

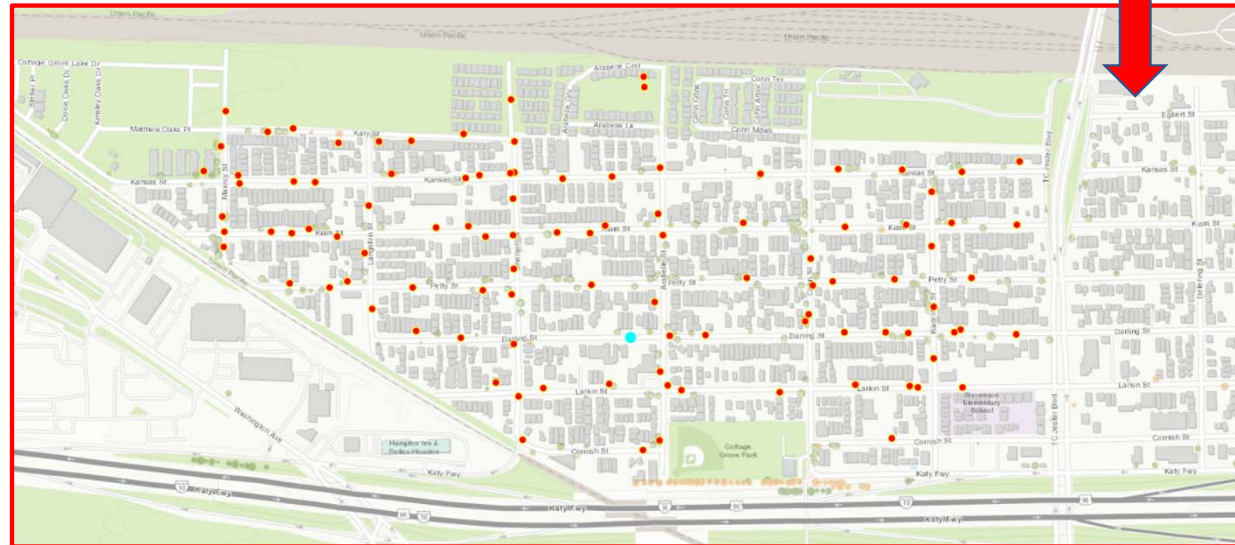
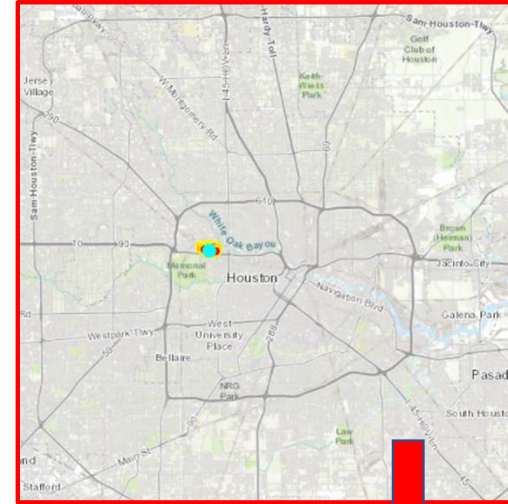
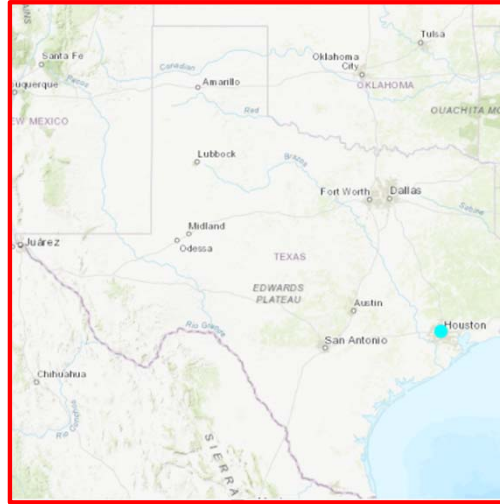
Use of Survey123 to Document Infrastructure Status

