

# PLANNING COMMISSION ACTION

## 2013-2 Crenshaw

**APPLICANT:** City of Houston, Public Works and Engineering Department

**KEY MAP:** 576M; 577J

**JURISDICTION:** City of Houston

**LAMBERT:** 5752, 5852

**DISTRICT/PRECINCT:** City Council: E  
Harris County Pct.: 2

### **PROPOSAL:**

City of Houston's Public Works and Engineering Department (PWE) is requesting to reclassify Crenshaw Road between South Shaver Street and Allen Genoa Road as a 4-lane 80-foot right-of-way (ROW) on the City's Major Thoroughfare and Freeway Plan (MTFP).

### **APPLICANTS JUSTIFICATION and HISTORY:**

Crenshaw Road is an east-west street in the southeast part of Houston that runs approximately 3.9 miles between South Shaver Street and Beltway 8. Houston's City Limits extend east to Allen Genoa Road. Shaver Road, east of Allen Genoa, is located within the City of Pasadena.

PWE conducted a pre-engineering study for Crenshaw Road between South Shaver Street and Allen Genoa Road as part of the Rebuild Houston program. The purpose of this study was to provide assessment of existing conditions, identify the needs, and provide alternative solutions and recommendations for street and paving improvements, as well as drainage concepts, water line and sanitary sewer utility improvements, and cost estimates.

The project length is approximately 4,300 feet and serves of mostly industrial, residential and vacant lands. The existing roadway consists of approximately 23-foot wide asphalt pavement with roadside ditches for drainage. According to the available records, the existing ROW along Crenshaw Road, between South Shaver Street and 150' east of 1st Street, is 60-foot wide. The remaining ROW segment of the roadway to Allen Genoa Road is 55-foot wide. The City's MTFP Hierarchy Table classifies Crenshaw Road as a 2-lane roadway with a 60-foot ROW (T-2-60). Crenshaw Road, between Strawberry Road and Space Center Boulevard, is located within City of Pasadena and is improved as a 4-lane boulevard.

Crenshaw Road thoroughfare alignment has been on the City's MTFP since 1957. The designated thoroughfare extended east from South Shaver Street to proposed Space Center Boulevard; this proposed alignment, however, did not align with the current alignment of Crenshaw Road. The 1972 MTFP map clearly identifies Allen Genoa as the city limits boundary between Houston and Pasadena. In 1990 the proposed east-west thoroughfare was aligned along Crenshaw Road and identified as a sufficient width thoroughfare. With the adoption of the Hierarchy Classification Table in 1995, Crenshaw Road was designated as 2-lane 60-foot ROW (T-2-60).

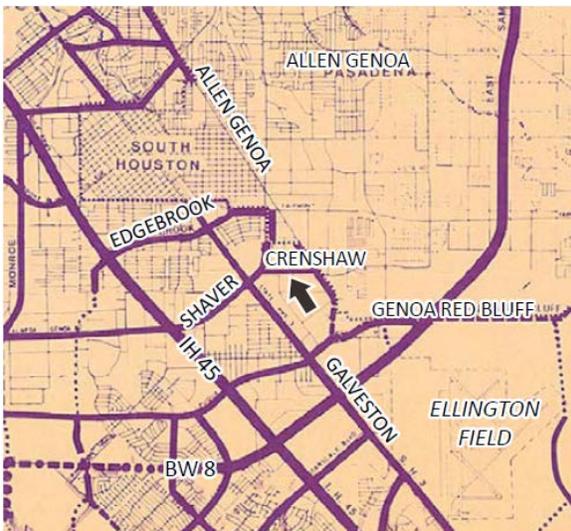
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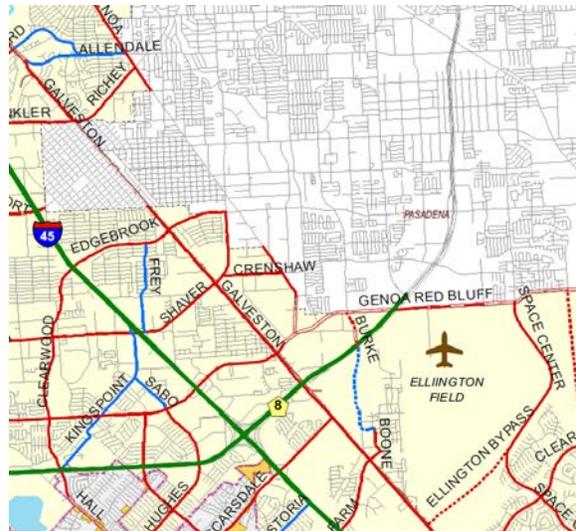
1957 MTFP



1972 MTFP



1990 MTFP



2012 MTFP

## **STAFF RECOMMENDATION:**

Reclassify Crenshaw Road between South Shaver Street and Allen Genoa Road as 4-lanes, with proposed 80-foot ROW on the MTFP.

