Logistics of Not Opening a New Campus Facility

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BARTLETT COCKE GENERAL CONTRACTORS

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Questions related to specific materials, methods, and services will be addressed at the conclusion of each presentation.

Agenda

- History
- Contract Impacts
- Warranty Impacts
- Construction / Schedule Impacts
- Construction Manager Perspective
- Insurance Considerations
- MEP Protocols
- Cost Impact
- Questions

Learning Objectives

Logistics of Not Opening a New Campus Facility

At the end of this program, participants will be able to:

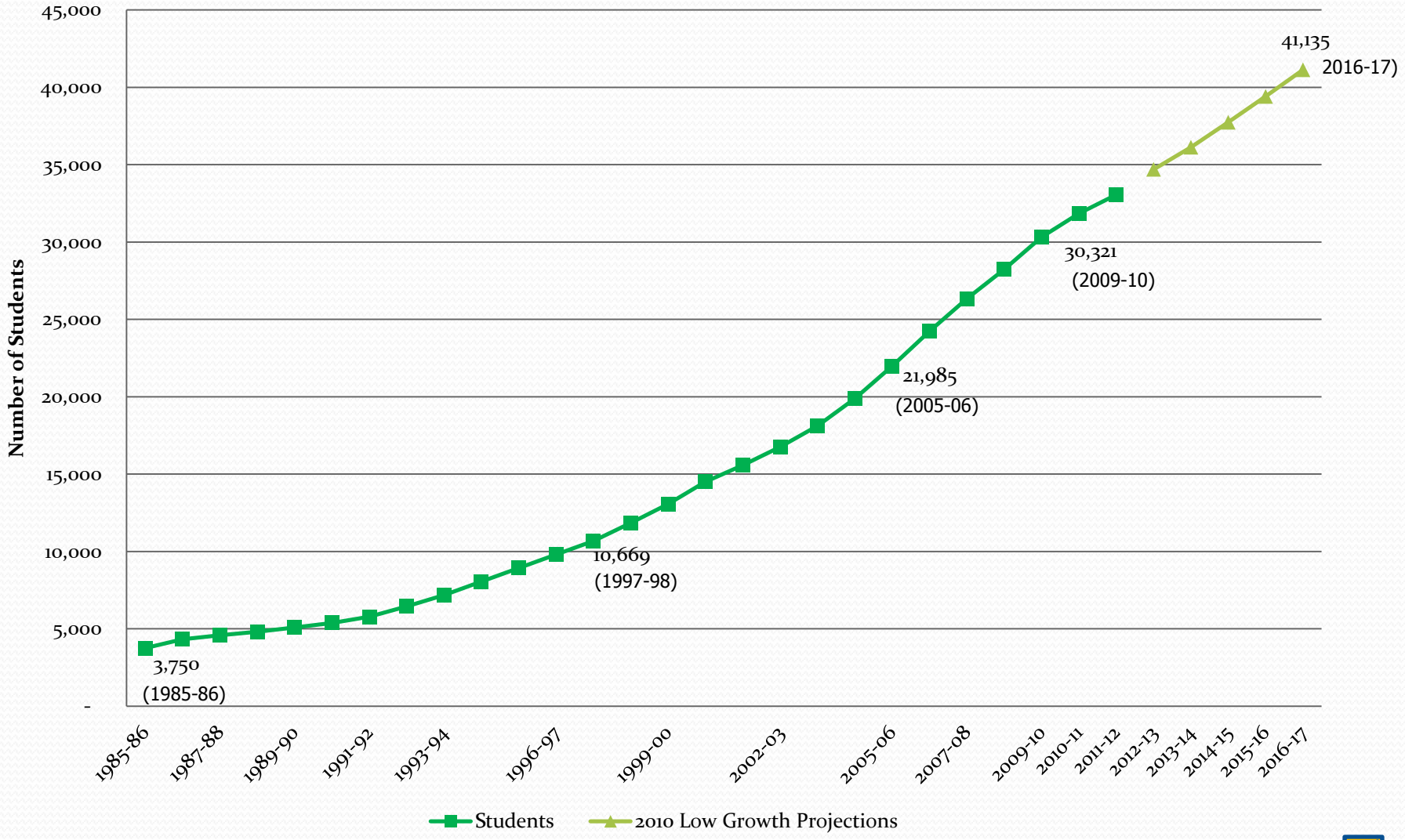
1. understand the impact on the construction schedule, including deferred and added construction elements;

2. understand the impact on warranties and insurance;

