

# roadstaken.org

## roadsTaken

A History of Highway Displacement  
in Houston

Presented by the Baker Institute Center for Energy Studies



Website not optimized for mobile devices. Please use laptop!



# Uncovering Lost Houston



## roadsTaken

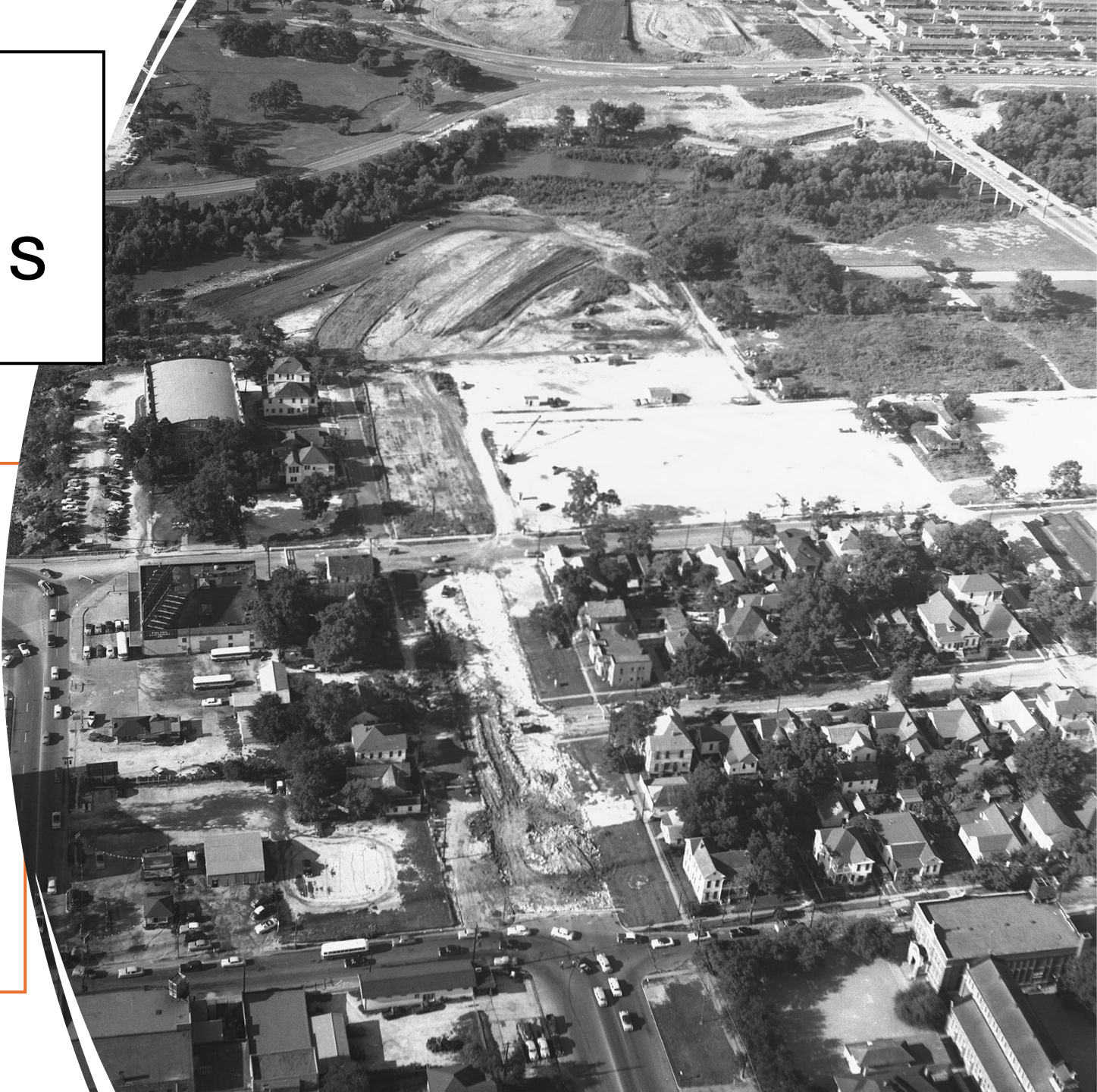
### A History of Highway Displacement in Houston

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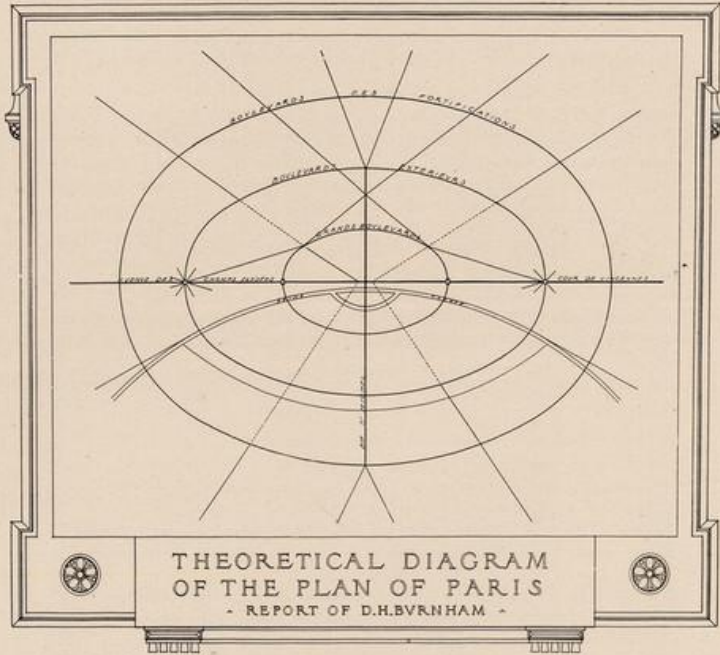
# roadsTaken: Research Questions

1. What was removed by urban freeway construction?
2. Who was displaced?





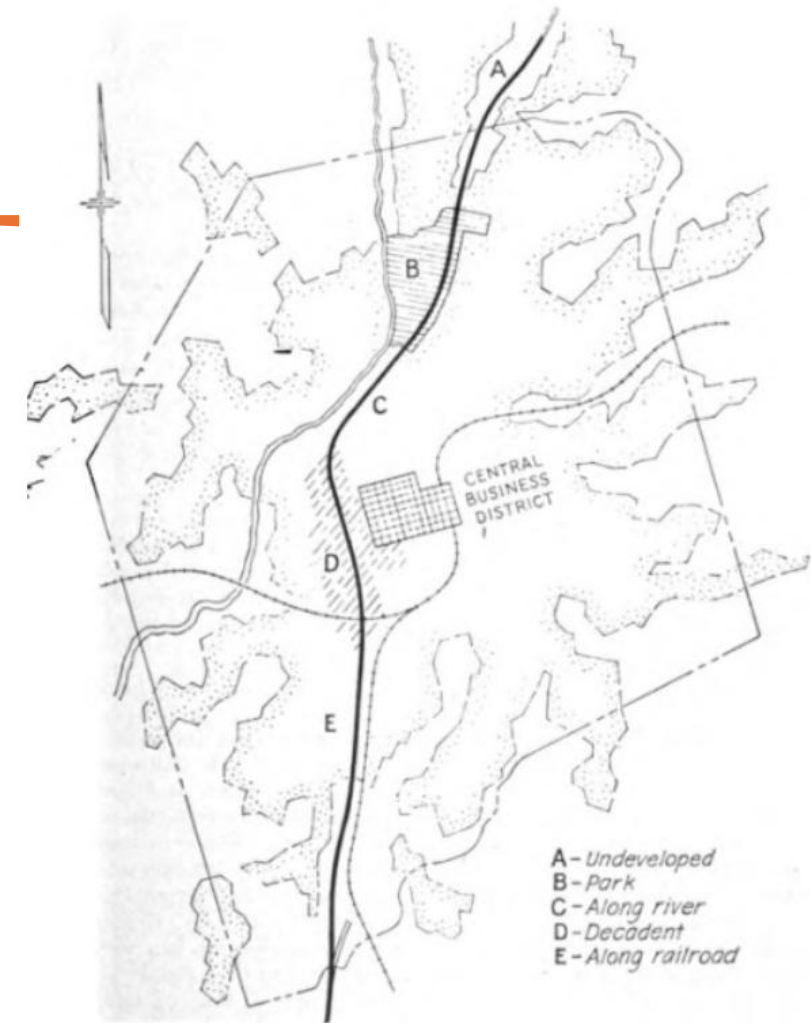
# National Context



SEE L'ARCHITECTURE  
NO. 16, 1909



PLATE 50.—A decadent area fringing a city business section.



LOCATION OPPORTUNITIES FOR ARTERIAL HIGHWAYS  
AS RELATED TO LAND USE AND PHYSICAL CONTROLS



# Houston Context

- Houston planners applied these ideas to urban freeways with free hand.

“Houston actually had more influence on the location of its freeways than almost any other city in dealing with the Highway Department.”

– Ralph Ellifrit, Planning Engineer







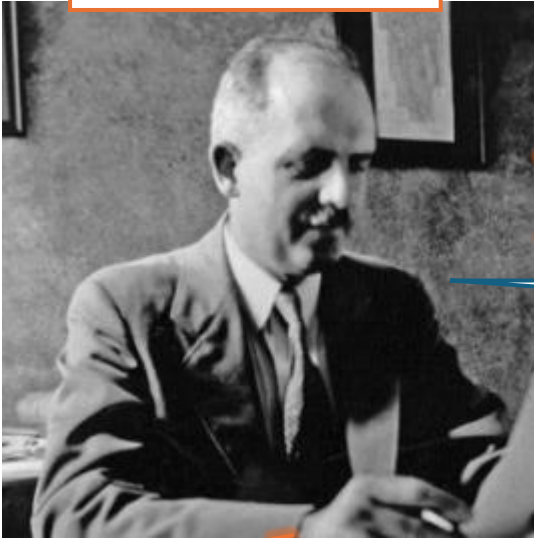
Who planned the location freeways?

- **Ralph Ellifrit** who worked for...
- **Hare & Hare** who, under contract for...
- **Will C. Hogg** who created the city's first...



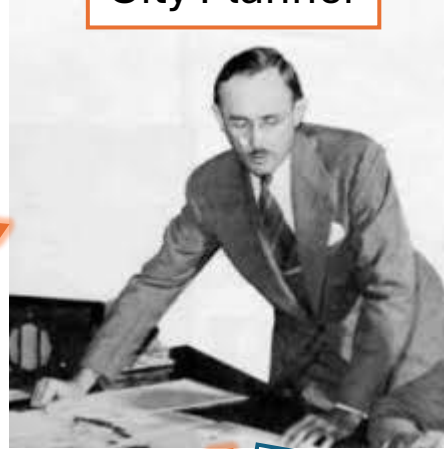
## S. Herbert Hare

Hare & Hare, Kansas City  
Planning Consultants



We planned Garden Oaks, Herman Park,  
and the University of Houston together  
when Ellifrit was our employee!

## Ralph Ellifrit City Planner



"Will Hogg, who used his foresight...  
And he was, I believe, **is the greatest**  
**citizen that Houston has ever had.**  
I mean, the most far-reaching in planning  
and thought."

"I believe **your scheme of voluntary segregation of  
the races** is the only feasible way of handling that  
problem, and I hope it can be worked out. I believe  
that values resulting from **some of the street  
openings and other improvements proposed in  
connection with the city plan** will tend to drive the  
colored population out of some of the localities now  
occupied by them."