2021 ESRI Infrastructure Management & GIS Conference

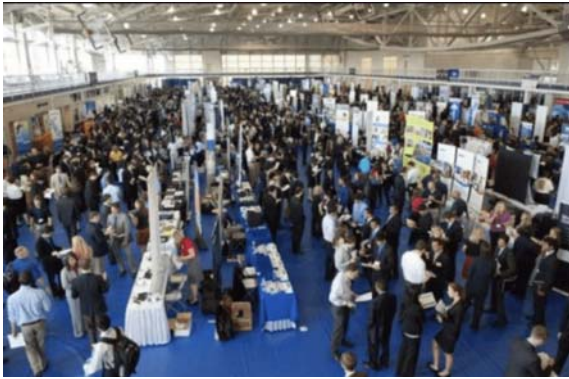
By: John M. Lynk, PE

Infrastructure Chair for Cottage Grove Civic Association

Where?



These factors . . .



+



+

POLITICS

Houston Passes \$5.1 Billion Annual Budget, Using Federal Aid To Plug Deficit

The city avoided budget cuts and layoffs, though Mayor Sylvester Turner said the pandemic caused the worst deficit in the city's history.

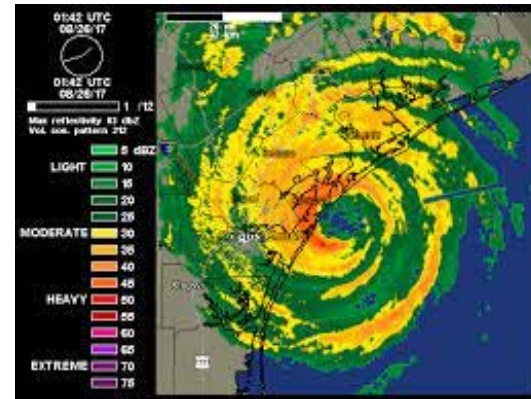
JEN RICE | JUNE 2, 2021, 6:25 PM (LAST UPDATED: JUNE 3, 2021, 3:14 PM)

Share



Lucia Vasquez / Houston Public Media
Mayor Sylvester Turner at a Houston City Council meeting on June 2, 2021. Council passed Turner's \$5.1 billion budget.

+



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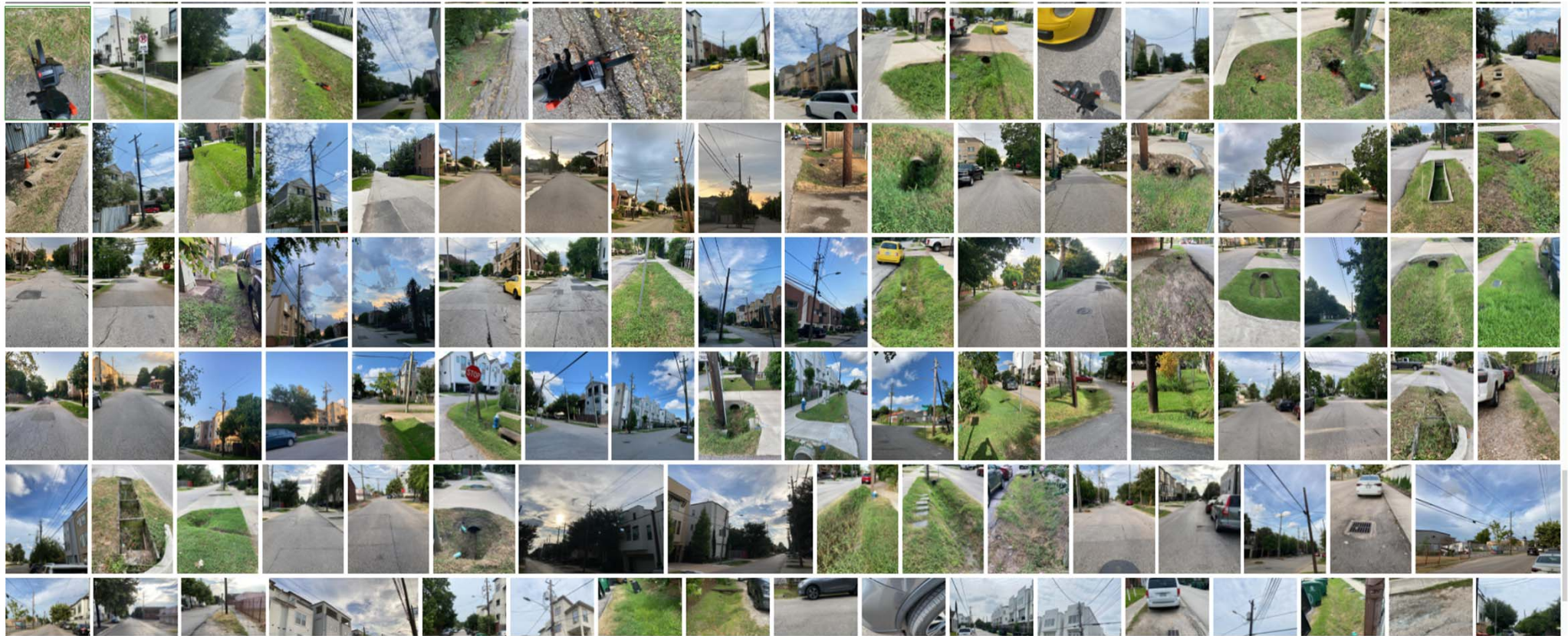
. . . result in these outcomes . . .



