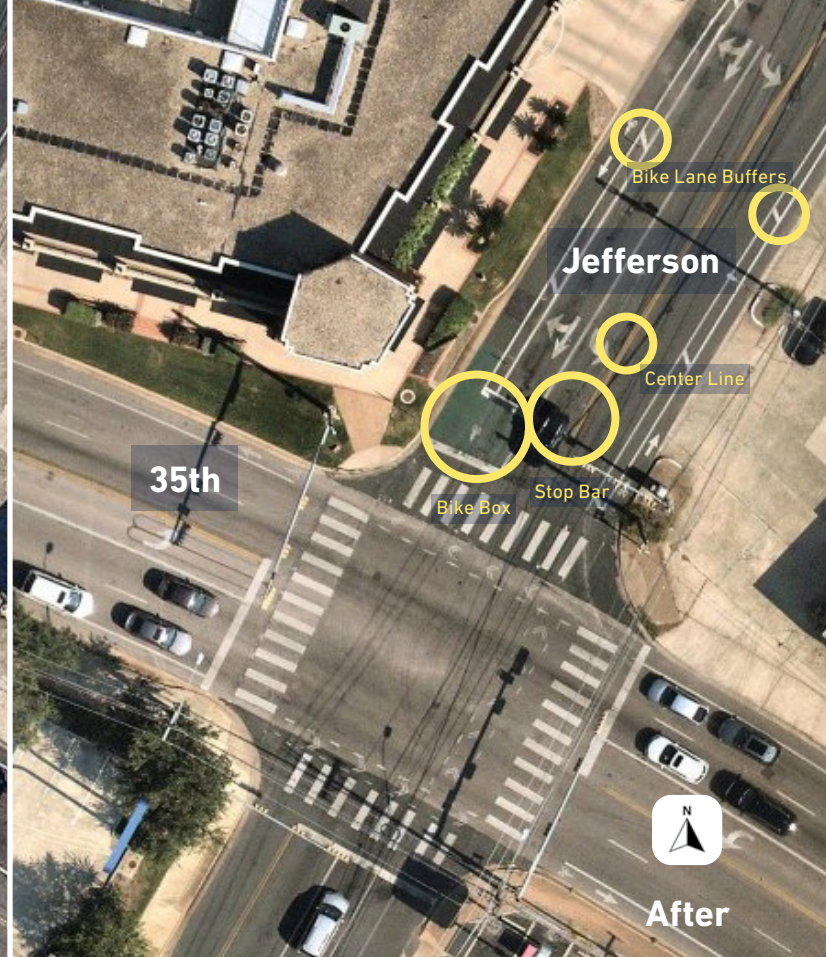
- Transit speed and reliability
- Traffic congestion relief
- Multimodal connectivity

Impacts

- 53 buses per day
- 2,000 passengers per day

Funding partner

- City of Austin 2016 Mobility Bond Bikeways Program



Spot improvements

22. West 35th Street and Jefferson Street

Route: 19

Issues

- Northbound Route 19 buses must make a right turn from westbound 35th St. to northbound Jefferson St. Buses were unable to navigate the turn efficiently due to the existing **configuration of travel lanes** at the intersection, resulting in **delay** for turning buses and trailing general purpose traffic on 35th.

Improvements

- After evaluating traffic volumes and motor vehicle turning patterns at the intersection, staff determined that the number of southbound travel lanes on Jefferson St. could be reduced from three to two.
- Travel lanes** on Jefferson St. were **restriped** to eliminate a southbound travel lane.

- Additional project elements included:
 - Moving the **stop bar** for the southbound left turn lane further to the north
 - Adding a **buffer** and a **bicycle box** to the southbound bike lane
 - Moving a segment of the centerline near the intersection to the west
 - Adding a **buffer** to the existing northbound bike lane
- These changes allow turning northbound buses to clear the intersection when south bound traffic is stopped and improve the comfort of the bicycle facilities on Jefferson St.

