



NORTH MAIN STREET SAFETY IMPROVEMENTS

LAUREN GROVE, AICP

MULTIMODAL SAFETY & DESIGN
TRANSPORTATION DRAINAGE & OPERATIONS

APRIL 18, 2023

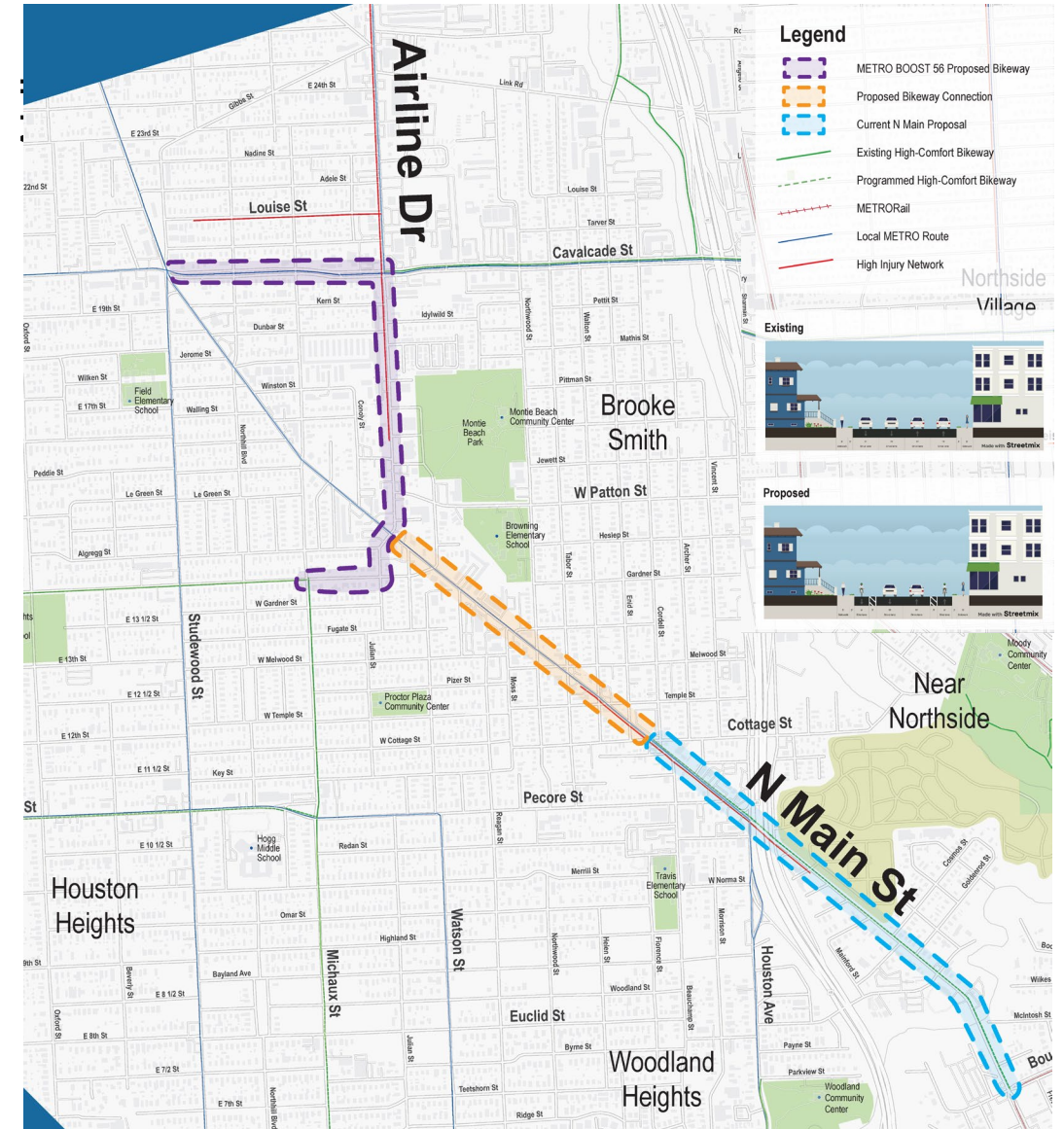


NORTH MAIN PROJECT OVERVIEW

Addresses safety concerns including high crash rates and high speeds

Project Improvements

- **Reallocate space for multimodal use**
 - Reduce vehicle lanes
 - Reduce high-end speeds
 - Shorten crossing distances
 - Add safe crossings
 - Add protected, on-street bikeway
- **Connect to planned bikeway on Airline Dr (METRO)**