... and these ...



. . . and these . . .



. . . and this.

- Street width surveyed in 59 locations
- Width less than 20'-0" in 48 of 59 locations, less than 12' in places.

3.4.6.1 Dimensions.

Fire apparatus access roads and Fire Lanes shall have an unobstructed width of not less than 20 feet and an unobstructed vertical clearance of not less than 13 feet 6 inches.



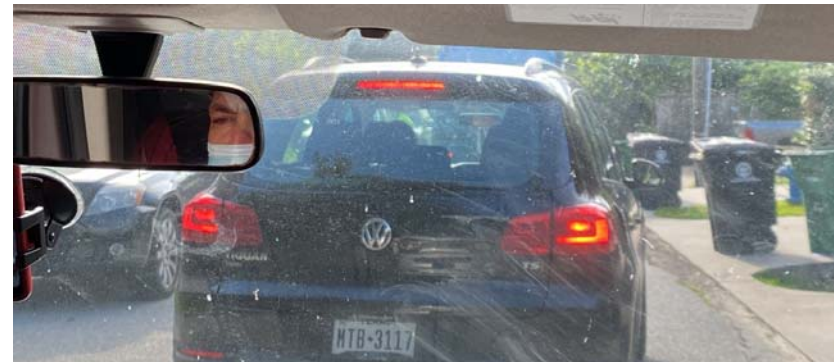
**HOUSTON FIRE DEPARTMENT
LIFE SAFETY BUREAU (LSB)**

**LSB STANDARD 03, REV 05
FIRE DEPARTMENT ACCESS**

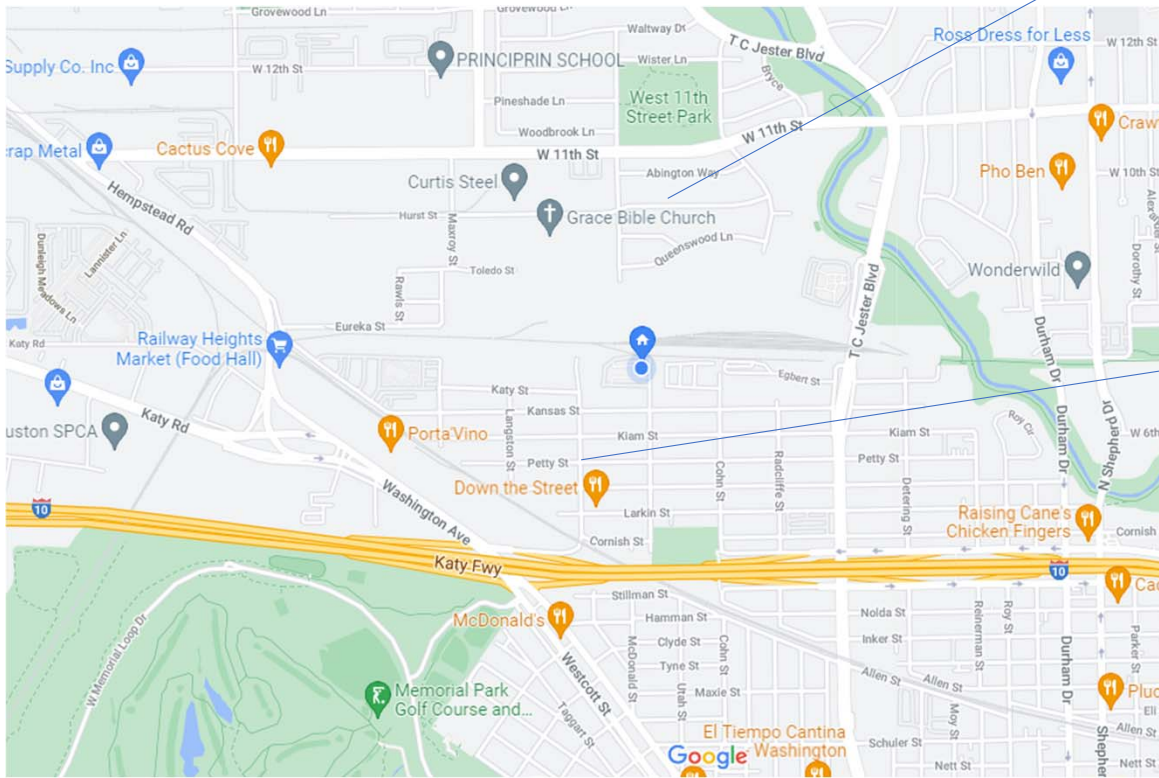
Note: A vertical bar in the left-hand margin denotes revisions to the previous version.