Benefits

- Street user safety
- Transit speed and reliability
- Traffic congestion relief

Impacts

- 23 buses per day
- 860 passengers per day



East Dean Keeton Street at Speedway

Bus stop improvements

23. East Dean Keeton Street and Speedway

Routes: 20, 642, 980, 981

Issues

- An existing bus stop's placement at the near-side of a signalized intersection resulted in **delay** for buses and trailing general purpose traffic.
- The stop's placement at the curbside also forced buses to **block the westbound bike lane** on Dean Keeton St. as passengers boarded or alighted.

Improvements

- The **bus stop** was **closed** and replaced by a **new far-side, floating bus stop** on the west side of the intersection. Floating bus stops reduce opportunities for conflict between people biking past a stop and buses arriving at a stop by providing physical separation between street users.
- A **MetroBike station** previously sited on the far-side of the intersection was **relocated to the near-side** and designed to provide a buffer to the westbound bike lane at the approach to the intersection.

Benefits

- Street user safety
- Transit speed and reliability

Impacts

- 95 buses per day
- 302 passengers per day
- 261 daily boardings and alightings



Speedway at 45th Street

Bus stop improvements

24. Speedway and 45th Street

Routes: 656, 681

Issues

- A **narrow sidewalk segment** along Speedway presented an accessibility and safety concern for people walking past, waiting at, boarding or alighting at a curbside bus stop. The stop's placement also forced buses to **block the southbound bike lane** on Speedway as passengers boarded or alighted.

Improvements

- **Travel lanes** on Speedway were **restriped** to create space for a **floating bus stop**. Americans with Disabilities Act (ADA) accessible **curb ramps** were installed in conjunction with construction of the new stop.

Benefits

- Street user safety
- Accessibility
- Transit speed and reliability

Impacts

- 95 buses per day
- 70 daily boardings and alightings



Trinity Street at 8th Street

Bus stop improvements

25. Trinity Street and 8th Street

Routes: 2, 6, 7, 10, 103, 111, 142, 171, 935

Background

- The existing stop experienced high volumes of riders queuing on the sidewalk and provided no physical separation between people biking past the stop and buses arriving at the stop.

Issues

- Staff collaborating on design plans for a protected bike lane on Trinity St. identified an opportunity to redesign a busy bus stop near 8th St.

Improvements

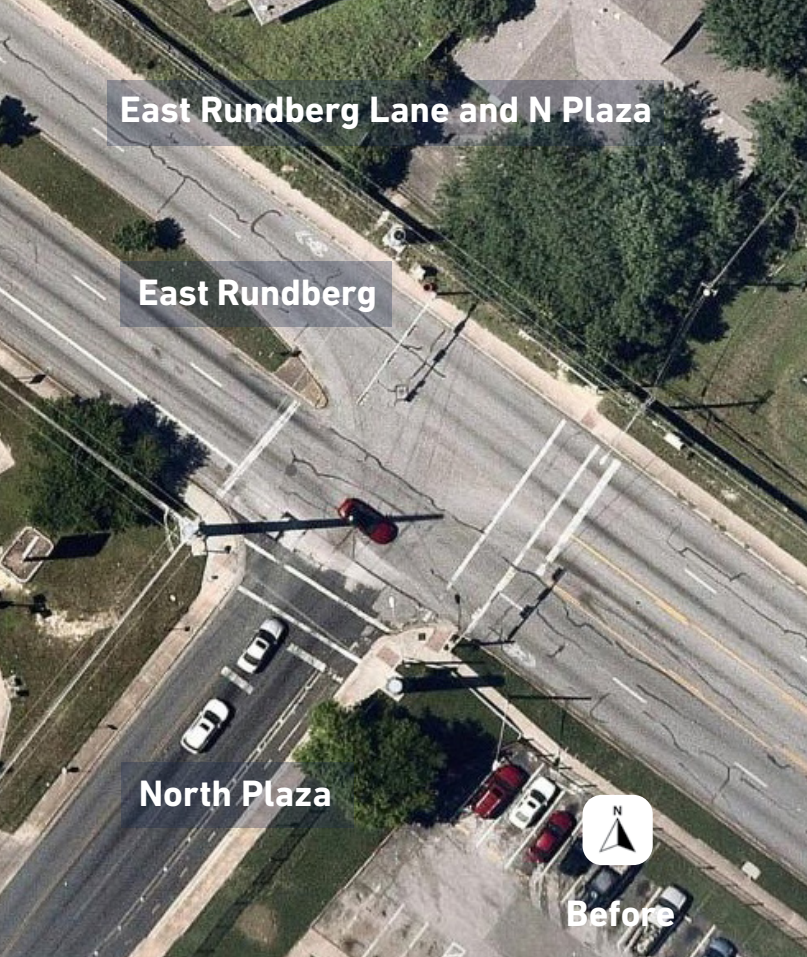
- A **floating bus stop** long enough for multiple buses to serve simultaneously was installed. A new **protected bike lane** segment and ADA accessible **curb ramps** were installed in conjunction with construction of the new stop.

