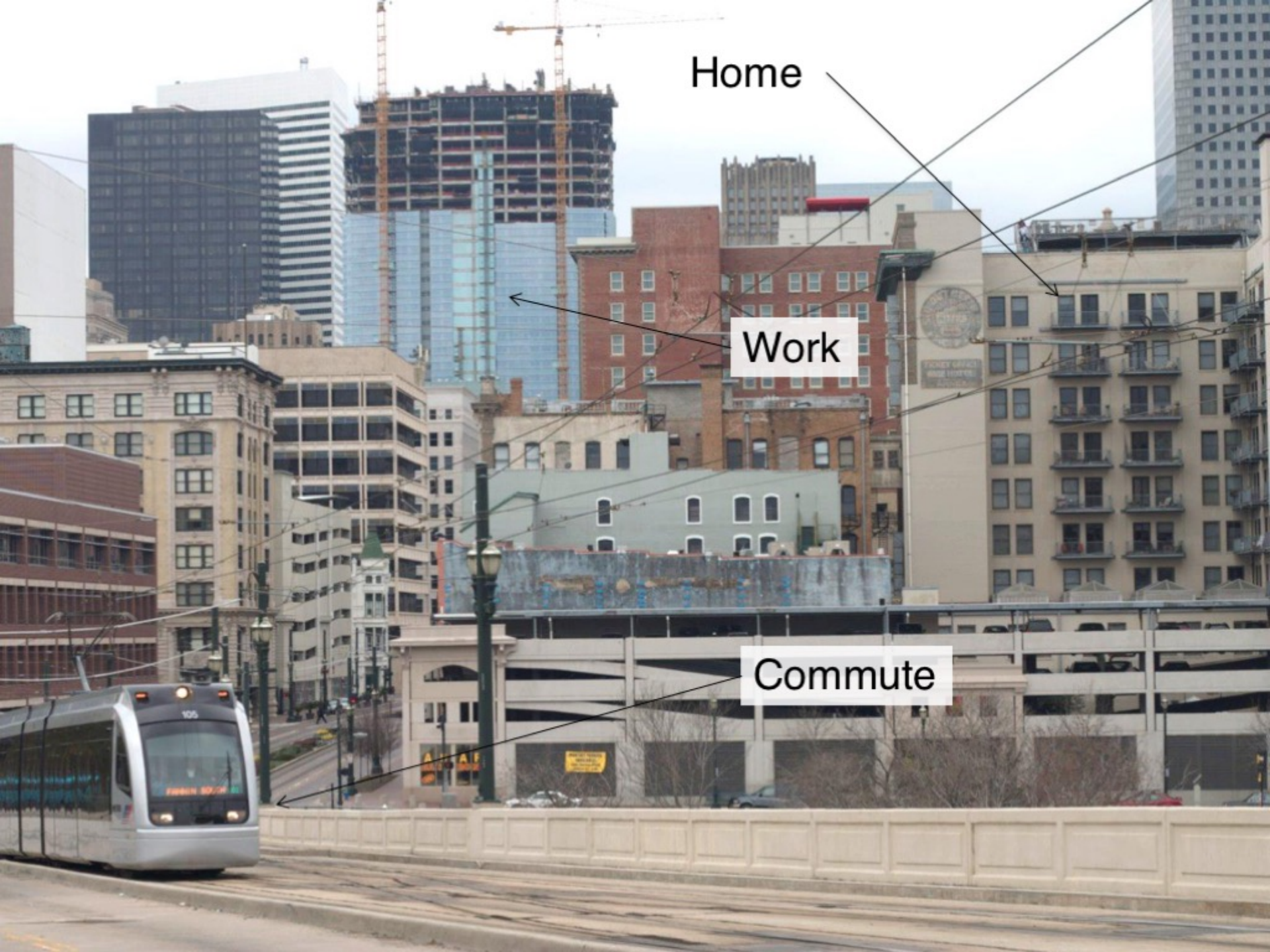




REIMAGINING THE BUS

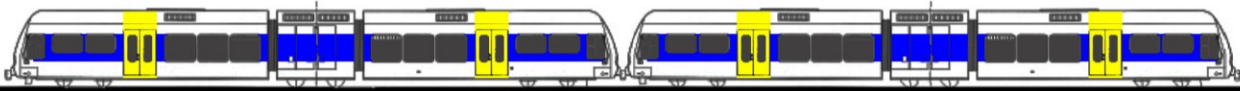
Christof Spieler, P.E., LEED AP
BOARD OF DIRECTORS, HOUSTON METRO
DIRECTOR OF PLANNING, MORRIS



Home

Work

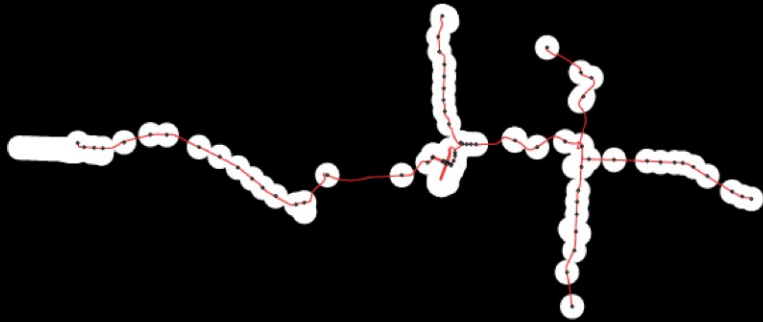
Commute



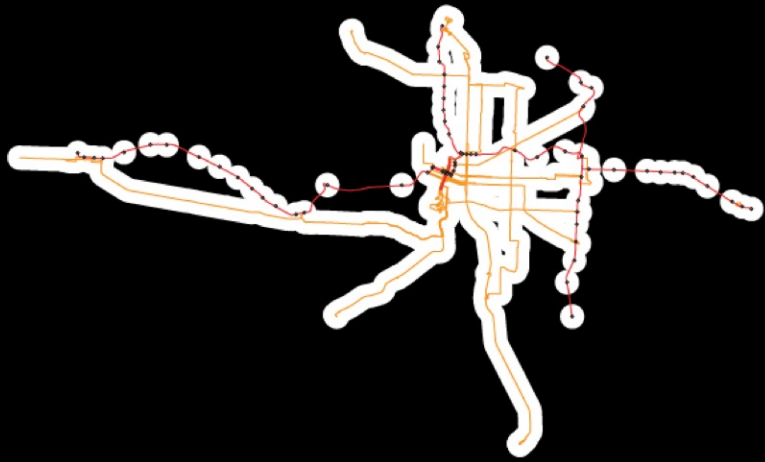
Cleveland



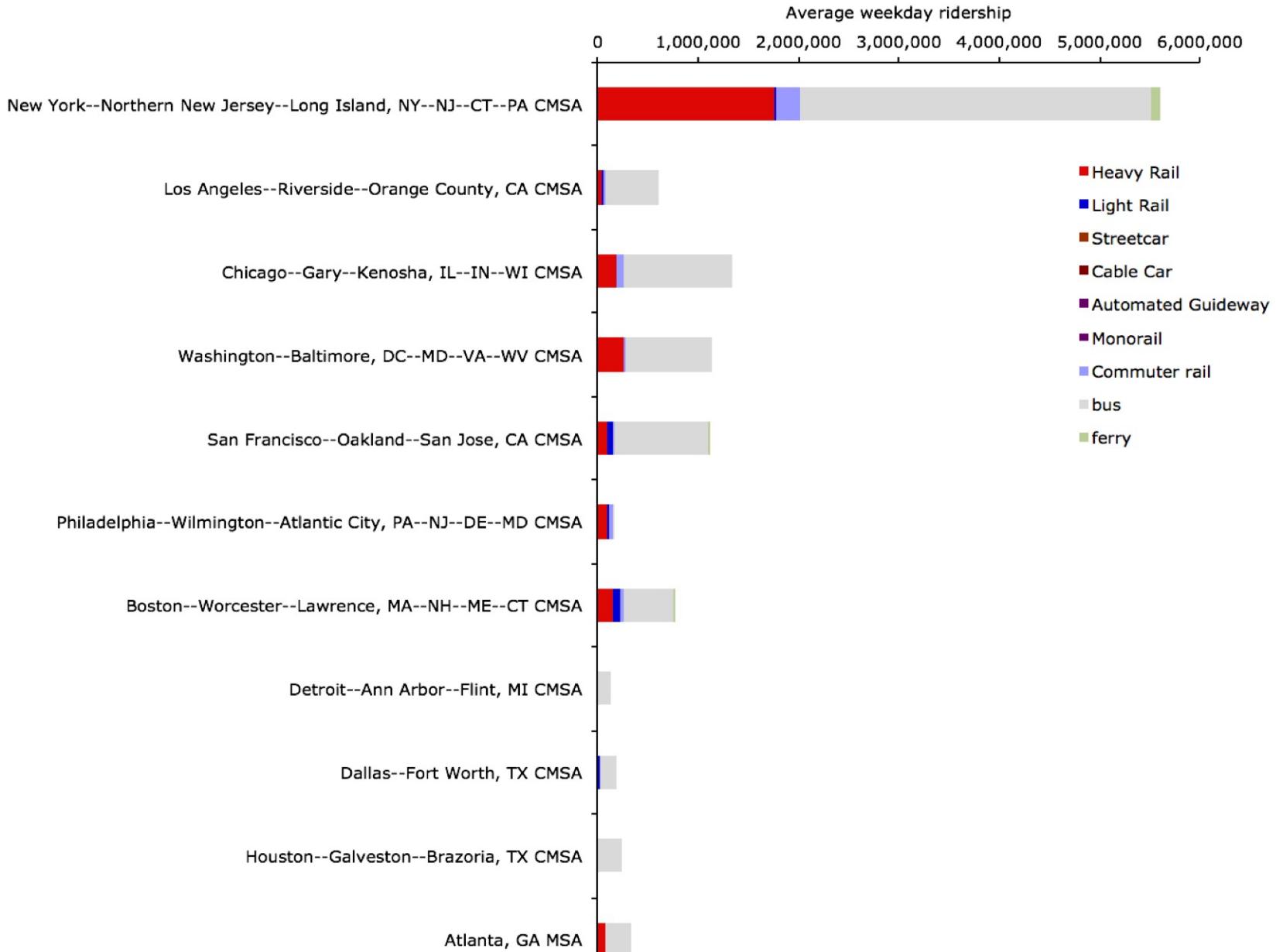
BUSES GO WHERE RAIL DOESN'T



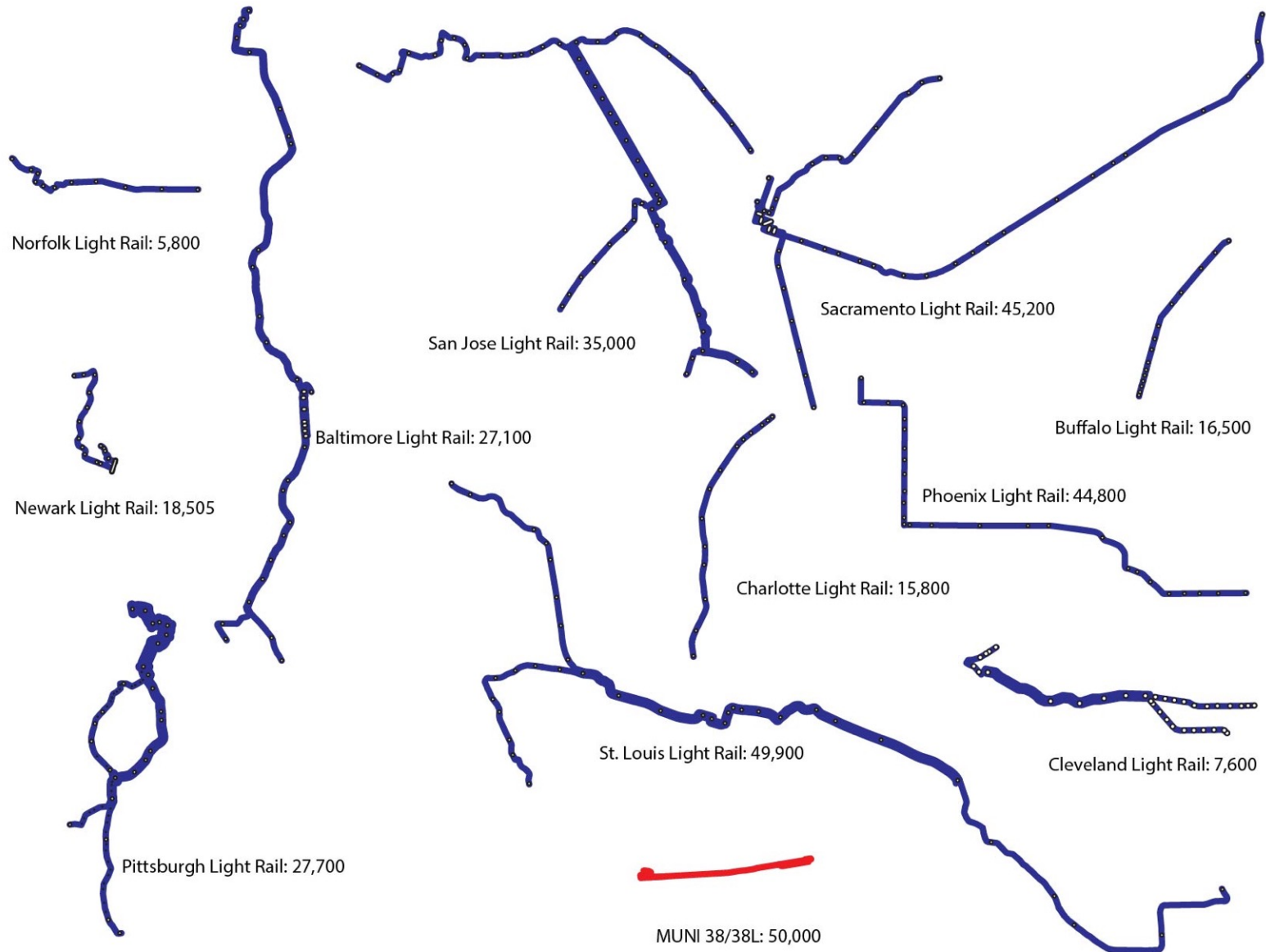
BUSES GO WHERE RAIL DOESN'T



BUSES CARRY LOTS OF PEOPLE



BUSES CARRY LOTS OF PEOPLE



BUSES MAKE RAIL BETTER



BUSES CAN MAKE LIFE BETTER



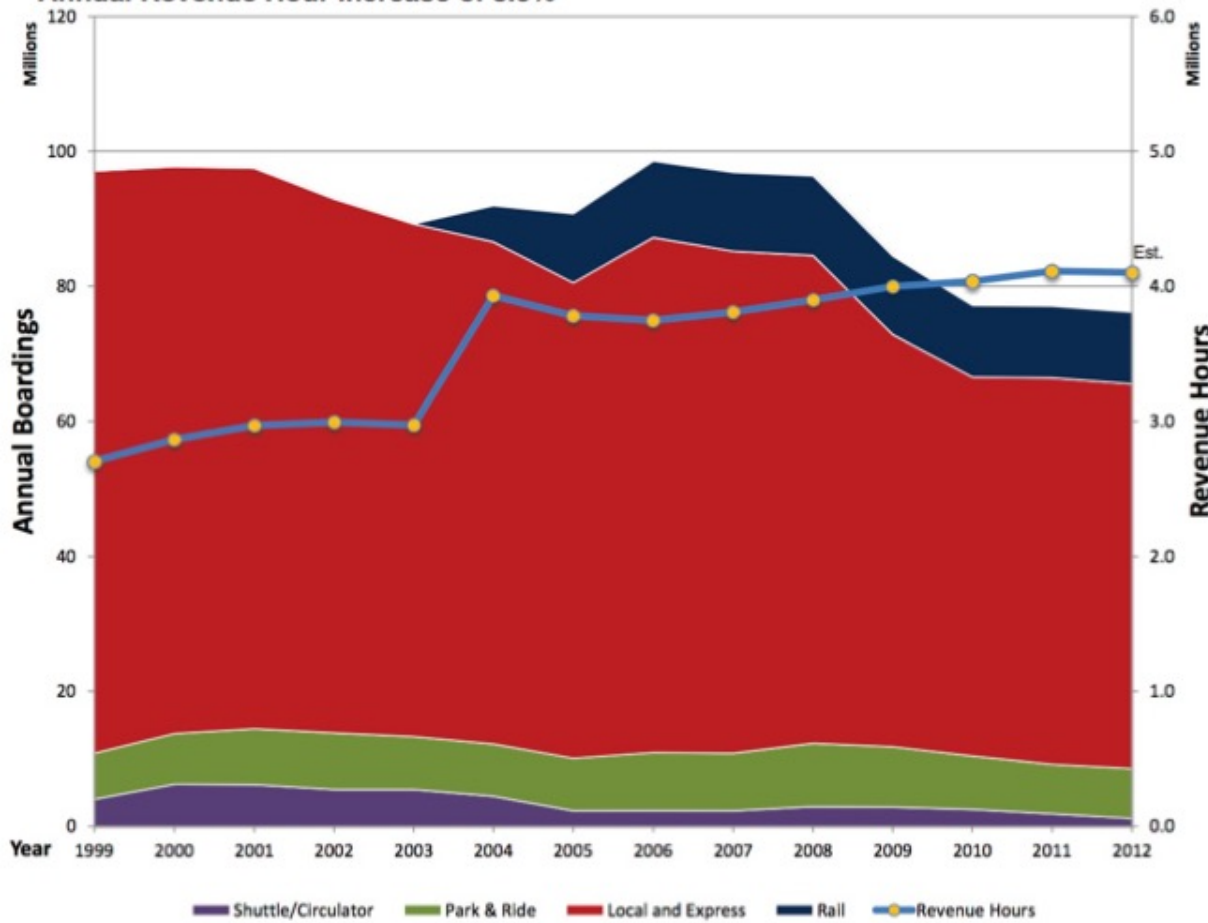
www.ridemetro.org 713-635-4000

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3425



METRO's Annual Fixed Route Ridership (1999-2012) with Average Annual Revenue Hour Increase of 3.6%



