

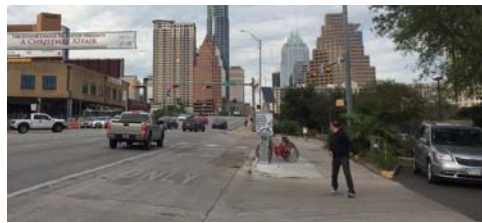
SIDEWALKS FOR PEOPLE

Common Elements

Congress Avenue is one of Austin's most iconic places, lined with local businesses, cultural institutions, and global offices. The design of the Avenue will respect its status as a National Historic District and provide a spacious and dynamic tree-shaded public realm that connects and supports these destinations with places for people to stroll, mingle, and participate in urban life.

SUPPORTING KEY THEMES

- CULTURE & HISTORY
- ECONOMICS
- SOCIAL EQUITY
- ENVIRONMENT



Existing Conditions

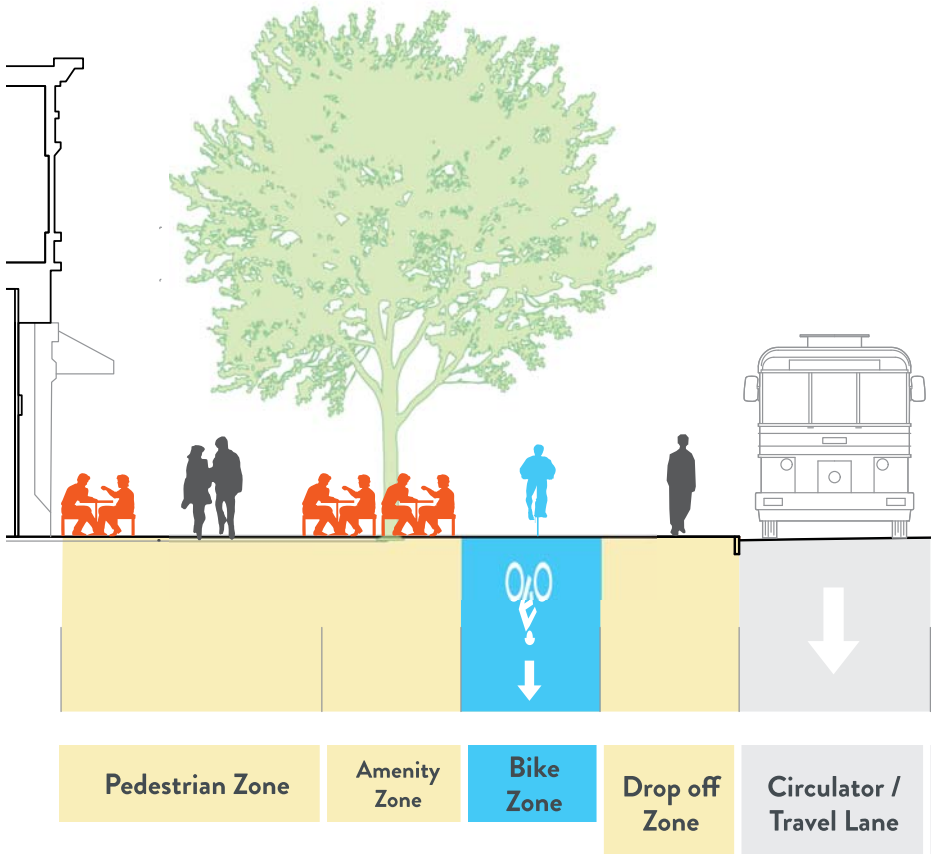
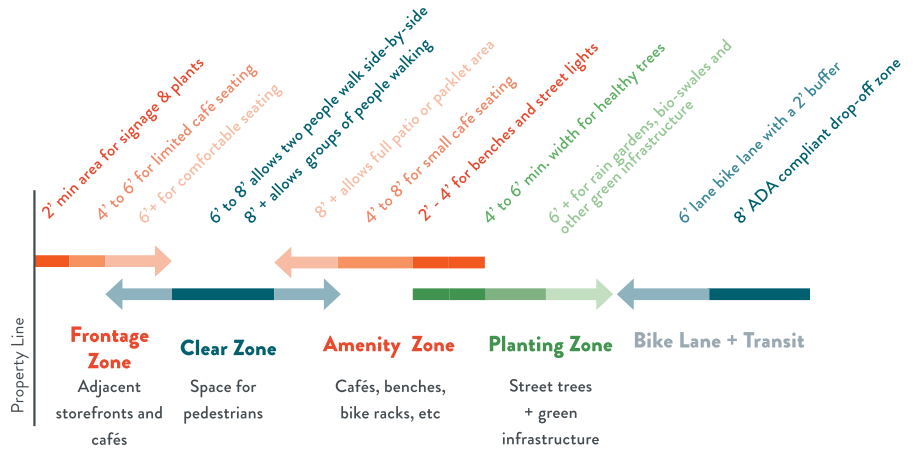
Most of the ROW is currently dedicated to vehicles, leaving minimal sidewalk and public space.



Precedent

Wider sidewalks that are inviting and include an array of public amenities.