Hare please map out the "**bounds** for  
these colored districts...beyond which the  
**colored population will not** undertake to  
**encroach.**"

## William James Van London

Chief Engineer, Gulf Freeway



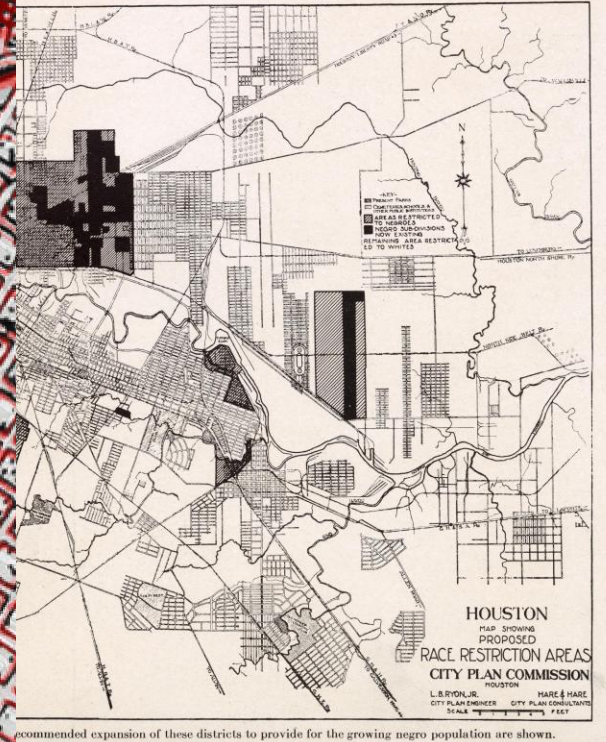
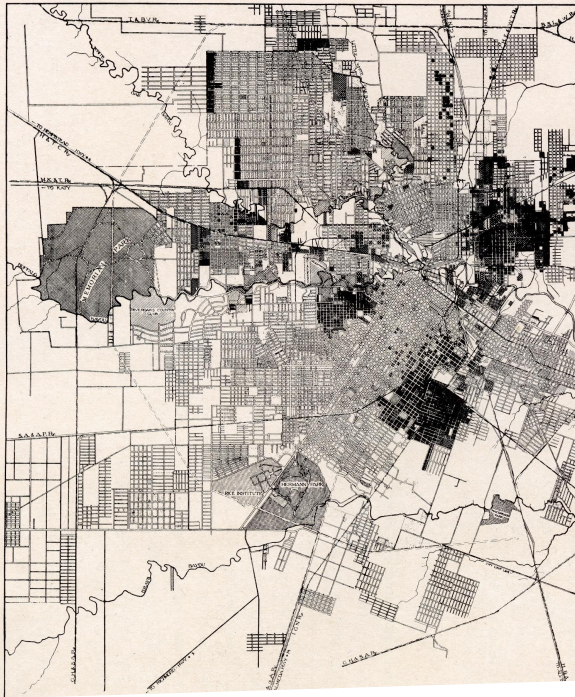
## Will C. Hogg

Chair of 1<sup>st</sup>  
Planning Commission





# Houston Context – Power of Georeferencing



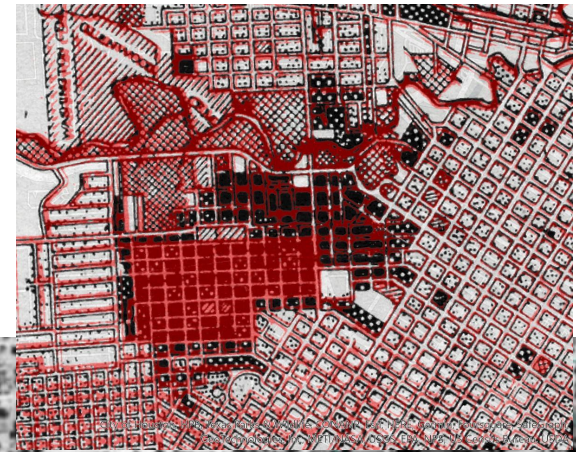
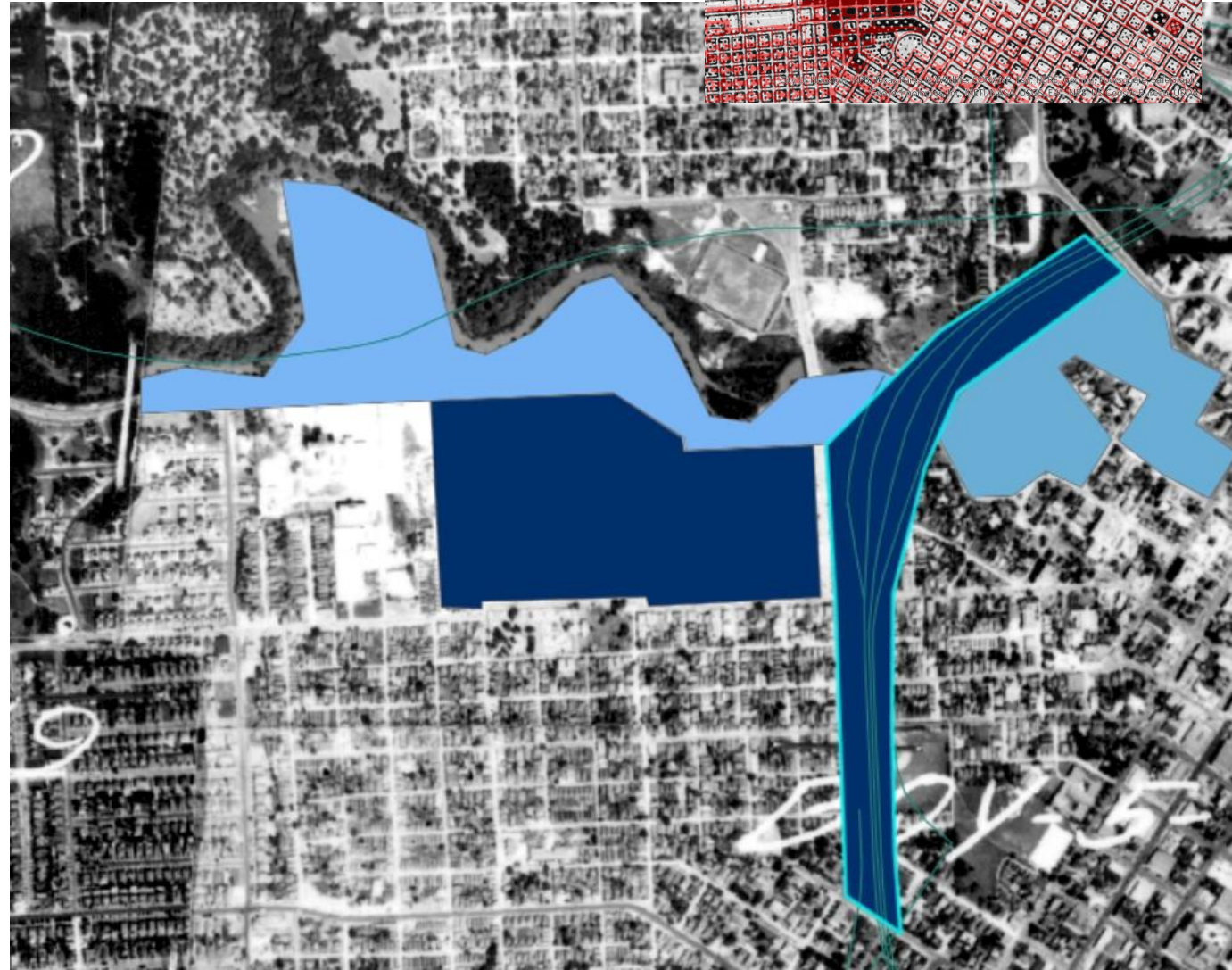
City of Houston, HPB, Texas Parks & Wildlife, CONANP, Esri, HERE, Garmin, Foursquare, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA



# Highways: “A valuable tool”

*“Frequently the central business district of a city is surrounded by a belt of land suffering from urban blight. Often such land served as good residential neighborhoods at one time, **but later deteriorated into slum areas.** It is important to remember that urban highway can be a valuable tool in rehabilitating such slum areas.*