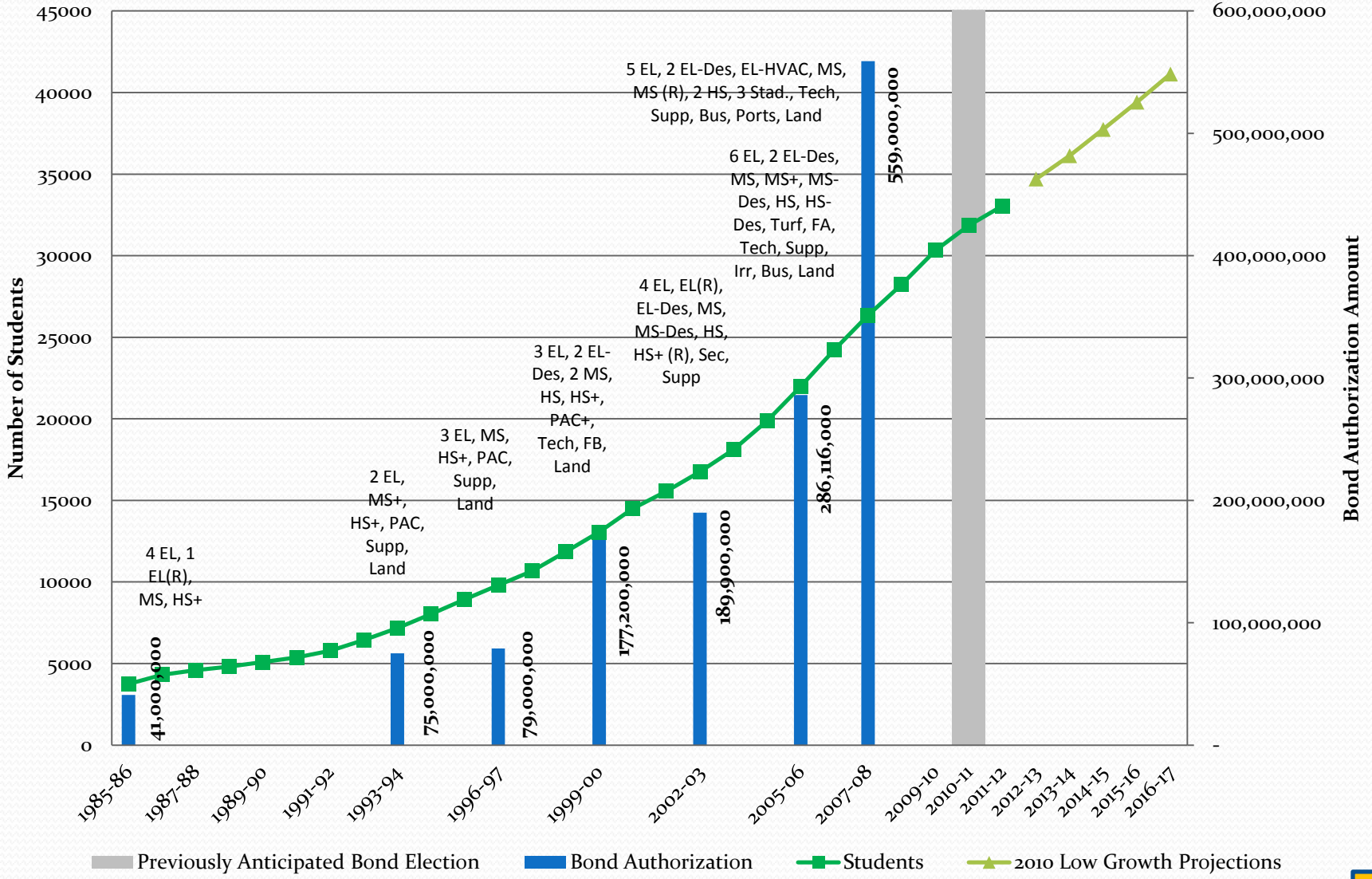
3. understand protocol that keeps the mechanical, electrical, and plumbing equipment, and interior finishes, indoor air quality, and indoor temperature in optimum condition; and

4. understand how the Construction Manager is impacted both contractually and on site.