POTENTIAL DESIGN



Station 4

Public Event 3: Imagine!

SAFE BIKE LANES

Common Elements

Despite a lack of bike facilities, Congress Avenue is a heavily-used route for cyclists. The Avenue intersects numerous urban bike routes as well as the trail system around Lady Bird Lake. The introduction of grade-separated bike lanes will create a safer route for cyclists of all ages and ability levels, strengthening the Avenue's role as central spine of Austin's bike network.

SUPPORTING KEY THEMES

MOBILITY & CONNECTIVITY

ENVIRONMENT



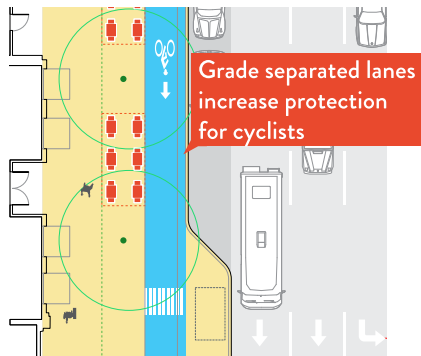
Existing Conditions:
Cyclist shares a vehicle lane on Congress Ave



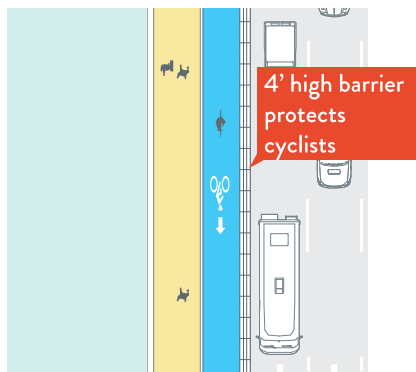
Precedent:
Dedicated bike lane at the same level as the sidewalk and protected from vehicles. Dexter Avenue, Seattle

- Riding Conditions
- Study Area
 - Medium-Comfort Roads
 - Low-Comfort Roads
 - Helpful Sidewalks
 - Trails
 - Dedicated Bike Lanes

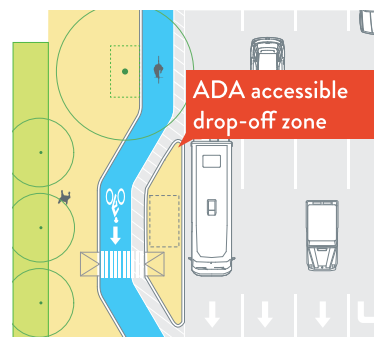
POTENTIAL DESIGN



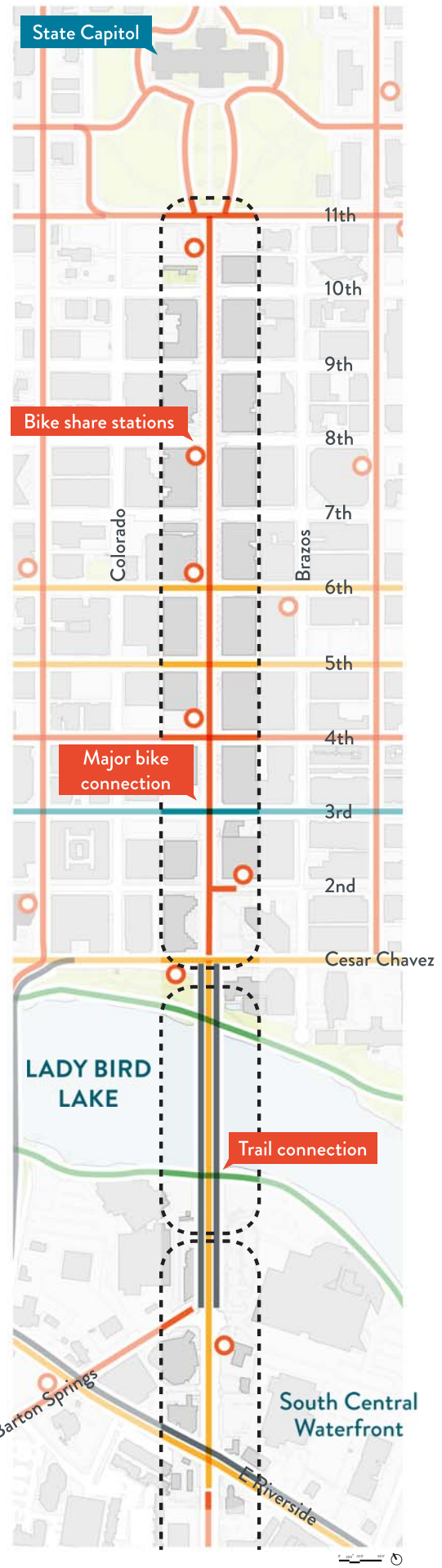
Protected Bike Lane North of Lady Bird Lake



Protected Bike Lane on Congress Ave Bridge



Buffered Bike Lane South of Lady Bird Lake



FLEXIBLE TRANSIT

Common Elements

A circulator connecting Downtown Austin with South Congress will tie together several of the city's most dynamic neighborhoods, and support local businesses and institutions. A future transit hub at Riverside Drive would support mass transit envisioned by Project Connect, provide access from under-served neighborhoods, and help reduce congestion by providing an alternative to driving.