J.C. Dingwall, Texas Highway Engineer, 1968

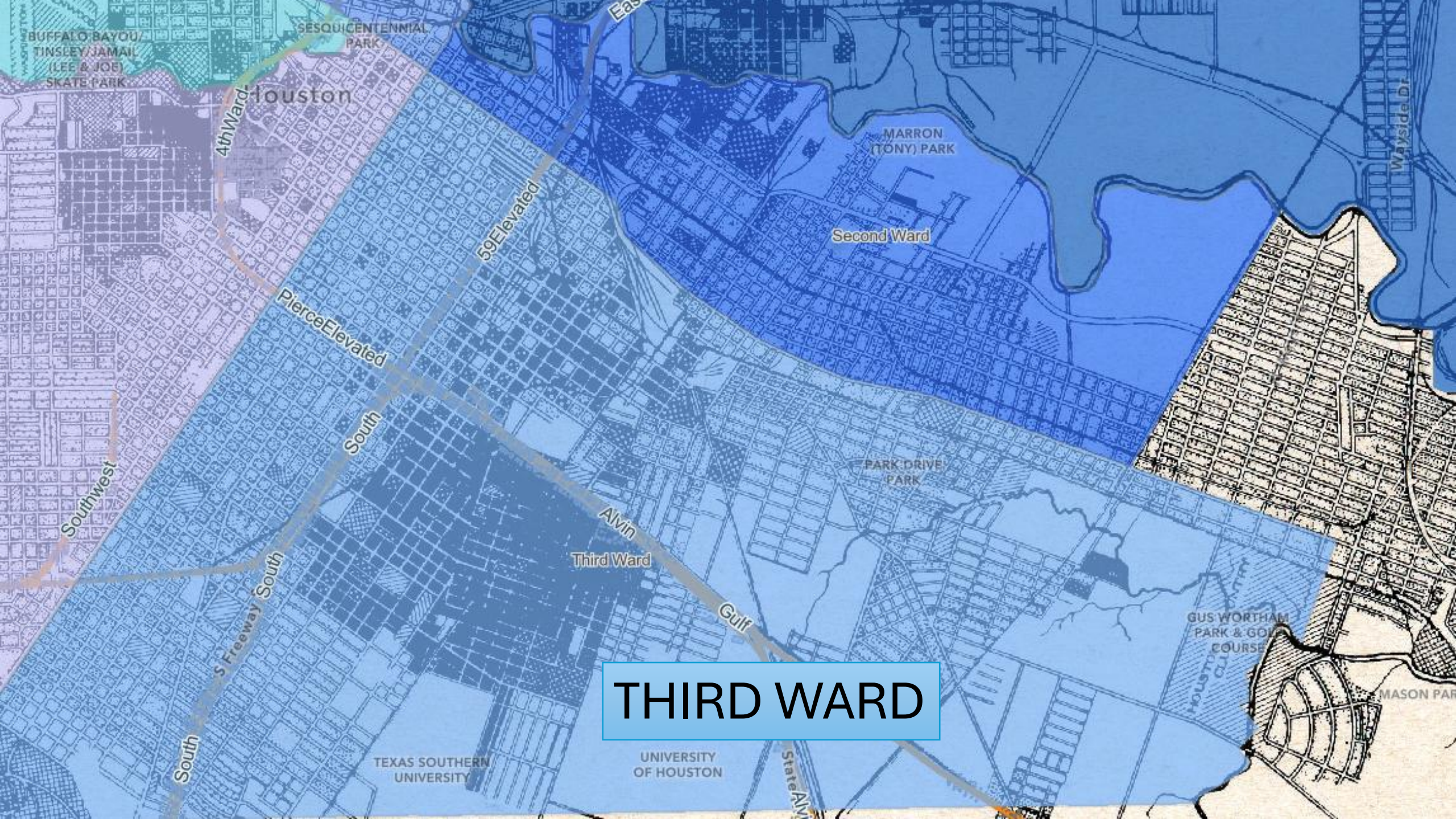




**HOUSTON**  
RACE  
DISTRIBUTION  
CITY PLANNING COMMISSION  
L.B. RYON, JR., City Plan Engineer  
MADE & SHAD

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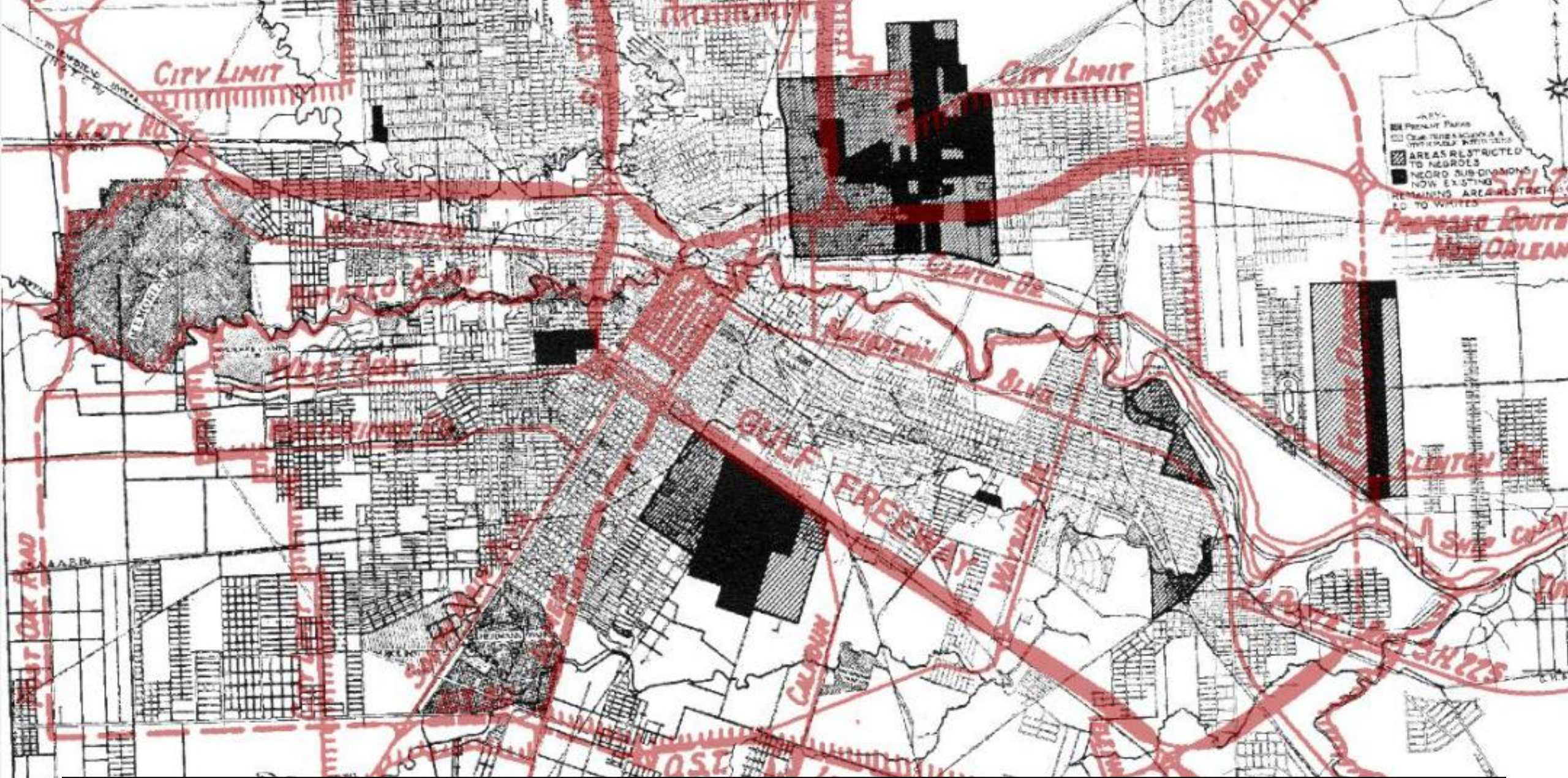


THIRD WARD



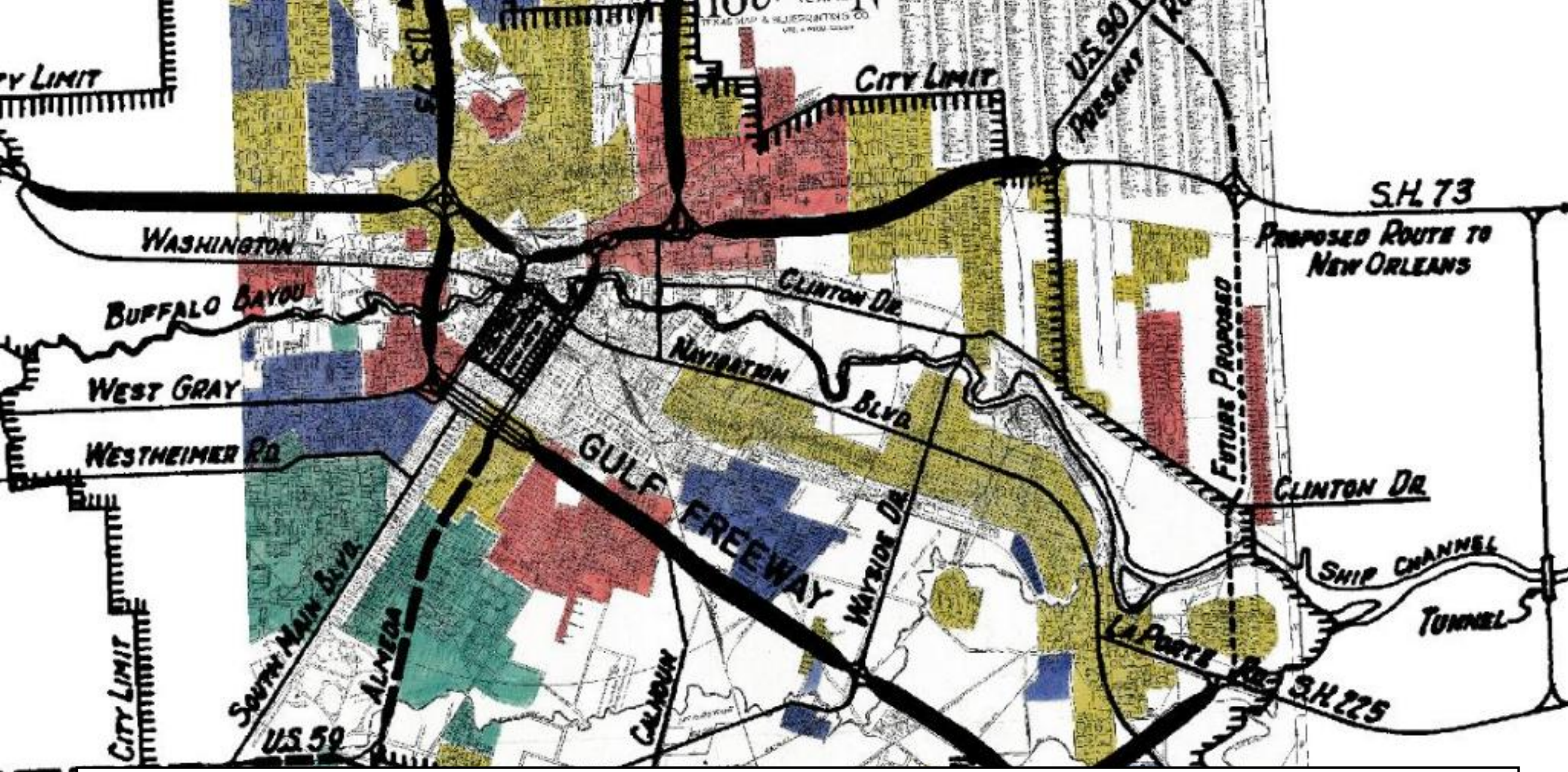






1947 Proposed Freeway map (red) overlaid on the Racial Restriction Area map (1929) of Houston.

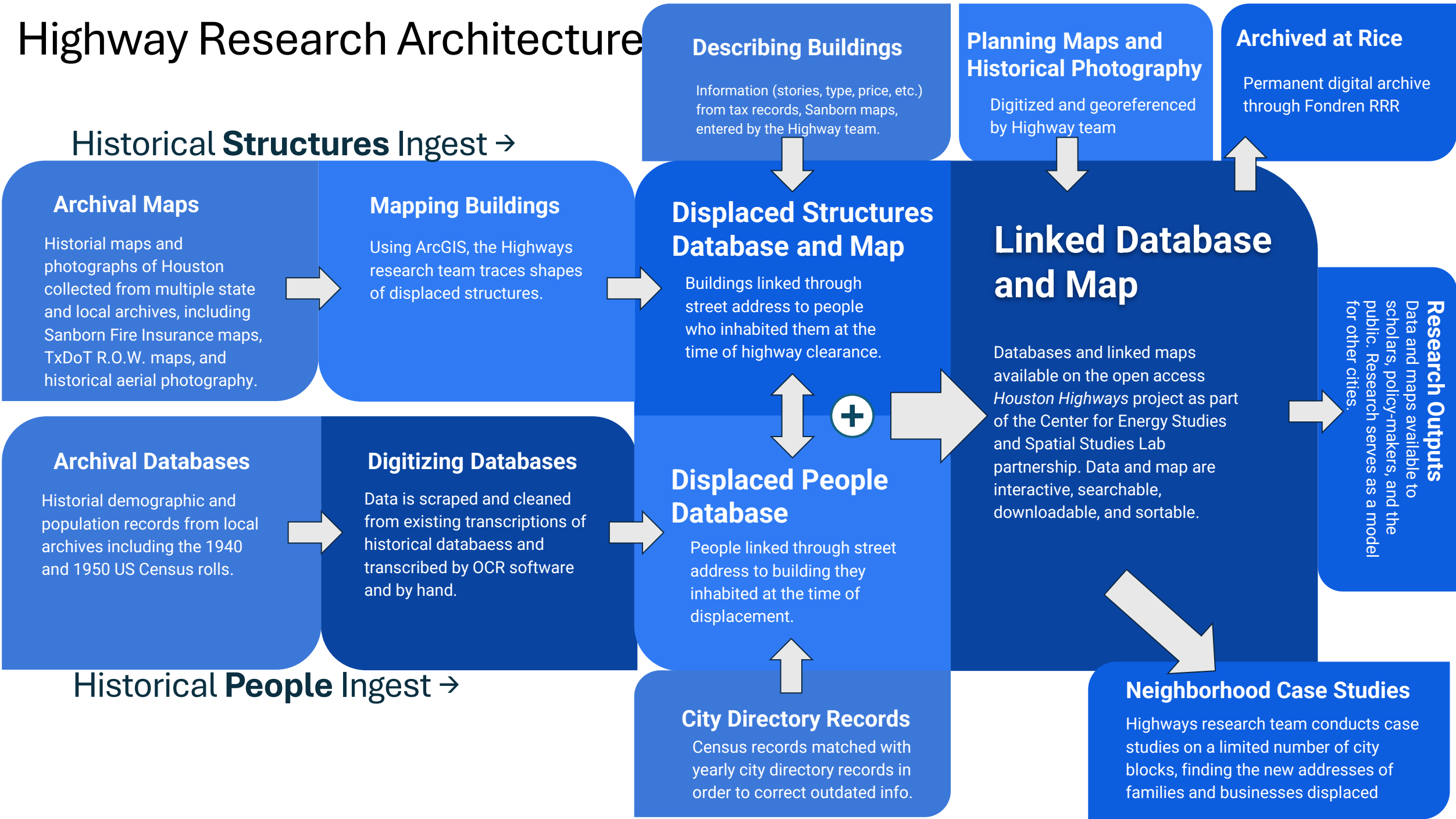




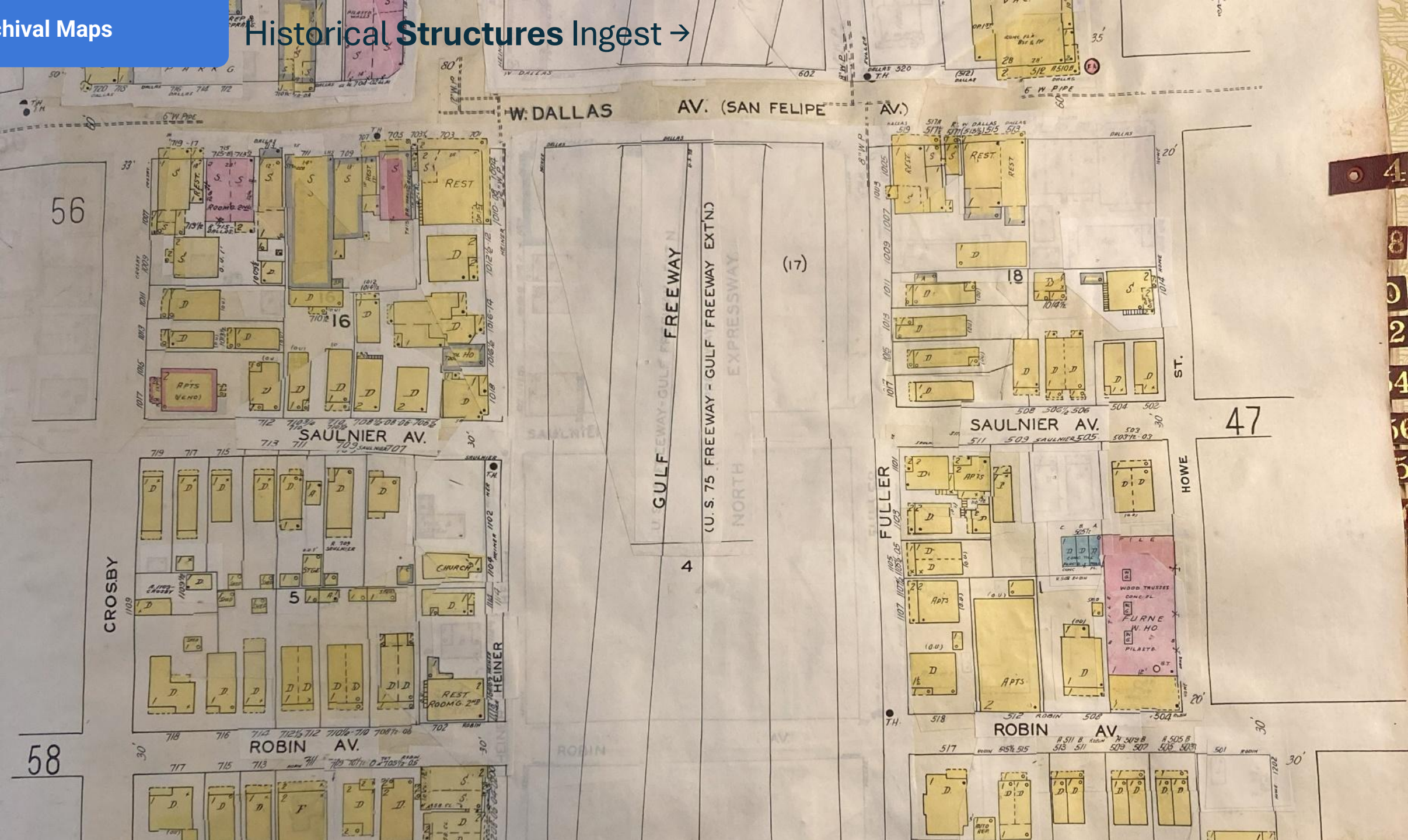
1947 Proposed Freeway map (red) overlaid on Home Owners' Loan Corporation (HOLC) "Redlining" map of Houston (1930s).



