

Aviation Advisory Commission

June 3, 2019



**Presentation by the Sheriff's
Agency Aviation Unit
Regarding
Blackhawk Helicopter
Operations**

VENTURA COUNTY AIR OPERATIONS



AIRCRAFT COMPARISON

AIRCRAFT DESCRIPTION

BELL "HUEY"



SIKORSKY HH-60L FIREHAWK



SIKORSKY HH-60L FIREHAWK

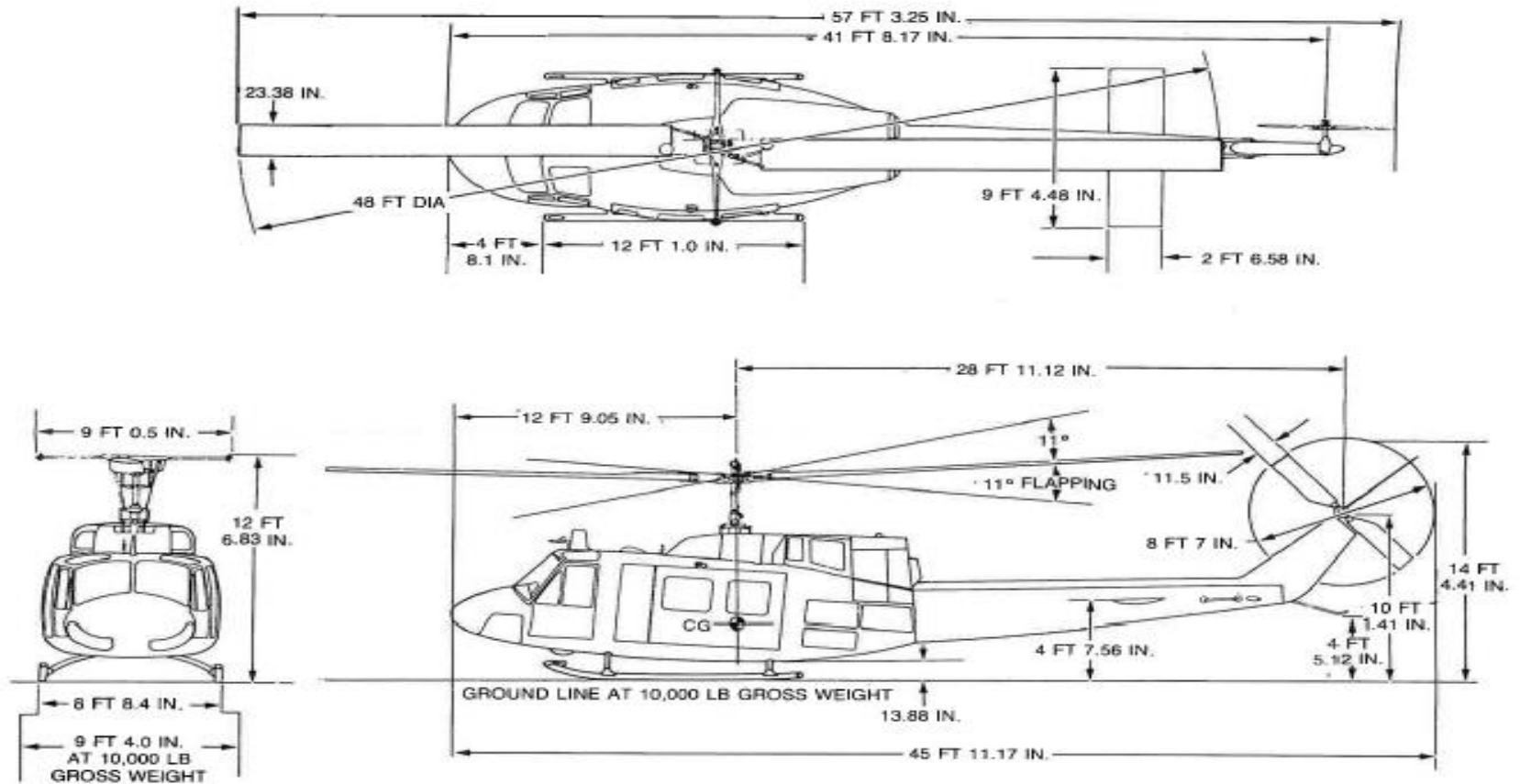
- *Type 1 twin-engine medical rescue, SAR, and firefighting helicopter (high capacity 1,000 gallon water tank)*
- *High performance (speed, rate of climb, pilot controls)*
- *Proven performance in military service*
- *Neighboring agency flies this aircraft*
- *Excellent safety record*