Benefits

- Street user safety
- Accessibility
- Transit speed and reliability
- Multimodal connectivity

Impacts

- 275 buses per day
- 697 daily boardings and alightings



Corridor improvements

26. East Rundberg Lane (Middle Fiskville Road to Crown Ridge Road)

Route: 325

Background

- When a new Workforce Solutions office was opened on N. Plaza, Capital Metro and Austin Transportation worked together to improve access from existing transit routes to the new office and other nearby destinations.

Issues

- Existing bus stops along Rundberg Ln. **lacked pedestrian crossings**, presenting a safety concern for passengers that needed to cross a street before boarding or after alighting.
- Two **bus stops** on the south side of Rundberg Ln. were **sited too closely** together, resulting in **delay** for buses and trailing general purpose traffic.

Improvements

- Two **bus stops** on the south side of Rundberg Ln. were **closed** and replaced by a **single bus stop** sited near an existing signalized pedestrian crossing at Middle Fiskville Rd.
- Two **bus stops** just east of N. Plaza were **closed** and replaced by **two new bus stops** at the intersection of Rundberg Ln. and N. Plaza.
- Curb ramps, crosswalks, and pedestrian signals** were installed in conjunction with the new bus stops.

Benefits

- Street user safety
- Accessibility
- Transit speed and reliability
- Traffic congestion relief

Impacts

- 66 buses per day
- 3,200 passengers per day



Oak Springs Drive at Webberville Road

Corridor improvements

27. Webberville Road and Oak Springs Drive (N. Pleasant Valley Road to Springdale Road)

Routes: 2, 300, 485, 493

Background

- Land uses along Webberville Rd. and Oak Springs Dr. include a community college, elementary school, library, commercial and retail businesses, and multiple residential developments.
- The 1.4 mile corridor is served by four bus routes, including two frequent routes.
- Planning for bicycle and pedestrian improvements along the streets was underway, which presented an opportunity to reassess bus stop facilities within the project limits.

Issues

- Most of the bus stops along the streets were “**legacy**” **stops** that had been in place for decades.
- The siting of existing bus stops did not align with industry best practices for **stop spacing** in service of transit speed and reliability.

Improvements

- Six bus stops were relocated or enhanced in coordination with the construction of bicycle and pedestrian improvements. Transit improvements included:
 - › A new **bus stop** and connecting **curb ramps** at Webberville Rd. and Govalle Ave.
 - › A new **shared-use path** connecting to an existing bus stop at Oak Springs Dr. and Airport Blvd.
 - › A new **bus stop** and **bus layover reconfiguration** at Oak Springs Dr. and Springdale Rd.
 - › A new **pedestrian crossing** connecting to existing bus stops at Oak Springs Dr. and Oak Springs Villas Apartments.
 - › Two existing bus stops upgraded to **floating bus stops** at Oak Springs Dr. and Gunter St. and Oak Springs Dr. and Webberville Rd.
 - › Bus turning movement improvements at Pleasant Valley Rd. and Webberville Rd. and Oak Springs Dr. and Springdale Rd.