SUPPORTS KEY THEMES

SOCIAL EQUITY

ECONOMICS

MOBILITY & CONNECTIVITY



Existing Condition:
Bus routes along South Congress

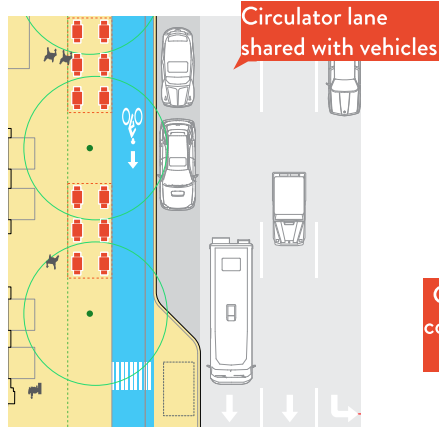


Precedent:
Small, frequent shuttles

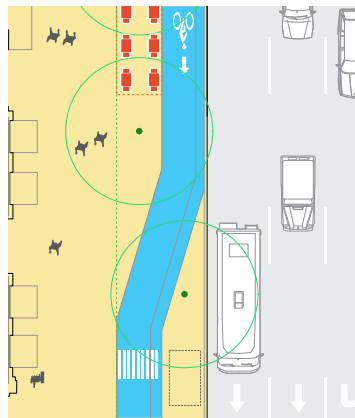


Precedent:
Circulator stop integrated with cycle lanes in Manchester, UK

POTENTIAL DESIGN



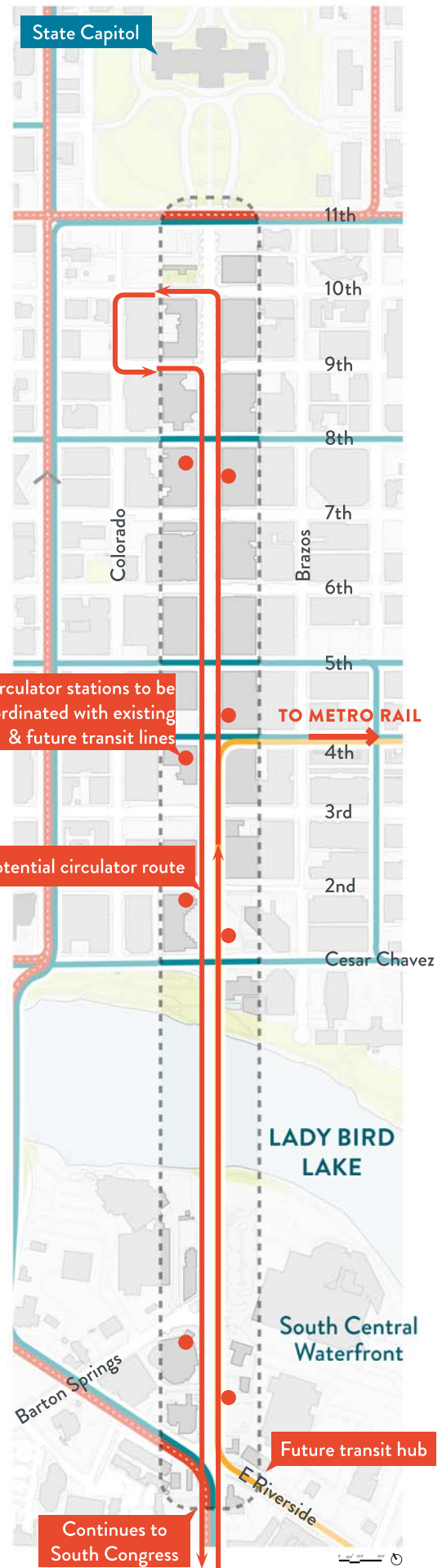
Circulator stop next to bike lane



Circulator stop integrated with bike lane

POTENTIAL CIRCULATOR ROUTE

- Study Area - - - - -
- High Frequency Bus Routes - - - - -
- Special / Airport Bus Routes - - - - -
- Local Bus Routes - - - - -



SPACES FOR CELEBRATION

Common Elements

Congress Avenue is the political, cultural, historic, and symbolic center of Texas's capital city. The Avenue hosts a diverse range of parades, festivals and protests that can attract thousands of visitors throughout the year. A flexible design for the northernmost portion of the Avenue, adjacent to the Texas Capitol, will create a place that can function equally well as a parade route, festival ground and an urban street.