BELL HUEY

- *Type 2 twin & single engine, medical rescue, SAR, and law enforcement helicopter*
- *High performance (speed, rate of climb, pilot controls)*
- *Proven performance in commercial service*
- *Excellent safety record*

AIRCRAFT DIMENSIONS

HUEY

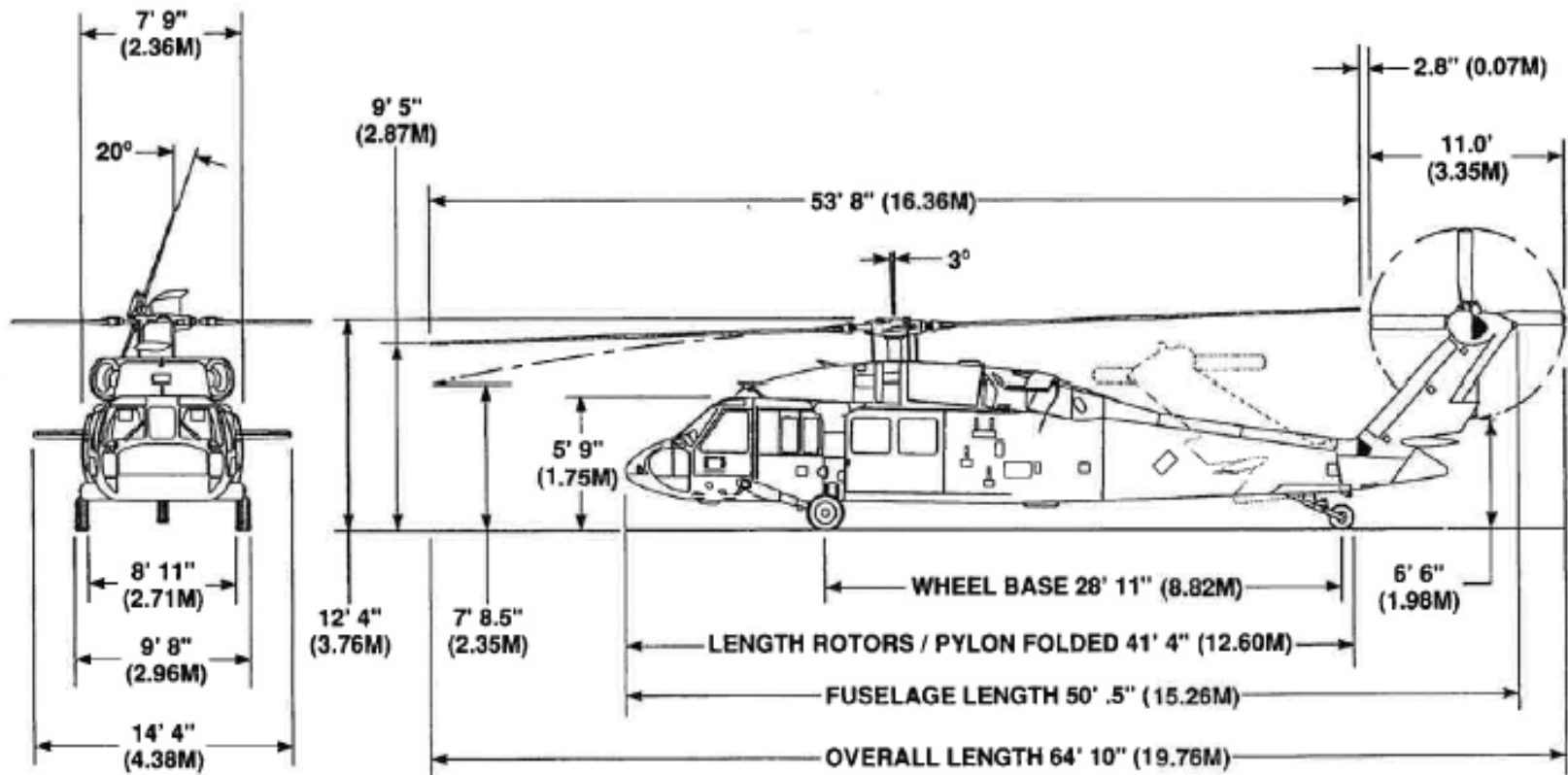


NOTE:
VERTICAL DIMENSIONS WILL INCREASE BY
APPROXIMATELY 3.3 INCHES WHEN
HELICOPTER IS EMPTY.

Figure 1-3. Exterior Dimensions

AIRCRAFT DIMENSIONS

HH-60L



AIRCRAFT NOISE STATS

TABLE: A1

BELL 212 TAKEOFF/APPROACH DATA TABLE

Military Designation: UH-1N

<u>CPA Distance (FT)</u>	<u>TAKEOFF SEL (dB)</u>	<u>APPROACH SEL (dB)</u>
200	92.5	98.6
400	88.3	94.6
600	85.6	92.1
1000	82.1	89.0
2000	76.8	84.5
4000	71.4	79.3
6000	67.4	76.0
10000	61.8	71.3

Takeoff Notes

Vy (Speed for best rate of climb) = 55 kts
 BRC (Best rate of climb) = 1350 feet per minute (fpm)
 Climb Angle (degrees) = 14°
 Climb Gradient (Run/Rise) = 4.0
 Takeoff Weight = 10,500 lbs

Approach Notes

Vy (Speed for best rate of climb) = 55 kts
 Approach Angle (degrees) = 6°

TABLE: N1

SIKORSKY S-70 TAKEOFF/APPROACH DATA TABLE

Military Designation: UH-60A

<u>CPA Distance (FT)</u>	<u>TAKEOFF SEL (dB)</u>	<u>APPROACH SEL (dB)</u>
200	91.4	98.2
400	86.9	94.1
600	84.1	91.7
1000	80.4	88.5
2000	74.9	83.9
4000	69.3	78.9
6000	65.6	75.7
10000	60.6	71.2

Takeoff Notes