SUPERSEDES: LSB Standard 03, rev 04, dated 12/31/2010

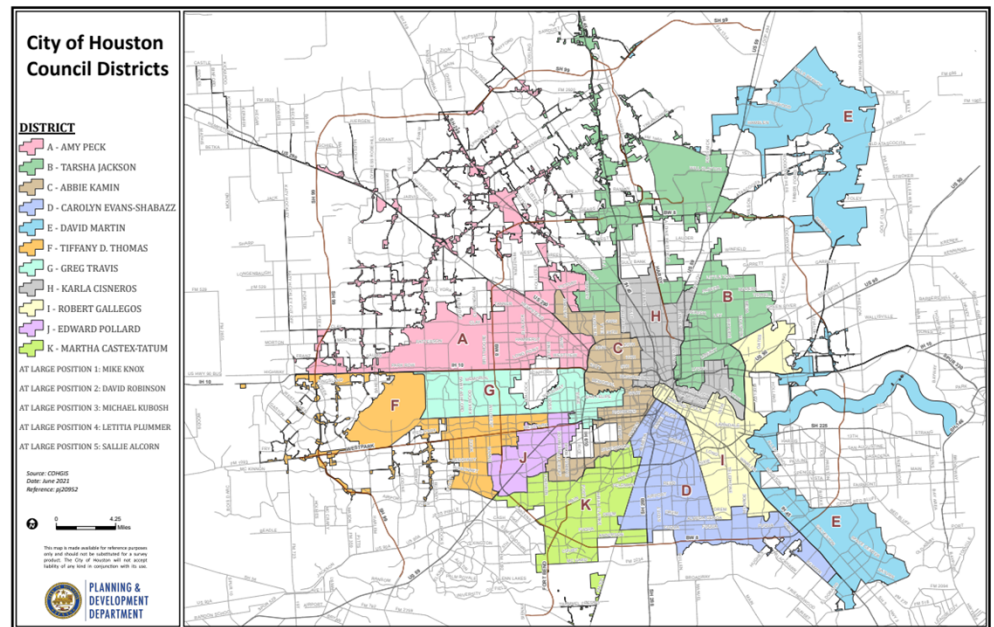
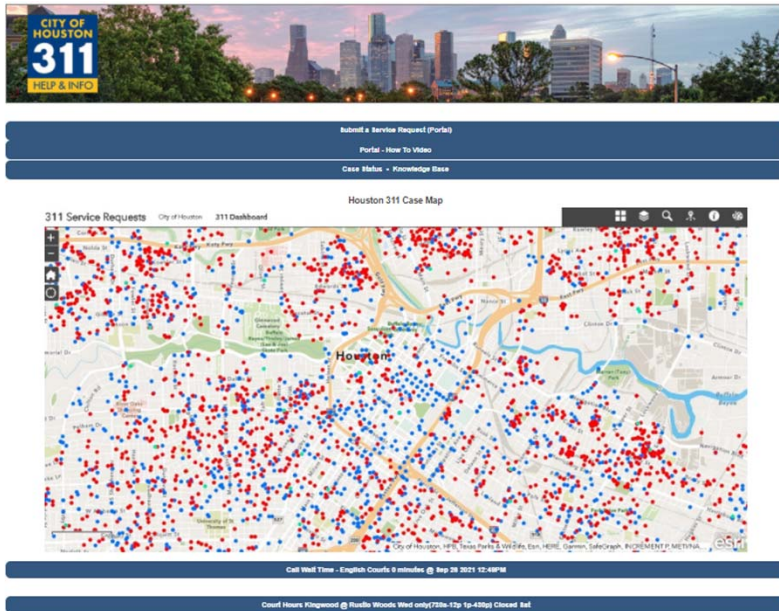
Effective Date: 5/01/2012