SUPPORTING KEY THEMES

SOCIAL EQUITY

CULTURE & HISTORY



Existing Conditions

Festivals along Congress Ave and on the Capitol Grounds

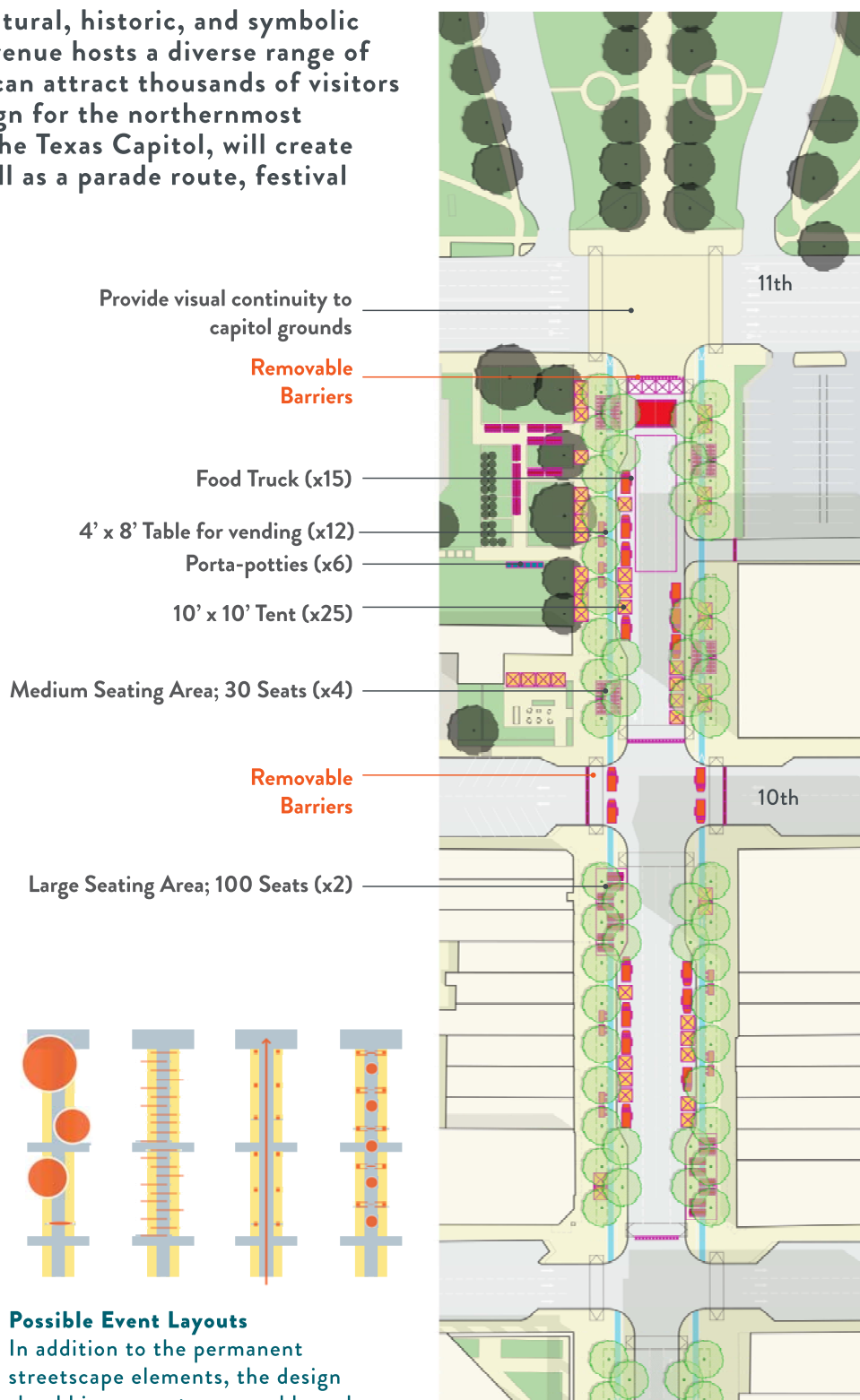


Precedent

Bethesda Fine Arts Festival. Bethesda, MD

Station 4

Public Event 3: Imagine!



Possible Event Layouts

In addition to the permanent streetscape elements, the design should incorporate removable and modular components for different types and scales of events.

ACTIVE GROUND FLOORS

Common Elements

In many places along Congress Avenue active ground floor uses such as cafés, retail, event venues, and busy building lobbies animate the sidewalks today. However, large stretches of the Avenue are lifeless due to blank facades, empty storefronts, and few building entries. Urban design guidelines for Congress Avenue will improve ground floor activations through a variety of strategies.