Vy (Speed for best rate of climb) = 80 kts
 BRC (Best rate of climb) = 1950 feet per minute (fpm)
 Climb Angle (degrees) = 13.9°
 Climb Gradient (Run/Rise) = 4.0
 Takeoff Weight = 20,250 lbs

Approach Notes

Vy (Speed for best rate of climb) = 80 kts
 Approach Angle (degrees) = 6°

APPROACH AND DEPARTURE



Operations within this area will be limited to maintenance inspections and ground run ups only.

WEST VIEW

Approach & Departure Profiles West View

Legend



Approach and Departure Profiles mitigate impact to airport tenants with minimal downwash

DOWN WASH

- The Blackhawk helicopter puts out approximately 1.5 times the down wash of the Huey.
- Down wash is directly affected by Blade Loading, and how heavy the aircraft is during take off and landing.
- Our planned operating weight of the Blackhawk is going to be approximately 5000LBS Below maximum gross weight on takeoff; and potentially 7000LBS below maximum gross weight when returning to base after a mission. This will aid in minimizing down wash during the vertical take off and landing described earlier.
- During multiple test take offs and landings performed by one of our Blackhawks and LA County's fire hawk, we determined that the down wash effect while landing on our paved concrete ramp (in a vertical fashion) proved to be a negligible difference when compared to the Huey.



VS.



? QUESTIONS ?