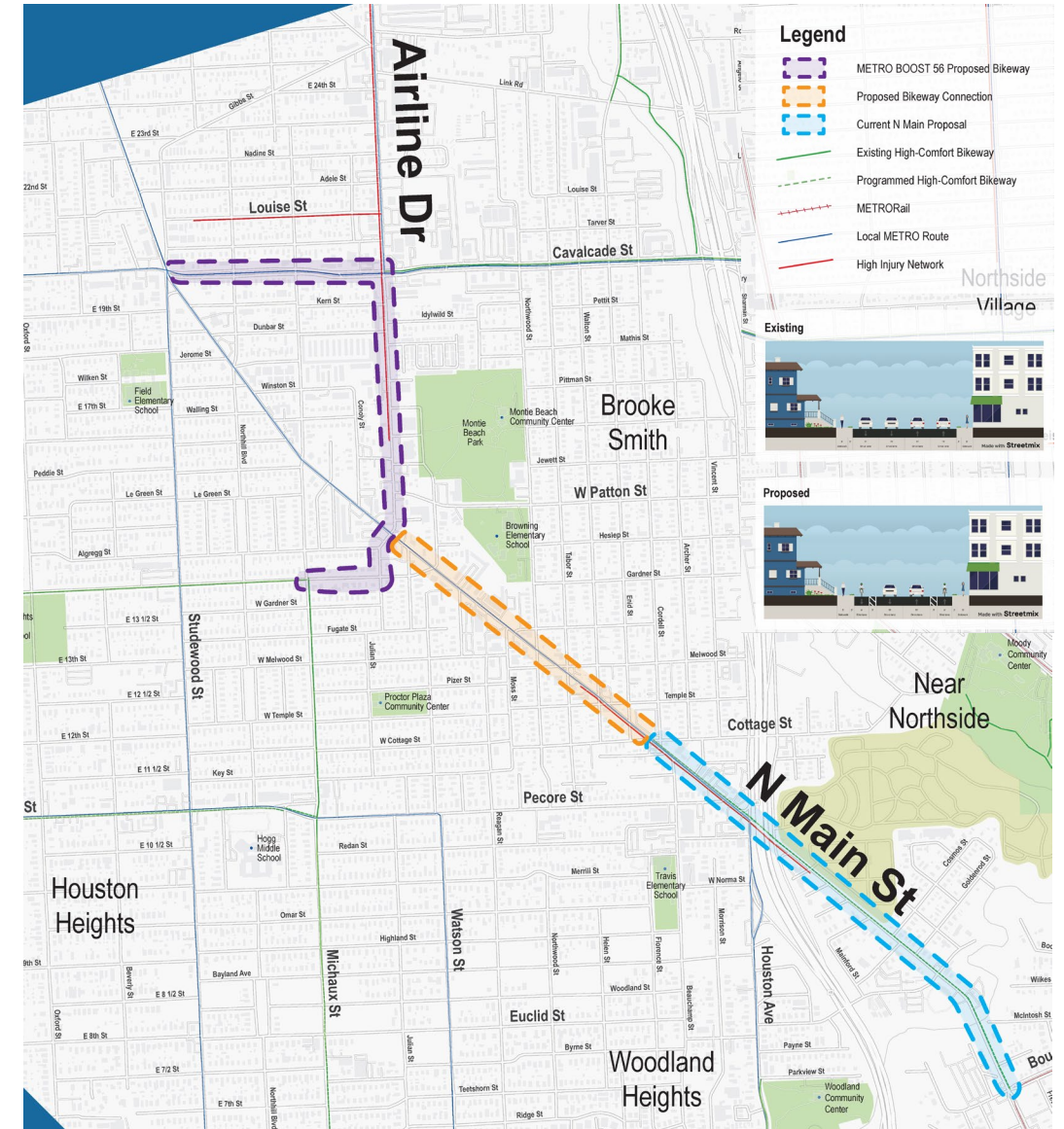
NORTH MAIN PROJECT OVERVIEW

Current Stage

- Boundary to Cottage: 100% design
- Cottage to Airline: Conceptual

Construction Start Dates (est)

- Boundary to Cottage: June 2023
- Cottage to Airline: August 2023



FUNDING SOURCES

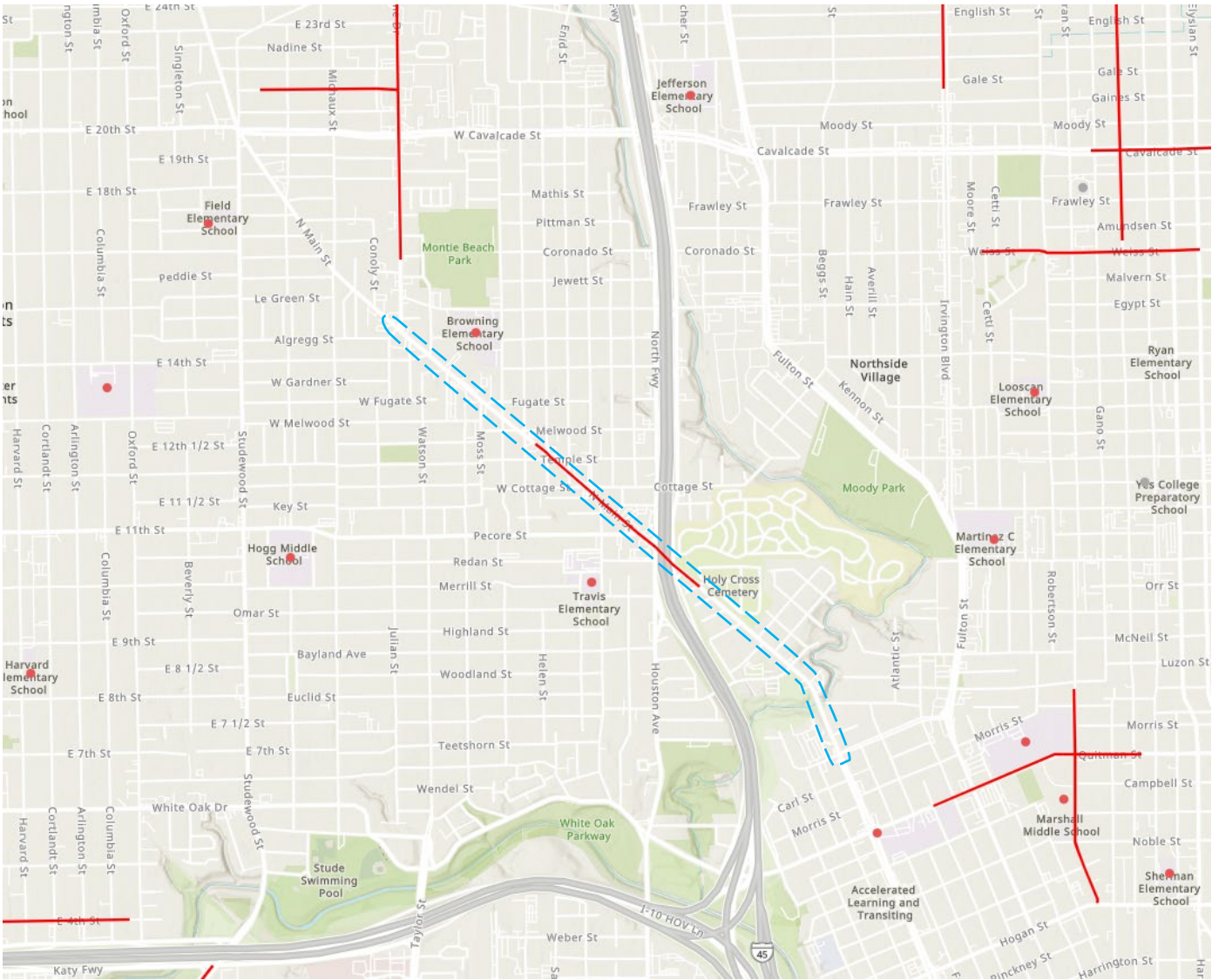
Design:

Council Member Cisneros

Construction:

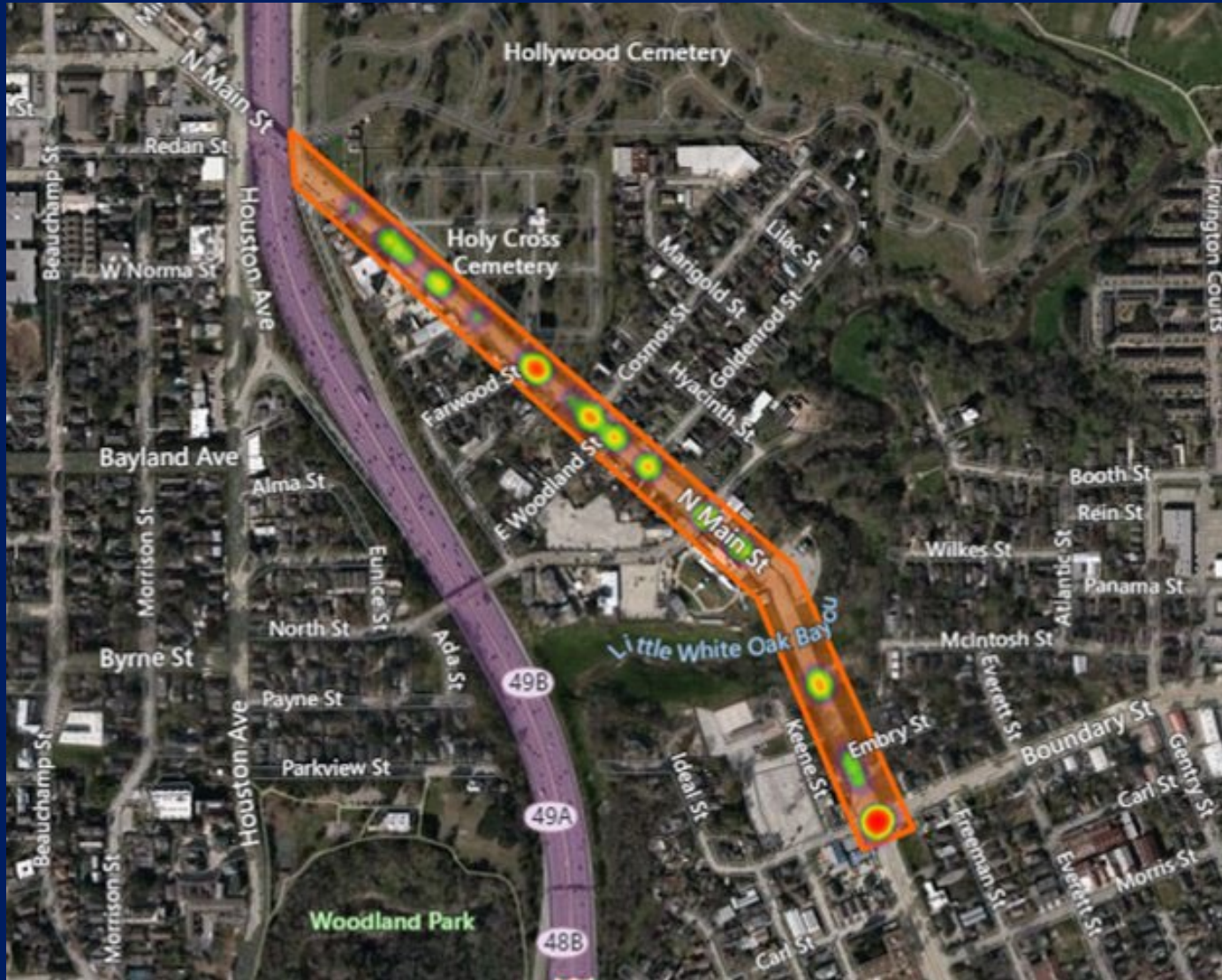
Houston Bikeway Program

EXISTING CONDITIONS



The High Injury Network represents the 6% of Houston streets which account for 60% of traffic deaths and serious injuries.

EXISTING CONDITIONS



N. Main Crash Heat Map Boundary to IH 45

Speeds: 41 MPH
38% greater than 30 MPH limit

Crash Rate

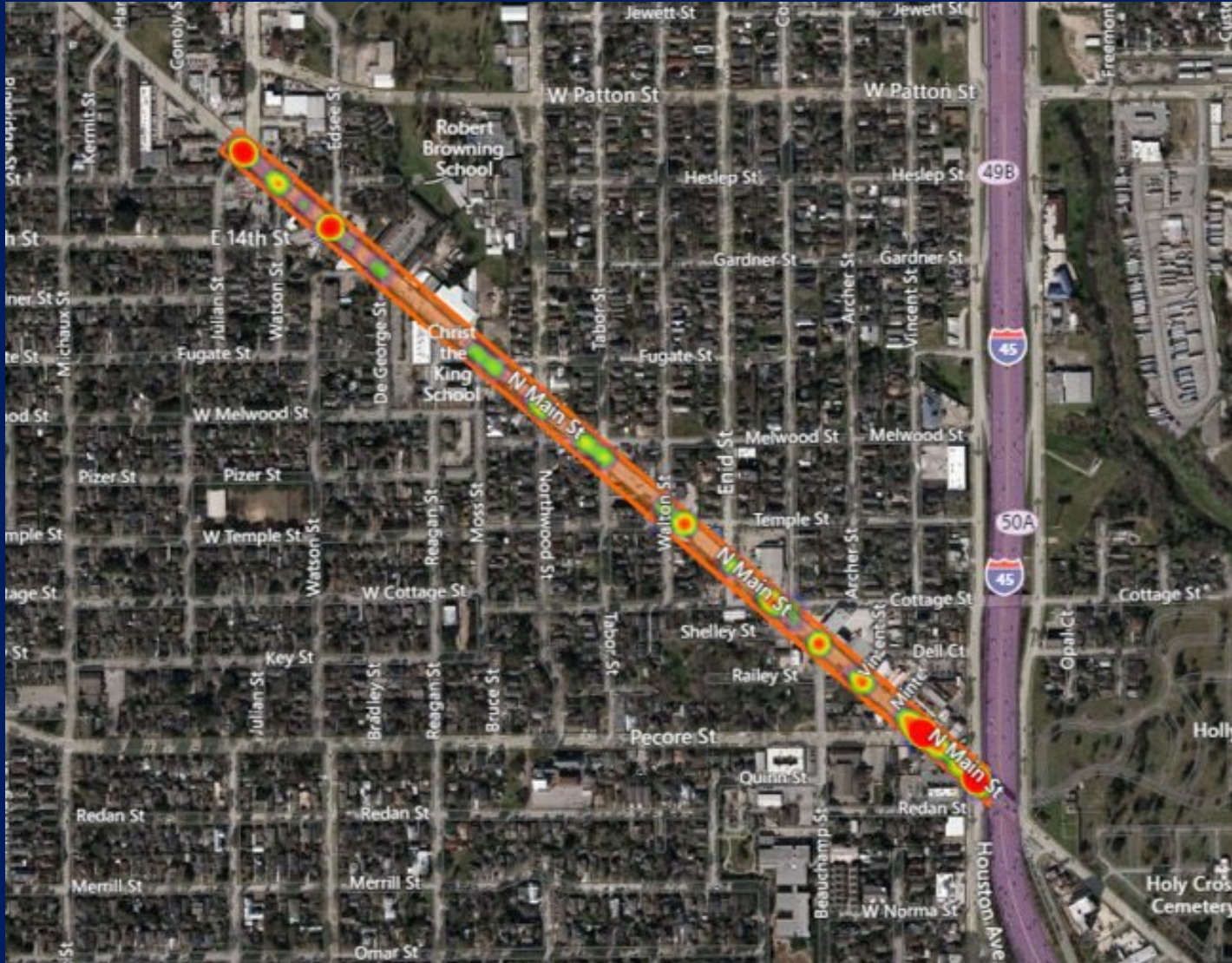
State average: 325
N Main: **1,072**

Traffic

Daily Volume: 9,565
Peak Volume: 397 (6 PM NB)