SUPPORTING KEY THEMES

SOCIAL EQUITY

CULTURE & HISTORY

ECONOMICS



800 Block East Side

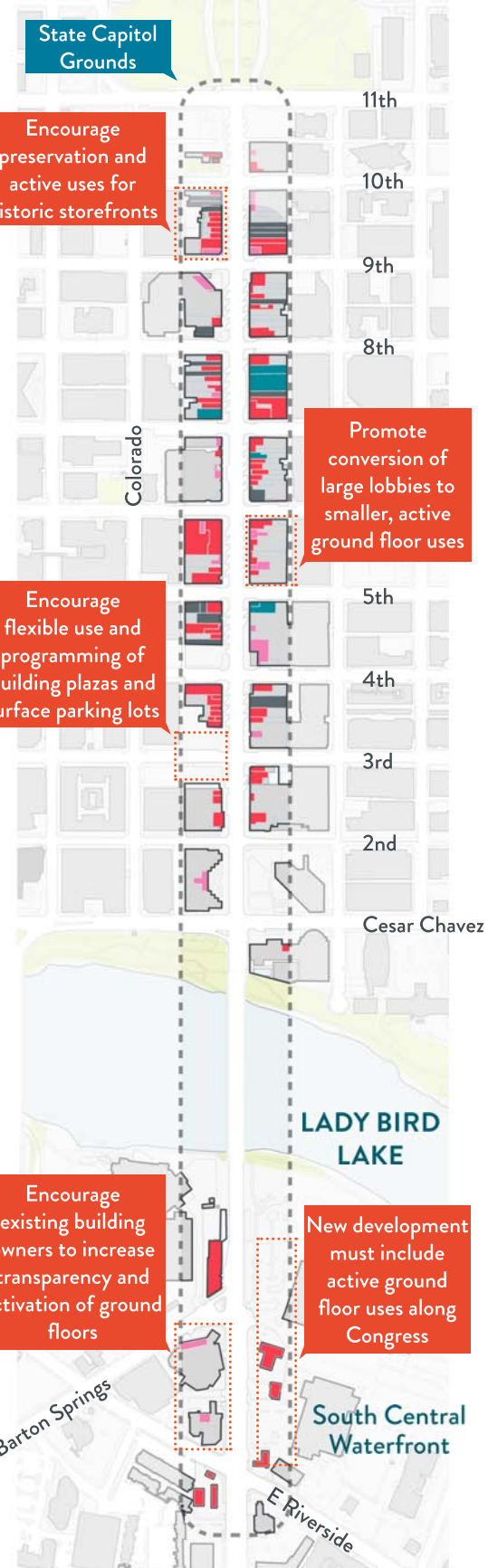
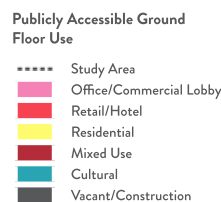


Variety of ground floor uses, multiple small scale venues, multiple entries

100 Block West Side



Single ground floor use spans entire block, single entry



EXISTING CONDITIONS

Ground floor conditions vary greatly along the Avenue. Sidewalks are enlivened by uses such as Royal Blue, yet empty just blocks away due to setback lobbies and limited active ground floor uses. South of the Bridge, surface parking greatly diminishes the pedestrian experience of the Avenue.

Station 4

Public Event 3: Imagine!

GROUND FLOOR USES

HEALTHY LANDSCAPES

Common Elements

Formerly a spring bed, Congress Avenue plays a central role in capture of stormwater from adjacent spaces. It has the potential to serve as a third continuous green finger through downtown—centered between Shoal and Waller Creeks. A majestic tree canopy will not only frame views to the Capitol, but provide continuous habitat from the Capitol to the Lake. The design of street tree planting and stormwater capture will be optimized to allow the Avenue to live up to this potential.

SUPPORTING KEY THEMES

ECONOMICS

ENVIRONMENT

EXISTING CONDITIONS



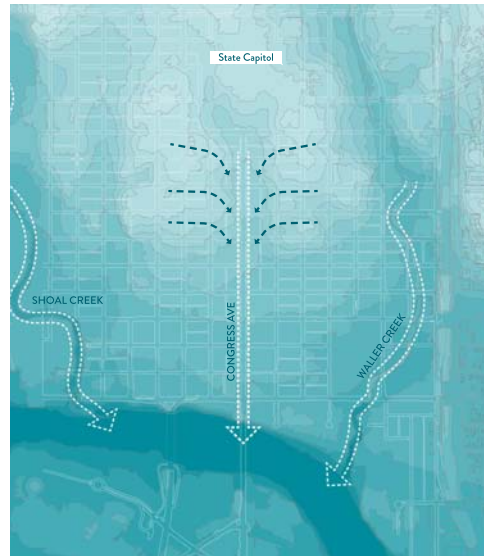
Tree growing conditions and spacing varies throughout the study area, weakening the trees' ability to provide strong definition and character to the Avenue.

PRECEDENTS



Permeable paving systems may be used in the sidewalk amenity zone to infiltrate stormwater, thereby reducing the amount of runoff.