Benefits

- Street user safety
- Accessibility
- Transit speed and reliability
- Multimodal connectivity

Impacts

- 155 buses per day
- 8,300 passengers per day

Funding partner

- City of Austin 2016 Mobility Bond Bikeways Program



Guadalupe Street at 4th Street

Corridor improvements

28. Guadalupe Street (3rd Street to 17th Street) and Lavaca Street (3rd Street to 15th Street) Red Pavement Markings

Routes: 1, 2, 3, 4, 5, 6, 7, 10, 17, 18, 19, 20, 30, 103, 105, 111, 142, 171, 410, 412, 481, 485, 663, 801, 803, 935, 980, 981, 982, 985, 987, 990

Background

- Austin's first transit priority lanes were installed on Guadalupe and Lavaca Streets downtown in 2014. As designed, these lanes are intended for Capital Metro buses only, but can be entered by other vehicles making a right turn within the same block.

Issues

- **Non-transit vehicles often entered the transit priority lanes outside of making a right turn,** causing delay for thousands of bus passengers.

Improvements

- Public Works crews **repaired damaged asphalt** along portions of the project limits.
- Austin Transportation crews applied **red pavement markings** (methyl methacrylate and thermoplastic) to 22 blocks of bus-only lanes, visually clarifying their intended use.

Benefits

- Transit speed and reliability

Impacts

- 1,155 buses per day
- **59,100 passengers per day** (Almost 60% of Capital Metro's average daily ridership)

Funding partner

- City of Austin Public Works Department



West 5th Street at Pressler Street

Corridor improvements

29. West 5th Street (West Lynn Street to Baylor Street) – Phase 2

Routes: 4, 663, 980, 981, 985

Background

- In 2018, a shared bus and bicycle lane was installed on 5th St. to reduce delay for bus routes exiting the MoPac Express lane and traveling east to downtown. As designed, these lanes are intended for Capital Metro buses and people riding bikes only, but can be entered by other vehicles making a right turn within the same block.

Issues

- Non-transit vehicles often entered the shared bus/bike lane**, causing delay for thousands of bus passengers.

Improvements

- New **overhead and ground mounted signs** were strategically added along the length of the .5 mile corridor, designating the proper use of each lane and improving clarity for all users.

Benefits

- Transit speed and reliability

Impacts

- 155 buses per day
- 4,800 passengers per day



North Lamar Boulevard at Powell Lane

Corridor improvements

30. North Lamar Boulevard and Powell Lane (Powell Lane to Meadowlark Street)

Routes: 1

Issues

- Existing bus stops along North Lamar Blvd. **lacked pedestrian crossings**. Additionally, the distance between stops was inconsistent with stop spacing guidelines.

Improvements

- This collaboration between Capital Metro and the City of Austin Corridor Construction Program allowed for bus stops to be optimized in coordination with the bond program's construction of a new traffic signal along this segment of Lamar.
- On Lamar, two **new bus stops** were constructed in tandem with the new traffic signal at Powell Ln., providing improved access to a safe crossing for transit users. Additionally, two **existing bus stops** at Meadowlark St. were **removed**, improving stop spacing.

Benefits

- Street user safety
- Transit speed and reliability

Impacts

- 38 buses per day
- 3,500 passengers per day

Funding partner

- City of Austin 2016 Mobility Bond Corridor Mobility Program

Collaboration

Acknowledgements

The successful implementation of these projects depended on collaboration between multiple City of Austin and Capital Metro departments, divisions and programs.

At the City, regular project collaborators include:

- Active Transportation and Street Design
- Arterial Management
- Corridor Program Office
- Parking Enterprise
- Public Information
- Right-of-Way Management
- Sidewalks Program
- Signs & Markings
- Street and Bridge Operations
- Transportation Engineering
- Vision Zero

At Capital Metro, regular project collaborators include:

- Bus Operations
- Capital Projects Group
- Communications
- Community Engagement
- Safety
- Short Range Planning

For more information about Austin Transportation's Transit Enhancement Program, Capital Metro's Transit Speed & Reliability Program, or to learn more about the projects in this report, please contact us:

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