Goal Setting



Getting to ~~Yes~~ no, no, no . . .





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... Yes!!!



Professional Crossover



The screenshot shows the ArcGIS Survey123 product page. At the top, the Esri logo and navigation links (Products, Solutions, Support & Services, Stories, About) are visible. Below the navigation, the product name 'ArcGIS Survey123' is prominently displayed. A central graphic features a laptop and a smartphone, both displaying survey data visualizations like bar charts and maps. The text 'Smarter forms. Smarter data collection.' is positioned below the graphic. At the bottom, a green banner contains a detailed description of the product's capabilities.

ArcGIS Survey123 is a complete, form-centric solution for creating, sharing and analyzing surveys. Use it to create smart forms with skip logic, defaults, and support for multiple languages. Collect data via web or mobile devices, even when disconnected from the Internet. Analyze results quickly, and upload data securely for further analysis.

The screenshot displays a user's 'My Learning Plans' dashboard. The user's name, 'John Lynk', and affiliation, 'College Grove Child Association', are shown at the top right. A 'Courses Completed' counter shows '10'. The main section is titled 'My Learning Plans' and includes a search bar and filters for 'STATUS' (Active), 'PLAN TYPE' (Viewing all), and 'SORT' (Recently Enrolled). A progress indicator shows '69% Completed' for the 'JML ArcGIS Pro Learning Plan summer 2020'. Below this, a table lists 13 courses with their respective completion status and durations.

View: 13 Courses	Edit Plan
<input checked="" type="checkbox"/>	WEB COURSE ArcGIS Pro Basics 30 Minutes
<input checked="" type="checkbox"/>	WEB COURSE Basics of Geographic Coordinate Systems 1 Hour, 15 Minutes
<input checked="" type="checkbox"/>	WEB COURSE Getting Started with Mapping and Visualization 1 Hour, 15 Minutes
<input checked="" type="checkbox"/>	VIDEO ArcGIS Online: Mapping Basics 2 Minutes
<input checked="" type="checkbox"/>	WEB COURSE Location-Enabling Data 1 Hour, 15 Minutes
<input checked="" type="checkbox"/>	WEB COURSE Displaying Coordinate Data on a Map 25 Minutes
<input type="checkbox"/>	WEB COURSE Symbolizing Map Layers 1 Hour, 45 Minutes
<input checked="" type="checkbox"/>	WEB COURSE Managing Map Layers in ArcGIS Pro 1 Hour
<input checked="" type="checkbox"/>	WEB COURSE Labeling Map Features 1 Hour, 35 Minutes

Survey Questions

1. Survey Date
2. Survey Time
3. Survey Location
4. Photos
5. Traffic – Effective Width, as in 20'-6".
6. Drainage Ditch Condition (North or East) (Width, depth, description)
7. Drainage Ditch Condition (South or West)
8. Overhead Wire Condition (North or East) (Number of wires, comments – tangled/drooping/tree interference)
9. Overhead Wire Condition (South or West)

Benefits of Survey123 for Cottage Grove Civic Association

ArcGIS Survey123 My Surveys Organization Help John

Cottage Grove Infrastructure Survey Overview Design Collaborate Analyze Data Settings

Cottage Grove Infrastructure Survey

This is a survey of Cottage Grove infrastructure in Houston, TX, 77007. It is to assess the effective passing width of roads, width and condition of drainage ditches, and general condition of overhead wires. The surveyor should use this to record the condition of various street locations. Created May 2021 by John M. Lynk.