# Highway Research Architecture

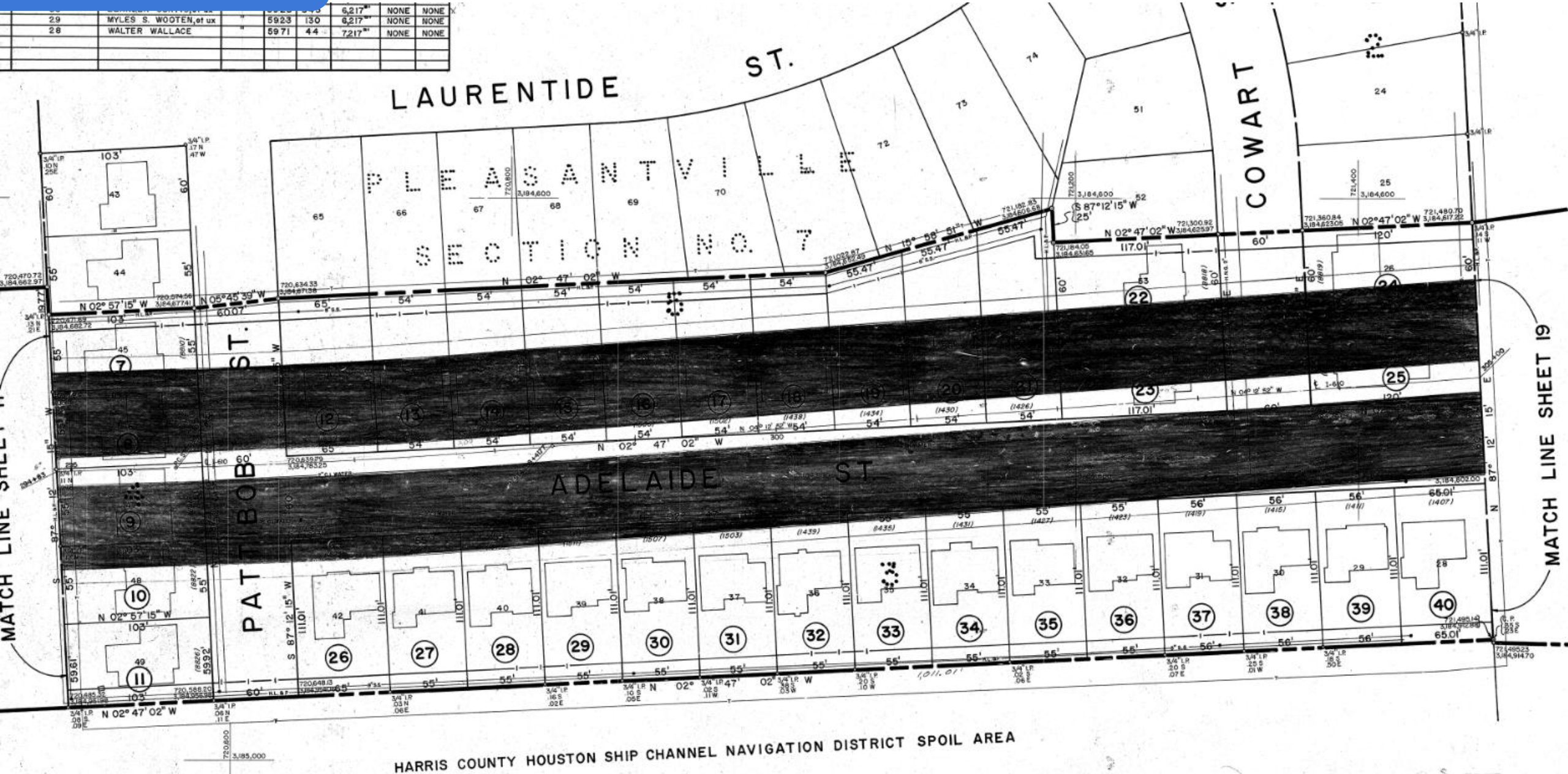






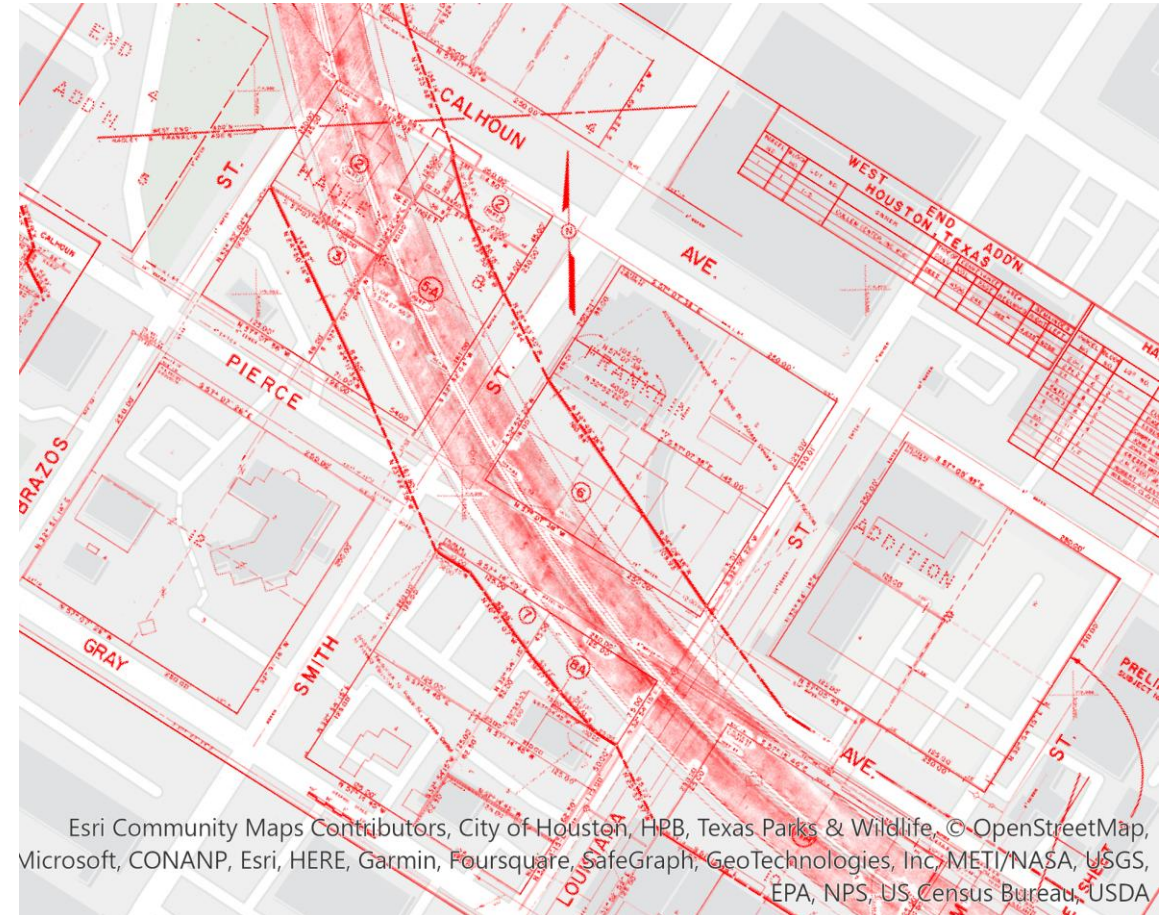
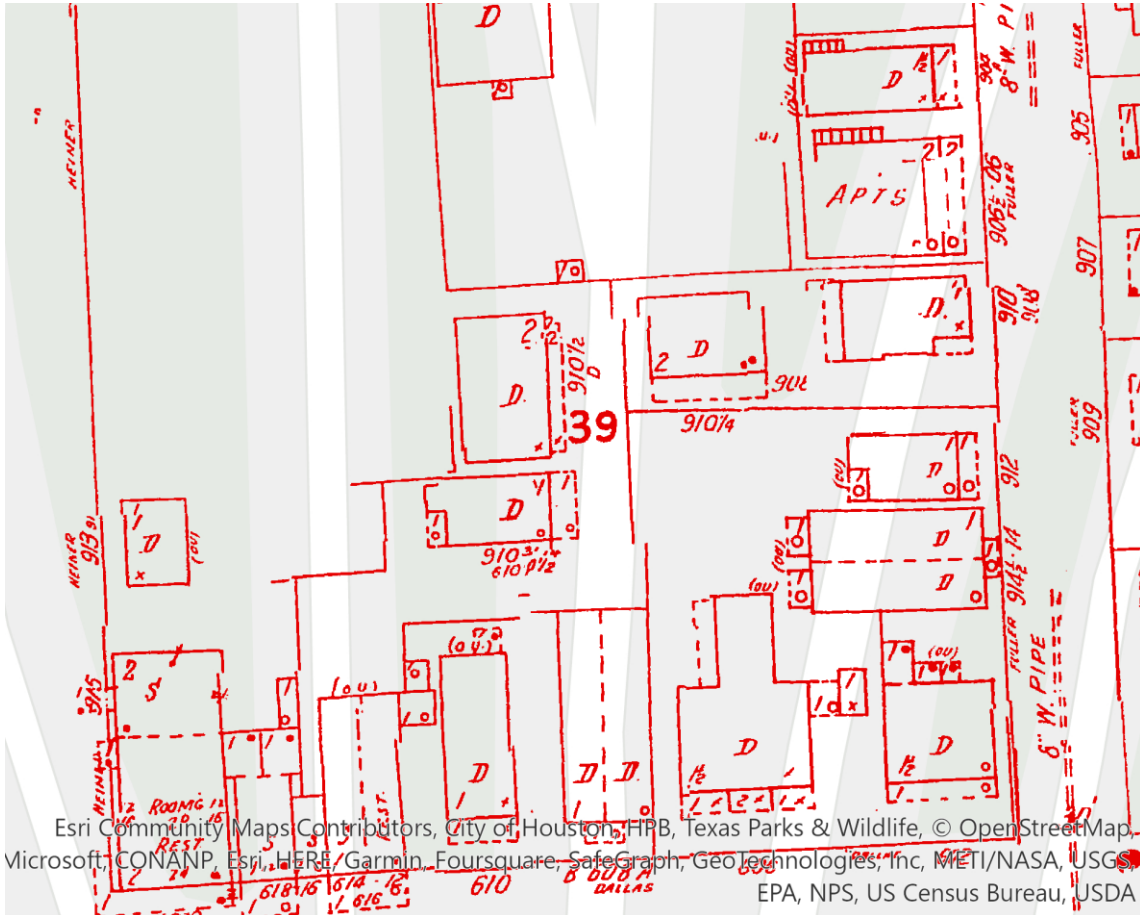


