

#### Facility Study Steering Committee

Meeting #3 April 21, 2021

#### Review



#### **Growth and Equity**

Equity does not mean exactly the same.
 Based on room configurations and building limitations, not every upgrade will look the same





## Digital Learning Review

Dianne Tidwell, Director of Digital Learning

#### Core Classroom Redesign for Equity and Growth

Retrofit existing core classrooms to meet current standards:

Classrooms currently used for core instruction 785

Potential for core classroom growth 100

#### **Campus-Wide Technology**

 Campus technology additions for promoting an inclusive environment for students and a collaborative planning/professional learning environment for staff.

Campus Levels	Digital Signage Additions	SMART Interactive Panel on Mobile Stand	Portable Power Charging Towers
Elementary Schools (11)	3	1	5
Intermediate/Junior High Schools (7)	4	1	6
High Schools* (2)	6	1	8



<sup>\*</sup> Excludes Tomball Star Academy

#### Library Redesign for Equity

#### Redesign 18 campus libraries as media centers

- Replace stationary bookshelves with mobile, customizable shelving
- Replace current furniture with age-appropriate flexible powered seating
- Add equipment for flexible learning areas including:

2 Dedicated Desktop Computers	Video Production Bundle (Green Screen, Device Tripod, etc)
3D Printer	Laser Cutter
VR Bundle (trackers, goggles,and desktop computer)	SMART Interactive Panel on Mobile Stand

- Add a dedicated cart of (15) laptops and (15) iPads
- Replace library catalog and online research desktops with 3 laptops
- Add Lightspeed audio amplification system with teacher microphone

## Questions?





#### Career and Technical Education



# CTE Purpose: Prepare Students for the Real World

CTE technology, equipment, materials and facilities should be representative of the grade and type used by businesses and should support industry training and safety standards.



#### **CTE** Priorities

- Upgrade facilities at Tomball High School
  - O District CTE Center?
- Implement new programs of study related to skilled trades



# Priority #1 Upgrade Tomball High School CTE Facilities

- Audio/Video Production Lab/Studio
- Agriculture Classrooms/Labs
- Culinary Arts Classroom/Lab
- Game & App Development Coding Lab
- Graphic Design Classroom/Lab
- Health Science Classrooms/Labs
- Marketing Lab (School Store)



#### Consider a District CTE Center

- Prevents expensive facility replication
- Allows "campuses" to share specialized staff and students
- Provides additional flexibility for scheduling



#### District CTE Center- Additional Consideration

- Explore a P-Tech Health Sciences program
  - Potential to earn 60 credit hours
  - Associate Degree
  - Transferable, stackable certifications
  - Partner with Lone Star College- Tomball
  - Pathway to Nursing Bachelor of Science



# Priority #2 Implement New Programs of Study

- Automotive Technology
- Carpentry/Construction
- Cosmetology
- Diesel and Heavy Equipment
- Welding (Program Expansion)



## Small Group Discussion

What do you agree with?

What questions do you have?



What would you want to argue with?

What if the district doesn't move forward with these recommendations?
What are the consequences?

What if the district does move forward? What are the consequences?



## Large Group Debrief







#### Transportation and Logistics



Keith Coleman

Director of Logistics

#### Points of Discussion

Current Situation

Future Situation

Things to Consider





# Transportation Logistics Center Building Capacity

#### **Current Number of Employees**

Support Staff - 25, and Drivers/Attendants 176 = 201

\*Building Max Capacity

183

Projection increase will exceed building capacity



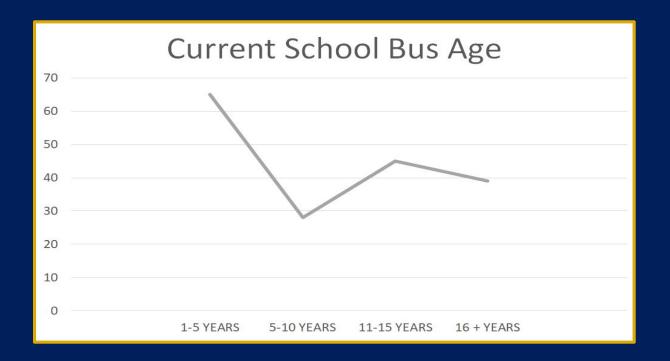




#### Vehicle Generation

```
1 to 5 years old - 65
6 to 10 years old - 28
11 to 15 years old - 45
16 + years old - 39
```

Entire Fleet - 177





#### Route Assessment

2019-20 124 Routes 2023-24 148 Routes 2025-26 162 Routes 2027-28 177 Routes





## Vehicle Exigency

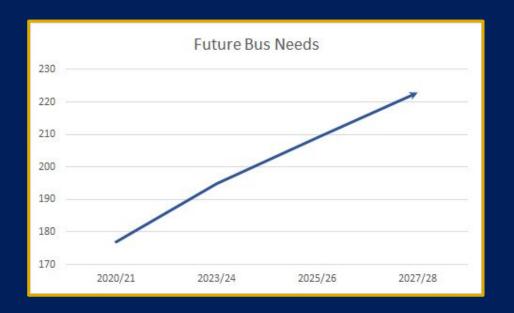
2020-21: 177

2023-24: 195

2025-26: 209

2027-28: 223

Total Growth 177 to 223 = 46 new buses





#### Distance Analysis

Current miles traveled per day - 8,580

Deadhead\* miles traveled per day - 3,880





# Looking to the Future & Items to Consider

- Facilities
- Equipment
- Innovative Solutions
- Potential Savings









## Second Facility







# Surrounding Districts with 2nd Facility

District	Square Miles	Facilities
HUMBLE ISD	90	1 (2nd to open 2022)
KLEIN ISD	81.8	2
TOMBALL ISD	83	1



## Future Equipment



Alignment Equipment







## Future Equipment Cont.

Paint Booth

Upholstery Shop







#### Innovative Solutions

Covered Parking for Buses





Addition of Solar Panels







#### Innovative Solutions Cont.

15 panels = 1.9 kw per hour

Multiply 5 hours of sunlight x 1900 watts from **solar panels** = 9,500 watts or roughly 9.5 **kilowatt** hours per day. 9.5 kw X 30 days = 285 kw per month. 285 kw X 177 vehicles = 50,445 kw a month

The **average** Texan household uses approximately about 1,171 kWh **per month**.









Power Generation

### Potential Savings

- Deadhead Miles
- Alignment
- Paint Booth
- Upholstery Shop
- Solar Energy





## Questions?





#### Safe and Supportive Schools

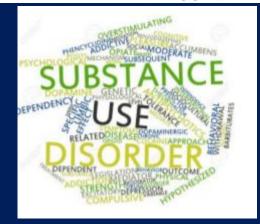
Steve Guerrero
Director of District Support

- Health & Wellness
- Emergency Management and Operations
- Culture, Climate, and Community
- Law, Policy, and Finance





RISE (Restore. Instruct. Support. Educate)































## District Security Needs

- Upgrade campus radio communications systems
  - Repeaters and
- Retrofit campus surveillance systems
  - analog -> digital
- Safety vestibules at all campuses
  - examples: Tomball HS and Canyon Pointe
- Fencing and security gates
  - 100% secured perimeter and aesthetics



## Questions?



## Large Group Debrief