Crash Source: TxDOT CRIS, May 2016 – May 2021

EXISTING CONDITIONS



N. Main Crash Heat Map IH 45 to Airline

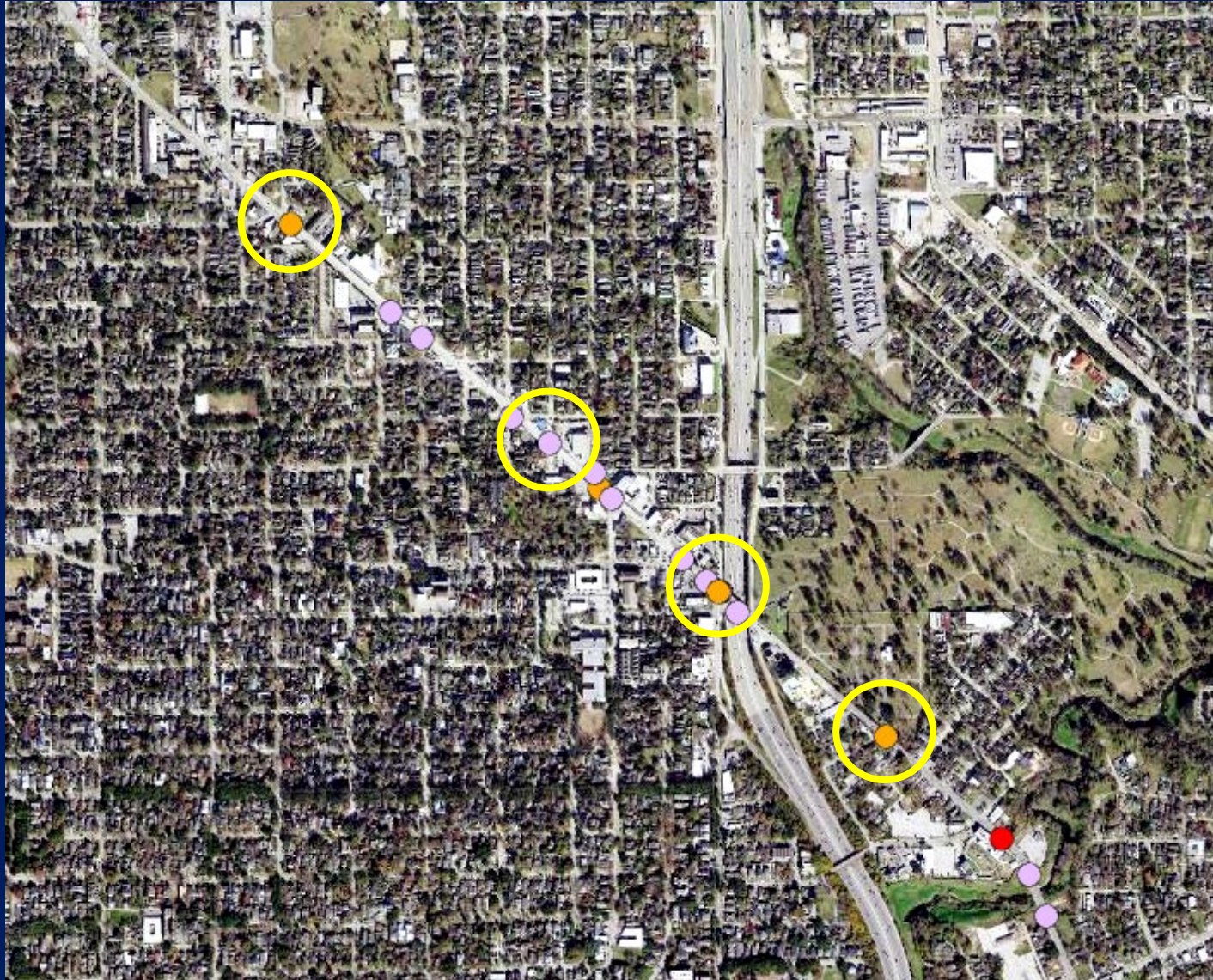
Speeds: 39.5 MPH
32% greater than 30 MPH limit

Crash Rate
State average: 325
N Main: 549

Traffic
Daily Volume: 13,172
Peak Volume: 756 (8 AM EB)