29	MYLES S. WOOTEN, et ux	5923	130	6,217	NONE	NONE
28	WALTER WALLACE	5971	44	7,217	NONE	NONE



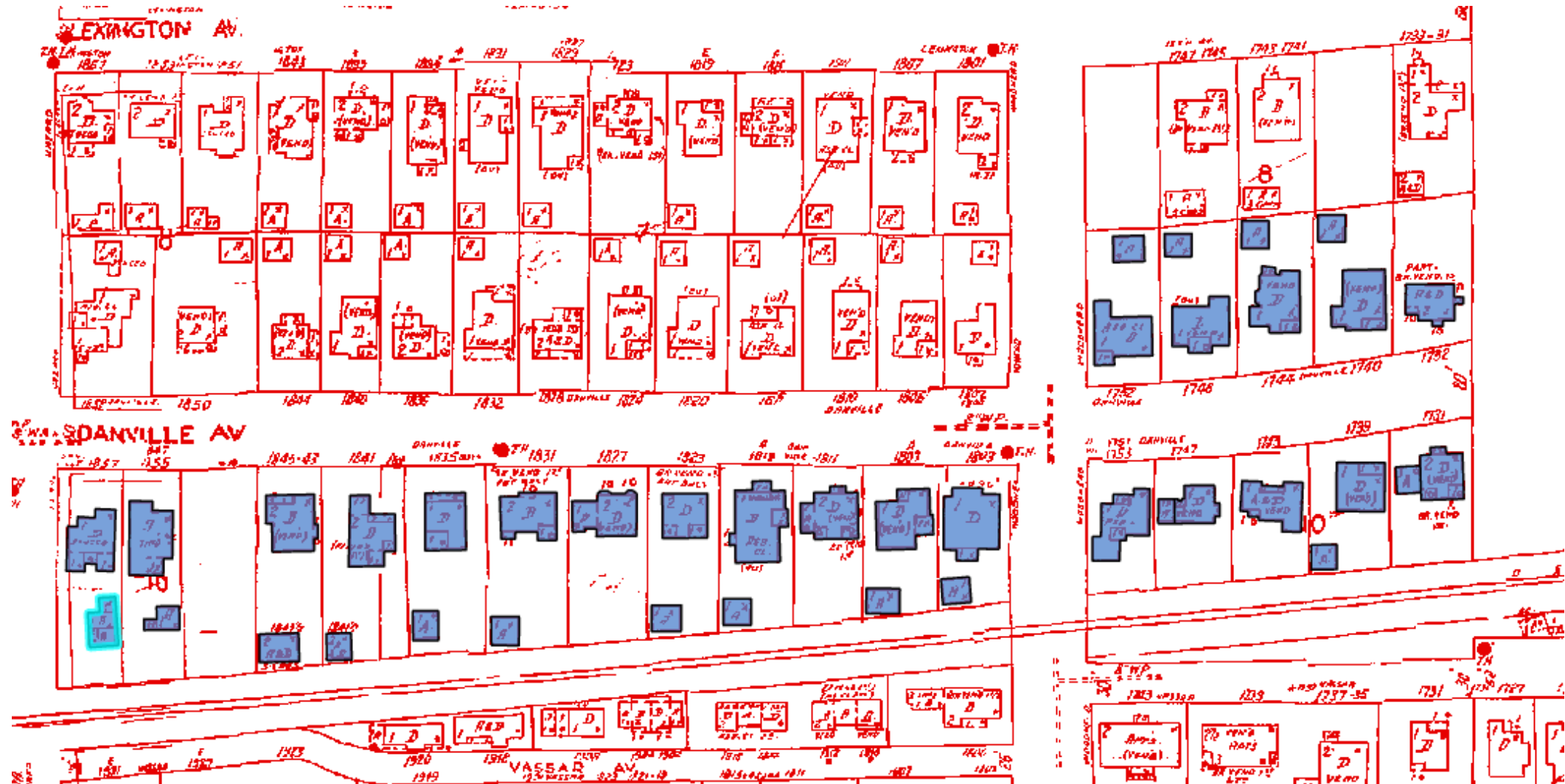


# Georeferencing Historical Maps





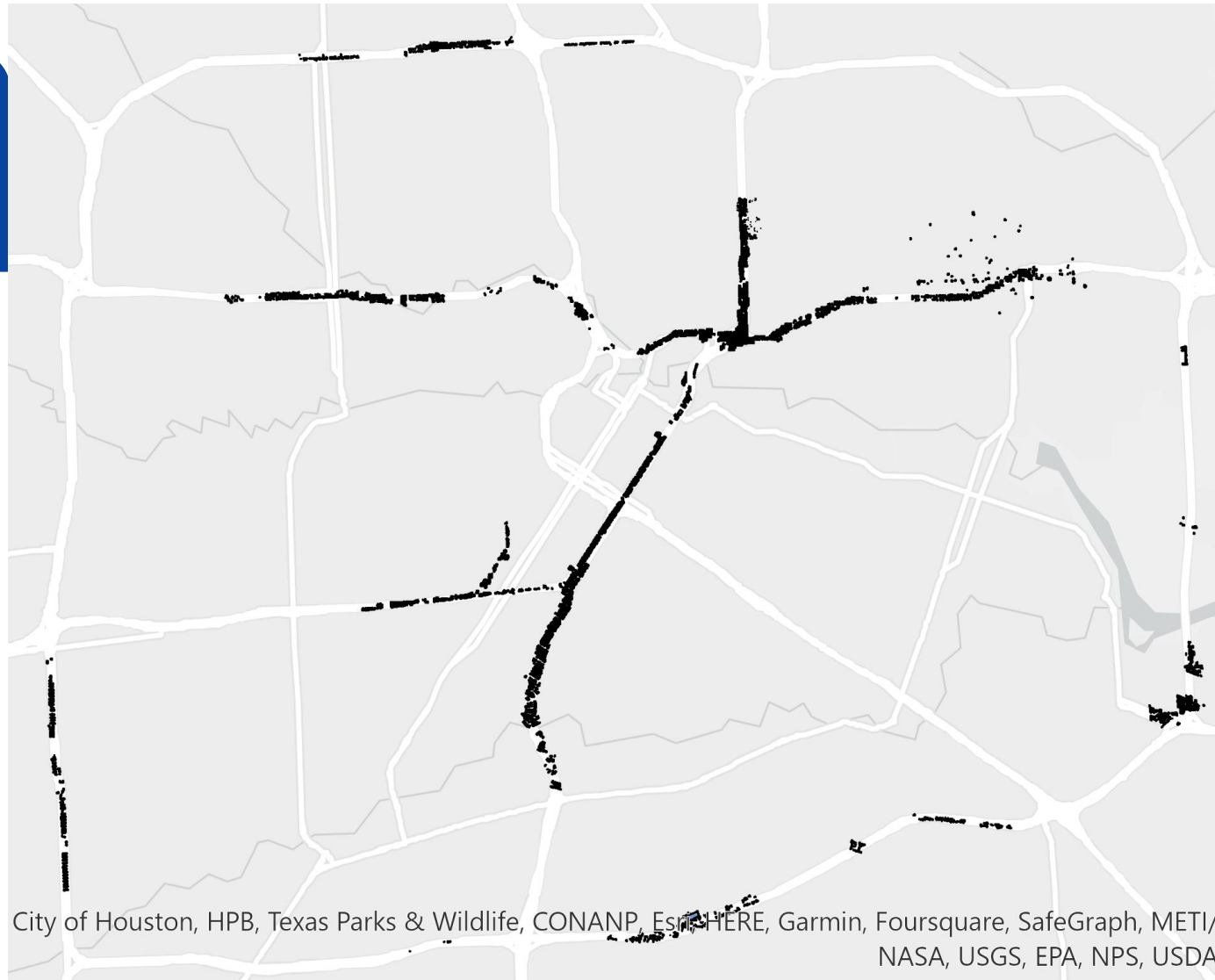
# Tracing Buildings with ArcGIS





## Linked Database and Map

## Mapping the Lost City



City of Houston, HPB, Texas Parks & Wildlife, CONANP, Esri, HERE, Garmin, Foursquare, SafeGraph, METI/  
NASA, USGS, EPA, NPS, USDA

Map of Houston, showing partially complete mapping of  
displaced structures (. ~8000)




# Data Scraping Script

297966	https://w	263-98	023	6	Bristol		168	No	No		Cherry	Brenda L	Daugh
297967	https://w	263-98	023	7	Vincent	1010	169	No	No	G	Vick	Robert S	Head
297968	https://w	263-98	023	8	Vincent	1010	169	No	No		Vick	Dorothy G	Wife
297969	https://w	263-98	023	9	Vincent	1010	169	No	No		Vick	Robert H	Son
297970	https://w	263-98	023	10	Vincent	1010	169	No	No		Vick	Elizabeth	Daugh
297971	https://w	263-98	023	11	Vincent		170				Allen	Bert	Head
297972	https://w	263-98	023	12	Vincent		170				Allen	Shirley R	Wife
297973	https://w	263-98	023	13	Vincent		170				Allen	Betty Caro	Daugh
297974	https://w	263-98	023	14	Vincent		170				Allen	Shirley An	Daugh
297975	https://w	263-98	023	15	Vincent		170				Allen	Bert D	Son

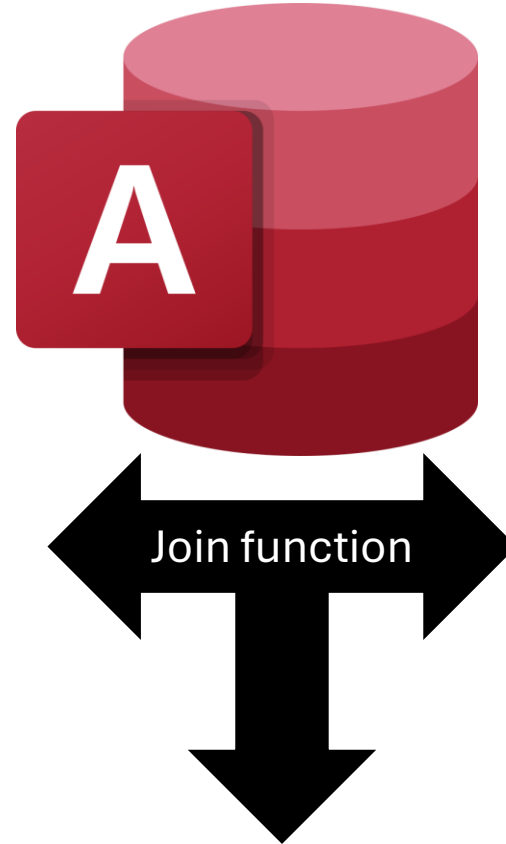


# Linking Databases




297966	https://www.263-98	023	6	Bristol	
297967	https://www.263-98	023	7	Vincent	1010
297968	https://www.263-98	023	8	Vincent	1010
297969	https://www.263-98	023	9	Vincent	1010
297970	https://www.263-98	023	10	Vincent	1010
297971	https://www.263-98	023	11	Vincent	
297972	https://www.263-98	023	12	Vincent	
297973	https://www.263-98	023	13	Vincent	
297974	https://www.263-98	023	14	Vincent	
297975	https://www.263-98	023	15	Vincent	

Scraped Database from  
1940 and 1950 Census  
(over 300,000 entries)



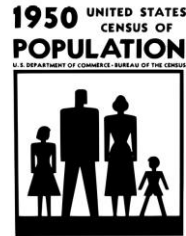
Matches between  
databases showing  
people displaced by  
highways



	A	B	C	D		H	I	J	K
1	ID Numb	House N	Apartment	Street		Stories	Sanborn	Other De	Notes
11	10	704		Fuller	1 D	Dwelling	1	45	
12	11	704		Fuller	2 n/a	Outhouse	1	45	
13	12	706		Fuller	1 D	Dwelling	1	45	
14	13	706		Fuller	2 n/a	Outhouse	1	45	
15	14	708		Fuller	1 D	Dwelling	1	45	
16	15	708		Fuller	2 n/a	Outhouse	1	45	
17	16	710		Fuller	1 D	Dwelling	1	45	
18	17	710		Fuller	2 n/a	Outhouse	1	45	
19	18	712		Fuller	1 D	Dwelling	1	45	Two lodge
20	19	712		Fuller	2 n/a	Outhouse	1	45	
21	20	714		Fuller	1 D	Dwelling	1	45	
22	21	602		Hardcastl	1 D	Dwelling	1	45	Two lodge
23	22	604		Hardcastl	1 D	Dwelling	1	45	
24	23	604		Hardcastl	2 n/a	Outhouse	1	45	Appears t
25	24	606		Hardcastl	1 D	Dwelling	1	45	