Annual Growth Rate %, 1999-2012

Overall Ridership: **(-1.9%)**

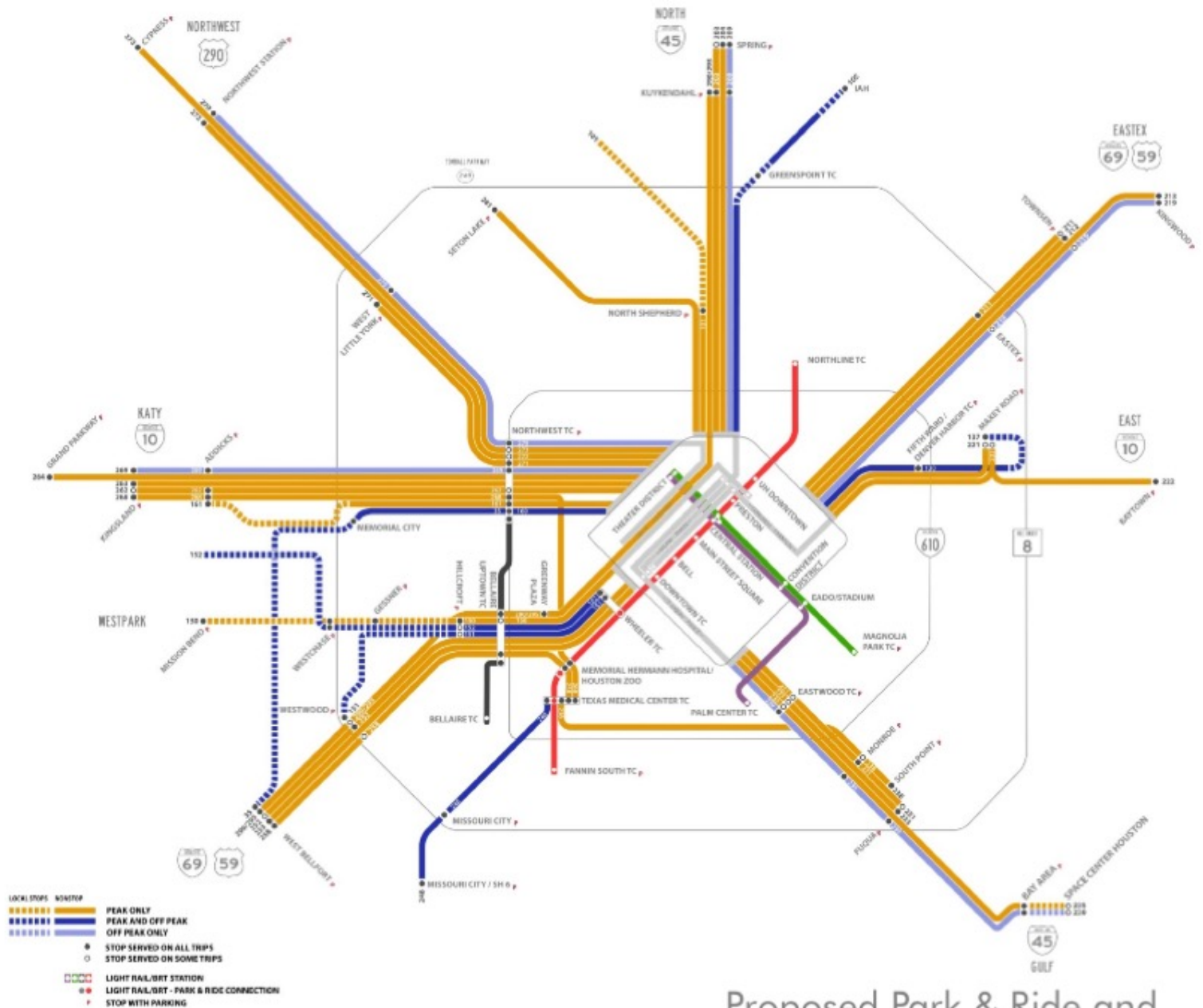
Light Rail ('04-'12): **8.9%**

Local Bus: **(-3.1%)**

Park & Ride: **0.6%**

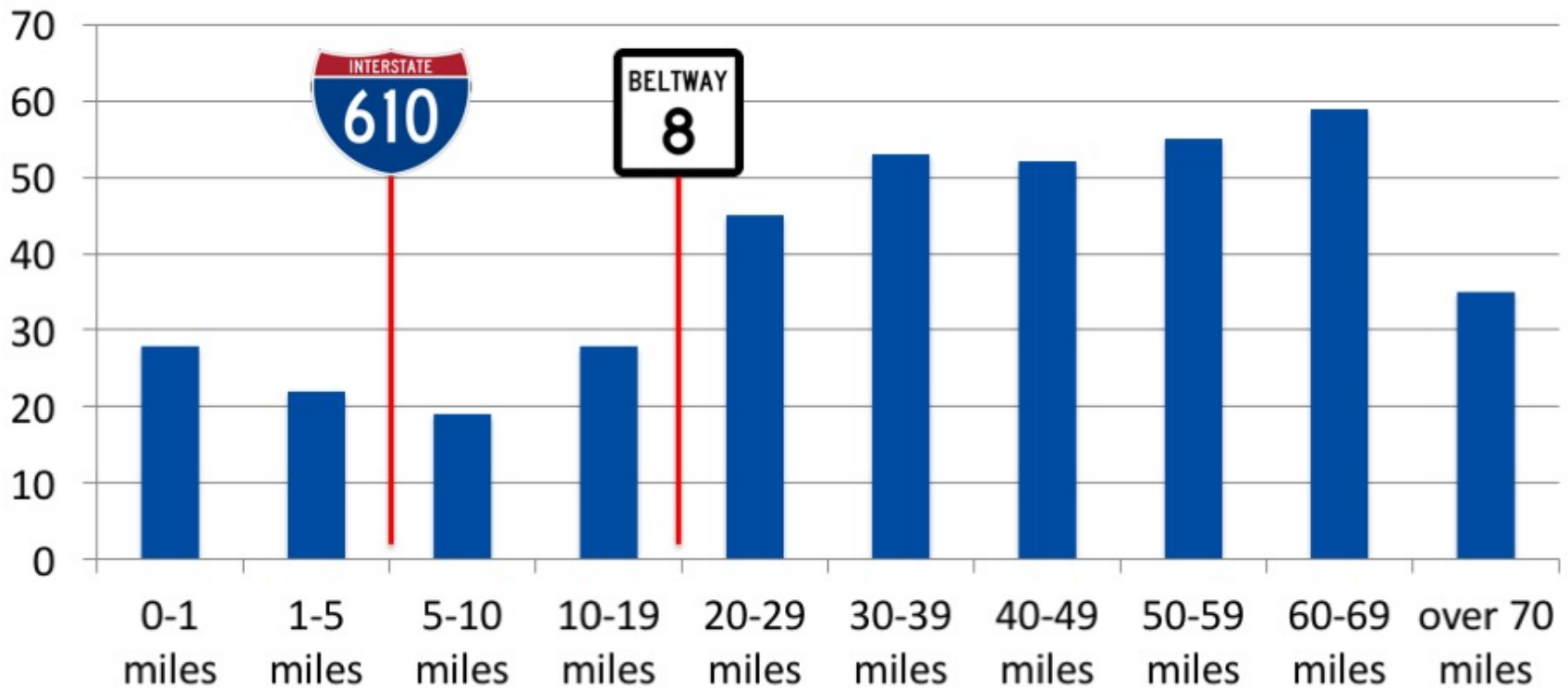
Circulator: **(-9.2%)**

**WHY AREN'T
MORE PEOPLE
RIDING
THE BUS?**



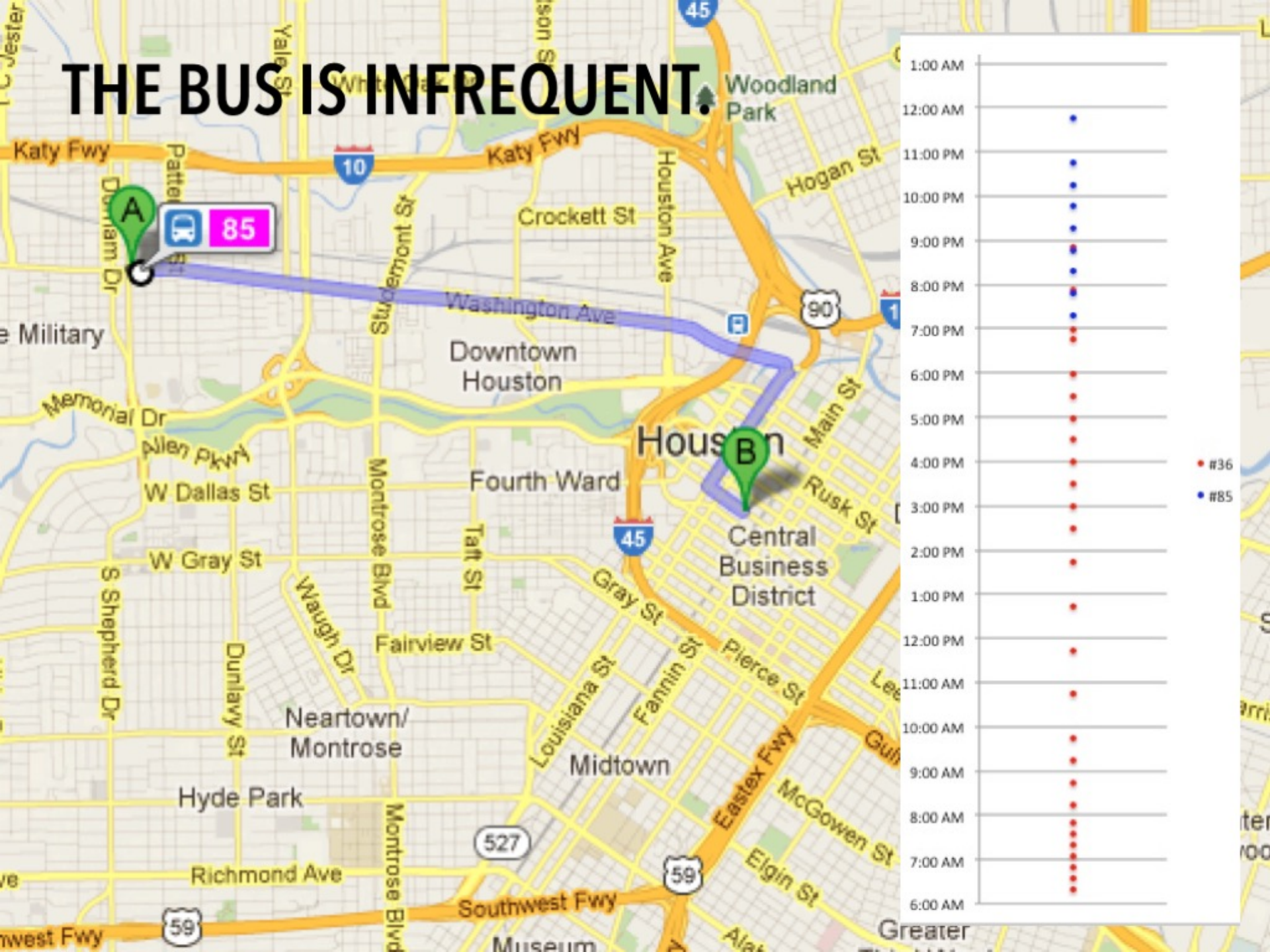
Proposed Park & Ride and Express Network

Transit use for Downtown workers by commute distance

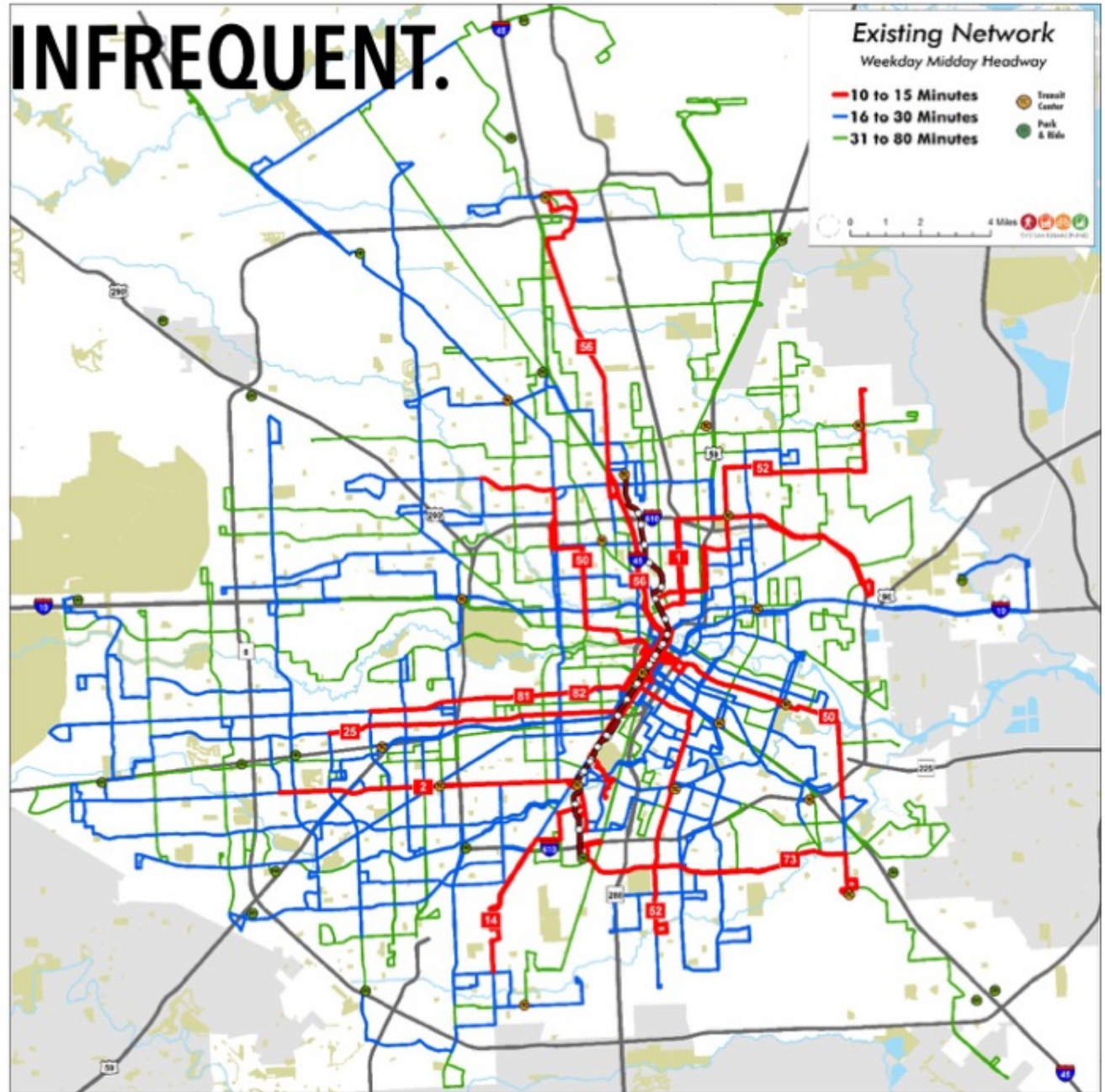


Downtown Houston Commute Survey Report,
Central Houston, Inc., August 2009

THE BUS IS INFREQUENT.