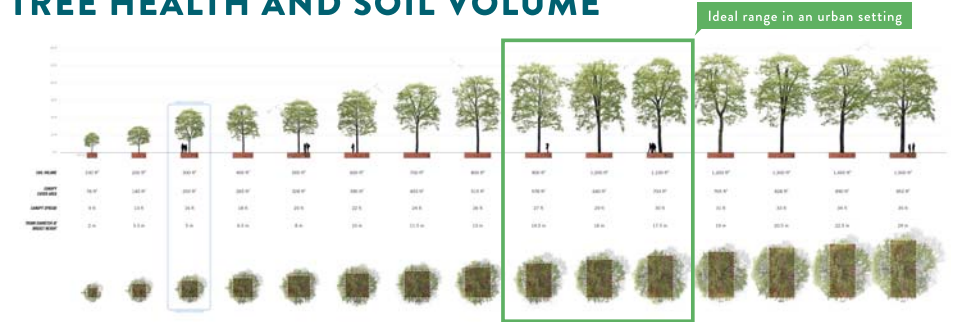
STORMWATER FLOW



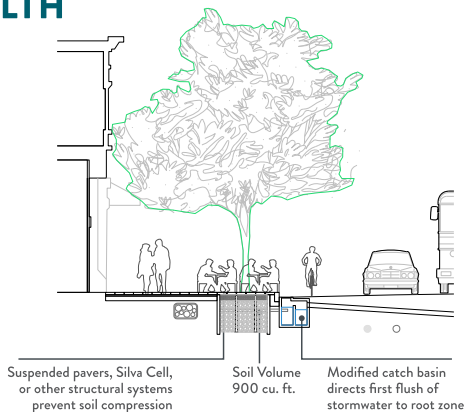
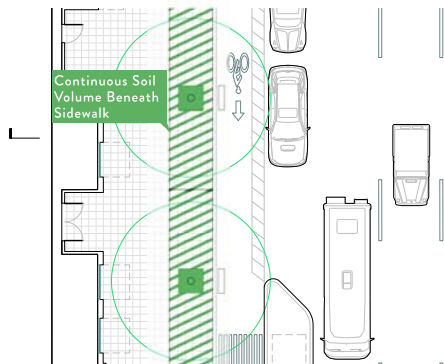
Along with Shoal Creek and Waller Creek, Congress Avenue is one of three mini-valleys in Downtown that channel stormwater into Lady Bird Lake.



TREE HEALTH AND SOIL VOLUME



STRATEGIES FOR TREE HEALTH



REFRESH THE BRIDGE

Common Elements

The Ann W. Richards Congress Avenue Bridge connects two of Austin's most vibrant pedestrian districts. On spring and fall evenings, the bridge becomes a lively destination as residents and visitors gather to watch the Congress Avenue Bat Colony. The design for the bridge should reflect its importance as an iconic destination, provide safe bike and pedestrian movement, and create shaded spaces to linger, sightsee, and learn.

SUPPORTING KEY THEMES

CULTURE & HISTORY

MOBILITY & CONNECTIVITY

ENVIRONMENT



Existing Conditions

Both cyclists and pedestrians share the sidewalk that is unprotected from fast moving traffic. Bat viewing crowds regularly spill into traffic lanes, creating unsafe conditions.



Precedents

Cyclists and pedestrians should be protected from traffic by a vehicle barrier; this would allow the railing at the bridge's edge to be re-imagined. Bringing the bike lane up to the level of the sidewalk allows for spillover by crowds at "peak times" while maintaining a clear walking path.

Station 4

Public Event 3: Imagine!

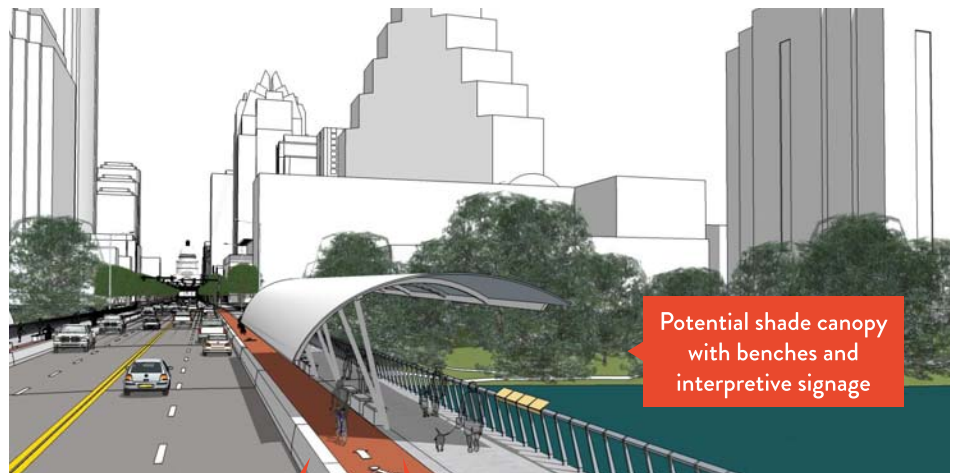
GOALS

- Increase capacity and safety for pedestrians and cyclists
- Respect the historic character and design of the bridge with any modifications
- Enhance the bridge as a destination
- Provide shade and greening opportunities



Precedents

Shade canopy size, location, and materials should respect the character and design of the bridge. Drought tolerant planting could be incorporated to help "green" the bridge.



Vehicle barrier protects bike lanes and pedestrians

Bike lane at level of sidewalk

Potential shade canopy with benches and interpretive signage

Bike connection to Butler Trail

2 min. walk to Cesar Chavez

Potential shade canopy locations

Potential "greening" opportunities

2 min. walk to Barton Springs Road

Bike connection to Butler Trail

AN URBAN AVENUE

Common Elements

Congress Avenue is an integral part of Downtown Austin's growing multimodal transportation network. It will be crucial for any proposed design to respond to current regional mobility patterns, as well as to provide for multiple modes of transportation that can help absorb Central Austin's growing population.



Downtown Destination

North of 6th Street, Congress Avenue has excess vehicular capacity and could benefit from an expanded public realm



Regional Mobility Context

North of Cesar Chavez, Congress Avenue serves primarily as a feeder road to Austin's commercial core and relies on the Downtown street grid to disperse peak-hour traffic. South of Cesar Chavez, the Avenue serves as a regional gateway to Downtown, connecting to Riverside Drive and points south.