1 **Survey Date***

2 **Survey Time**

+	+	+	+
Add	Edit	Appearance	Options
Singleline Text	Multiline Text		
Single Choice	Single Choice Grid		
Dropdown	Multiple Choice		
Rating	Likert		
Ranking	Number		
Date	Time		
Date and Time	Signature		



Benefits of Survey123 for Cottage Grove Civic Association

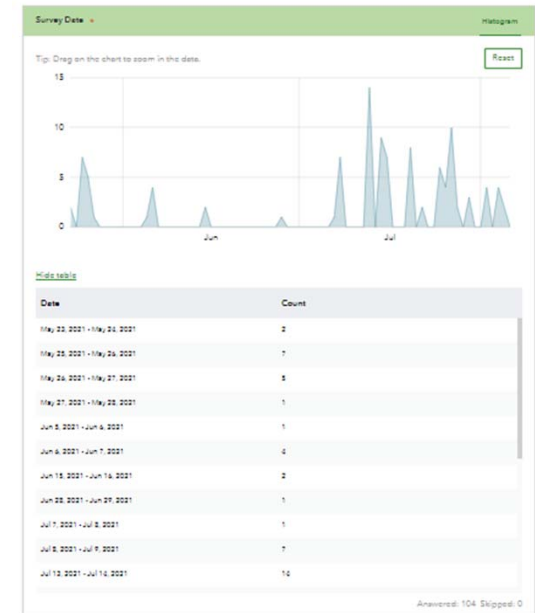
ArcGIS Survey123 My Surveys Organization Help John

Cottage Grove Infrastructure Survey Overview Design Collaborate Analyze **Data** Settings

Image info

PHOTOS

- Aug 5, 2021 11:46 AM
- photos-20210805-164634.jpg 3024 x 4032 2.2MB
- Apple iPhone 11 Pro Max f/1.8 1/4800s 4.25mm ISO32
- 85.4°
- 5700-5712 Petty St, Houston, Texas, 77007
Lat: 29.78052 Lon: -95.42539



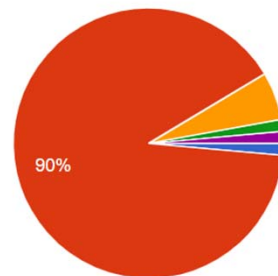
Survey Results, Next Steps, and Conclusions

- 104 data points taken. Provided substantial evidence to support claims about road width, ditch conditions, and utility wires.
- Presented to rest of Cottage Grove community on September 9, 2021
- A related community survey was sent out based on the Survey123 data:

Do you think that Cottage Grove is receiving equitable infrastructure service for taxes paid to the City of Houston by its residents?



70 responses

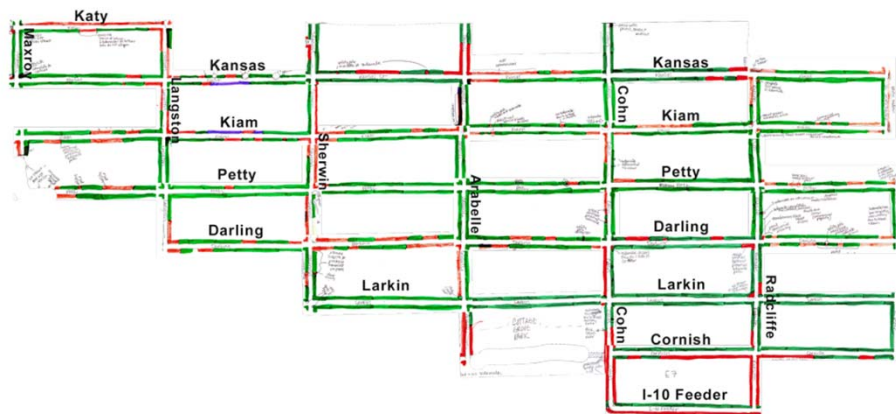


- Yes
- No
- Maybe
- I'm not sure. We definitely brings more opportunities for increased focus on our infrastructure. opportunities for increased infr
- The park is lousy for kids to play

Ideas for Other Mapping Applications

CG Internal Assessment Report

Sidewalk Continuity Survey



Thank you!

jmlynk03@gmail.com