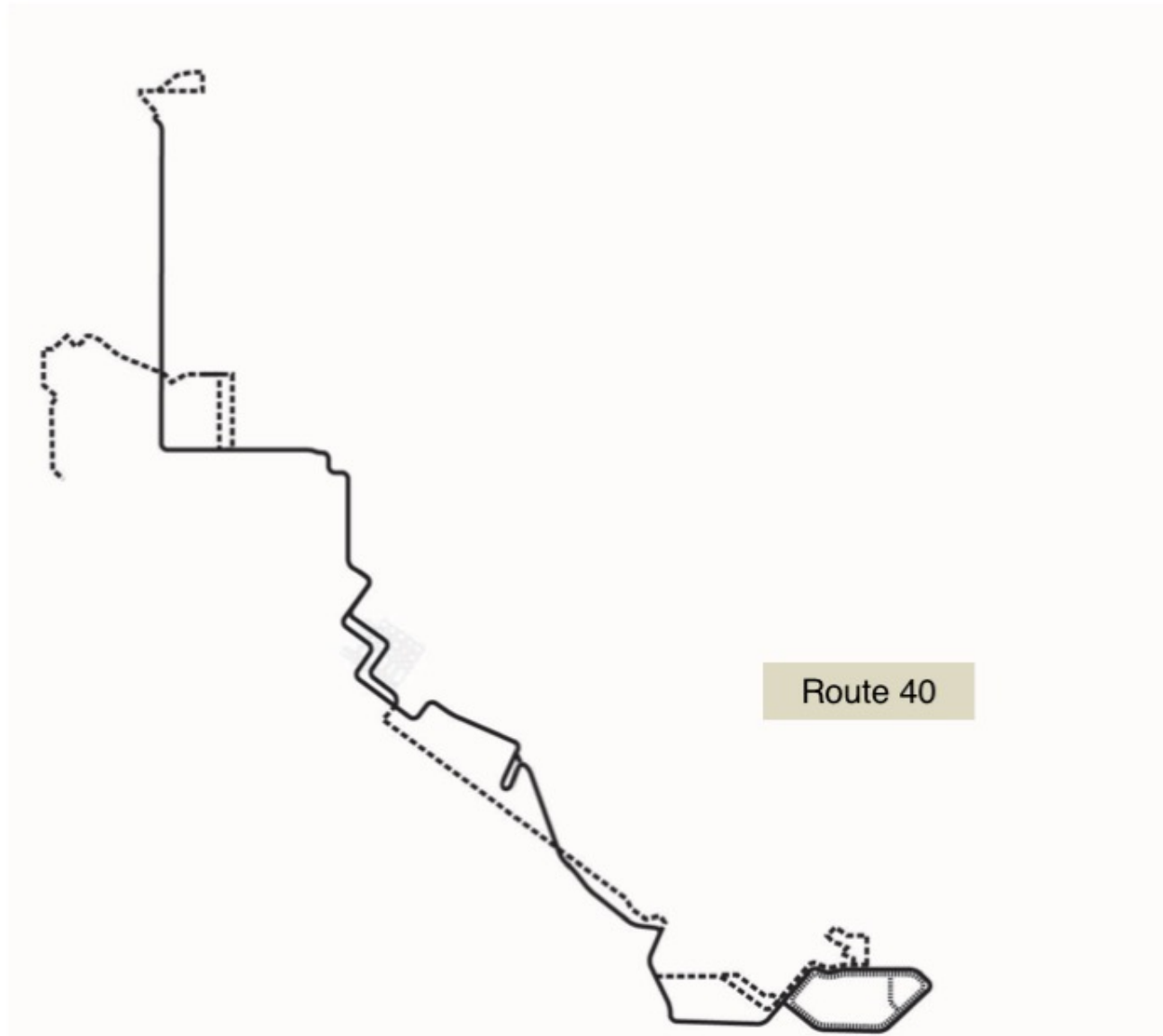


THE BUS IS INFREQUENT.

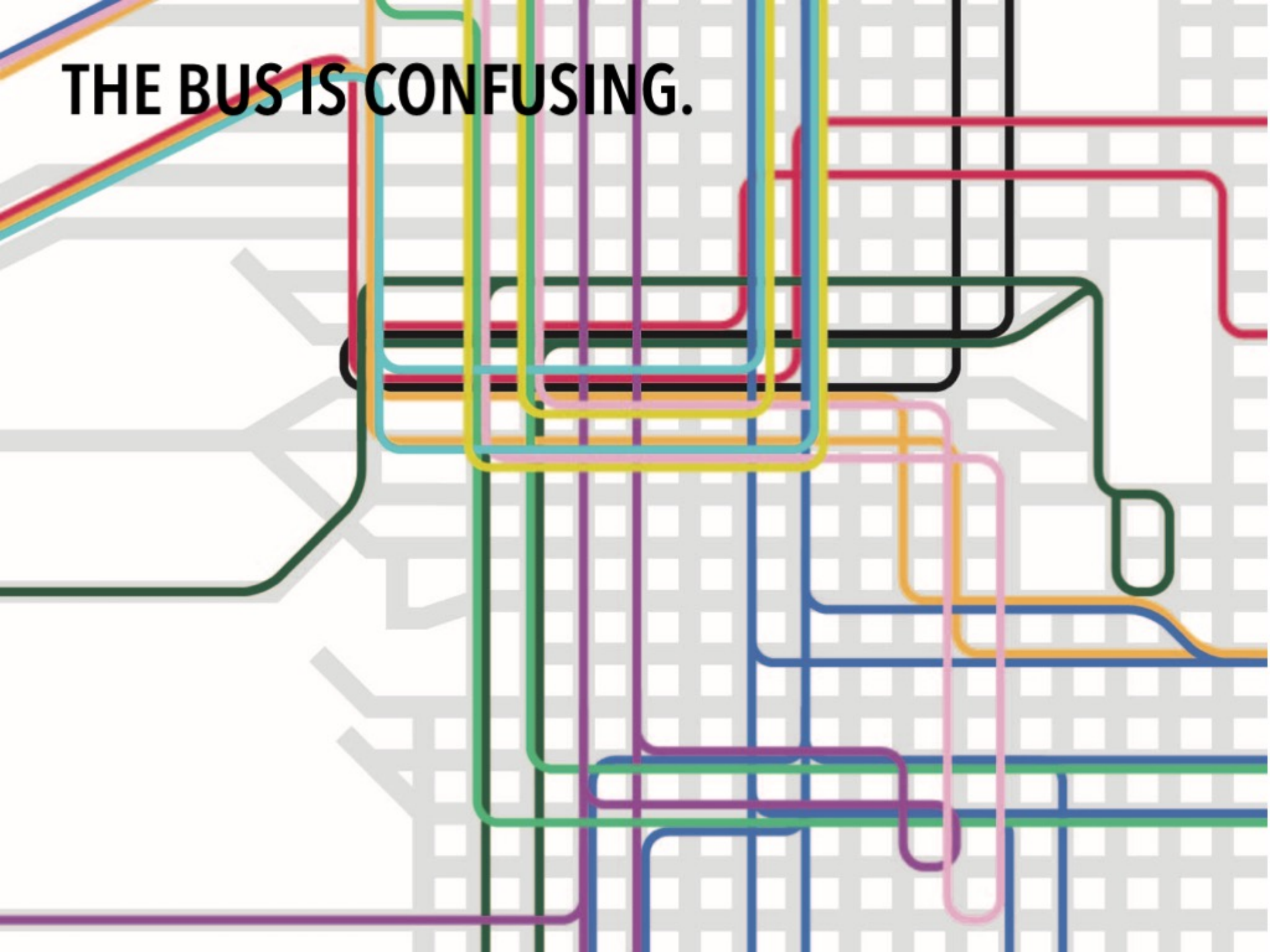


Red: Frequent Network
Blue: 16 to 30 minute headways
Green: 31+ minute headways

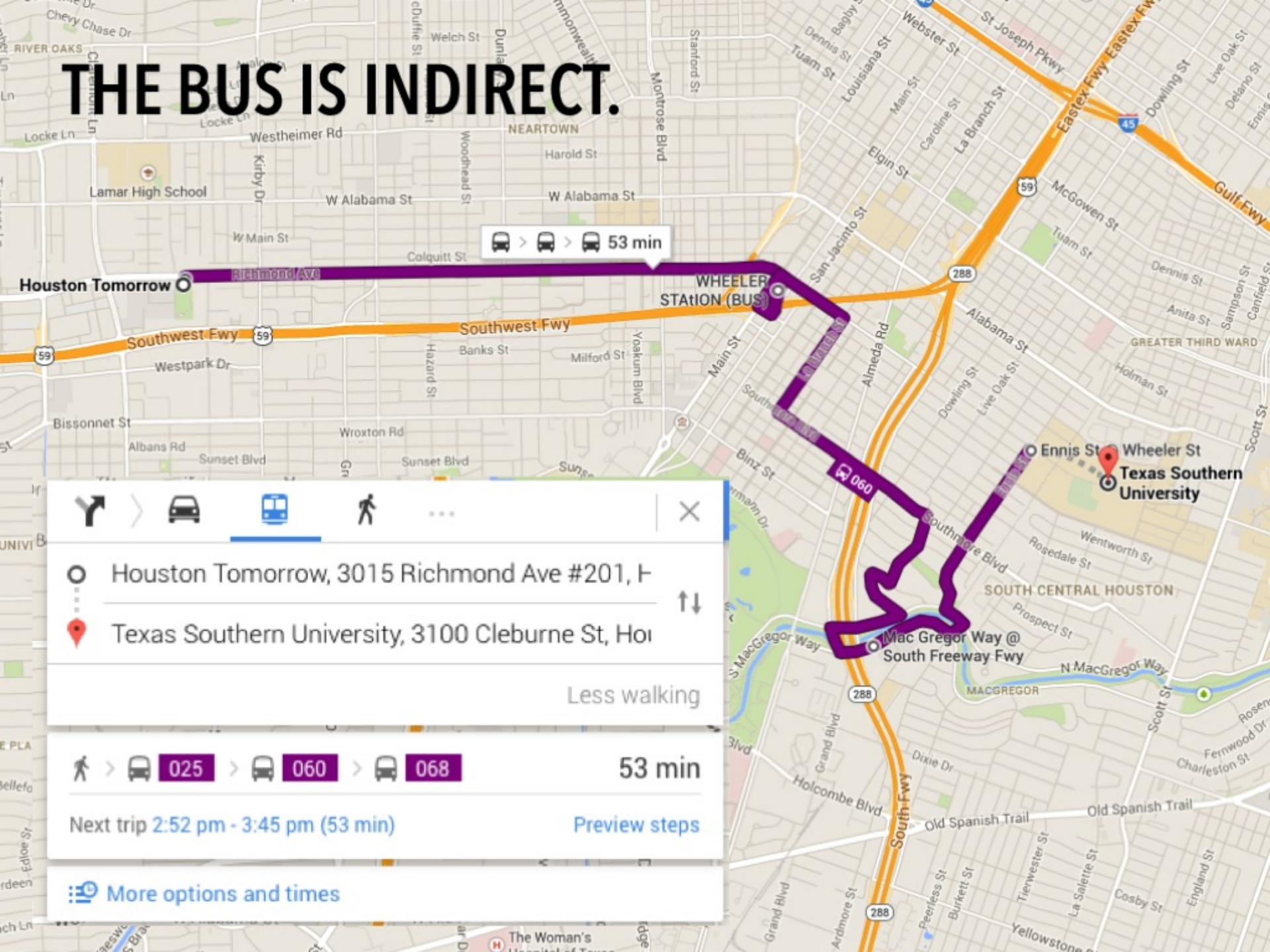
THE BUS IS CONFUSING.



THE BUS IS CONFUSING.



THE BUS IS INDIRECT.



🚌 > 🚌 > 🚌 53 min

📍 Houston Tomorrow, 3015 Richmond Ave #201, Houston, TX

📍 Texas Southern University, 3100 Cleburne St, Houston, TX

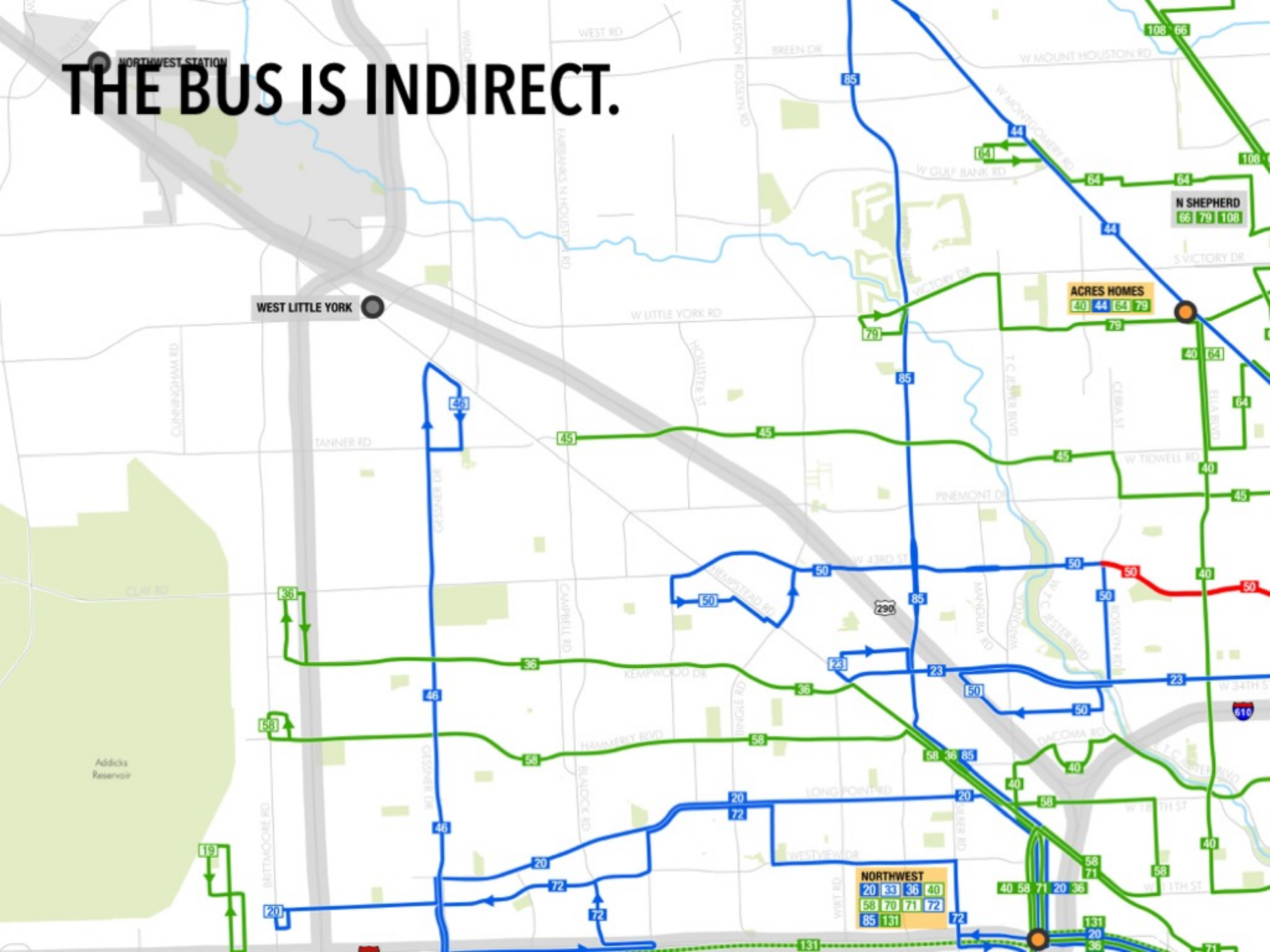
🚶 > 🚌 025 > 🚌 060 > 🚌 068 53 min

Next trip 2:52 pm - 3:45 pm (53 min) [Preview steps](#)

[More options and times](#)

📍 Ennis St
📍 Wheeler St
📍 Texas Southern University

THE BUS IS INDIRECT.