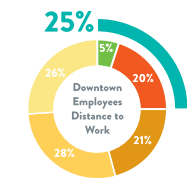
Transit Potential

While multimodal options are currently limited, a more diverse mode split (ped, bike, circulator) will be necessary to serve new development, such as the South Central Waterfront.



Transit Options

- High Frequency Bus Routes (Red line)
- Special / Airport Bus Routes (Orange line)
- Local Bus Routes (Blue line)



Downtown Employees Distance to Work



Congress Avenue is a walking street for 12,000 Downtown residents, an iconic destination for 24 million annual visitors, as well as a regional distributor for 86,000 employees, especially south of Sixth Street.



Walking Heatmap

Congress Ave is the main pedestrian route in Downtown



Biking Heatmap

Even without protected bike lanes, Congress Ave serves as the most important bicycle route.

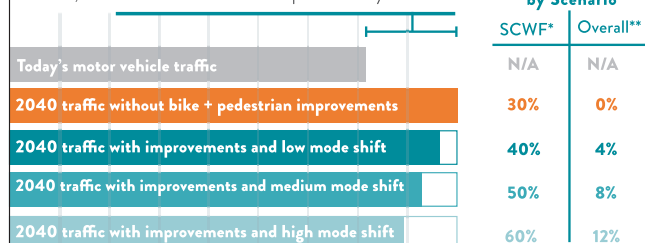
A MULTIMODAL FUTURE



Common Elements

As Downtown Austin and the surrounding neighborhoods continue to attract more residents and jobs, strategies to mitigate congestion will become even more important. As part of this initiative, a study was commissioned to determine how regional trends and future development would affect traffic along Congress Avenue.

Travel demand is projected to increase by .5% each year, plus trips generated by new development, in particular, the South Central Waterfront. Without any improvements, most of these additional trips will be by vehicle.



Improved bike, pedestrian, and transit facilities could mitigate congestion by shifting up to **12%** of trips to alternative modes of transportation in 2040

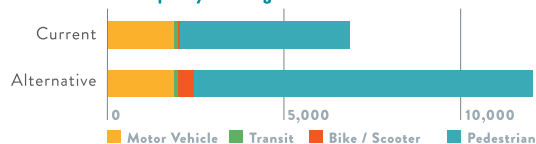
BUILDING MULTIMODAL CAPACITY

With no room to expand Congress Avenue's Right of Way or the Congress Ave Bridge, it will be vital to increase the capacity for non-vehicular modes of transportation. A successful design must accommodate the Avenue's dual function as a regional connector (especially south of Cesar Chavez) and as a downtown avenue.

- Locating new development close to downtown and implementing transportation demand management programs can mitigate new trips generated by **30% to 60%**.
- The 2014 Austin Bicycle Plan envisions that **15% of trips less than 3 miles** and **7% of trips less than 9 miles** will be by bicycle.
- Typically, people will choose to walk rather than drive for distances between **1/4 and 1/2 mile**. The Congress Avenue Bridge is ~ 1/4 mile long.
- A frequent circulator route could link all parts of Congress Avenue together, as well as connect to city-wide high capacity transit proposed in the **CapMetro Project Connect Plan**.

The alternative configurations are able to significantly increase person carrying capacity across the bridge in a peak hour and peak direction due to expanding the space for people traveling by foot, bicycle, and scooter as well as improving the efficiency of these spaces by removing bicycle conflicts from the sidewalk.

Peak Hour Person Capacity of Congress Ave



Analysis Notes:

* The new vehicular trips due to the South Central Waterfront are assumed to be 30% less than standard calculations for the no build based on very central location of the development. In the alternative scenarios these new trips are assumed to range from 40% less to 60% less than standard calculations depending on the success of mode shift.

** The existing trips in all scenarios are increased at 0.5% per year to 2040. The no build scenario assumes no reduction from this value. Alternatives are assumed to be between 4% and 12% less than this number of trips depending on the success of mode shift.

AM Peak Traffic
Intersection Delay (Seconds)