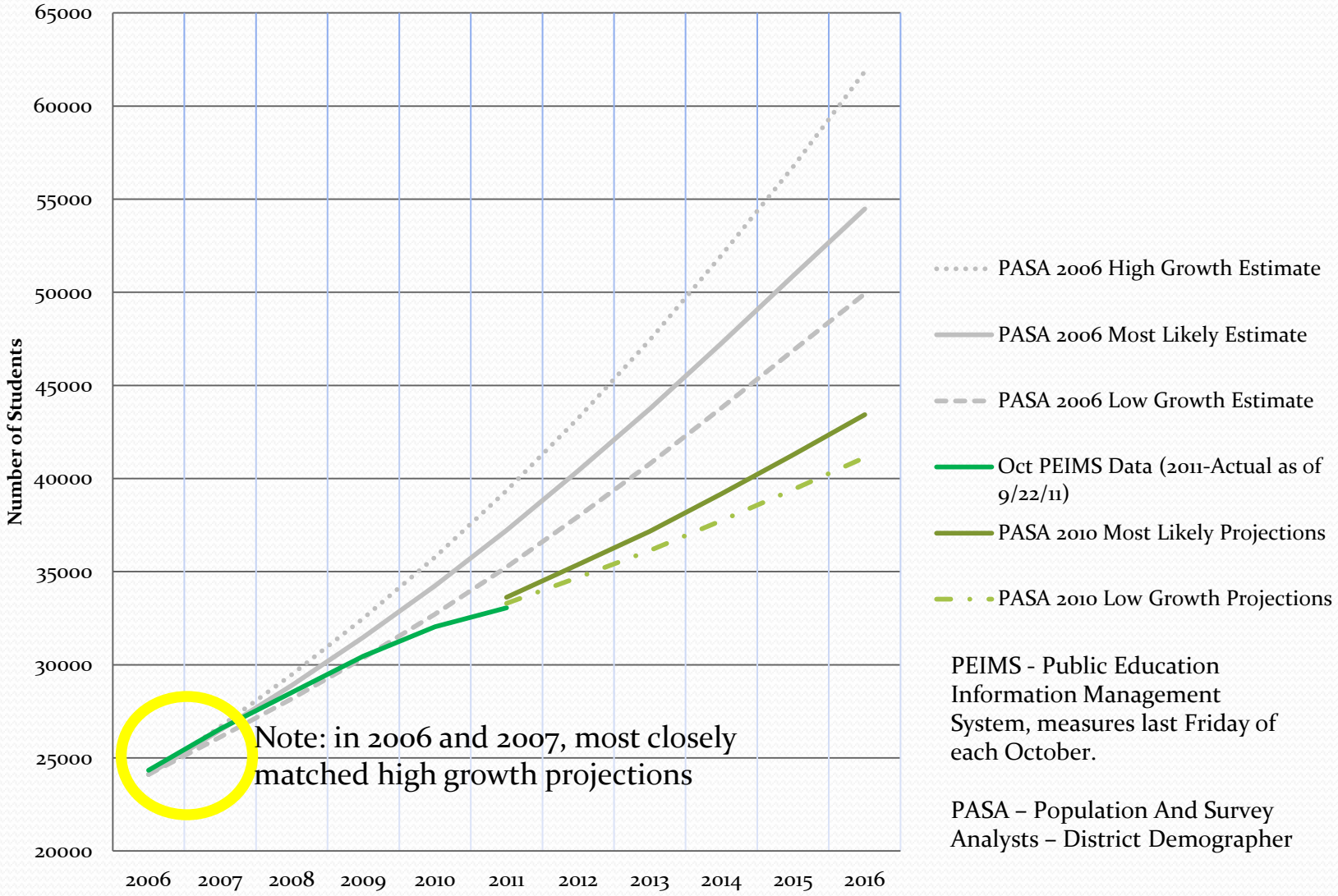
Enrollment History and Projections



Enrollment vs. Bond Authorization Year



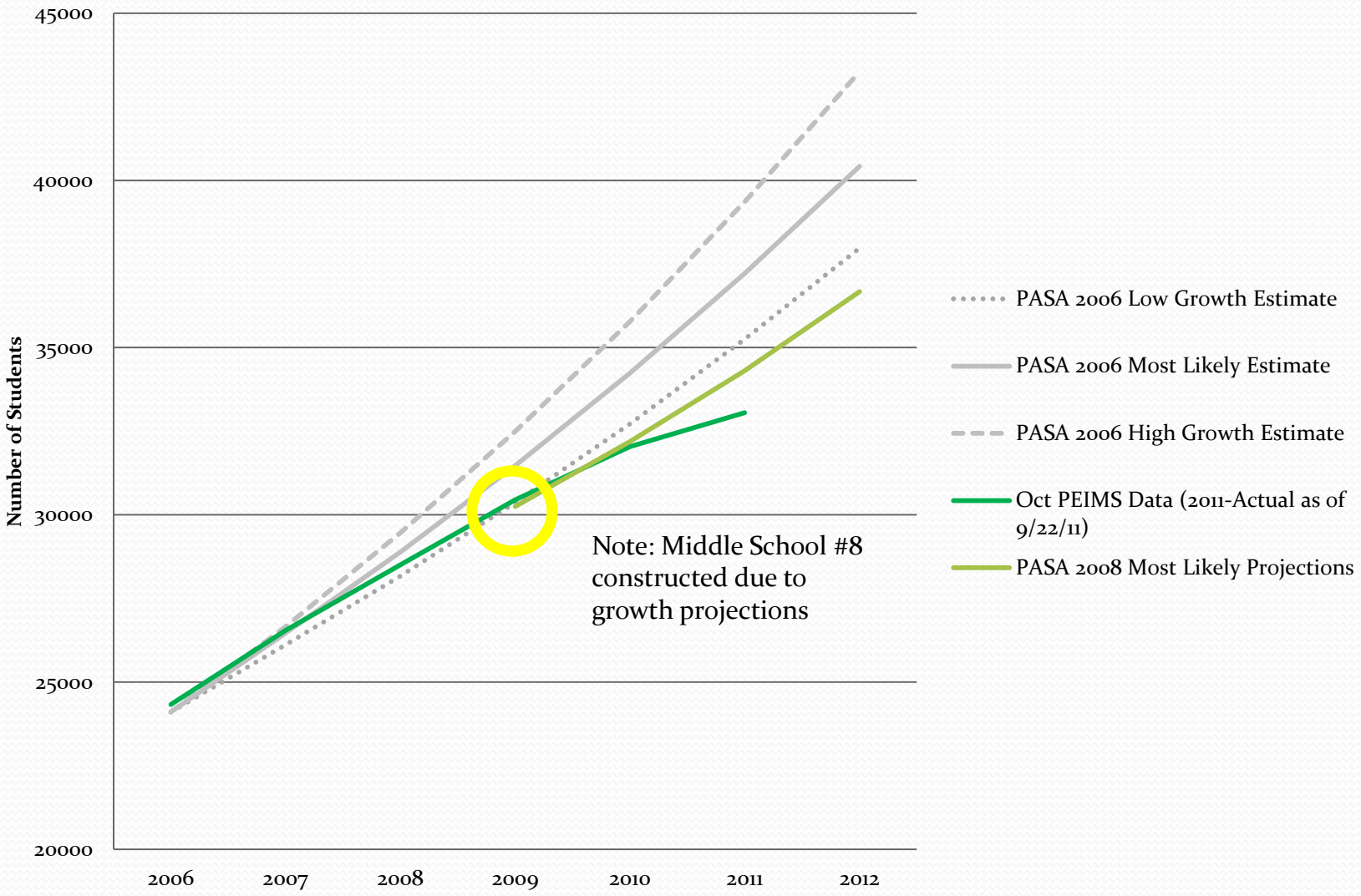
Compare PASA Projections to PEIMS



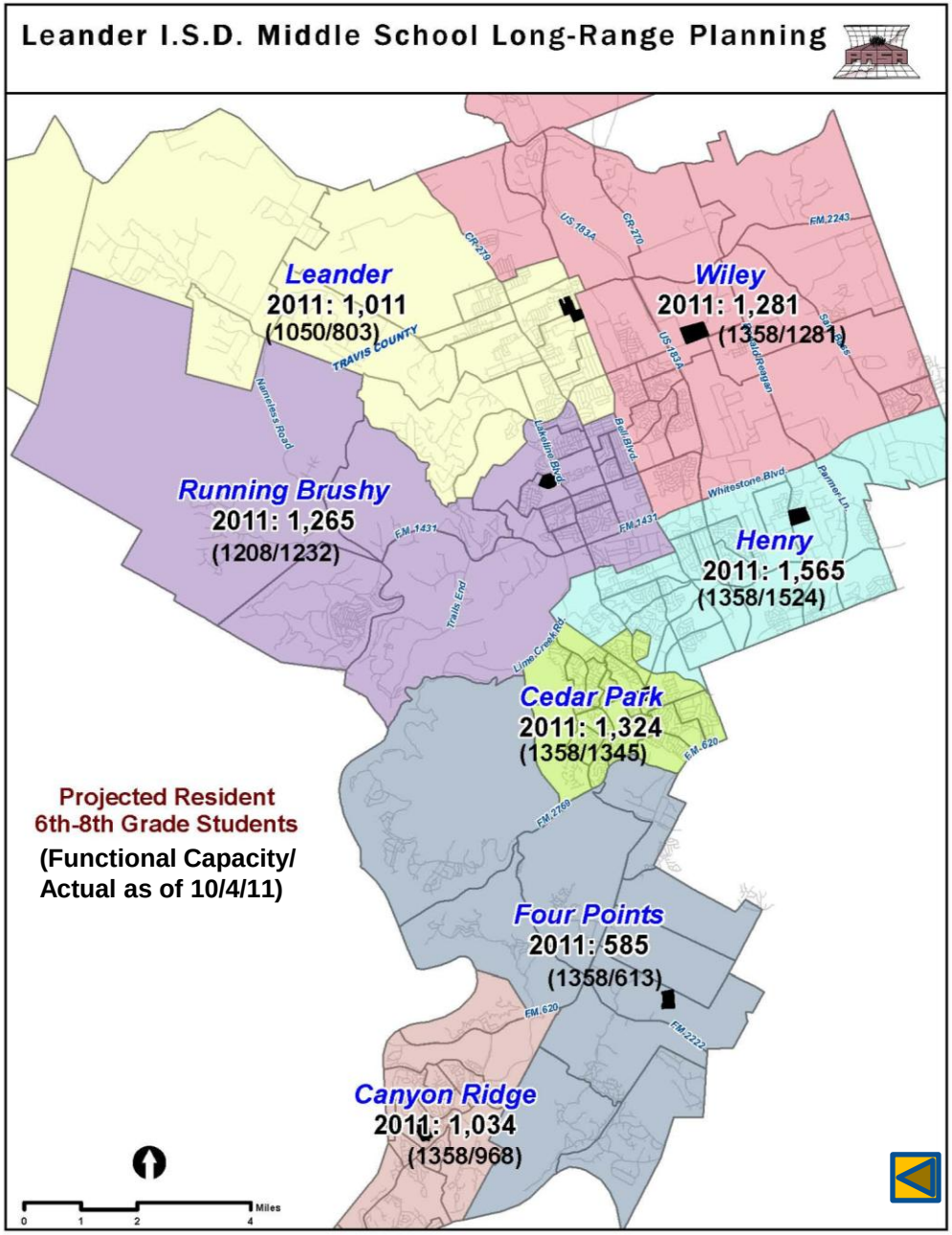
PEIMS - Public Education Information Management System, measures last Friday of each October.

PASA – Population And Survey Analysts – District Demographer

Enrollment Estimates Affect Building Plan



Middle School Projections
from the
2009 Demographic Study
(using "most-likely" scenario)



But then..

- Economy goes in a tail spin
- Growth Slows in LISD
  - From just over 2,200 students in 2007 to just over 1,200 in this year (October 2011)
- State Funding Reduced
  - General Operating Budget reduced by $37 million, $15M in 2011-2012 and $22M 2012-2013