**Justification:** The existing 2-lane configuration of the roadway is inadequate to meet the proposed traffic needs in the future. The proposed 4-lanes designation is consistent with the thoroughfare designation of the roadway and provides for adequate roadway capacity between Shavers Road and Space Center Boulevard in the City of Pasadena.

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## **PLANNING COMMISSION ACTION:**

Reclassify Crenshaw Road between South Shaver Street and Allen Genoa Road as 4-lanes, with proposed 80-foot ROW Major Thoroughfare (T-4-80) on the MTFP.

## **Population & Employment Projections:**

According to 2010 Census, Texas grew by 20% in ten years to over 25 million people recording about a quarter of the nation's overall growth. The rate of growth in Texas was twice the national average. Harris County is the most populous county (4 million) in Texas. Today, 2.1 million people live within the City of Houston and another 2 million live in the City's extraterritorial jurisdiction (ETJ). Since 2000, the City of Houston added 146,000 people (8 %) to its population. However, Houston's ETJ grew 35 % during the same time period.

Houston and its ETJ's rich employment sector are home to more than 1.8 million jobs, making it the state's most populous and robust economic center. More than one million jobs are located within the City limits and are saturated within the City's eight major activity centers.

One of the greatest challenges to Houston's mobility is that by 2035 significant numbers of residents are projected to live outside the City limits in the ETJ; while the major employment growth is expected to occur within the City limits. These expanding imbalances increase distances between the population and employment centers will result in more travel, greater travel time, and longer travel delays.

In addition to anticipated growth within the ETJ, an additional 550,000 new residents are expected to move within the city limits. The most notable population growth is projected to occur inside Loop 610. It reflects efforts to create a dense urban core through mixed-use development strategies.

To compare the result between 2000 and 2010 Census, the subject area's population grew by - 56.9 % from 3,781 to 5,932 which demonstrates a percent change higher than that of the City of Houston's growth (7%).

Year	Population (Persons/Acre)	% Change	Households (Households/Acre)	% Change	Jobs (Jobs/Acre)	% Change
2010	5.8		1.8		0.6	
2015	5.8	0.1%	1.8	0.2%	0.7	4.0%
2020	5.9	1.6%	1.8	1.6%	0.7	0.0%
2025	6.3	7.2%	1.9	8.2%	0.7	0.0%
2030	6.6	5.0%	2.1	6.4%	0.8	18.0%
2035	6.6	0.0%	2.1	0.0%	0.8	-0.5%
Change (2010 to 2035)	0.8	14.4%	0.3	17.2%	0.1	22.1%
City of Houston Change (2010 to 2035)	1.6	30.4%	0.6	32.4%	1.3	32.9%
City of Houston ETJ Change (2010 to 2035)	1.3	53.4%	0.6	73.7%	0.6	85.6%

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Source: H-GAC's 2035 Regional Growth Forecast

\* Data represents population, jobs, and households in 3 Traffic Analysis Zones (TAZ) encompassing approximately 1,037 acres around the proposed amendment. Population projections do not include projections for group housing.

The Houston-Galveston Area Council (H-GAC) projects that over the next 25 years (2010 – 2035), the population within the study area\* will increase from 6,031 to 6,900 (869 person) or 14.4%. The number of persons per acre is projected to increase from approximately 5.8 to approximately 6.6. During the same period, H-GAC estimates that the total jobs in the subject area will slightly increase from 674 to 823 (149 jobs), or 0.1%. The number of jobs per acre is projected to increase from approximately 0.6 to 0.8.

Expressed in percentages, both the subject area's population growth and job growth are expected to be less than that of the City of Houston's at 14.4% vs. 30.4% and 22.1% vs. 32.9%, respectively.

## **Land Use and Platting Activity:**

There is a mix of land uses along Crenshaw Road. The educational facility, Yes Preparatory School – Southeast Campus, is located along the north side of Crenshaw Road at South Shaver Street. Harris County Flood Control Authority has a Detention Facility along the south side of the roadway. The remainder of the tracts along the roadway were platted with Highland Acre Subdivision and vary from one-half acre to 6.7 acres. These properties have residential, commercial and industrial uses.



## **Right-Of-Way (ROW) Status:**

Crenshaw Road is classified as a two-lane Major Thoroughfare with 60' ROW between South Shaver Street and Allen Genoa Road. Crenshaw Road, between Strawberry Road and Space

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Center Boulevard, is located within City of Pasadena and is improved as a 4-lane boulevard with a ROW width varying between 100' and 130'. Surrounding thoroughfares include Galveston Road, South Shaver Street and Allen Genoa Road which maintain 4- to 6-lanes of traffic with a ROW of 100', 120' and 100', respectively. Allen Genoa Road from Hernandez Road to Genoa Red Bluff Road, currently maintains 4-lanes of traffic in an 80' ROW. This corridor is slated "to be widened".