Created database  
describing buildings in  
highway R.O.W.  
(over 11,000 collected)





## 1950 US CENSUS

1950 US CENSUS OF POPULATION AND HOUSING

FOR HEAD OF HOUSEHOLD

NAME: *Brown, Alex*

RELATIONSHIP: *Head*

AGE: *47*

SEX: *M*

What kind of work was he doing? *WR*

FOR ALL PERSONS

NAME: *Shelby, Roy*

RELATIONSHIP: *Son*

AGE: *19*

SEX: *M*

What kind of work was he doing? *WR*

NAME: *Madison, Lawrence*

RELATIONSHIP: *Head*

AGE: *57*

SEX: *M*

What kind of work was he doing? *WR*

NAME: *Abbey, Arthur*

RELATIONSHIP: *Son*

AGE: *16*

SEX: *M*

What kind of work was he doing? *WR*

NAME: *Abbey, Arthur*

RELATIONSHIP: *Son*

AGE: *15*

SEX: *M*

What kind of work was he doing? *WR*

NAME: *Abbey, Arthur*

RELATIONSHIP: *Son*

AGE: *15*

SEX: *M*

What kind of work was he doing? *WR*

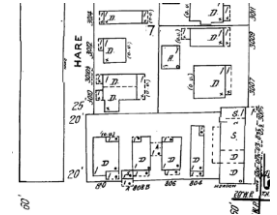
NAME: *Abbey, Arthur*

RELATIONSHIP: *Son*

AGE: *15*

SEX: *M*

What kind of work was he doing? *WR*



## DATABASE CREATED USING HISTORICAL MAP

ID Number	House Number	Apartment	Street	Building	Sanborn	Building	Stories	Sanborn	Other Data	Notes
3367	3009		Nance	1 D	Dwelling		1	327		
3368	3007		Nance	1 D	Dwelling		1	327		
3369	3007		Nance	2 A	Garage		1	327		
3370	3005		Nance	1 S	Store		1	327		
3371	3003 1/2		Nance	1 S	Store		1	327		
3372	3001 1/2		Nance	1 D	Dwelling		1	327		
3373	3001		Nance	1 D	Dwelling		1	327		
3374	804		Meadow	1 D	Dwelling		1	327		
3375	806		Meadow	1 D	Dwelling		1	327		
3376	806		Meadow	2 A	Garage		1	327		
3377	808B		Meadow	1 D	Dwelling		1	327		
3378	808A		Meadow	1 S	Store		1	327		
3379	10		Meadow	1 D	Dwelling		1	327		
3380	10		Hare	1 D	Dwelling		1	327		
3381	30 1/2		Hare	1 D	Dwelling		1	327		
3382	3012		Hare	1 D	Dwelling		1	327		
3383	3014		Hare	1 D	Dwelling		1	327		
3384	3016		Hare	1 D	Dwelling		1	327		

Match! "806 Meadow"



City Directory Records

Census records matched with yearly city directory records in order to correct outdated info.

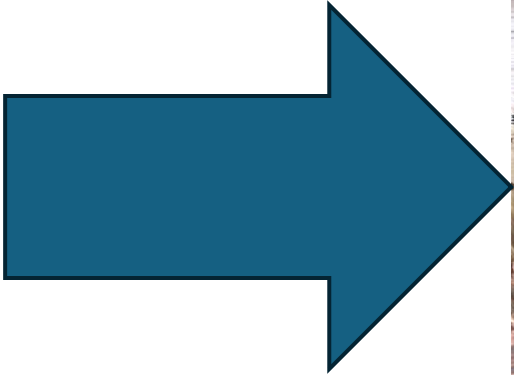
Historical **People** Ingest →

Updating Databases



297966	https://wv	263-98	023	6	Bristol	
297967	https://wv	263-98	023	7	Vincent	1010
297968	https://wv	263-98	023	8	Vincent	1010
297969	https://wv	263-98	023	9	Vincent	1010
297970	https://wv	263-98	023	10	Vincent	1010
297971	https://wv	263-98	023	11	Vincent	
297972	https://wv	263-98	023	12	Vincent	
297973	https://wv	263-98	023	13	Vincent	
297974	https://wv	263-98	023	14	Vincent	
297975	https://wv	263-98	023	15	Vincent	

Scraped Database from 1940 and 1950 Census



Houston yearly city directory updated to year of ROW clearance.

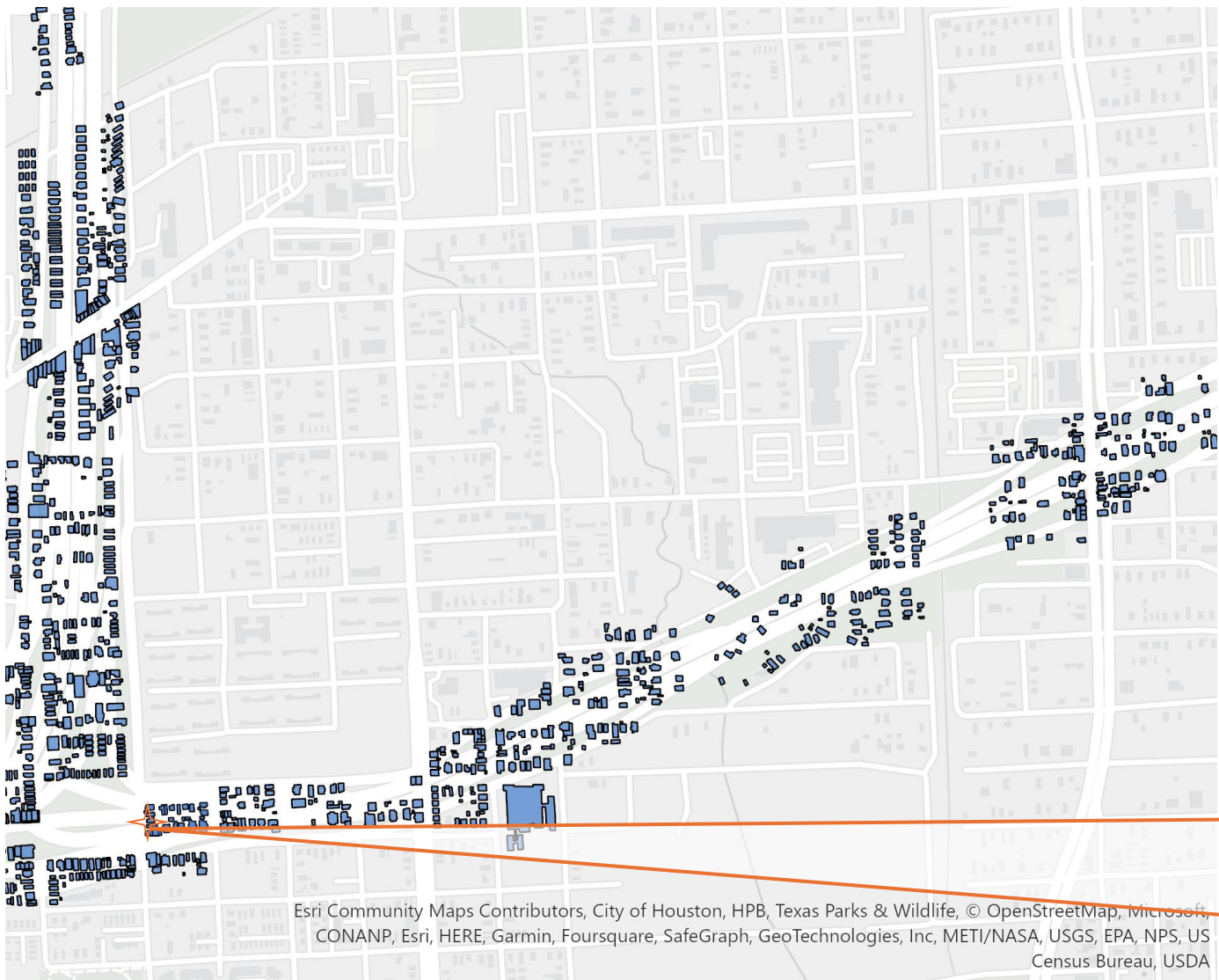






# Highway Research Architecture in Practice

Linked Database  
and Map



Information on each structure and who inhabited the building is available when structure is selected. Full data available for download.

Building: **Dwelling, 1 Story**  
Address: **806 Meadow**  
1950 Residents:

Laurence	Madison	Negro (Black)	Male
Retha	Max	Negro (Black)	Female
Abbie L	Max	Negro (Black)	Female
Aurthur	Max	Negro (Black)	Male
Earnestine	Max	Negro (Black)	Female

Map of Houston’s Fifth Ward Neighborhood showing structures displaced by the East and Eastex Freeways.



# Highway Research Architecture in Practice

Planning Maps and  
Historical Photography


Digitized and georeferenced  
by Highway team

JSTOR Forum


 Viewcones Generator

The same photograph georeferenced with an interactive “**viewcone**,” enabling users to see a map of **sight lines** of an image.

34789517

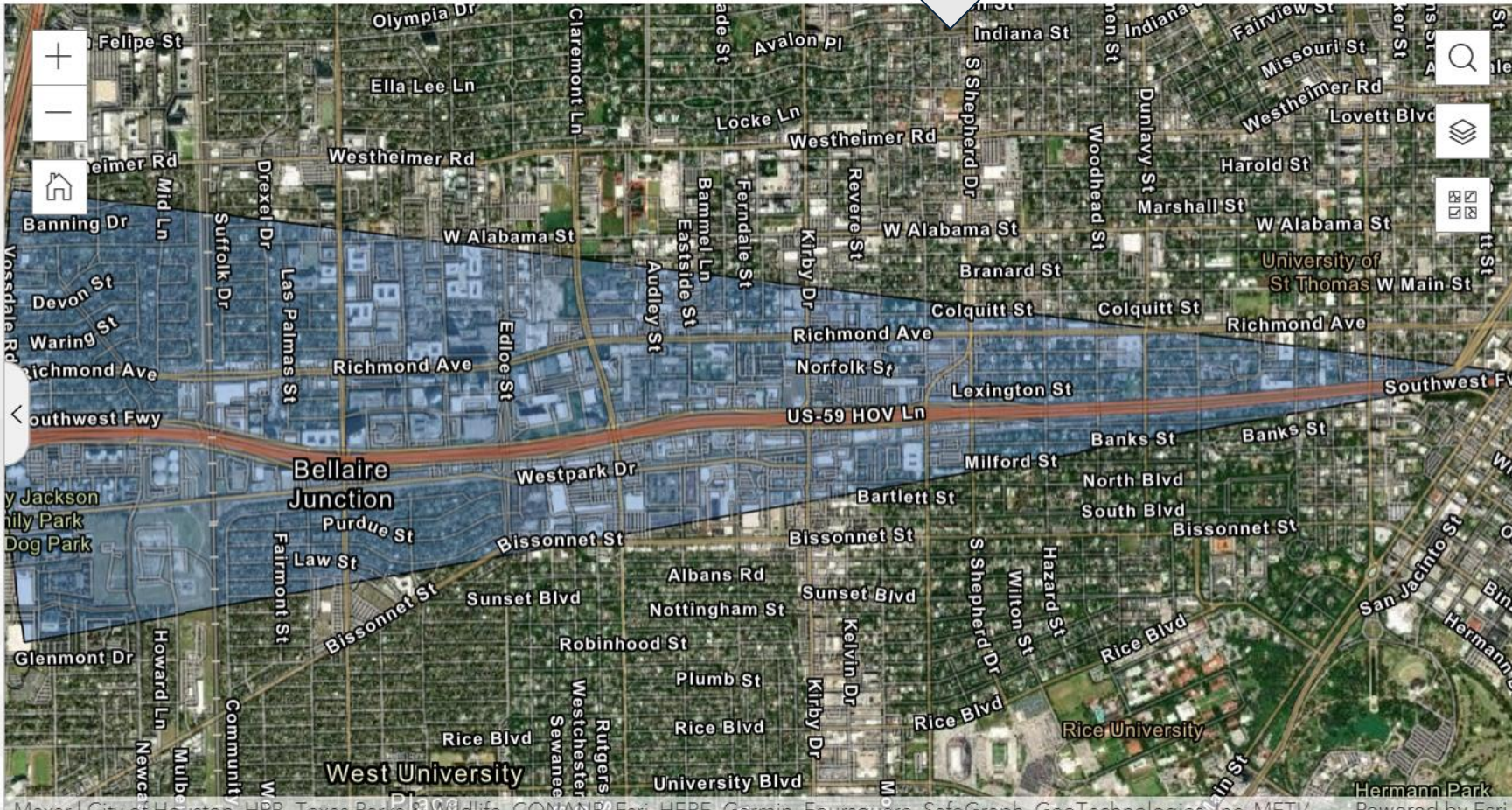


1/1



ssid:  
34789517

title:  
firstyear:





# Dowling (Emancipation) Commercial Area

1717 Bates Chester  
 1718 Randle Foster  
 1720△Holden Thelma bdg hse  
 1721△Huckaby Funeral Home  
 1721½ Sunset Masonic Hall

## Jefferson av intersects

1802△Stone Cleothilde ①  
 1804 Mayberry Louis ①  
 1805 Davis Martin  
 1806△Lee's Lightning Shoe Repair  
 Shop shoe reprs

Lee Fred T ①

Lee's Flower Nook florist

1808△Woodruff Callie D ①  
 1808½ Woodruff Harold W  
 1809 Hannon Jos  
 1810 Newton Andrew J Rev  
 1811△Fitch Floral & Nursery Co  
 Fitch Nathan H ①  
 1813 Berean Seventh Day Adventist  
 Church

## Calhoun av intersects

1901-06△Johnson Funeral Home  
 △Johnson Fred C ①  
 1902△Jones Jesse Service Sta filling  
 sta  
 1905△Owens John J  
 1907△Rush Erwin  
 1909△Mosley Bashle M ①  
 1911 Thomas Wm H  
 1912 Jones Isabell  
 1916 Williams Bill Barbecue restr  
 Williams Albert  
 1917 Green Leaf Cafe  
 1919△Jackson L R watch repr  
 1919-21 Abramson's dry gds  
 Flake Ayrie L watch mkr  
 1920 Corner Drug Store  
 1923△Shoe Market The

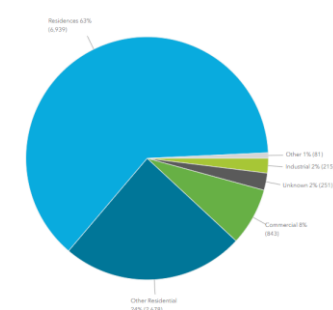
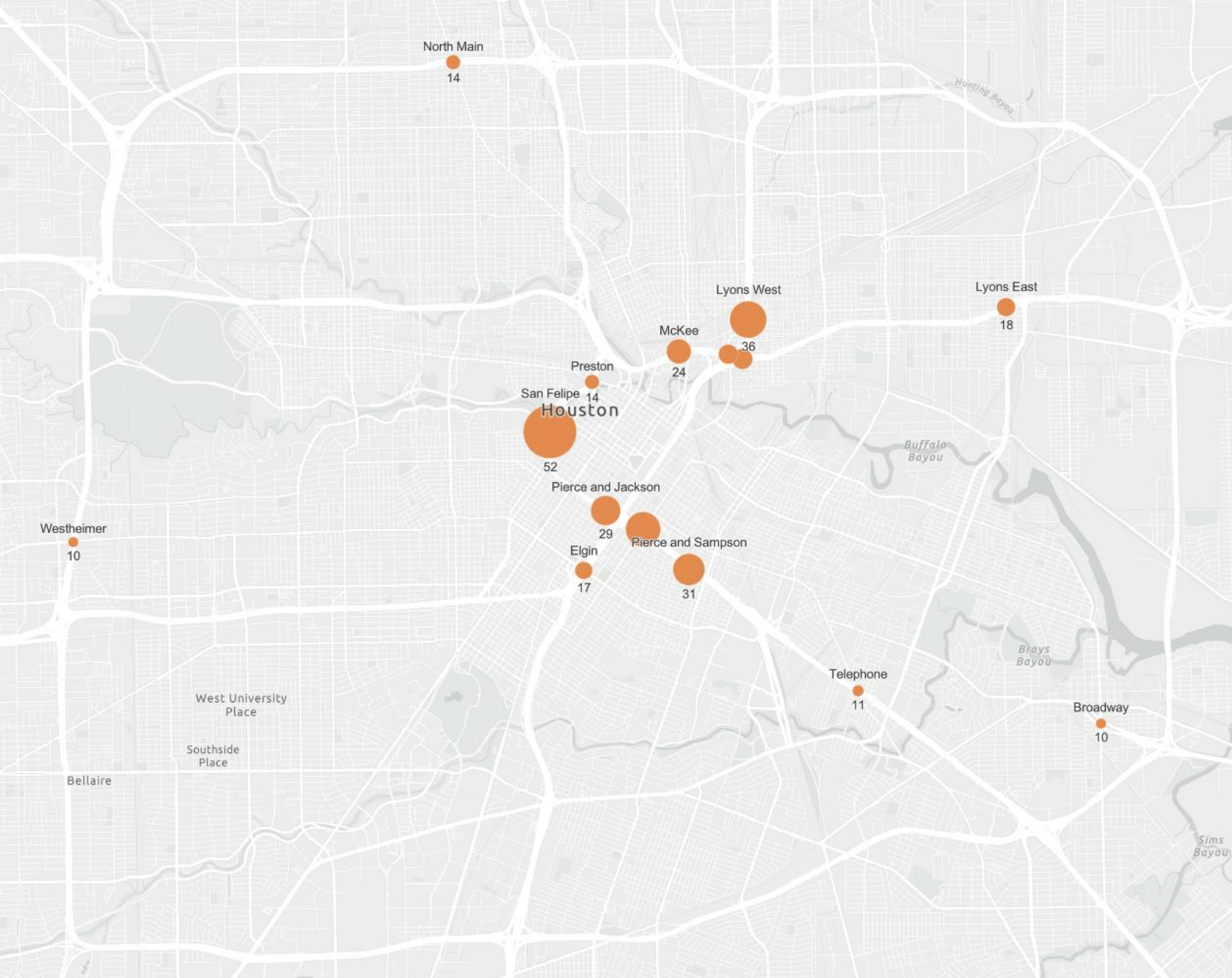


## 2319△Hall Marie Dowling intersects

2404 Vacant  
 2405△Green Front Cleaners (br)  
 2406△Buckhorn Cafe restr  
 2408 Johnson Harry furn repr  
 2409 Hicks Augustus H barbecue  
 2409½ Neeley Dexter  
 2410△Standard Ice & Fuel Co  
 2411 Hicks Augustus H  
 2412△Peoples Lumber Co  
 2413 Davis Mary  
 2416△God Is With Us Tailors  
 2417△Mable's Beauty Box beauty  
 shop

## StCharles intersects



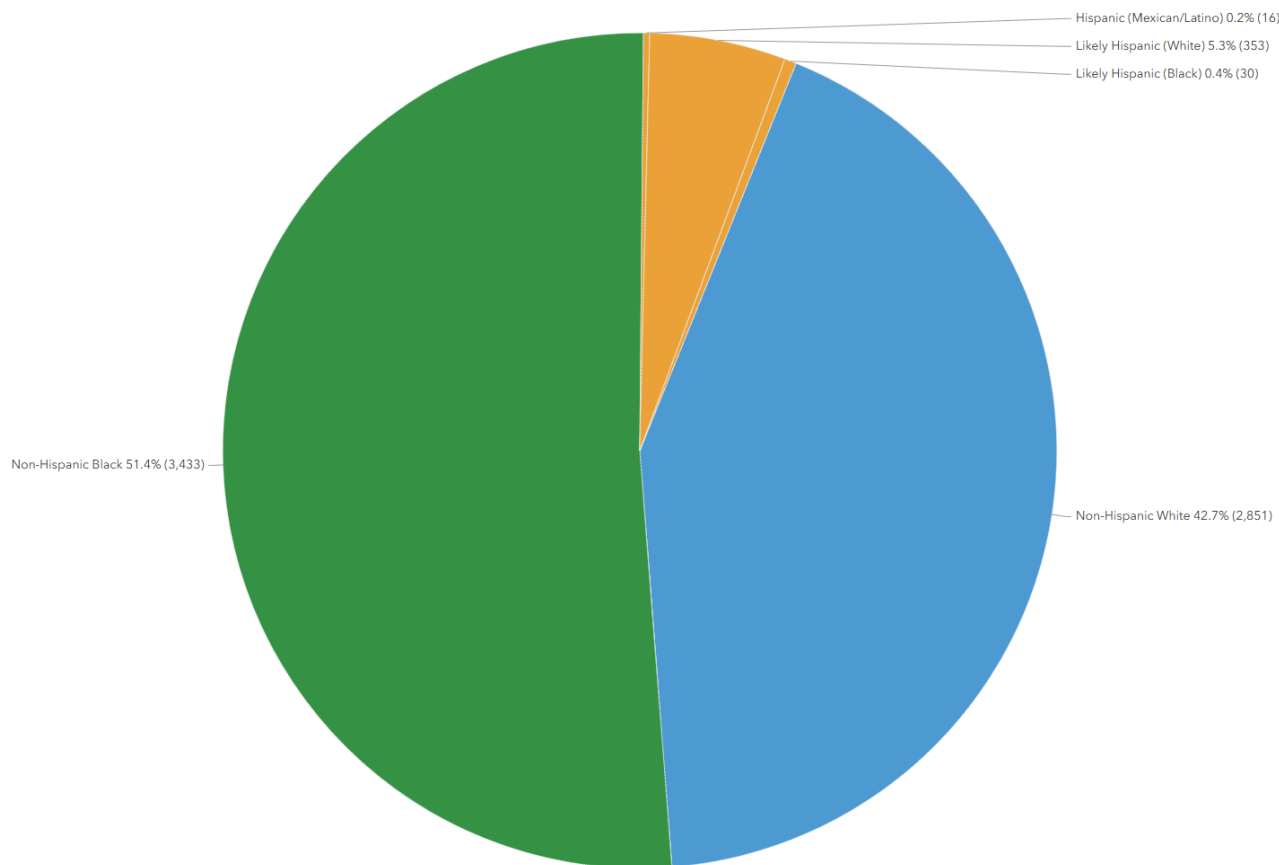


# Major Business Displacements

- 843 Total commercial buildings
- Of the 15 largest districts:
  - 7 in Black neighborhoods or poor neighborhoods
  - 4 on the borders of Black or poor neighborhoods
  - 4 (48 businesses total) in white neighborhoods
- 28% of businesses closed\*
- 29% of business operators, net worth worsened\*
- \*THD Study 1974