- Board considers delaying the opening of MS #8 and Elem #24

Board considers delaying the opening of Middle School 8 and Elementary 24 …

- Option 1 – Stop construction
- Option 2 – Build out and delay opening
  - Middle School 8 October 2010
    - Fields & Associates Architects/Bartlett Cocke General Contractors
  - Elementary 24 February 2011
    - O'Connell Robertson/American Constructors
  - Decision made **NOT** to utilize buildings for alternative purposes

Option 2 - Build out and delay opening

Contract Impacts

- Construction Manager - Architect/Engineer – Other Consultants
  - amend the contract's substantial completion date
  - amend the contract's final completion and acceptance date
  - potential change-order for additional general condition costs

Option 2 - Build out and delay opening

Warranty Impacts

- Considered price to extend full building warranties
  - EL 24 - $181,200 (excludes 2 year pre-purchased HVAC)
  - MS 8 $584,000
- Considered price to extend critical warranties
  - MS 8 - $134,000
- Decided to Self warranty

Option 2 - Build out and delay opening

Construction Schedule Impacts

- Elements deferred
- Elements added
- Elements we considered

Option 2 - Build out and delay opening

Construction Schedule Impacts

- Elements deferred
  - Track surface
  - Wood gym flooring
  - Gym bleachers, pads and paint
  - Gym scoreboard
  - Weight room flooring
  - Weight room equipment
  - Playground equipment
  - FF&E phones, computers, and furniture
  - Dance flooring
  - Exterior basketball equipment
  - Worked with City to delay all landscaping (Middle School 8)
  - Exterior way finding signage