WEST LITTLE YORK

ACRES HOMES

NORTHWEST

20 33 36 40

58 70 71 72

85 131

N SHEPHERD
66 79 108

40 44 54 79

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40 44 54 79

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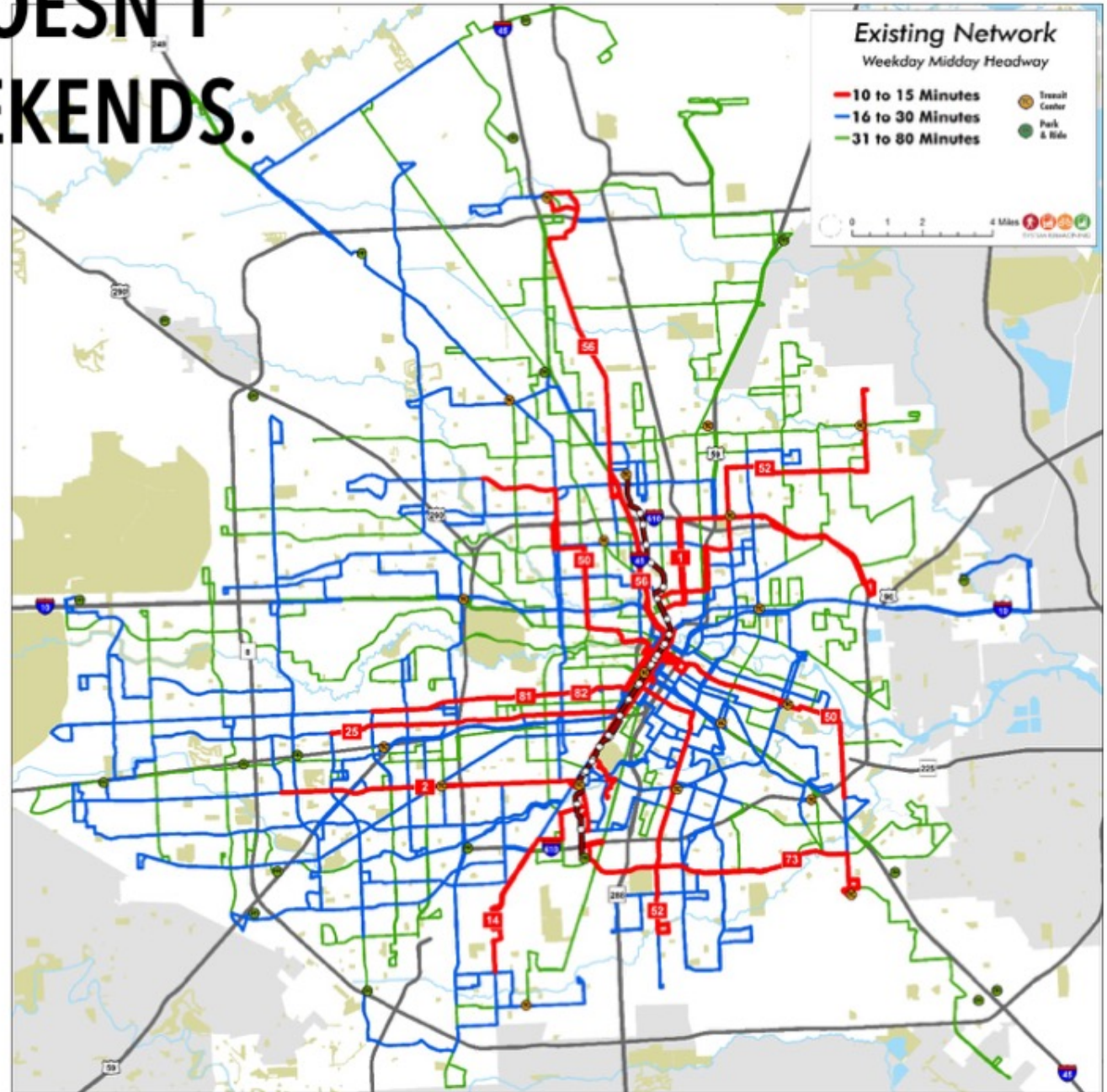
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THE BUS DOESN'T WORK WEEKENDS.



Red: Frequent Network
Blue: 16 to 30 minute headways
Green: 31+ minute headways

THE BUS DOESN'T WORK WEEKENDS.



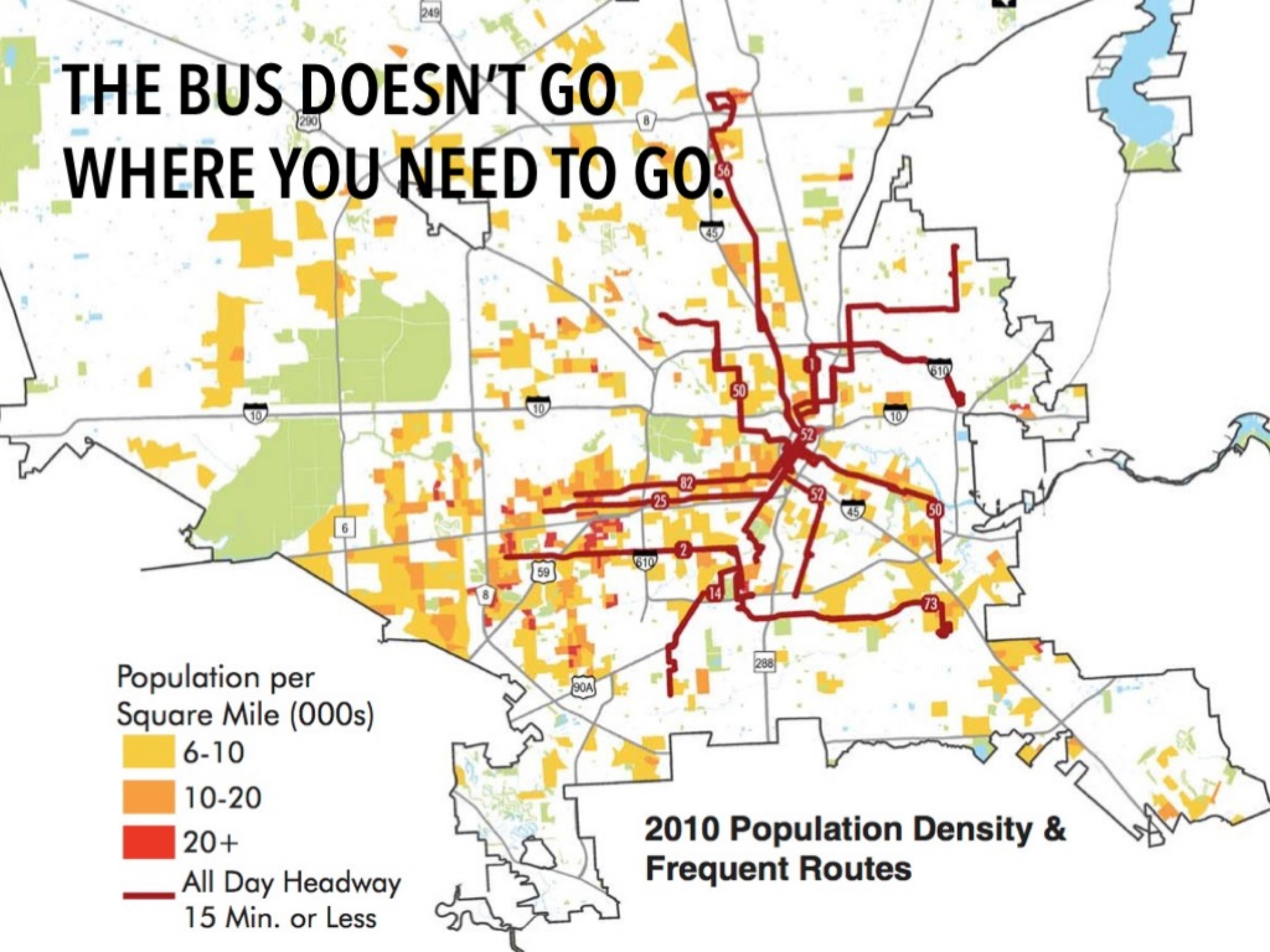
THE BUS DOESN'T WORK WEEKENDS.



THE BUS DOESN'T GO WHERE YOU NEED TO GO.



2010 Population Density & Frequent Routes



THE BUS DOESN'T GO WHERE YOU NEED TO GO.

Energy Corridor
2% transit use

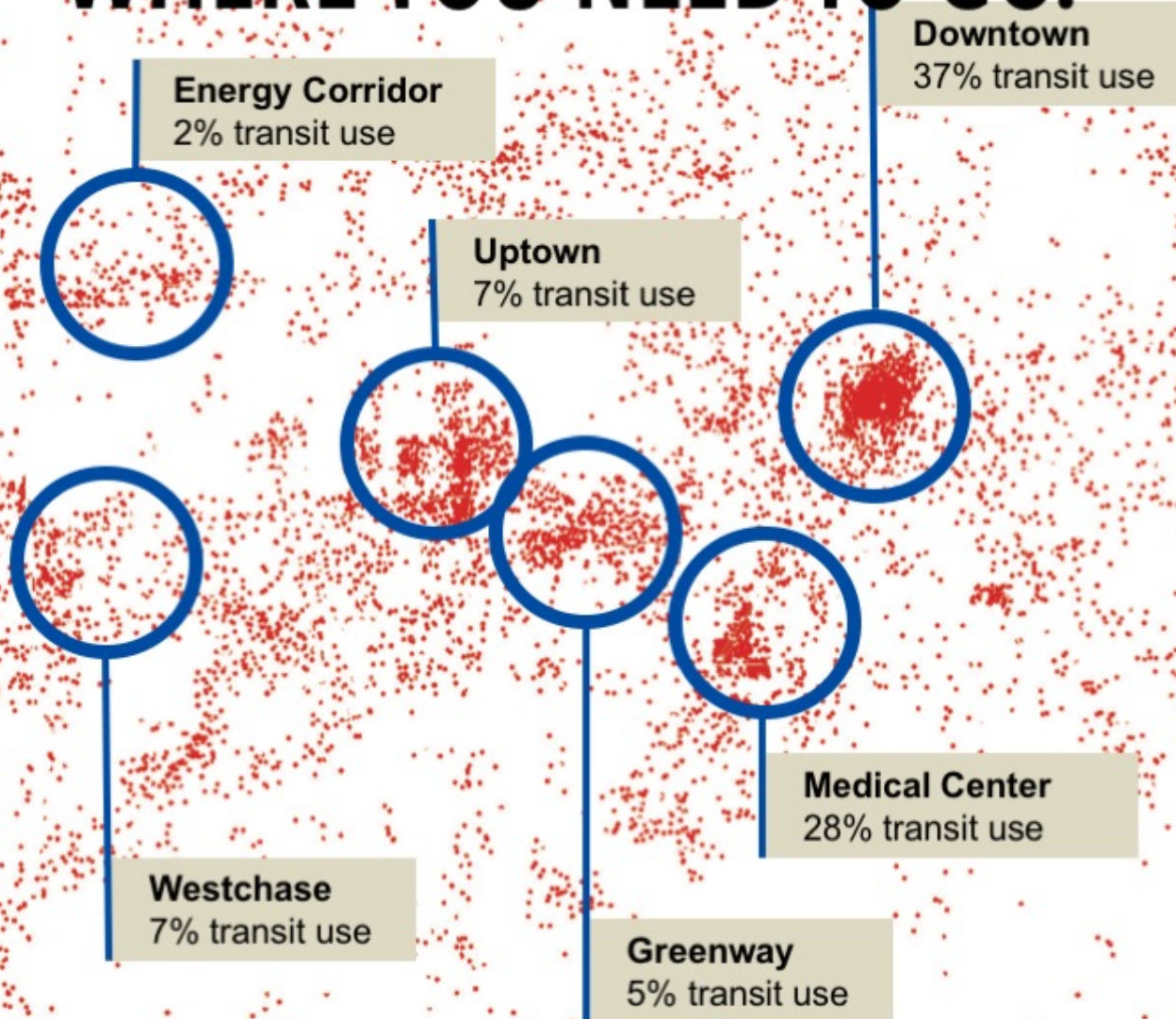
Downtown
37% transit use

Uptown
7% transit use

Medical Center
28% transit use

Westchase
7% transit use

Greenway
5% transit use



**WHY IS OUR
BUS
SYSTEM
SO BAD?**

THEATER DISTRICT 100
Hamilton

THEATER DISTRICT 200
Chenevert


ONLY

ONE WAY


PARKING


11 **NANCE DENVER HRBR**

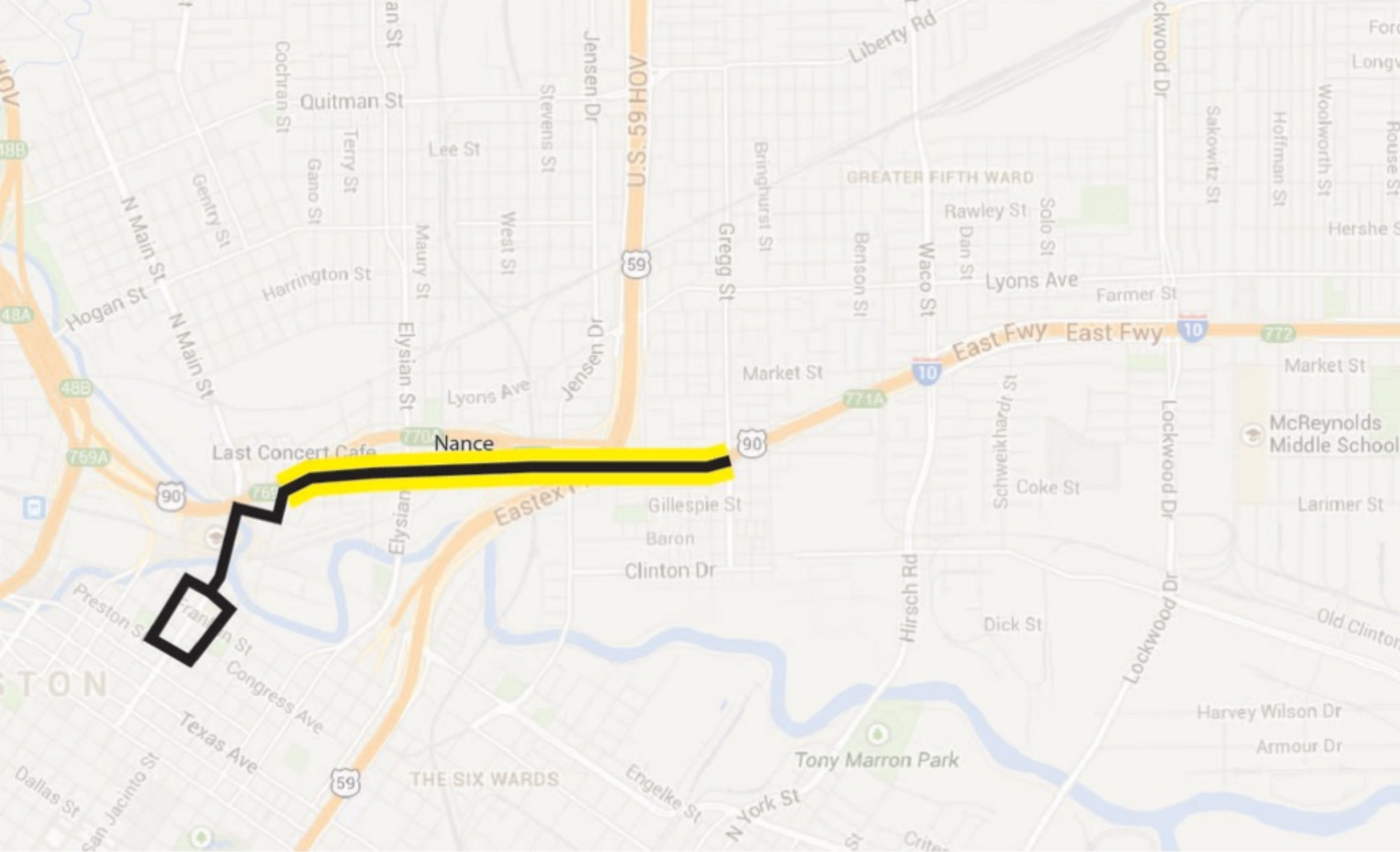
202

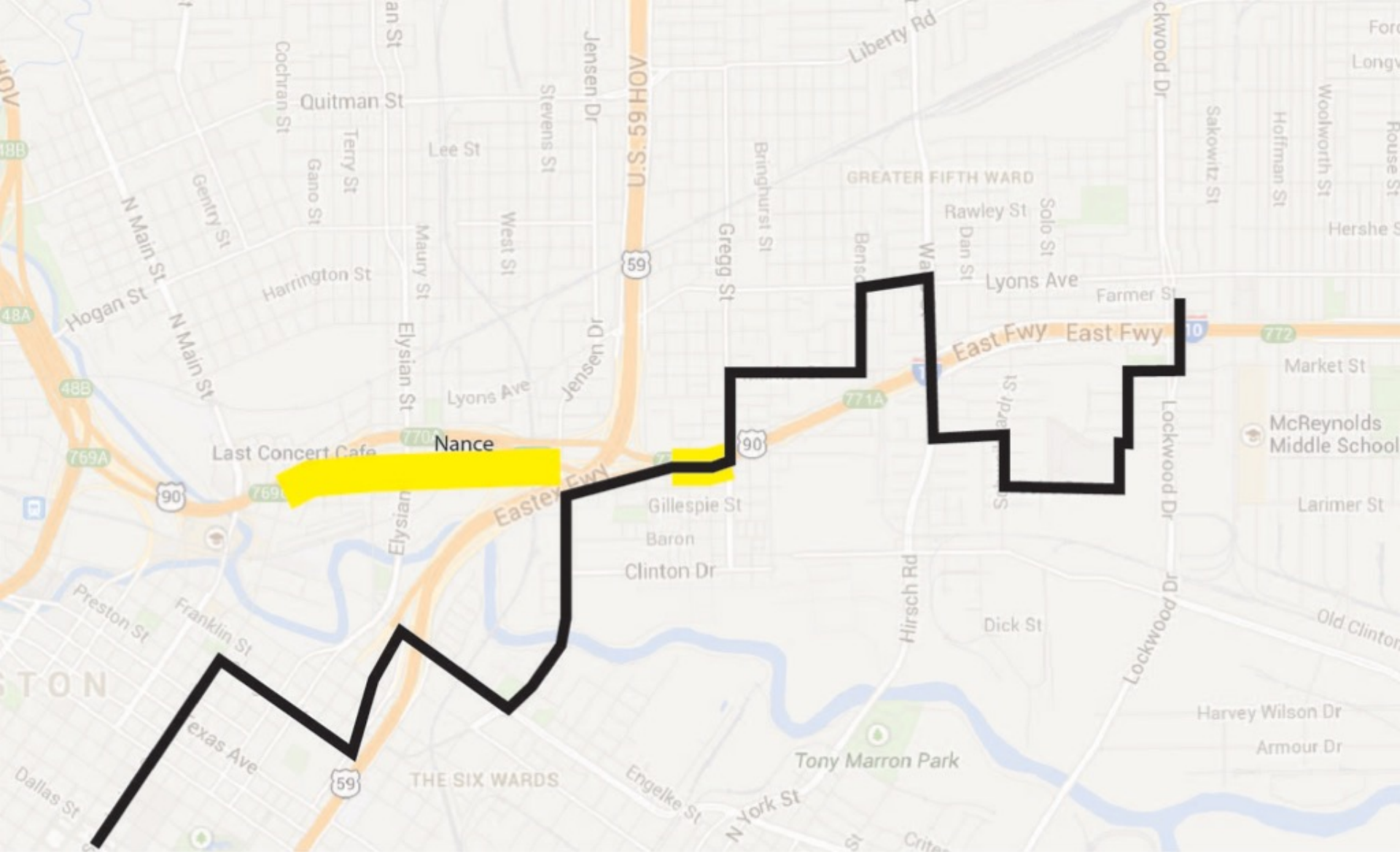
3278

788-559

DO NOT ENTER







WHAT WOULD OUR
BUS SYSTEM
LOOK LIKE
IF WE
REIMAGINED IT
FROM A
CLEAN SHEET?