Street	From	To	Classification	Status	Direction
Crenshaw	Shaver	Allen Genoa	T-2-60	Sufficient width	W-E
Galveston	E Edgebrook/Fairmont	Fuqua	P-6-100	Sufficient width	NW-SE
South Shaver	E Edgebrook/Fairmont	Genoa Red Bluff	P-6-120	Sufficient width	N-S
Allen Genoa	Keith	Hernandez	T-4-100	Sufficient width	N-S
Allen Genoa	Hernandez	Genoa Red Bluff	T-4-80	To be widened	N-S

## Spacing:

Crenshaw Road provides an east-west connection between South Shaver Street to its east and Allen Genoa Road to its west extending approximately 0.8 miles. Crenshaw Road runs in parallel with East Edgebrook Drive/Fairmont Parkway which is approximately 0.8 miles north of the corridor. Genoa Red Bluff Road is approximately one mile south of the of the corridor, making Crenshaw Road the only east-west connection between the approximate two mile stretch between East Edgebrook Drive/Fairmont Parkway and Genoa Red Bluff Road.

Street	From	To	Classification	Direction	Spacing
Crenshaw	Shaver	Allen Genoa	T-2-60	W-E	0.81 mile
Galveston	E Edgebrook/Fairmont	South Shaver	P-6-100	NW-SE	0.97 mile
Galveston	South Shaver	Genoa Red Bluff	P-6-100	NW-SE	1.29 mile
South Shaver	E Edgebrook/Fairmont	Crenshaw	P-6-120	N-S	0.89 mile
South Shaver	Crenshaw	Galveston	P-6-120	NE - SW	0.15 mile
Allen Genoa	Keith	Crenshaw	T-4-100	NW-SE	0.31 mile
Allen Genoa	Crenshaw	Hernandez	T-4-100	N-S	0.37 mile
Allen Genoa	Hernandez	Genoa Red Bluff	T-4-80	N-S	0.52 mile

## Mobility:

The pre-engineering study conducted by PWE for Crenshaw Road Street, between South Shaver Street and Allen Genoa Road, yielded Average Daily Traffic (ADT) Projections as indicated in the table below. The preliminary Level of Service (LOS) was determined using Highway Capacity Software (HCS) software, based on the data collected on-site and ADT and the V/C ratio data provided by the City of Houston. The results indicate that 2011 LOS is B for the study area. The 2035 LOS is F applying the existing roadway geometry.

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From	To	2011 ADT	2011 LOS	2035 ADT	2035 LOS
Shaver	Allen Genoa	7,062	B	16,583	F

Source: *Street and Paving Improvement for Crenshaw Street, COH-PWE, January 2013*

Future traffic projections provided by the City of Houston for 2035 show significant traffic growth along the Crenshaw Road corridor compared to 2011 traffic patterns.

The current LOS B indicates that there is reasonably free flow along the roadway. Moreover, LOS F means that traffic is forced or the flow may breakdown where every vehicle moves in lockstep, with frequent slowing required. Travel time cannot be predicted along such a street since the demand exceeds the capacity of the roadway.

Given the existing 4-lane configuration of the roadway within the City of Pasadena, as well as the projected growth in the area, the proposed 4-lanes configuration along the street will improve east-west mobility without displacing traffic to adjoining thoroughfares Edgebrook Drive/Fairmont Parkway and Genoa Red Bluff Road.

The table below compares Intersection LOS for existing and proposed conditions along the Crenshaw Road corridor.

## Peak Hour Intersection LOS Comparison

	Existing (2012)	AM Peak Hour Intersection LOS (2035)	PM Peak Houston Intersection LOS (2035)
Crenshaw Rd. at Shaver Rd.	C	B	A
Crenshaw Rd. at Allen Genoa Rd.	C	A	B

The proposed request to reclassify Crenshaw Road as 4-lane configuration with additional intersection improvements will improve Intersection LOS along Crenshaw Road to A and B by 2035.

# CRENSHAW

2013 MTFPA REQUESTS

EDGEBROOK

SHAVER

PASADENA

Houston City Limits

Centerpoint Enegy

Yes College Preparatory School

CRENSHAW

ALLENGENOA

GALVESTON

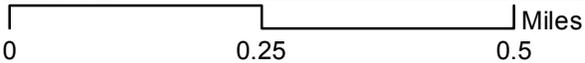
## LEGEND

### Staff Recommendation

- Reclassify Major Thoroughfare

### 2012 MTFP

- Proposed Freeway
- TBW Freeway
- Freeway
- Major Thoroughfare
- TBW Major Thoroughfare
- Proposed Major Thoroughfare
- Major Collector
- TBW Major Collector
- Proposed Major Collector
- Transit Corridor Street
- Proposed Grand Parkway
- Railroad
- Houston City Limits
- Houston ETJ



PLANNING & DEVELOPMENT DEPARTMENT