Option 2 - Build out and delay opening

Construction Schedule Impacts

- Elements Added
  - Exterior fence height
  - Security gates at driveways
  - MEP protocol
  - Security (surveillance) cameras
  - Maintenance and Custodian inspections
  - Temporarily moved lockers to other school
  - Work with police and fire departments
  - Environmental controls / protection
  - Floor protection
  - Additional air quality testing

Option 2 - Build out and delay opening

Construction Schedule Impact

- Elements considered
  - Kitchen equipment
  - Library furniture
  - Installation of technology infrastructure
  - Installation of lockers

Option 2 - Build out and delay opening Warranty & Schedule Impact Summary for Middle School 8

Extra Year of Full Warranty	Extra Year of Critical Warranty
$584,000	$134,000

- **Decided to Self Warranty**
- Middle school campus administrative staff typically occupies building in March prior to school opening
- LISD extends Middle School 8 substantial completion date for non-deferred items to January 2012
  - Provides warranties through first half of school year (cooling and heating cycle)
- Final completion of non-deferred items in March of 2012
  - Coincides with campus administration moving in to building
- Substantial completion for deferred items scheduled for May 2012
- Final completion and acceptance scheduled for June 2012 for Middle School 8

Option 2 - Build out and delay opening

Construction Manager Perspective

- Some considerations resulting from delay
  - Safety – longer amount of time creates more opportunities for exposure
  - Sub-contractor mobilizations – managing crew downsize creates longer schedule durations
  - Security - unoccupied campus
    - Stored materials and equipment
  - Protection of finishes
  - Training
    - Operations and maintenance training (prior to substantial completion)
    - Staff training (kitchen, administration, art teachers, athletics)

Option 2 - Build out and not open

Insurance considerations

EXHIBIT B
LISD SUPPLEMENTAL GENERAL CONDITIONS
Article 1. General Provisions
1.1 Definitions.

1.1.14 "Substantial Completion" is that stage of completion, short of final completion, at which the Work, or a discrete portion thereof, is usable by Owner for the purpose for which it is intended (any necessary Certificate of Occupancy having been obtained, unless a Certificate of Occupancy is not issued through no fault of Construction Manager), and at which, in order to obtain possession and control of the Work or the particular discrete portion, **it is advantageous to Owner to assume the burden of maintenance and risk of loss thereof.** The date of Substantive Completion is shown on Amendment No. 1 to the Contract.

Option 2 - Build out and delay opening

Insurance considerations

- Insurance Carrier
  Texas Association of School Boards, (TASB)
  - Limited experience insuring a temporarily vacant building
  - TASB now has an approved process
    - Site visit to inspect building and finished status from a security and protected investment standpoint
    - Required to log a weekly site inspection
      - Monitor security and fire alarm systems
      - Active sprinkler systems
      - HVAC systems
      - Maintain exterior landscape
      - Restrict access to site

Option 2 - Build out and delay opening

Insurance considerations

Phased Insurance Coverage

Phase I - Base building at substantial completion (Contractor drops building coverage)

Phase II - Increase coverage to include technology infrastructure equipment (switches, power supplies, servers, access points, etc.)

Phase III - Increase coverage to include district provided furniture, fixtures, and equipment (FF&E)

Contractor will need to reinstate insurance coverage per the contract when installation of deferred items begin.

Option 2 - Build out and delay opening Mechanical Electrical and Plumbing (MEP) Protocols

- MEP Engineering generated a schedule of runtimes for mechanical and plumbing components
  - Equipment to maintain space cooling and heating to the unoccupied temperature settings
  - Humidity controlled by dew-point sensors rather than humidity sensors
  - HVAC equipment to cycle weekly
  - Plumbing fixtures to be cycled regularly

Option 2 - Build out and delay opening

Mechanical Electrical and Plumbing (MEP) Protocols

- MEP Engineering generated a schedule of runtimes for mechanical and plumbing components
  - Main Distribution Frame (MDF)/Intermediate Distribution Frame (IDF), HVAC equipment to run in normal occupied mode, maintaining 72 degree set point.
  - Freeze protection sequences on the chilled water system to be verified when ambient temperature is below 40 degrees

Option 2 - Build out and delay opening

Mechanical Electrical and Plumbing (MEP) Protocols

- Shut down of equipment – check with manufacturers/installer for specific instructions
  - Walk-in Cooler/Freezer
  - Ice machines
  - Elevator (after inspection)