**ANNOUNCEMENT
REQUEST FOR QUALIFICATIONS (RFQ) NO. RFQ1200013
TRANSIT SYSTEM RE-IMAGINING PROJECT**

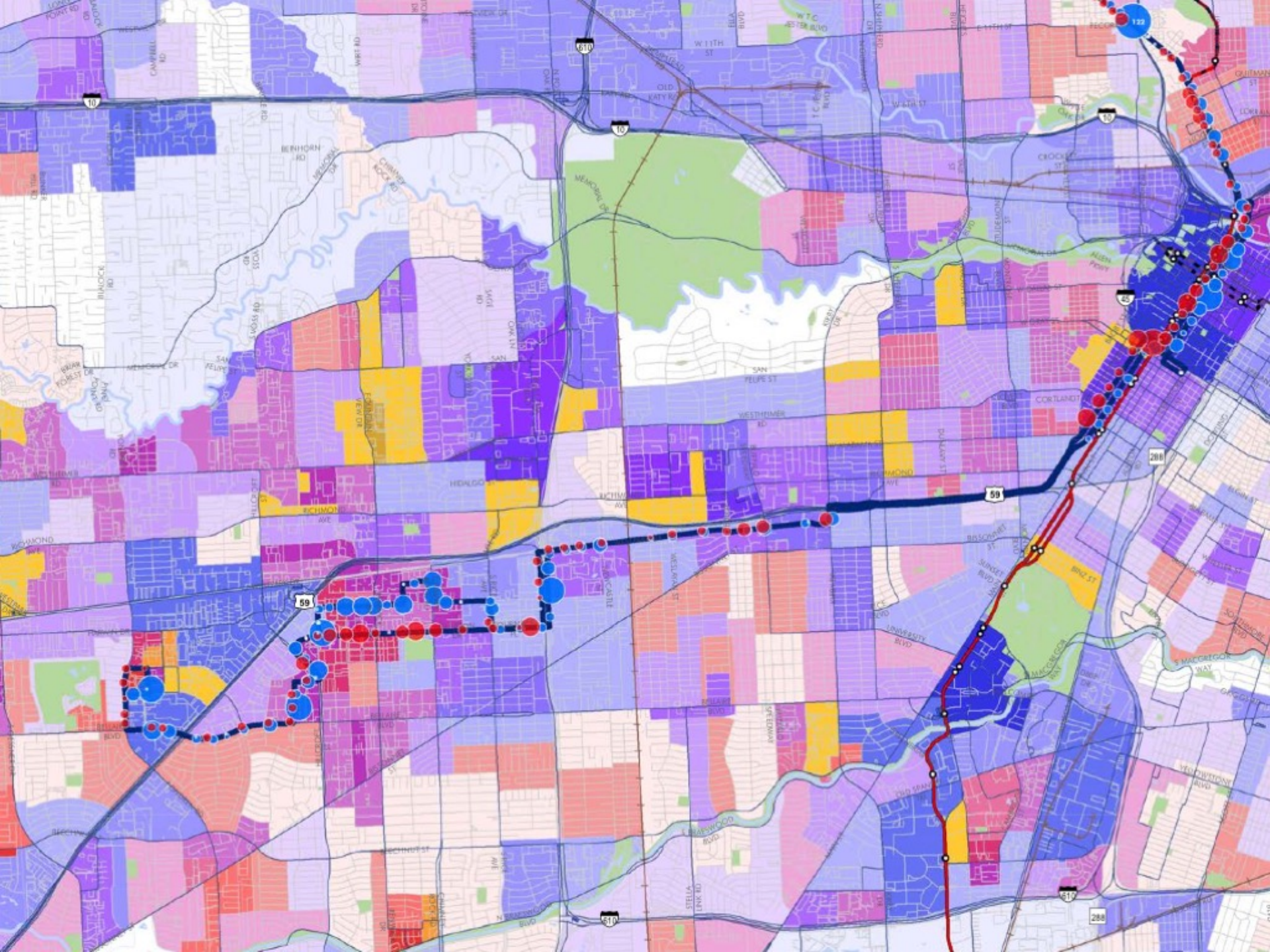
PROPOSED SCOPE OF WORK

The Metropolitan Transit Authority of Harris County (METRO) is seeking a qualified consulting team to aid in the re-imagining of its transit system.

Over the past decade, METRO has lost substantial local bus ridership as METRORail replaced several well-utilized bus routes, fares were increased and passenger discounts reduced, inner city neighborhoods were redeveloped, and population growth continued to occur in areas largely outside of METRO's current service footprint. During this time, many local bus routes have remained unchanged and may or may not be well suited to changing demographics and employment opportunities in the region. METRO has also not found effective ways to serve major activity centers outside of Downtown and the Texas Medical Center; park-and-ride services that have been provided in these areas have not performed to expectations.

At the same time, METRO does many other things well. Houston has the most successful new start light rail in the United States measured by boardings per mile, carrying 38,000 average weekday boardings on only 7.5 miles. It also has one of the best commuter bus systems in the country; as a result, a third of Downtown employees use transit. METRO has one of the lowest fares of all its peer agencies, has a smart card payment system that has been functional for several years, is replacing about 100 or 1/12 of its bus fleet each year, operates one of the country's largest commuter vanpool programs, and has an innovative operational model for its paratransit program that makes it extremely efficient.

The overall purpose of this study is to take a fresh look at the METRO service area (given our existing transit facilities and level of financial resources) and design a new regional transit system from the ground up with a "blank slate" approach. In some neighborhoods or corridors this may be similar to the existing transit network. In others it might bear absolutely no resemblance to the current system. The consultant team will be tasked to evaluate the current system and develop creative recommendations aimed at designing a **financially sustainable future transit system that will grow ridership while evolving into more than just a transportation system of last resort for those who cannot drive.**





KEY QUESTION FOR GOALS STATEMENT

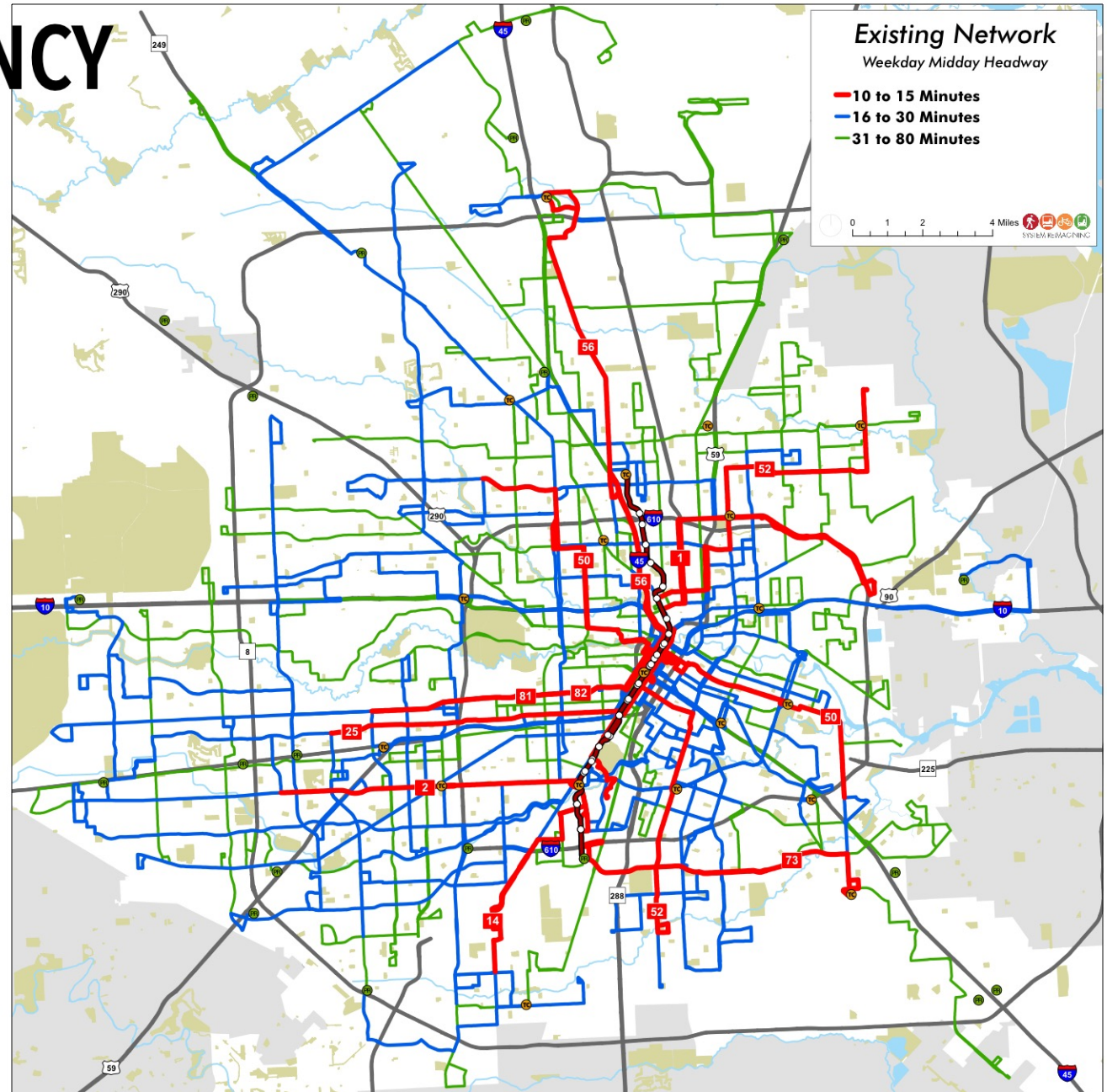
Currently METRO's non-Park&Ride service is deployed approximately **50% for ridership and 50% for coverage...**

How should this percentage split be adjusted to reflect the relative importance of

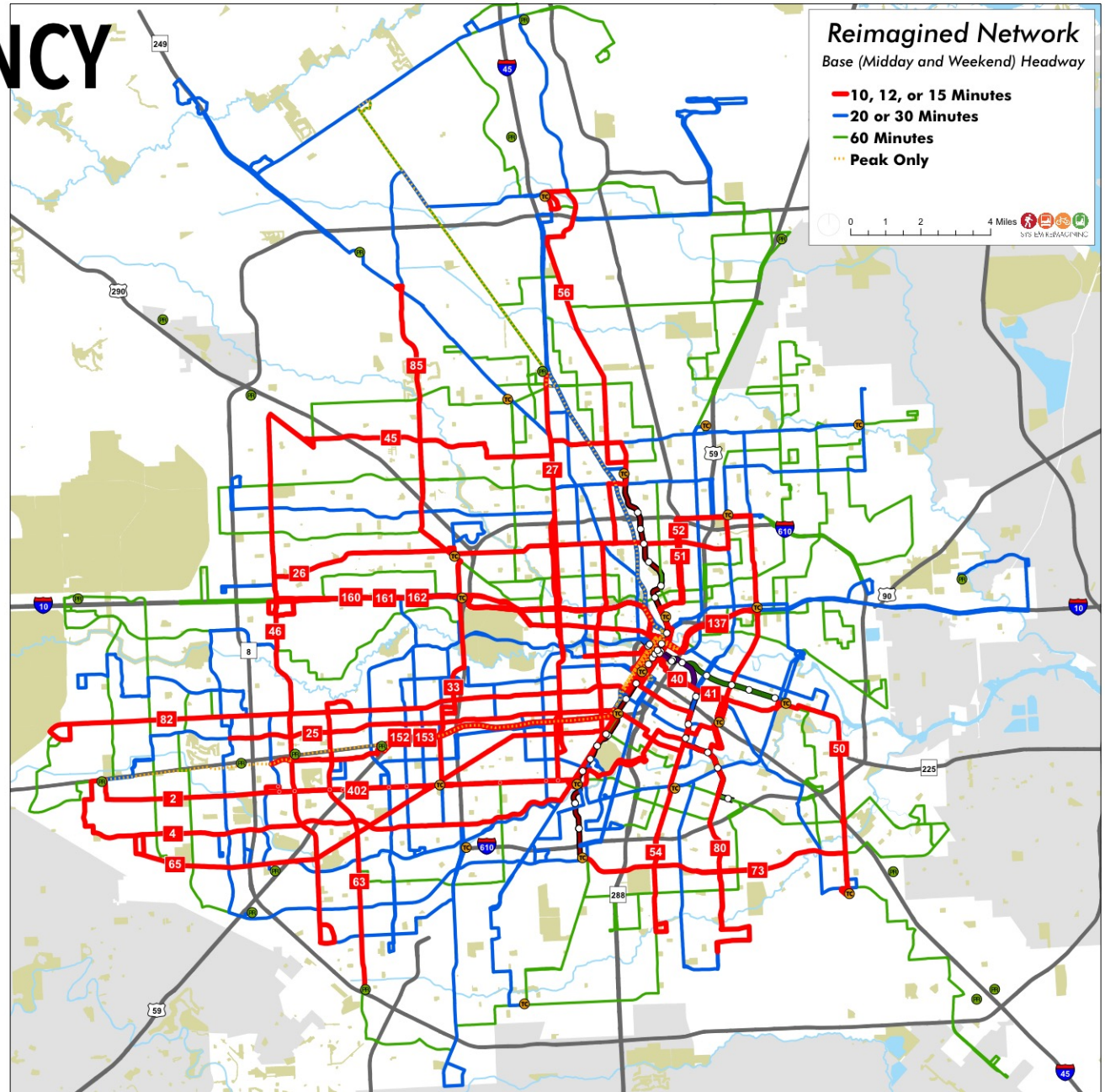
- **Ridership Goals** (fare revenue, VMT reduction, redevelopment), and
- **Coverage Goals** (social service needs, perceptions of equity)?