Crash Source: TxDOT CRIS, May 2016 – May 2021

SERIOUS INJURIES & FATALITIES



5 serious injuries
1 fatality


4 crashes
involved pedestrians or
cyclists

- 2 resulted in
serious injuries

- Ped/Bike crashes
- Non-incapacitating injuries
- Serious Injuries
- Fatalities

Crash Source: TxDOT CRIS, 2016-2020

VOICED CONCERNS



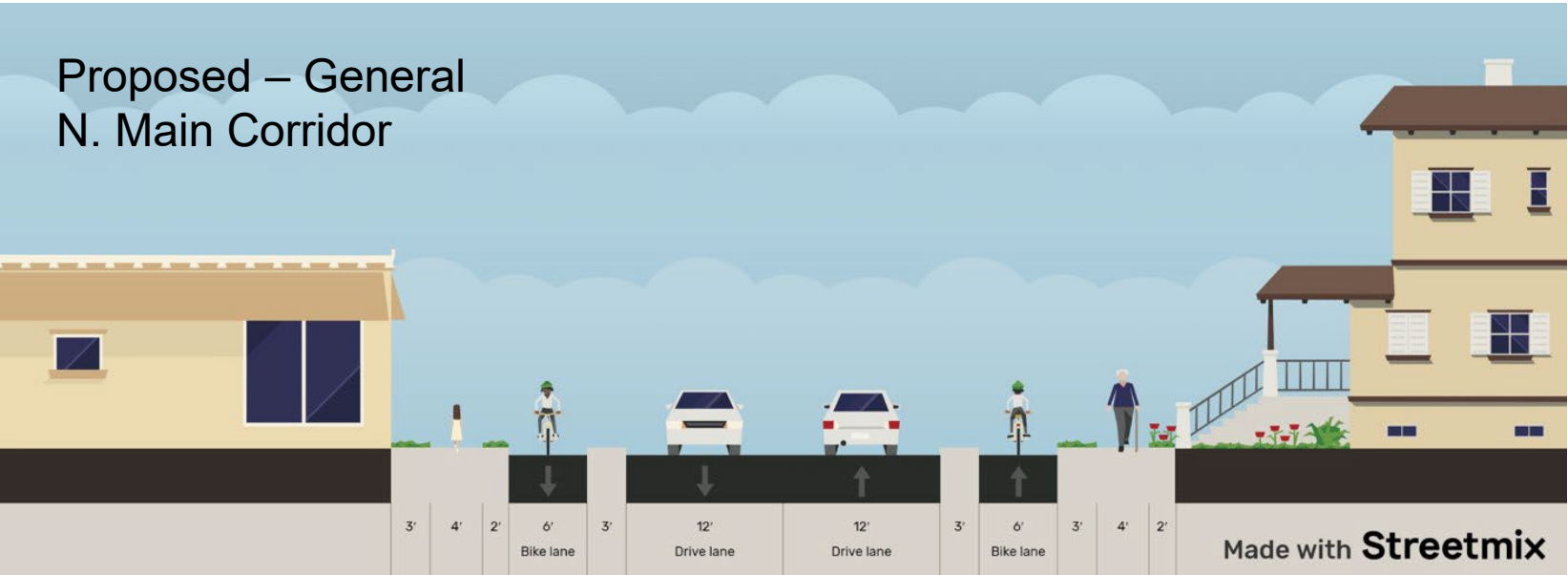
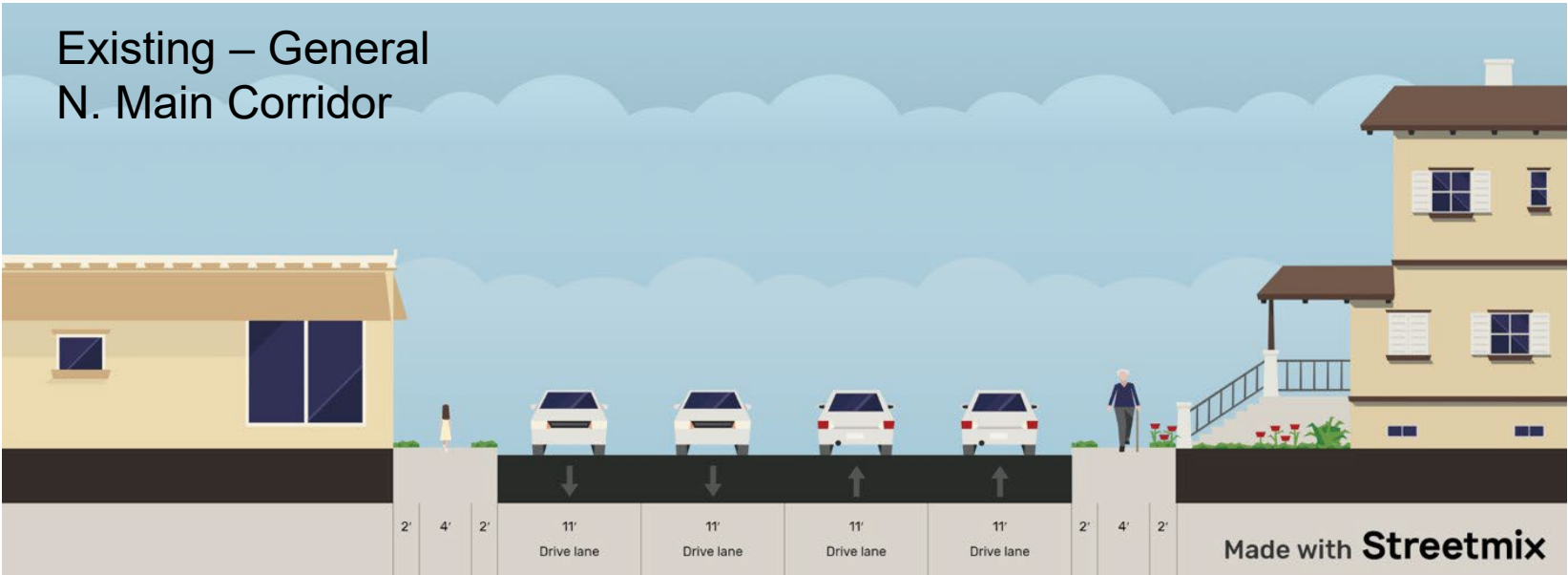
It's nearly **impossible to cross safely at this light**. The angle of the streets means that cars turning right onto N Main from Airline don't see people in the crosswalk. I have had many near-misses here. **There are no other options for crossing N Main.** - Ellen

It is very difficult to **cross the street and even turn right** because of the way the street slants. Ppl get stuck here and end up peeling out. - AlainaH

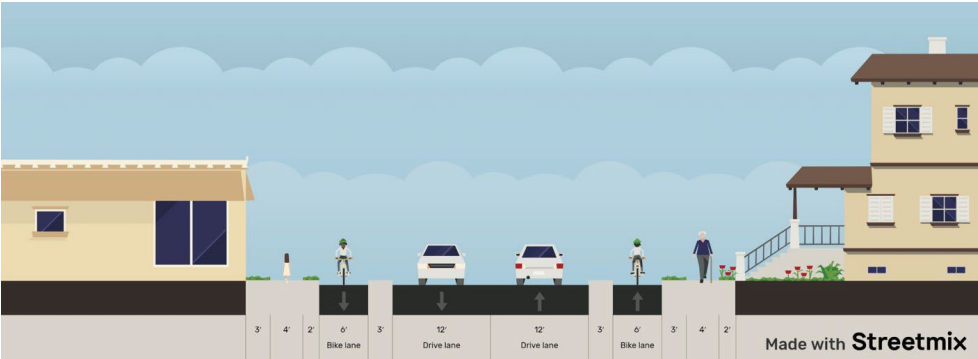
There is **essentially no safe way to cross N Main on foot or by bike**, for the kids who live E of N Main but are zoned to Travis Elementary school, which is W of N Main. Cars go very fast in 2 directions across multiple lanes of traffic. **And no crosswalks or traffic lights.** - MParks