Option 2 - Build out and delay opening

Mechanical Electrical and Plumbing

- Scheduled maintenance
  - **Change filters** on six month intervals, (minimum), monitoring the first 2-3 months to ensure more frequent changes are not required.
  - **Visually inspect** all HVAC equipment monthly.
  - **Observe** the major HVAC equipment components in **operation** monthly, (includes chiller, pumps, heat recovery units and outside air units).
  - **Verify weekly** that the **security lighting** is operating correctly.
  - During an extended power outage, shut off the **domestic water supply** to the building.
  - **After a freeze event**, (when temperature drops below 32 degrees for an extended time), send maintenance personnel immediately to building to **verify freeze damage** has not occurred.
  - **After extensive rain**, send maintenance personnel to building immediately to **verify if water damage has occurred**.

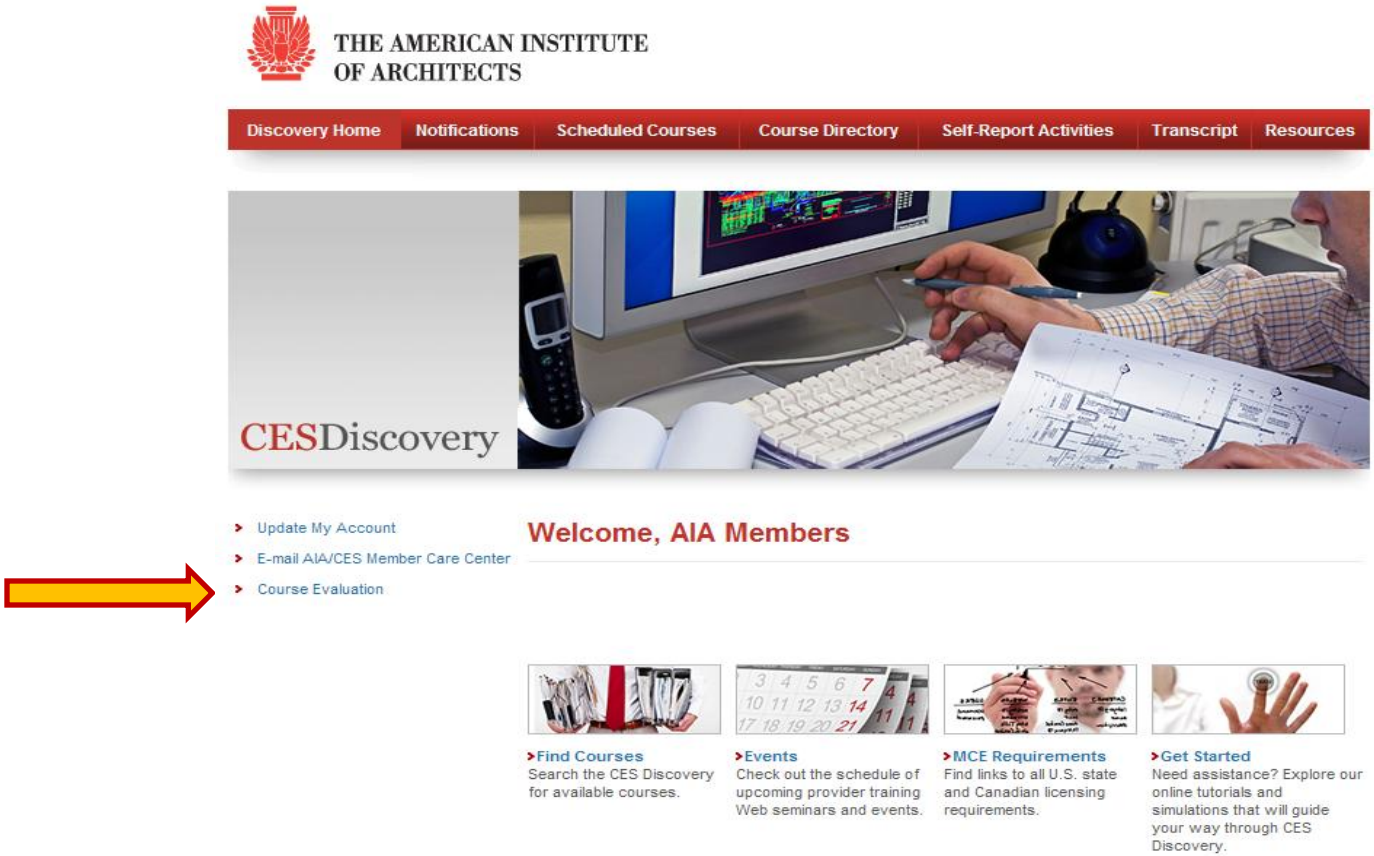
Option 2 - Build out and delay opening

Cost Impact – Cost avoidance to general operating fund

- Middle School 8
  - Anticipated cost savings to general operating budget is $1.6 million
- Elementary 24
  - Anticipated cost savings to general operating budget is $631,000