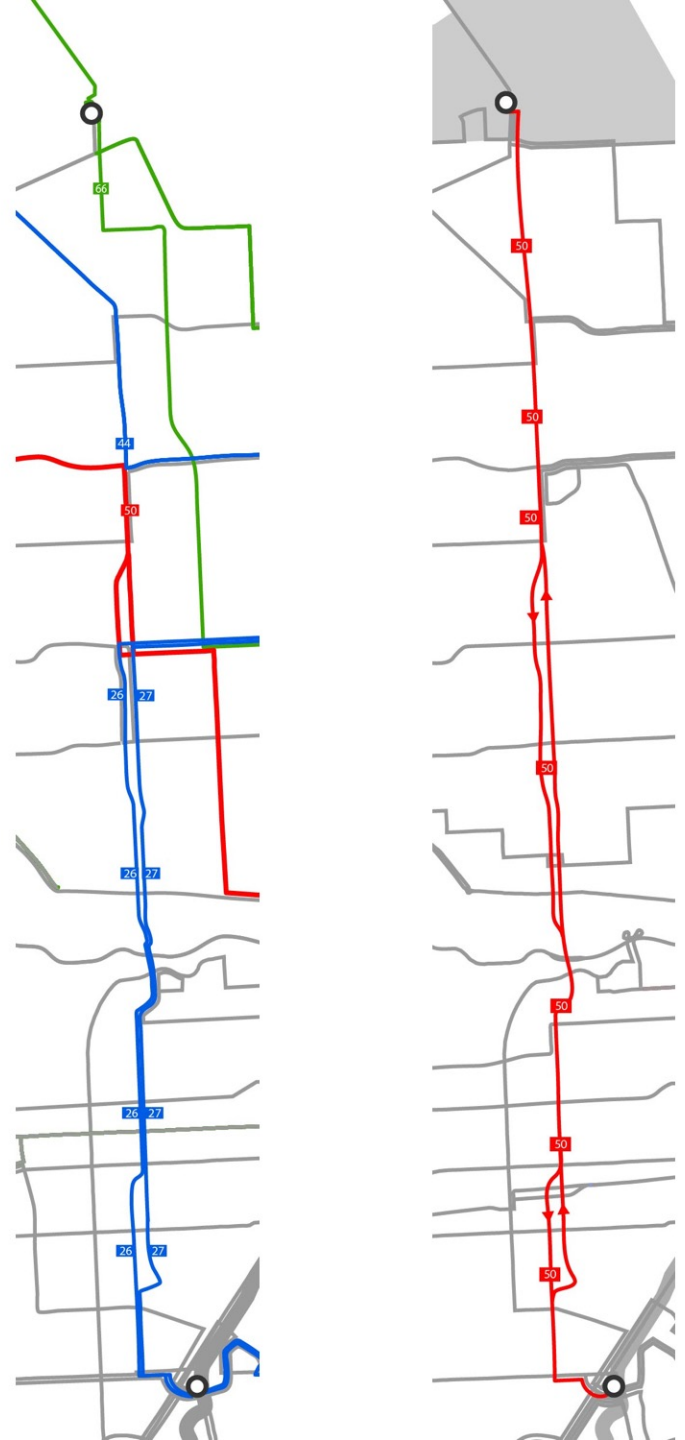
1. FREQUENCY



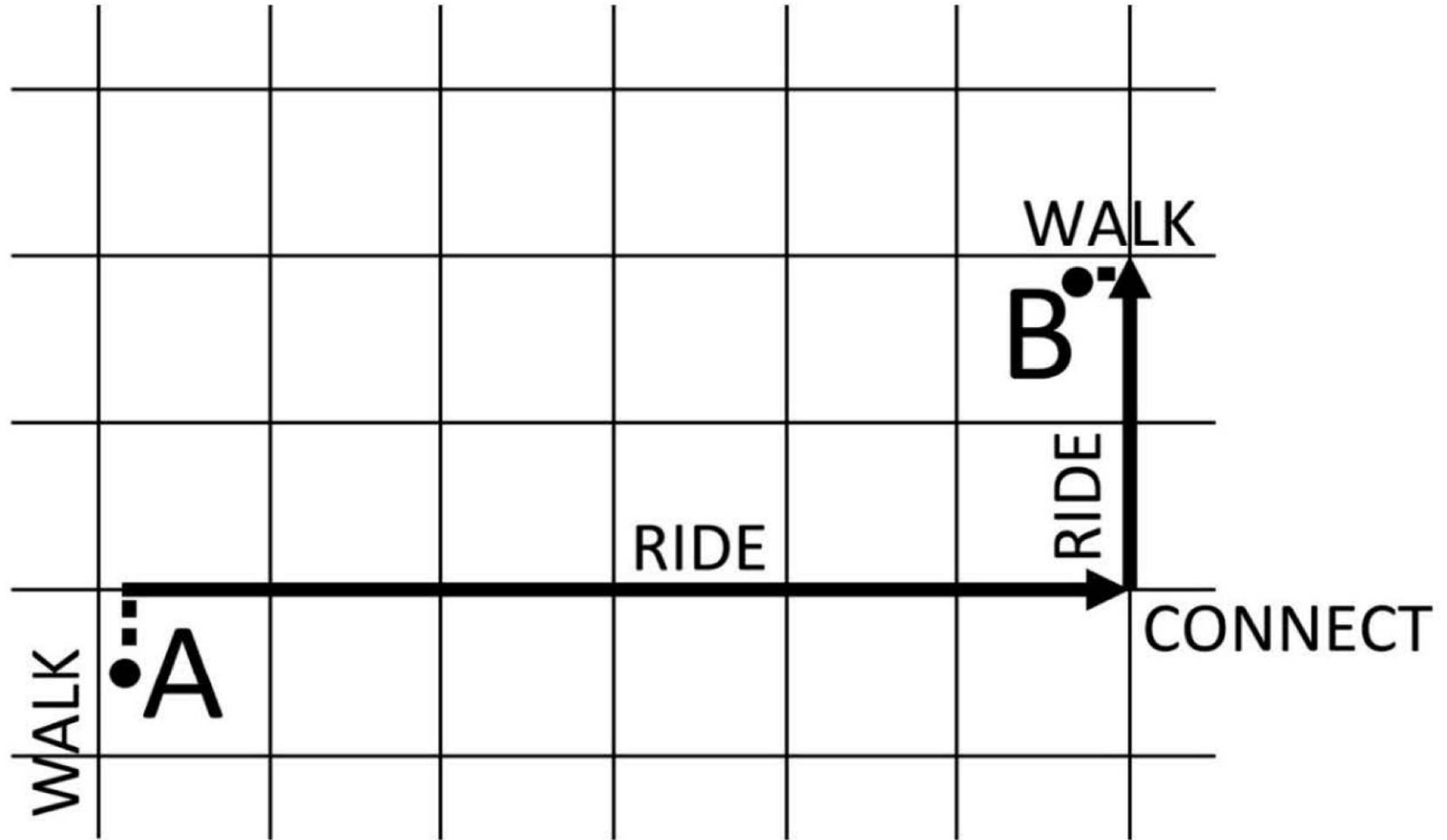
1. FREQUENCY



2. GRID



2. GRID



2. GRID

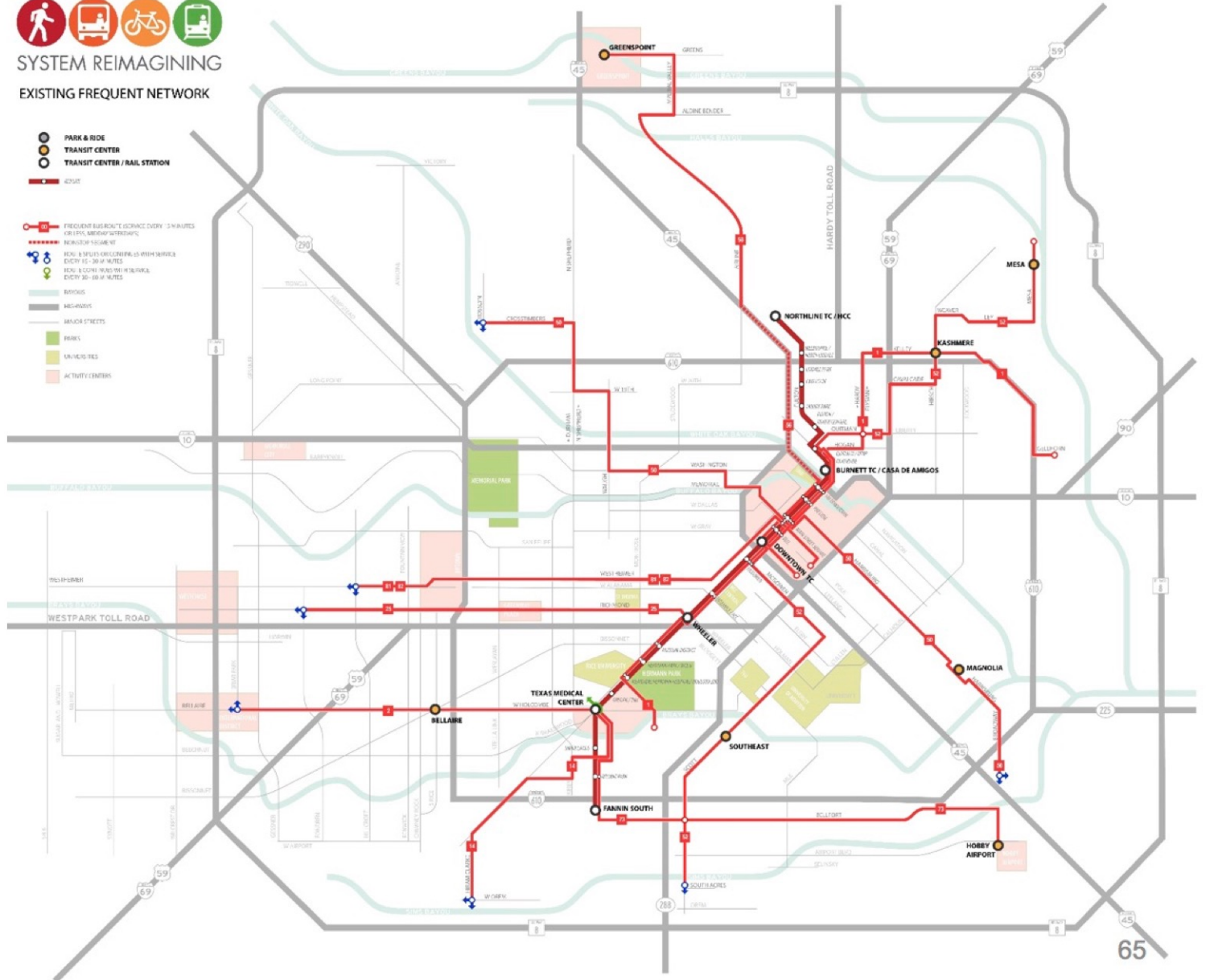


SYSTEM REIMAGINING

EXISTING FREQUENT NETWORK

- PARK & RIDE
- TRANSIT CENTER
- TRANSIT CENTER / RAIL STATION
- ROUTE

- FREQUENT BUS ROUTE (SERVICE EVERY 3-5 MINUTES FOR 15-30 MINUTES OF TRAVEL)
- BUS ROUTE (SERVICE EVERY 15-30 MINUTES)
- LOCAL BUS SERVICE (SERVICE EVERY 15-30 MINUTES)
- LOCAL BUS SERVICE (SERVICE EVERY 30-60 MINUTES)
- BIPODIS
- METROWAYS
- PARKS
- UNDEVELOPED
- ACTIVITY CENTERS



2. GRID



SYSTEM REIMAGINING

PROPOSED FREQUENT NETWORK (AUGUST PLAN UPDATE)

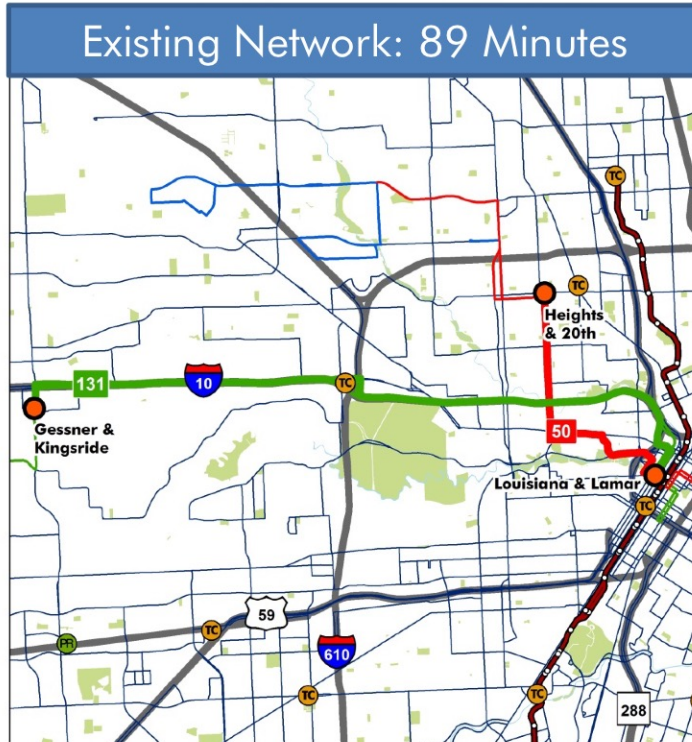
- PARK & RIDE
- TRANSIT CENTER
- TRANSIT CENTER / RAIL STATION
- ROUTE
- BIPOD
- FRONTLINE
- FREQUENT BUS ROUTE (SERVICE EVERY 15 MINUTES OR LESS, 1-4 HOURS A DAY, 7 DAYS A WEEK)
- BIPOD SERVICE
- BIPOD & BIPOD SERVICE WITH BIPOD EVERY 15-30 MINUTES
- BIPOD & BIPOD SERVICE WITH BIPOD EVERY 30-60 MINUTES
- BIPODS
- METRODAYS
- WALKER STREETS
- PARKS
- UNIVERSITY/IES
- ACTIVITY CENTERS



2. GRID

Sample Trip: Heights to Memorial City

(Weekday PM Peak)



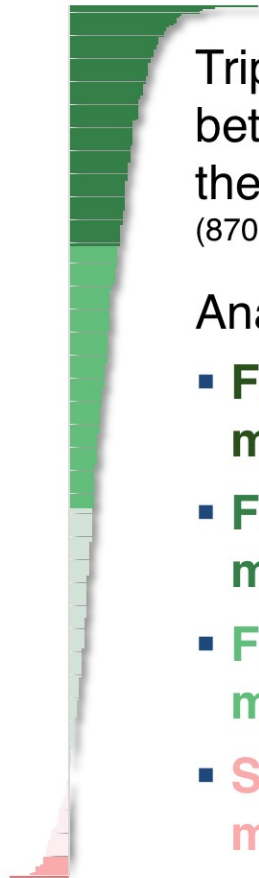
Average Wait Time:	31 min.
Walk Time:	6 min.
Ride Time:	52 min.
Total:	89 Minutes (1 Transfer)



39 minutes (44%)
Time Savings

Average Wait Time:	16 min.
Walk Time:	0 min.
Ride Time:	34 min.
Total:	50 Minutes (1 Transfer)

2. GRID



Trip times were calculated between 30 destinations in the METRO service areas (870 total trips analyzed)

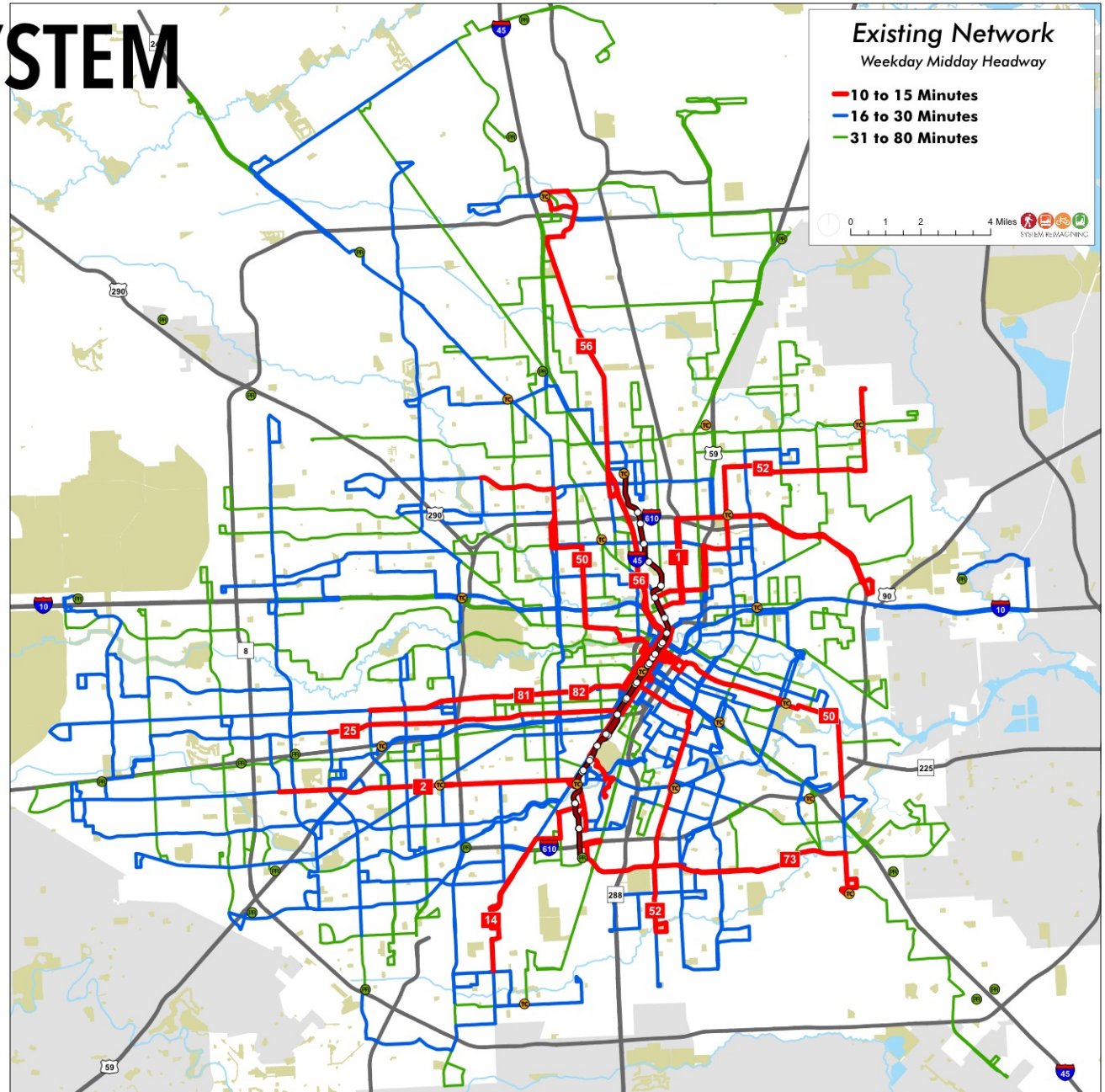
Analyzed Trips*:

- **Faster by 20 minutes or more:** **28%**
- **Faster by 10-19 minutes or more:** **30%**
- **Faster by 5-9 minutes:** **19%**
- **Slower by 5 minutes or more:** **6%****

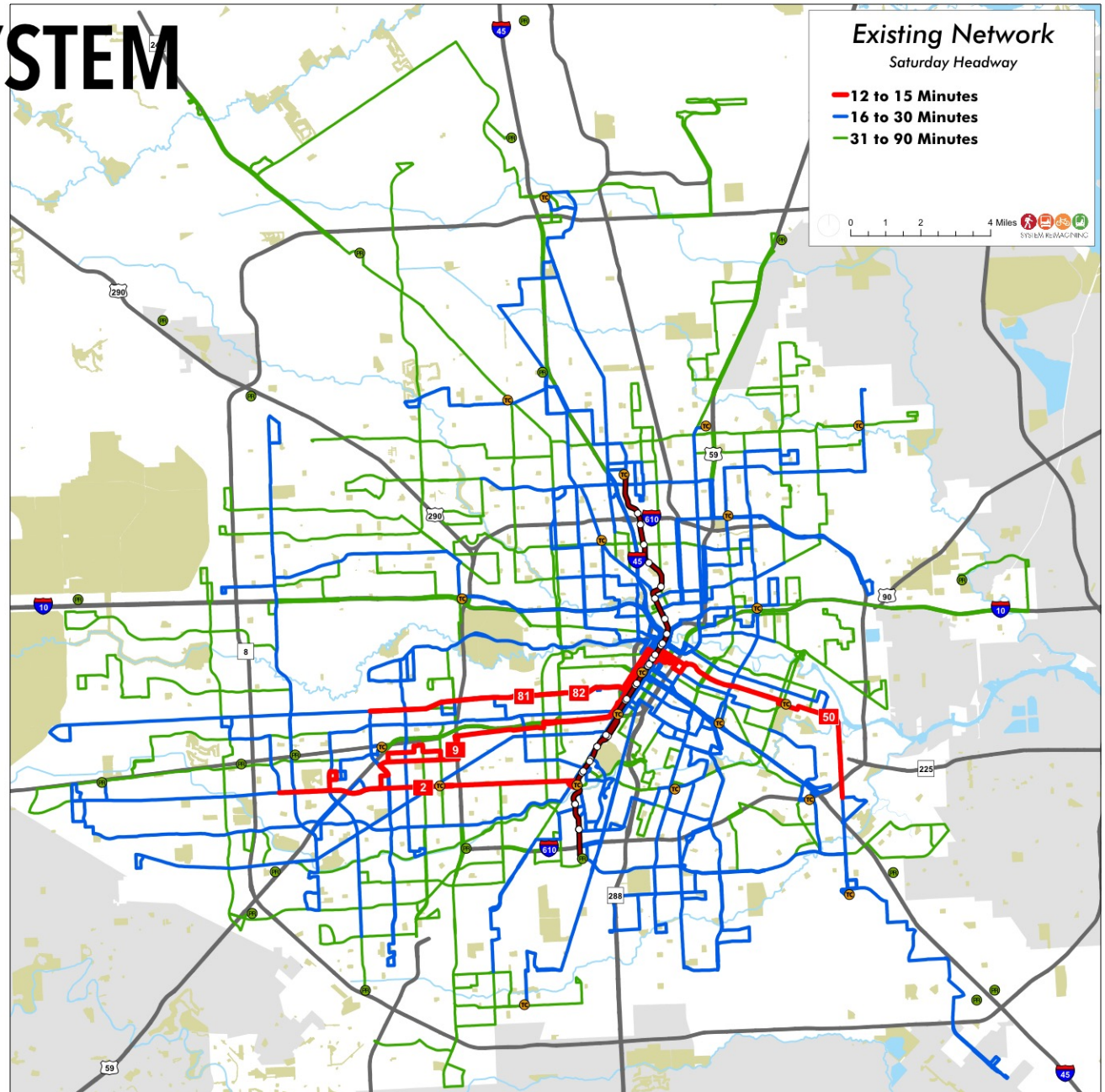
* Trip times include average walking, waiting and on-vehicle travel time