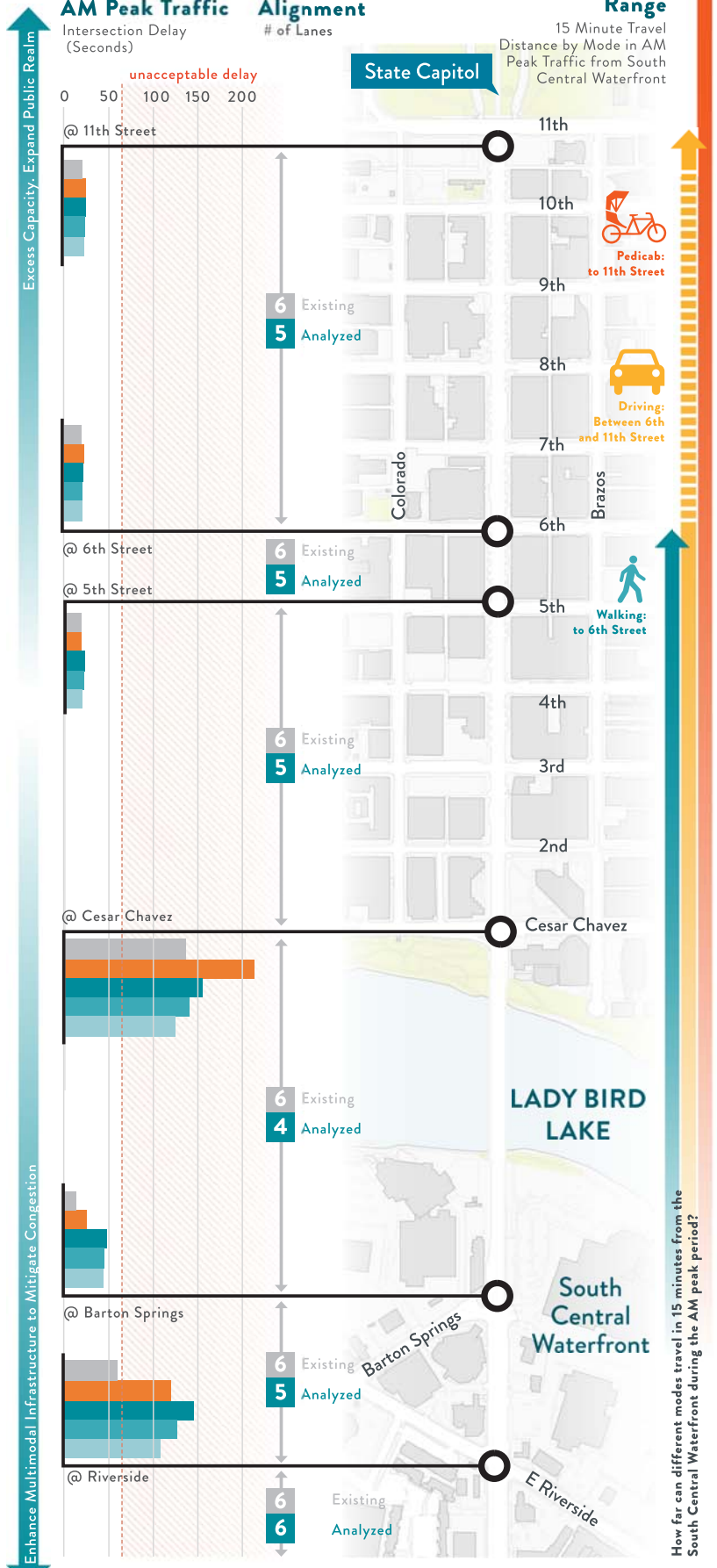


Alignment
of Lanes



Range

15 Minute Travel Distance by Mode in AM Peak Traffic from South Central Waterfront



Excess Capacity, Expand Public Realm

Enhance Multimodal Infrastructure to Mitigate Congestion

How far can different modes travel in 15 minutes from the South Central Waterfront during the AM peak period?

Station 4

Public Event 3: Imagine!

A MULTIMODAL FUTURE

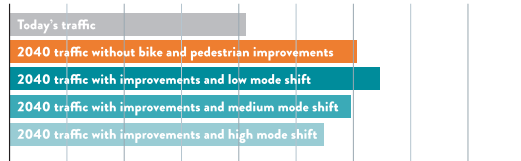
Common Elements

The reduction of lanes included in the alternatives is expected to affect motor vehicle travel times during the PM peak hour compared to the no-build scenario. Impacts outside the PM peak are negligible. Benefits to safety and improved signalization throughout the day are anticipated.

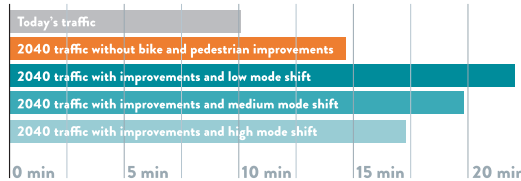
- Peak period delays are expected to increase from current conditions for all scenarios, including the no-build scenario, due to traffic growth.
- Walking, bicycling and scooting along this portion of Congress will likely be the most reliable travel modes during peak times and will be highly time competitive for short trips.
- The Cesar Chavez intersection remains the controlling constraint for motor vehicle volumes along the entire corridor as it is today. Additional vehicle capacity cannot be provided through this intersection due to heavy east-west demand. Walking, cycling, scooting, and transit are the modes that have potential to absorb future trip growth along the corridor.

PEAK HOUR TRAVEL TIMES

AM Northbound from Riverside to 11th



PM Southbound from 11th to Riverside



- AM peak direction (northbound) travel times are comparable to the no-build scenario depending on the degree of mode shift affected by the alternatives. PM peak direction (southbound) travel time impacts vary from moderate to significant impact, depending on the degree of mode shift achieved.
- Further options could be studied to improve PM peak travel times for the alternatives. For example, a third southbound lane could be added from the south end of the Congress Ave bridge through Riverside.
- The proposed alternatives seek to provide a better balance of safe mobility opportunities for pedestrians, bikes, scooters, and transit while maintaining most of the current vehicle capacity.

PM Peak Traffic

Intersection Delay During PM Peak Traffic (Seconds)

Alignment

of Lanes