Course Evaluations

In order to maintain high-quality learning experiences, please access the evaluation for this course by logging into CES Discovery and clicking on the Course Evaluation link on the left side of the page.



Thank you for your time!

QUESTIONS??

This concludes The American Institute of Architects Continuing Education Systems Course

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Questions & Resources

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Appendix

Option 1 –
Stop Construction and delay opening

- Legal/Contractual implications
- Safety
- Security
- Fencing
- Securing existing material and equipment
- Deliveries in route (storage and insurance)
- Environmental considerations

Option 2 - Build out and delay opening

Middle School 8 and Elementary 24

- Cost avoidance to the general operating budget, by delaying the opening of new schools
  - Staff costs
  - Utility costs
  - Bus transportation costs

EL 24 status at delay decision

AMERICAN CONSTRUCTORS

LISD ES#24
Leander, TX

Date: February 13, 2011

MS8 status at delay decision

BARTLETT COCKE

LISD MS #8

Date: October 16, 2010

Option 2 – Build out and delay opening

Critical Warranties

- HVAC equipment
- DDC building automation
- Fire alarm and sprinkler systems
- Plumbing
- Electrical systems
- Elevator
- Kitchen equipment

Vacant Building Weekly Inspection Log

This log must be maintained weekly as a condition of coverage

Member: _____ Location Inspected: _____

	Date	Inspected by:	Initials	1. Monitored security and fire alarm systems operational?	2. Fire sprinkler systems operational?	3. Mandated sprinkler inspections completed?	4a. If no sprinkler system, Water service shut off?	4b. If no sprinkler system - Water system drained?	4c. If no sprinkler system - Boilers protected from corrosion?	5a. Building HVAC operational?	5b. HVAC set to prevent freezing or advent of mold?	6a. Exterior landscaping managed to eliminate fire hazards?	6b. Trees trimmed to prevent overgrowth and roof debris?	7a. Unnecessary access to facilities secured?	7b. Access to parking areas secured?	7c. Access to playgrounds and other areas secured?	Comments
1	10/28/11	Linda Courtney	X.C.	✓	✓	✓	NA	NA	NA	✓	✓	✓	✓	✓	✓	✓	
2																	
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10																	
11																	

Example of deferred items…

EL24 - example of deferred items

AMERICAN CONSTRUCTORS

LISD ES#24
Leander, TX

Date: June 18, 2011

MEP Protocols - HVAC

- HVAC equipment to cycle weekly,
  - Roof top units, water source heat pumps, and fan cooling units expected to run to maintain temperatures, monitored by direct digital control (DDC) system. During spring and fall months, a scheduled runtime to be established to ensure that equipment runtime is achieved for maintenance /energy manager staff to verify that equipment is still operable.
  - Chiller and pumps to be enabled to bring the loop temperature down to set point, allowing heat recovery unit and outside air unit to dehumidify the incoming outside air used to purge volatile organic compounds from the building. This operation will be scheduled during a non-peak temperature period, (such as evening) to reduce energy consumption.
  - Non-essential equipment scheduled for a short runtime monthly.

MEP Protocols – Freeze Protection

- Freeze protection sequences on the chilled water system to be verified when ambient temperature is below 40 degrees:
  - Heat recovery units and outside air units are disabled
  - Chilled water pumps are energized
  - Fully open all chilled water valves to enable flow through coils
  - Heat trace on chiller barrel to be energized

MEP Protocols - Plumbing

- Plumbing fixtures to be cycled regularly,
  - Water closet and urinal automatic flush valves operate in the “sentinel” flush option, (one flush every 24 hours).
  - Manual water closet and urinal flush valves as well as all lavatory and sinks, including hot water, to be manually activated on a schedule to keep chlorinated water in the piping and assist the trap primers to maintain a water seal in the traps.
  - Water heater circulation pumps to be energized periodically to help reduce stagnation in the hot water piping system.