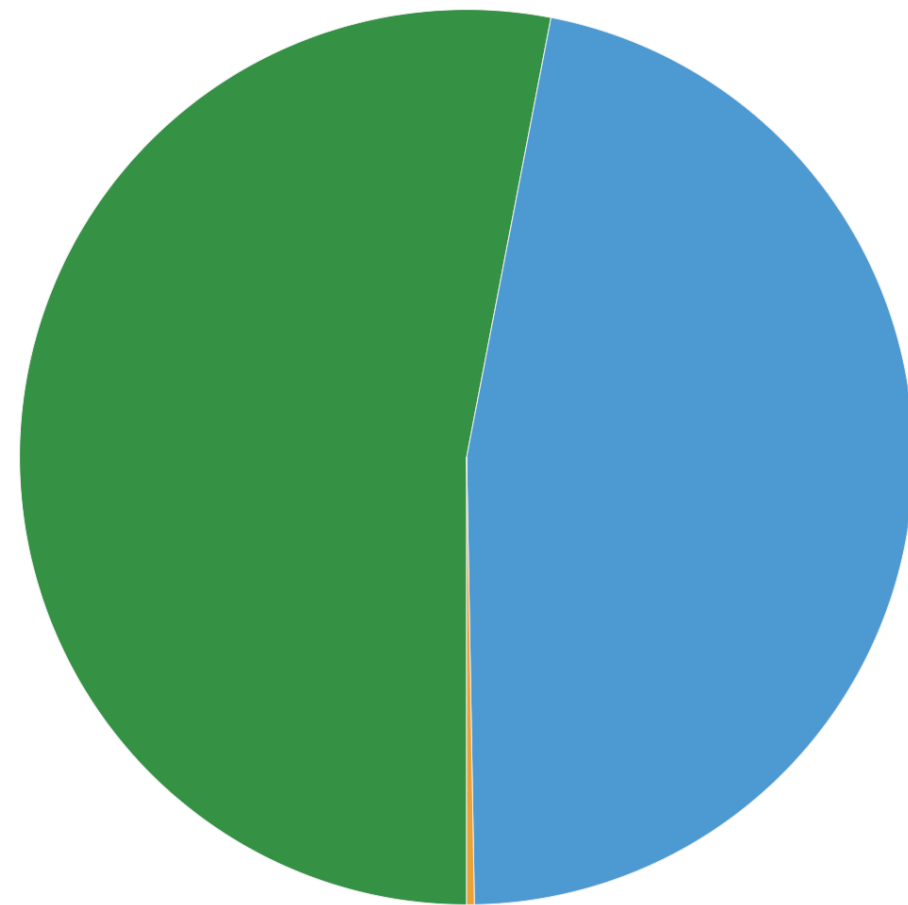


# Disproportional Displacement in Houston



Displacement by Race and Likely Hispanic Ethnicity

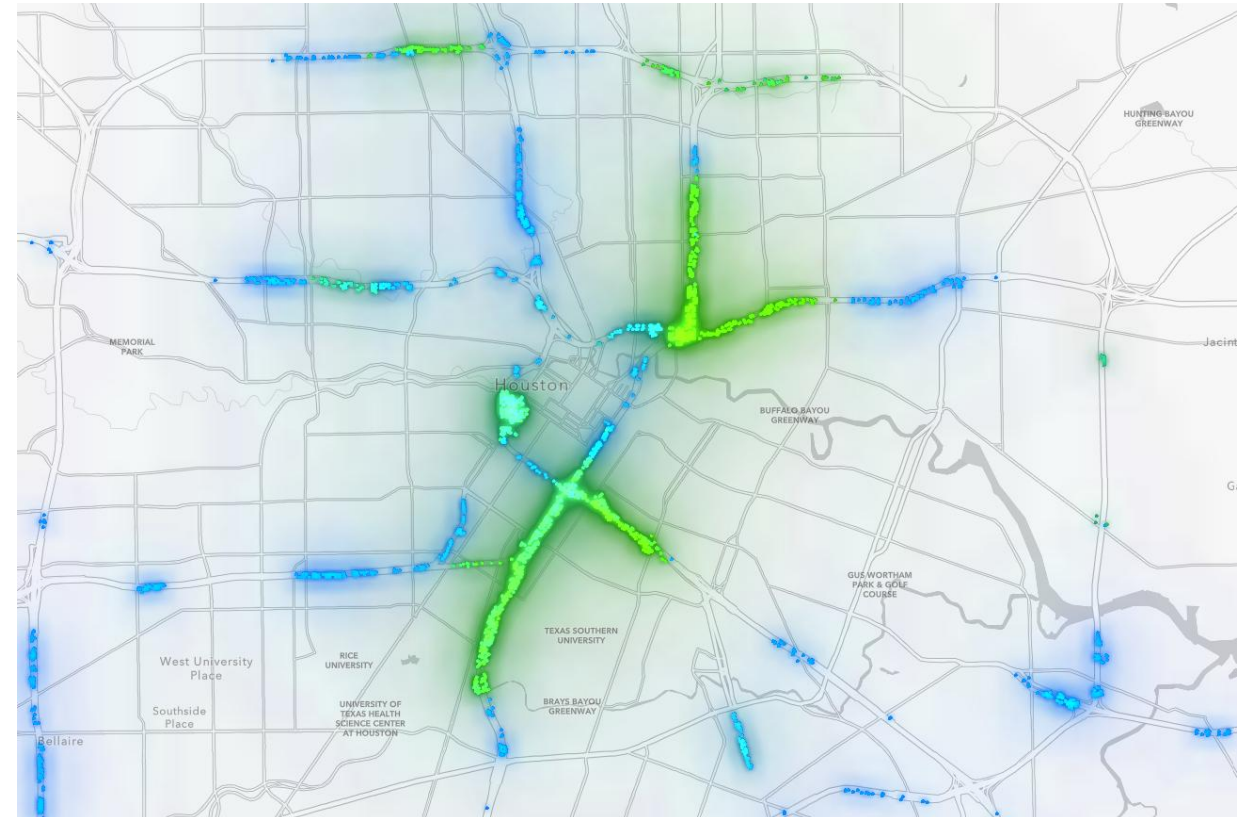
■ Non-Hispanic White ■ Non-Hispanic Black ■ Hispanic (Mexican/Latino) ■ Likely Hispanic (White) ■ Likely Hispanic (Black)



■ Black ■ White ■ Other



# Disproportional Displacement in Houston





# Battle Over Gulf Freeway Widening Flares Anew

The battle over the state highway department plans to widen the Gulf Freeway from Live Oak to Woodridge flared anew today in a hearing at city hall.

Opponents pleaded for a re-routing so that residents on the south side of the freeway in the area would not have to give up their homes.

Spokesmen for the highway department defended the plans. The project would displace about 500 persons, most

The spokesmen said present plans are the most feasible and economical and that the residents would be justly compensated.

Jerry King, city traffic and transportation director, endorsed the highway department's plans for the \$26.4 million project to widen the freeway from six to eight lanes over a 4.8 mile stretch from Live Oak to Woodridge.

Moses Leroy, a veteran black civil rights leader, re-

south. Admitting his own special interest, he said expansion on the north side would take just as many homes plus very expensive business property.

W. L. McClure, administrative engineer for the highway department here, said a final decision on the routing of the project should be complete in about six months.

## Massive Power

# East End toll road plan meets protest

By ELLEN MIDDLEBROOK  
Post Reporter

Opposition was developing Wednesday to Mayor Louie Welch's proposal that the East End Freeway might be

meeting of that group's executive board for Monday afternoon to discuss the matter, while Mrs. Anthony Schnur, 115 Clifton, said residents in her neighborhood are trying to organize a committee to protest the toll road.

## Freeway Revolts

### 2 citizens groups trying to stop construction of freeways

By NIM CROSSLEY  
Post Reporter

Can ordinary citizens stop freeway

aiding the citizens. "It's a good area, with a median income of \$14,000-plus."

A highway department report on the

ty and environmental impact of the highway construction. Citizens say the objections have not been met.

is no longer holding public hearings. There is simply no place for many of them to go."

Behind the two organized groups is

Highway fighter Helgin said "you have to watch these engineers all the time. They posted a public hearing for 2 p.m. and then came on one hour from the window

and region. The addition of lanes to the Gulf Freeway and state highway 28 will allow 200,000 more people a day to get in and out of the city."



# Residents Respond

“We didn’t like [the freeway]. We weren’t excited about it because **it wasn’t helping us...** And it [the freeway project] was just displacing a lot of black people.”

- Myrtle Ross, Fourth Ward resident

That [highway building] set the Third Ward back...In the Third Ward you have a larger ratio of undeveloped land to the total land than you normally have...That transportation problem **became a development problem** for the Third Ward.”

- Ernie Atwell



# The Consequences of Undemocratic Design

- ~21,000 Houstonians displaced by freeway construction
- Majority of displacements were Black Houstonians, despite making up around 20% of the area's population
- Renters, the poor, the old, non-white, and non-Anglo displaced had less notification of construction and had worse outcomes after displacement
- Displaced residences roughly equivalent to removing every home in the Memorial Villages





# The Limit to Freeways: "More Democratic" less "Great Designer"

“We shouldn’t slow down on our freeway building program. But there’s **a limit to how many we can build**. Eventually, **vital parts of the city will have to be destroyed** for more freeways.”

- Roscoe Jones, City Planner, 1965





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roadsTaken

A Collaboration with Diluvial Houston

< 1968 >

1950

1960

1970

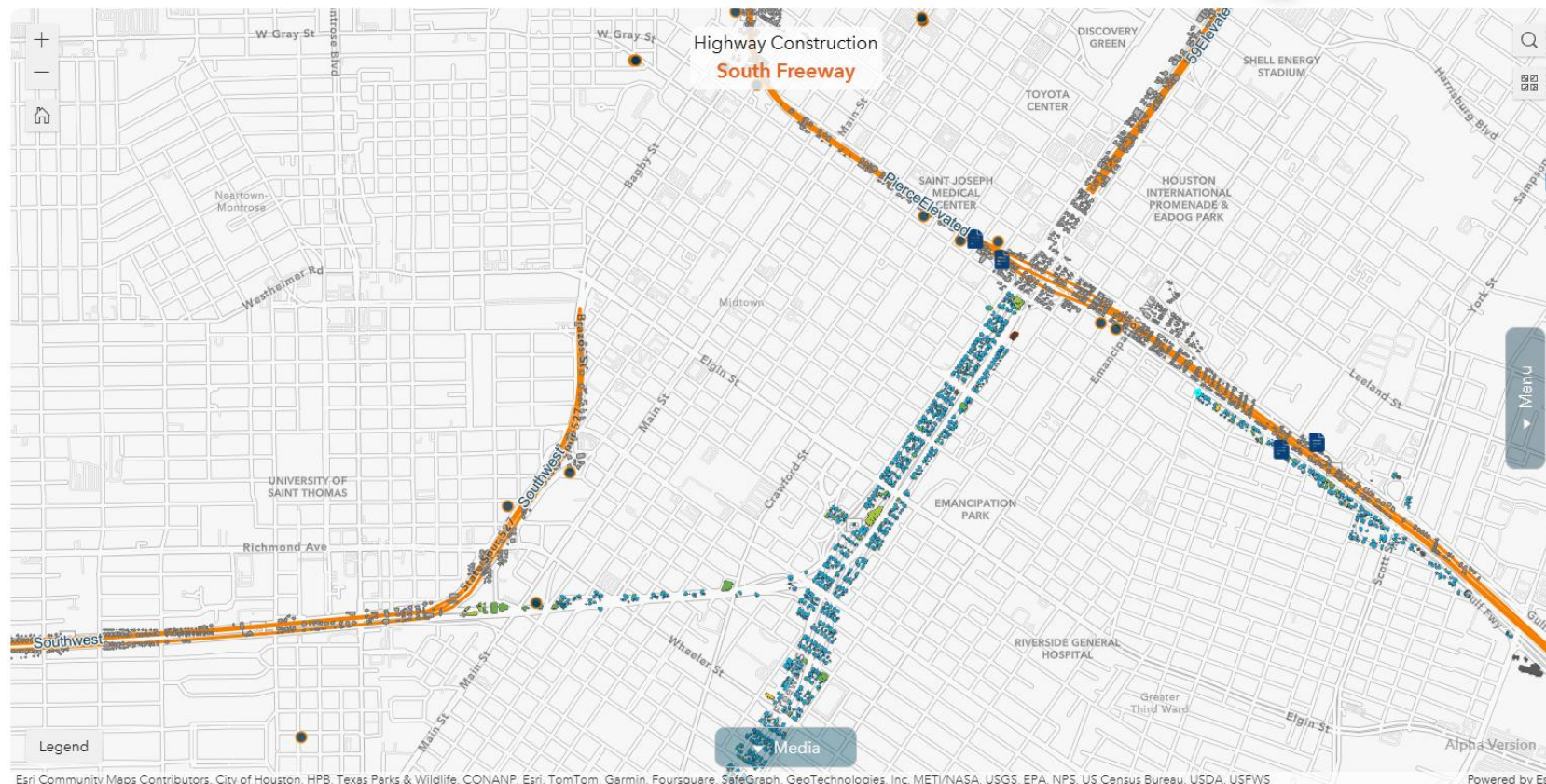
1980

1990

2000

i Info

User guide



Buildings Cleared

8,764

Residents Race Info

Estimate

Census Rolls

Demographics

Black: 8,899

Others: 37

White: 8,257

Total: 17,192

Overlays

Important Maps

Building history

Property ID: 70001

Resident: Lewis Odums

Relation to Head of House: Son

Race: Negro (Black) Age: 27

Building type: Dwelling

Property ID: 70001

Resident: Celestine Odums

Relation to Head of House: Wife

Race: Negro (Black) Age: 56

Building type: Dwelling

Property ID: 70001

Resident: Roy Odums

Relation to Head of House: Son

Race: Negro (Black) Age: 21

Building type: Dwelling

Property ID: 70001

Resident: Robert Odums

Relation to Head of House: Head

Race: Negro (Black) Age: 58

Building type: Dwelling

1940 1950