** May be prioritized to address with future system improvements

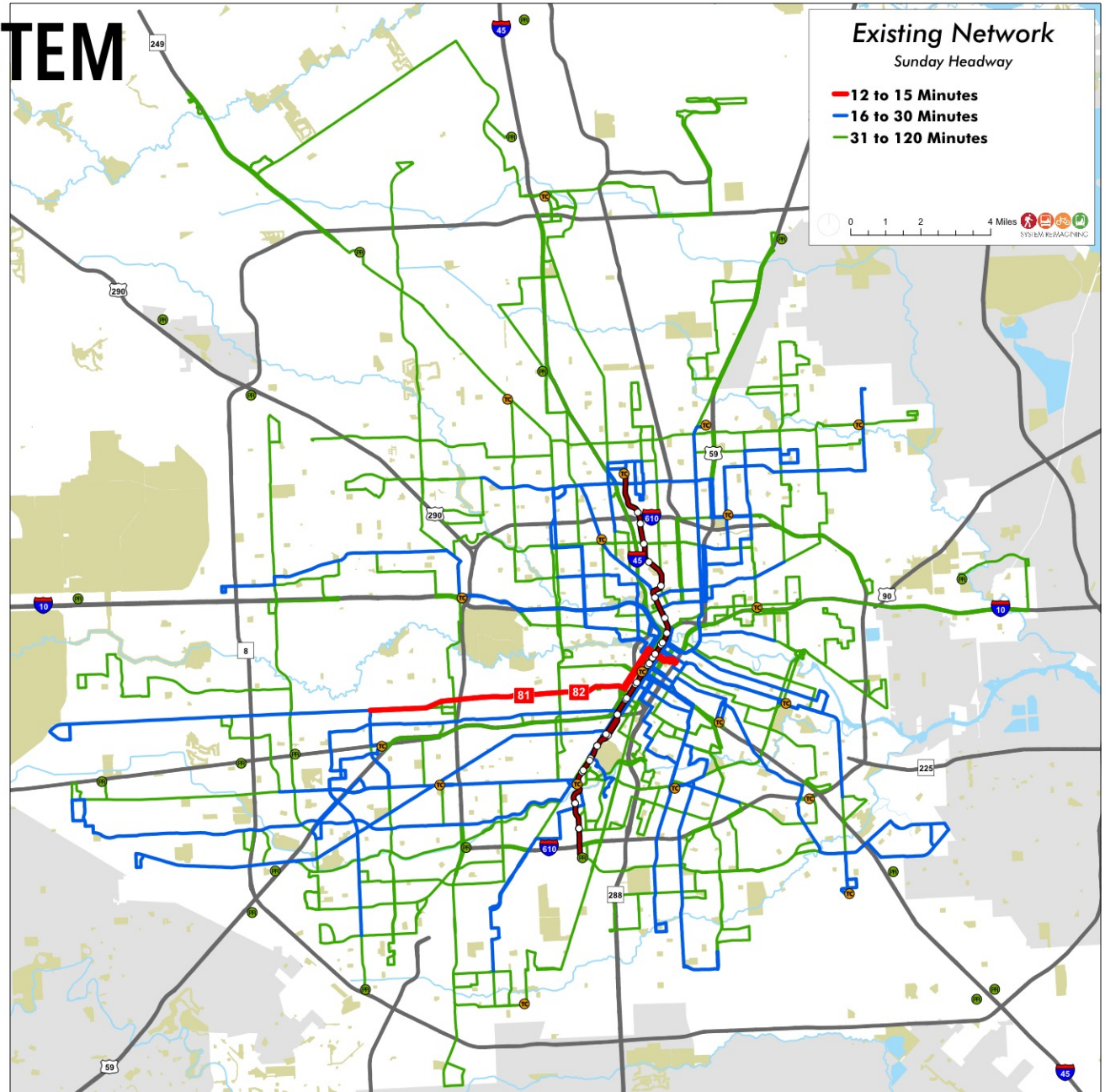
3. 7-DAY SYSTEM



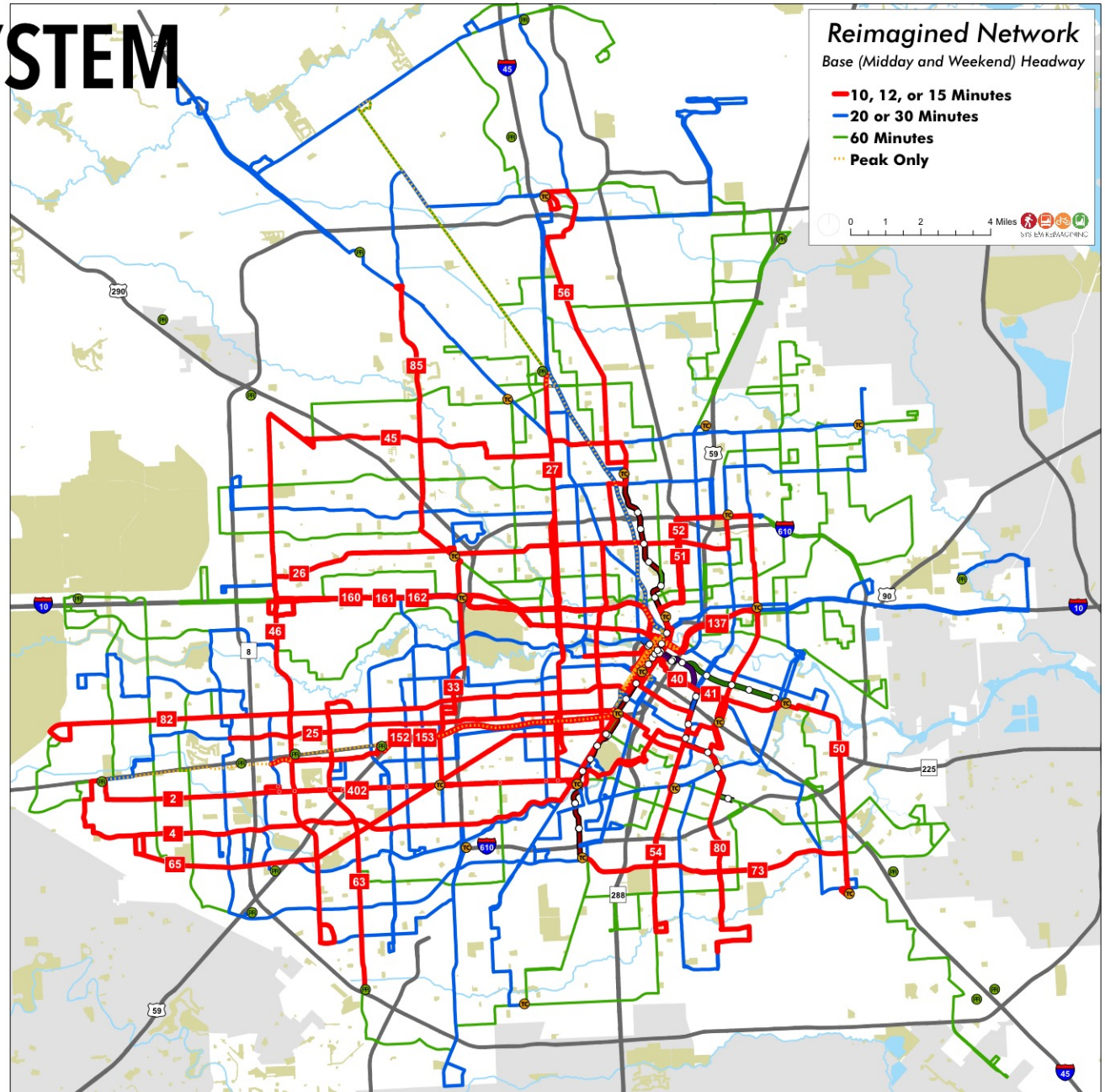
3. 7-DAY SYSTEM



3. 7-DAY SYSTEM

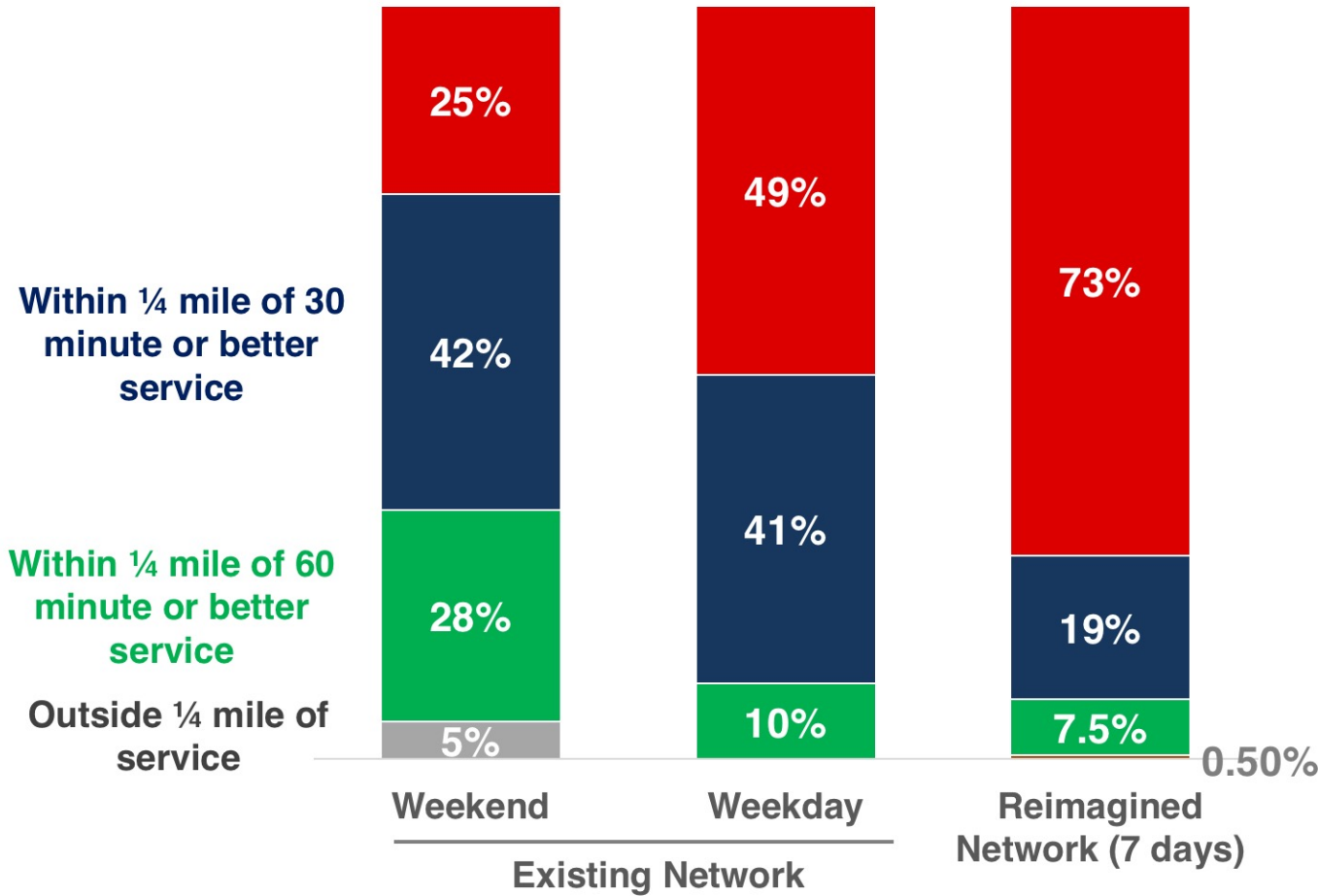


3. 7-DAY SYSTEM



3. 7-DAY SYSTEM

93% of current boardings can access the system at the same stop they do today

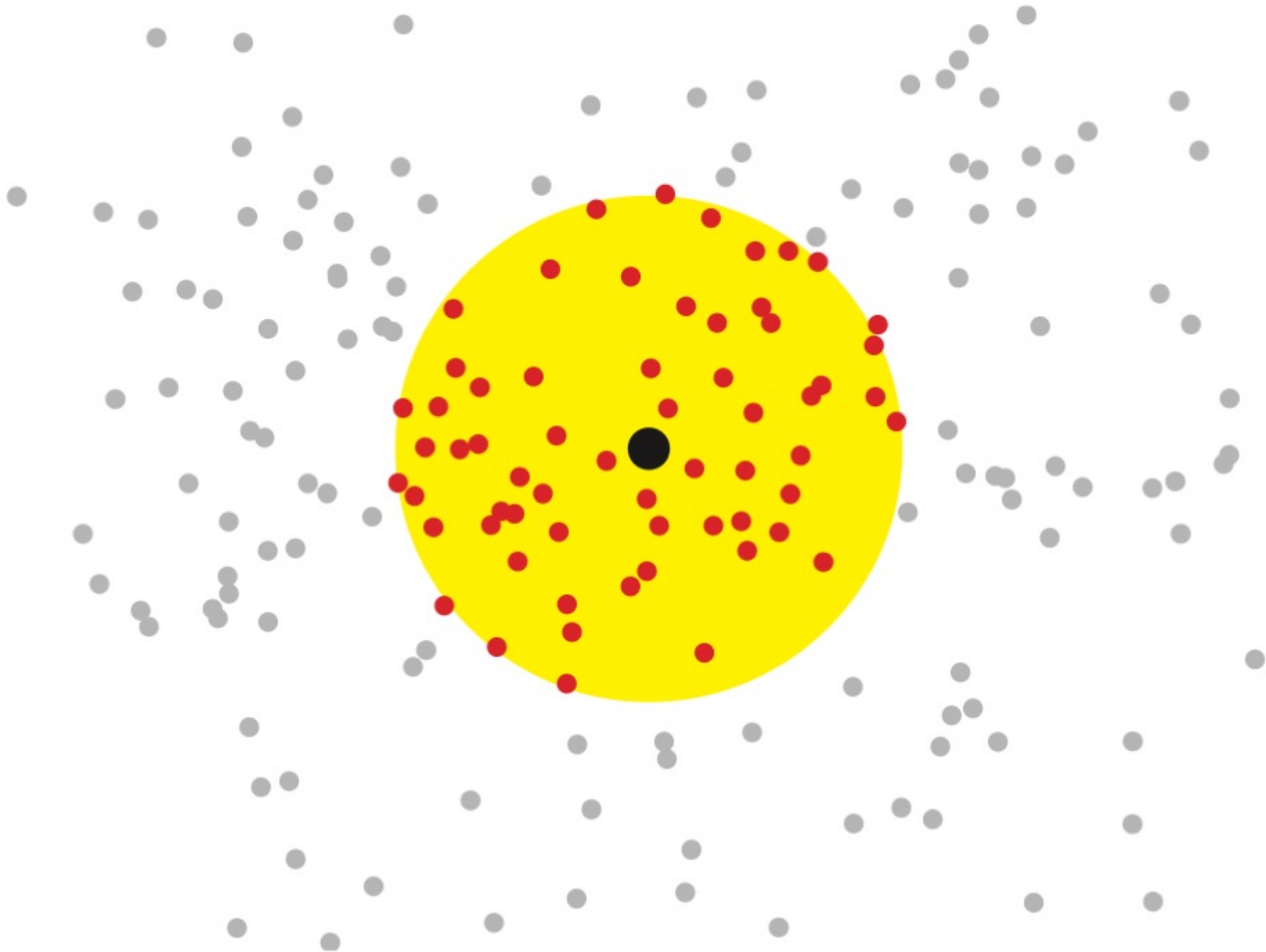


Most of this 0.5% are just over 1/4 mile and nearly all less than 1/2 mile; the farthest is 1.2 miles.

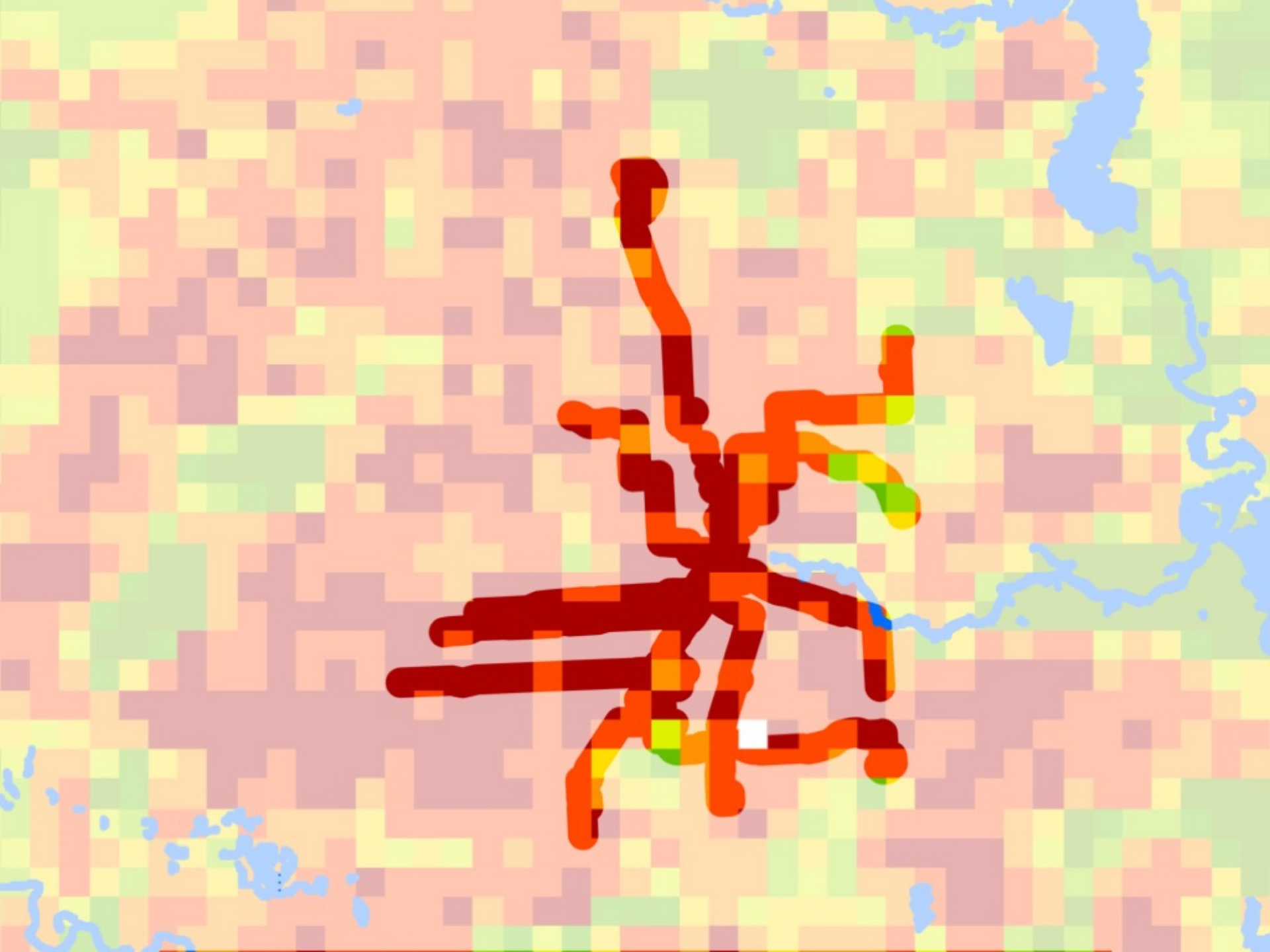
ACCESS

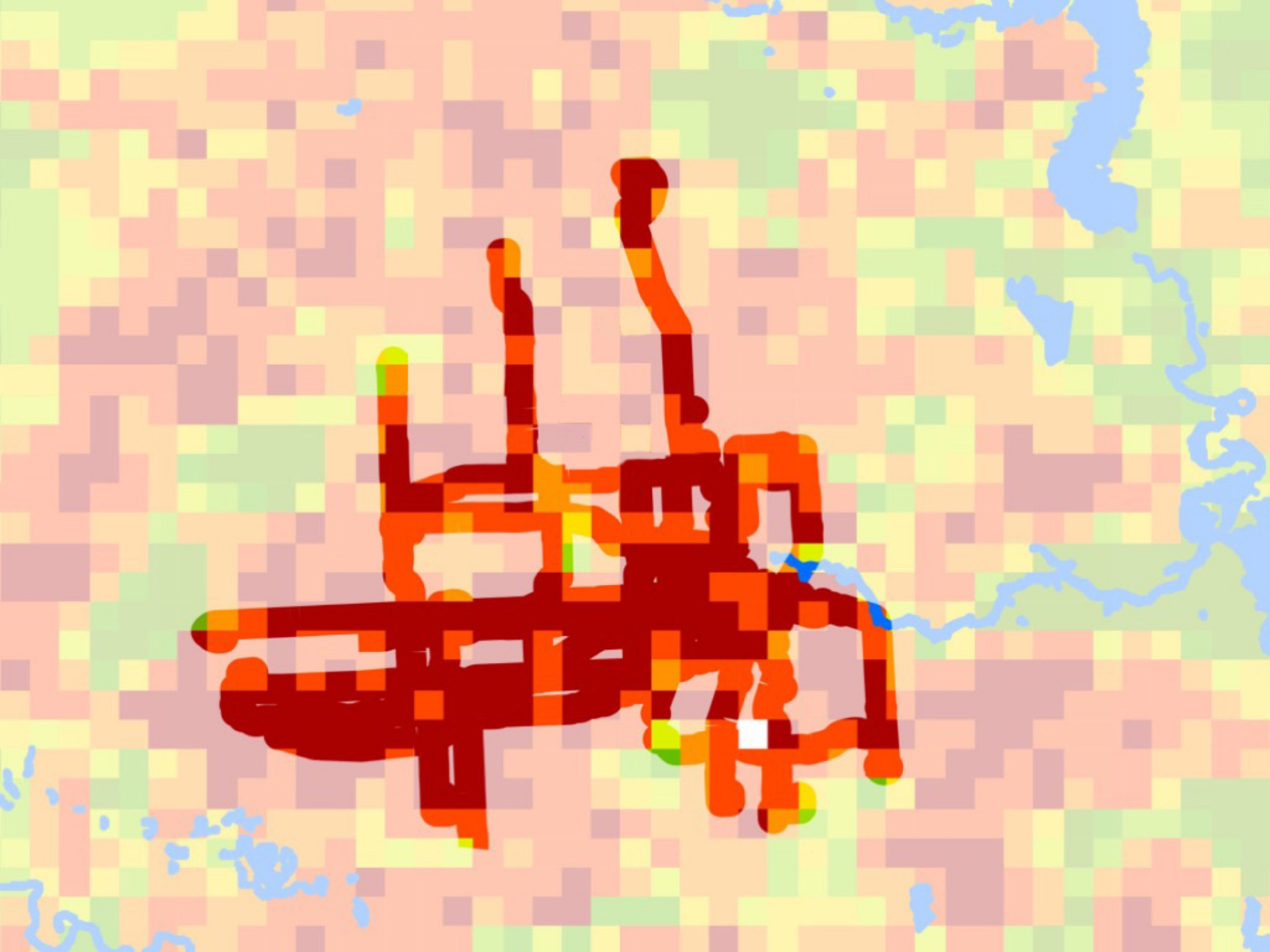
IS

QUALITY OF LIFE



**CAN THE
BUS
IMPROVE
ACCESS?**







Denver



Dallas



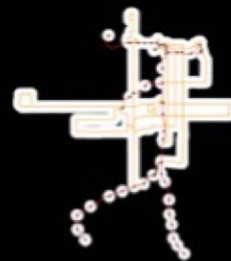
Atlanta



Portland



Minneapolis



Salt Lake City



Houston Reimagined System



Denver



Dallas



Atlanta



Portland



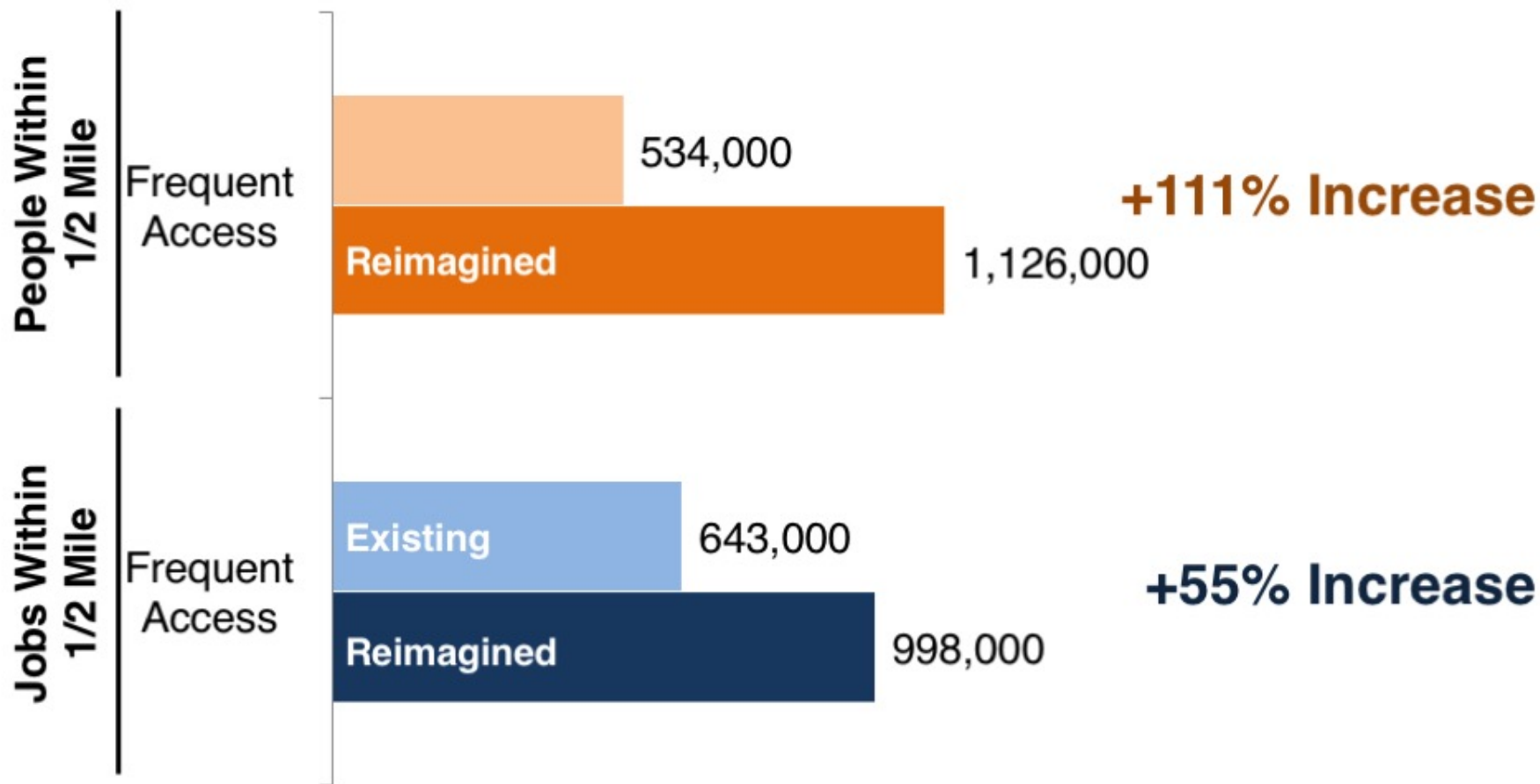
Minneapolis



Houston Reimagined System

Salt Lake City

The Reimagined Network Plan **connects a million people to a million jobs on the frequent network**



Source: 2010 US Census Data; American Community Survey

ACCESS

IS

A BETTER LIFE



STEINWAY
PIANO GALLERY

UAP CIG
E-CIGARETTES AND ACCESSORIES

www.UAPCIG.com

Steinway

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WHAT

**DOES IT TAKE TO
CHANGE?**



**STAFF
CONSULTANTS
BOARD
ELECTEDS
PUBLIC**



AutoZone
Auto Parts • Access
STARLIT MOTI
SOU
MA
DE
OVE

WE CARE PLAZA
LUXURY OFFICE BUITES
UNDER
CON
MAKING

SOCCER WORLD

OPEN

VA
95
520

Supplies
Williams
LITTLE
SOME IZ

State Shop

VA
Shop



Christof Spieler, P.E., LEED AP
BOARD OF DIRECTORS, HOUSTON METRO
DIRECTOR OF PLANNING, MORRIS

@CHRISTOFSPIELER

CHRISTOF.SPIELER@MORRISARCHITECTS.COM