The turn on Main Street near White Oak Music Hall is a **blind curve that everyone speeds around**. I have witnessed countless near, head-on collisions as people do not remain in their lane. In addition, the sidewalks are not pedestrian friendly. - NatalieBarron

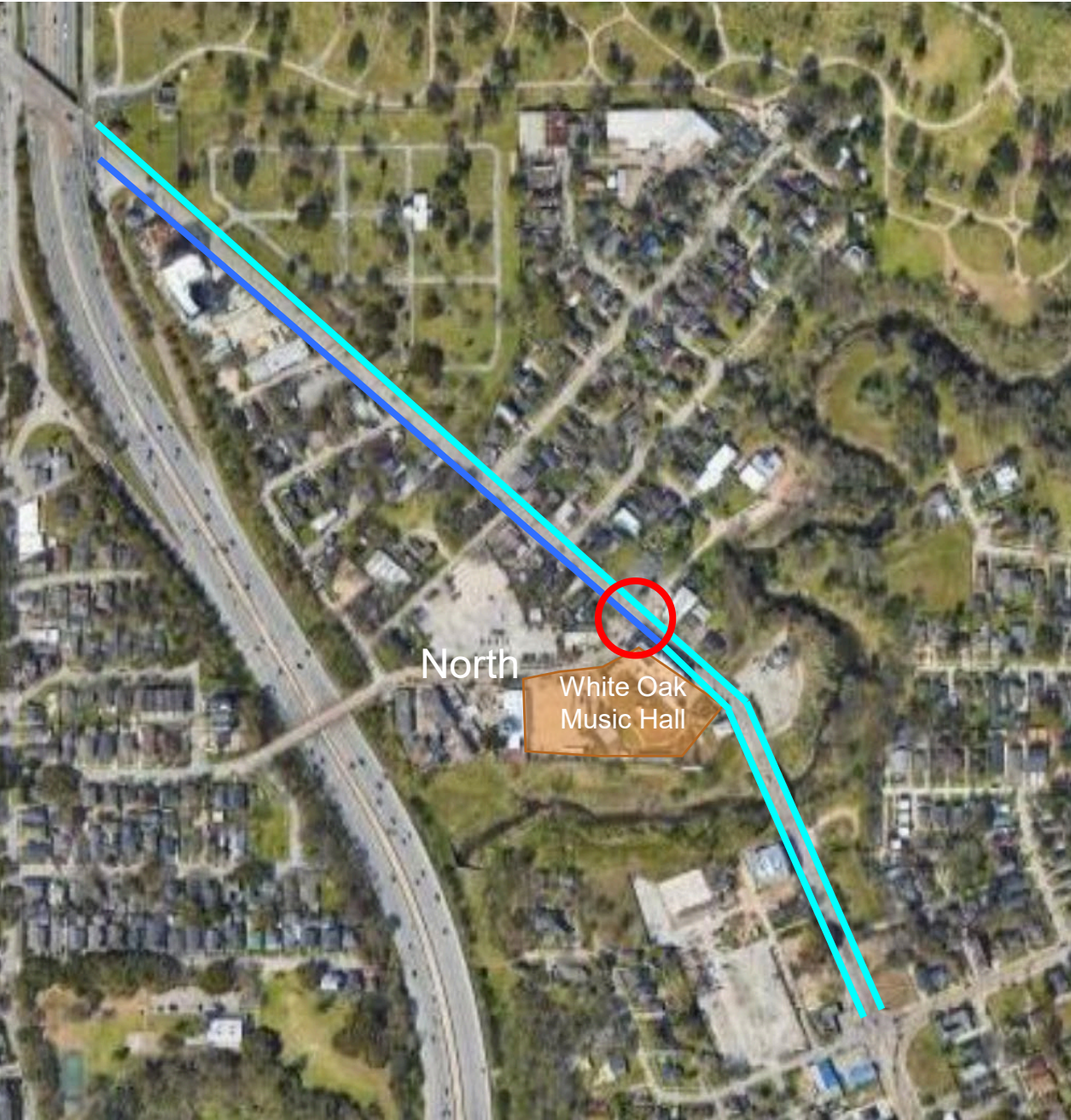
EXISTING/PROPOSED CROSS SECTION



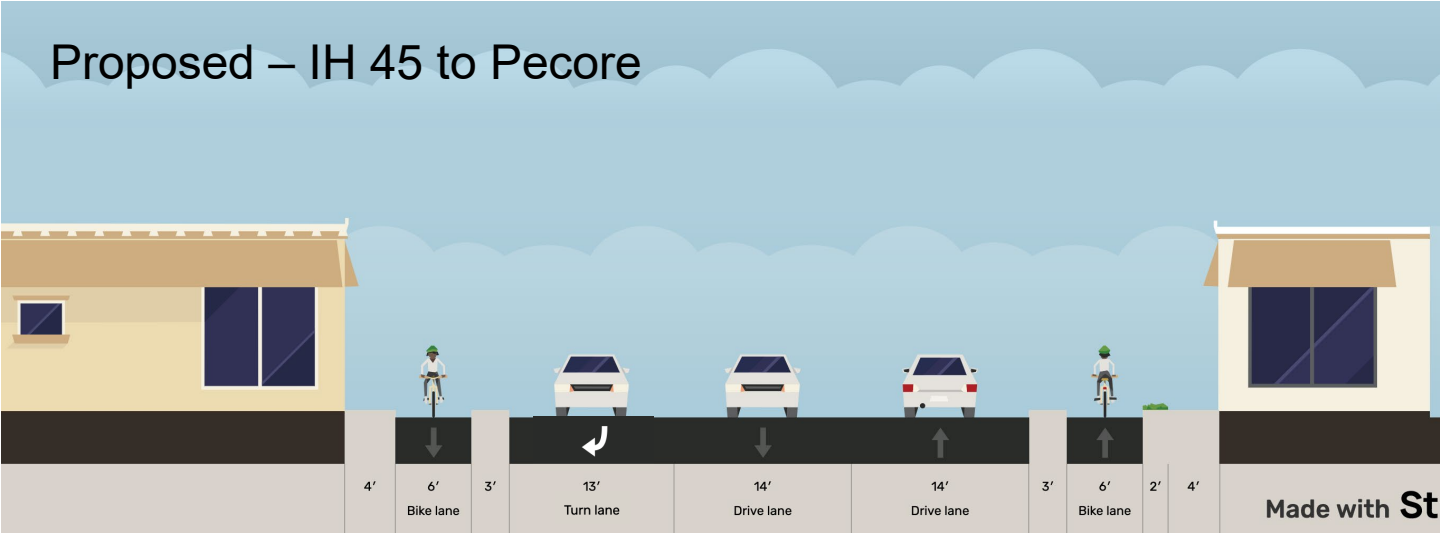
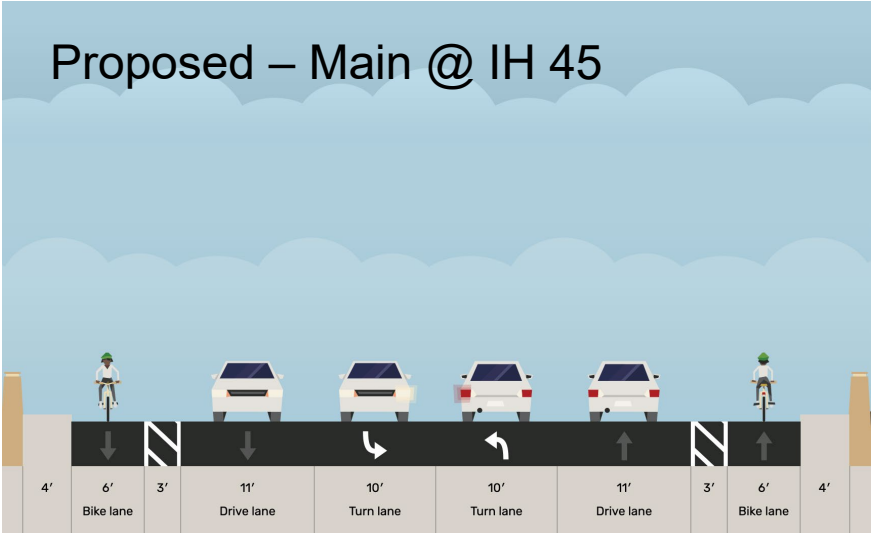
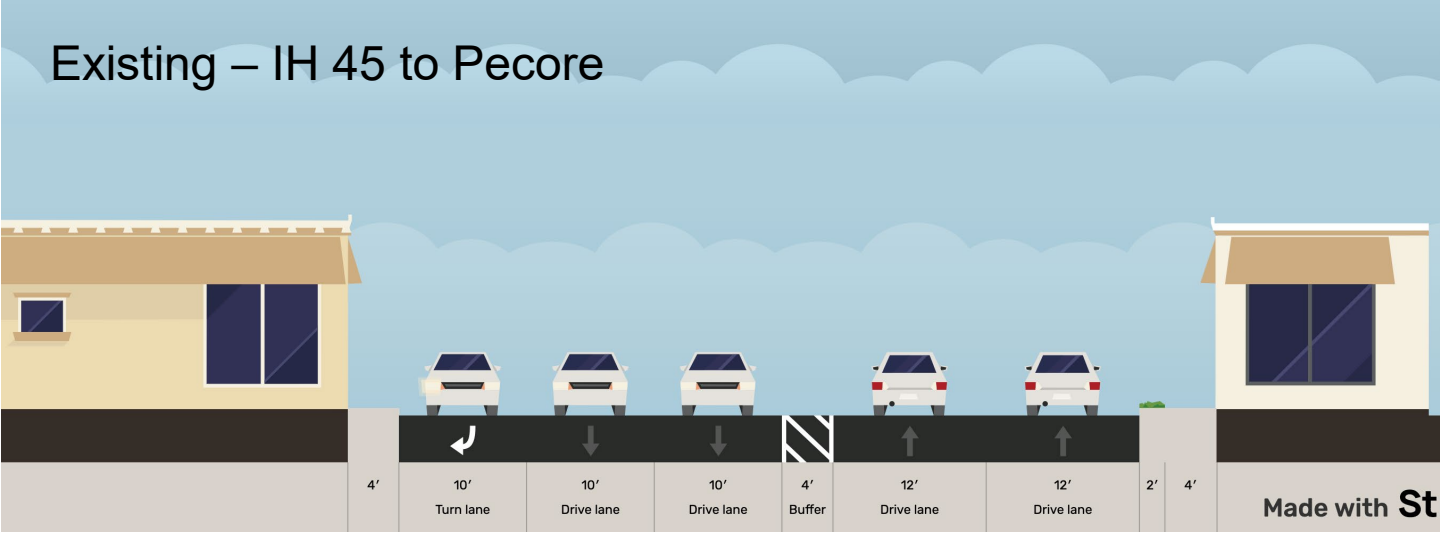
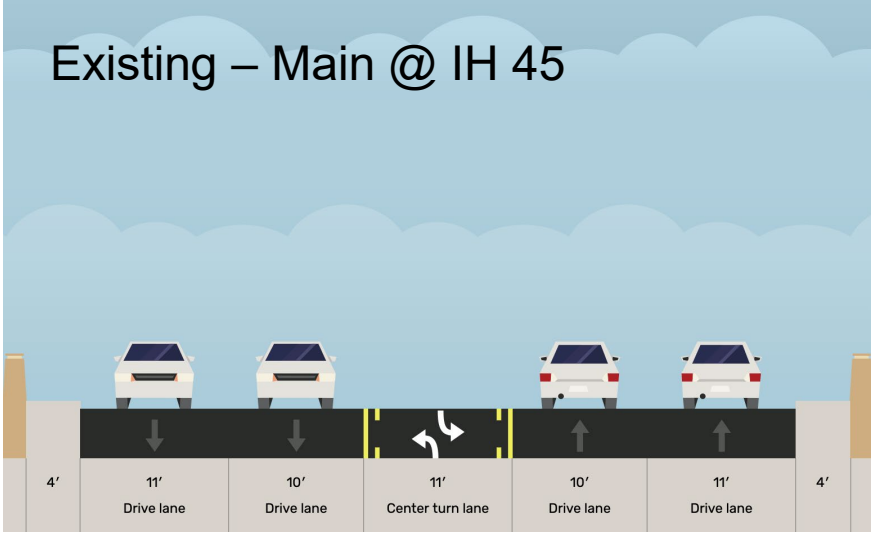
BOUNDARY TO IH 45