7.A. Annual Service Contracts for FY 2019-2020

Coffman Associates **\$50,000**

- Contemplated Services:
 - Environmental Planning
 - Environmental Review Services
 - Grant Support Administration Services
 - Planning

Mead and Hunt, Inc. **\$100,000**

- Contemplated Services:
 - Civil Engineering
 - Design Review Services
 - Specification Writing
 - Cost Engineer/Estimator
 - Disadvantage Business Enterprise Support

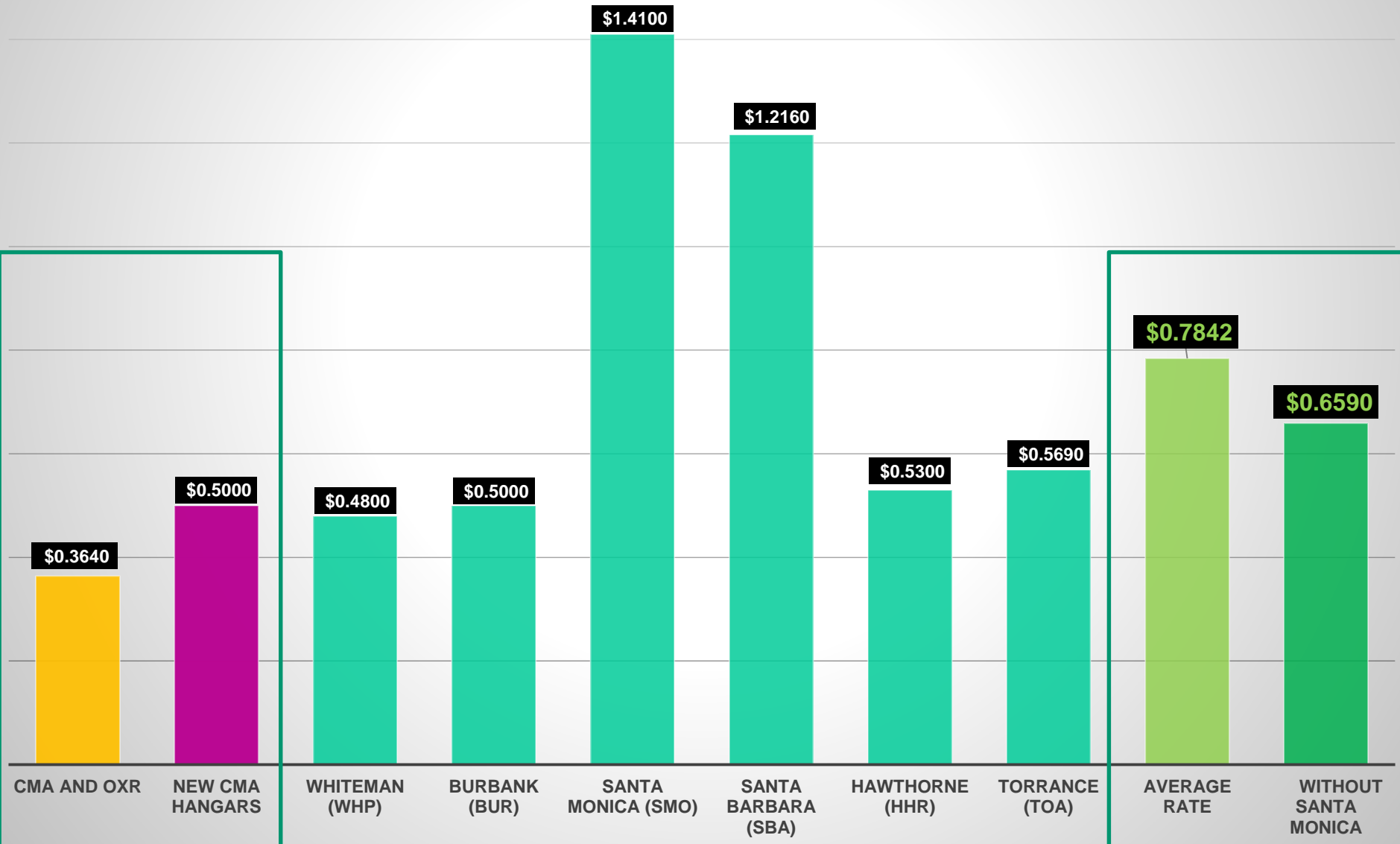


8. Director's Report

Airport Owned Hangar Rates

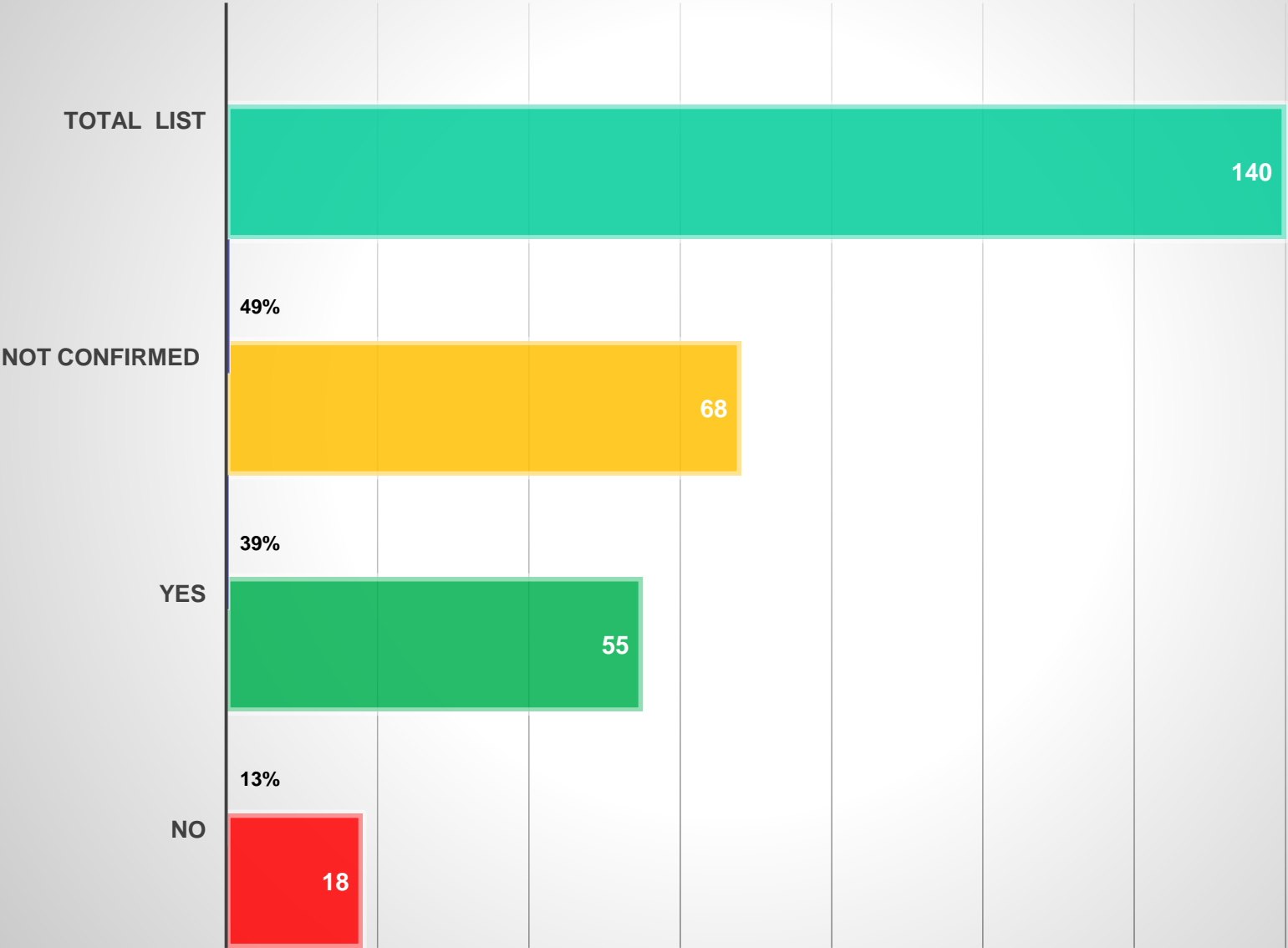
(within driving distance of CMA/OXR)

Per Square Foot per Month



Hangar Waiting List Survey

New Hangar Complex Interest



Other Items