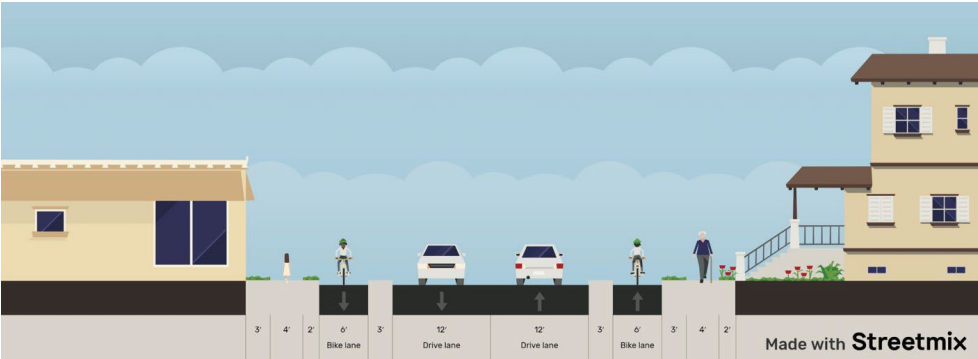
-  Intersection improvements
-  Mountable curb
-  Cast-in-place curb



EXISTING/PROPOSED IH 45 TO PECORE



PECORE TO AIRLINE



Conceptual Design Phase



Intersection improvements



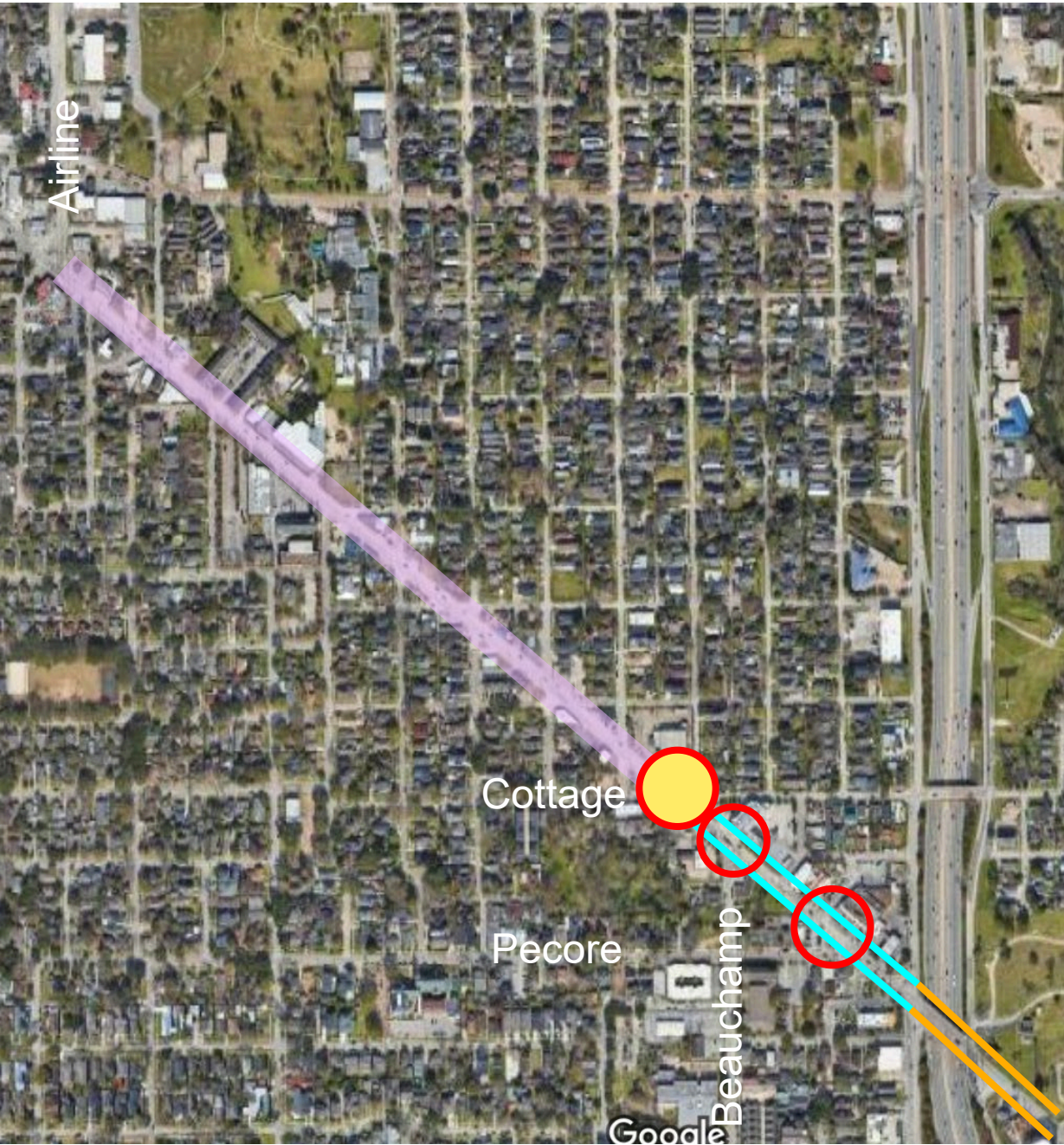
Refuge Island



Buffer w/ delineators



Cast-in-place curb



STREET SAFETY IMPROVEMENTS



U.S. Department of Transportation
Federal Highway Administration



Bicycle Lane Additions
can reduce crashes up to:

49%

for total crashes on urban 4-lane
undivided collectors and local
roads.*

*Separated bicycle lanes may provide further safety benefits.
FHWA is anticipating completion of research in Fall 2022.



OFFICE OF SAFETY

Proven Safety Countermeasures



Austin



Pedestrian Refuge Island

56%

reduction in pedestrian crashes.²

STREET SAFETY IMPROVEMENTS



Safe space for people biking

Decrease in fatal crash rates

--60.6% Seattle

--49.3% San Francisco

--40.3% Denver

--38.2% Chicago



Bike lanes help business!

- Increase in monthly spending
- Increase in the number of customers
- Increase in frequency of visits
- Vacancies held steady

<https://medium.com/sidewalk-talk/the-latest-evidence-that-bike-lanes-are-good-for-business-f3a99cda9b80>

NEXT STEPS

- Advance design for Cottage to Airline
 - Develop 30% design concepts in next month
 - Collect public input
 - **What are your safety concerns along this segment of North Main?**
 - **What intersections need safe crossings along this segment?**
 - **Is there anything you're aware of that we need to consider in the design?**
- City & Bike Houston staff to visit businesses along corridor (April 28)
 - Inform of project and construction timeline
- Public meeting May 23 @ Montie Beach Community Center
 - Collect input on Cottage to Airline segment
 - Inform of construction timeline for Boundary to Cottage segment

WE WANT TO HEAR FROM YOU!

- Phone: 832-395-3277
- Email: safestreets@houstontx.gov
- www.letstalkhouston.org/north-main

Thank You!

Website: <https://houstonbikeplan.org/lawndale-street/>

Email: Safestreets@houstontx.gov



HoustonPublicWorks.org



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