



PSUSD

PALM SPRINGS UNIFIED SCHOOL DISTRICT



FACILITIES STUDY SESSION OE-12 **January 25, 2022**

Presented by PSUSD Staff:

Julie Arthur, Executive Director, Facilities
Planning & Development

AGENDA

1. June 8, 2021 Facilities Study Session Outcomes
2. Review Redevelopment Projects
3. Review Measure E & I Bond Projects
4. Desert Learning Academy Project
5. Battery Storage Update
6. Update EV Charging Stations
7. Identify Potential New Actions and Projects



1. June 8, 2021

Facilities Study

Session Outcomes

1. June 8, 2021 Facilities Study Session Outcomes

1. Addition of electric vehicle charging equipment in current Phase 1 modernizations, RVES and MSJ solar projects and the battery projects at the 4 high schools and DAC/DSC. Costs associated with electric vehicle charging will be included in the individual project budgets.
2. Business Services' staff to return at a future board meeting with a long-term electric vehicle replacement plan for the District's vehicles.



2. Redevelopment Projects

2. Redevelopment Projects

Name of Project	Board Approval Date	Status
1. Minor Capital Projects (MCPs)	6/08/2021	On-going
2. Desert Hot Springs High Aux. & Gym Floor Replacement	7/23/2019	Bidding
3. Solar, battery storage & micro-grid review	12/11/2018	On-going
4. District Administration Center building alteration fund	7/24/2018	On-going
5. Solar canopies at RVES & MSJ (CEC Zero Interest Loan)	12/10/2019	Construction (95%)

2. Redevelopment Project Funds

Projects	Expense thru 6/30/2021	FY22 Budget	FY23 Budget	Project Budgets
District-wide Furniture Replacement Funding – 2 Years**		1,950,000	1,950,000	3,900,000
Desert Hot Springs High Gym Floor Replacement	67,100	1,082,900	0	1,150,000
District Administration Center & Alterations	32,452,815	1,047,185	0	33,500,000
Solar Canopies at RVES and MSJ*	31,403	762,597	0	794,000
Solar, battery storage and micro-grids	110,310	3,750,000	2,539,690	6,400,000
Estimated Total Project Amounts	\$32,661,628	\$8,592,682	\$4,489,690	\$45,744,000

*Fund match for zero interest California Energy Commission loan

**DW Furniture Replacement - Cabinet approved 10/26/2021 – awaiting board approval

2. Redevelopment Annual/On-going Expenses

Annual/On-going Expenses	Expense thru 6/30/2021	FY22 Budget	FY23 Budget
Student technology devices 06 for Technology*	0	*0	2,000,000
Restricted Routine Maintenance Account funds (3%)	3,844,823	4,448,134	4, 448,134
Communication tower maintenance (Airlinks)	140,000	144,000	144,000
Lease Edom Hill antennas & ETIS PO's	16,014	39,300	39,300
1000 Tahquitz Lease	102,200	126,177	126,177
MCP Funds*	255,279	283,596	200,000
Estimated Total of Annual Amounts	\$4,358,316	\$5,041,207	\$6,957,611

* Student technology devices currently purchased using Cares Act Funds

2. Redevelopment Fund Balance

	Expensed as of 6/30/2021	FY22Budget	FY23 Budget
Estimated Total of Annual/On-going Amounts	4,358,316	5,041,207	6,957,611
Estimated Total of Project Amounts (Page 6)	32,661,628	8,592,682	4,489,690
Total Combined Annual & Project Amounts		13,633,889	11,447,301
Projected Revenues		11,620,000	11,200,000
Net Change		(2,013,889)	(247,301)
	FY20	FY21	FY22
Balance 6/30/21	\$18,797,528		
Balance as of 6/30/22		\$16,783,639	
Balance as of 6/30/23			\$16,536,338



3. Measure E & I Bond Projects

3. Measure E Bond Current Projects

Name of Project	Board Approval Date	Status
1. Bubbling Wells Elementary Modernization*	2/11/2020	Design Phase
2. Della Lindley Elementary Modernization*	2/11/2020	Design Phase
3. Landau Elementary Modernization*	2/11/2020	Design Phase
4. Sunny Sands Elementary Modernization*	2/11/2020	Design Phase
5. James Workman Middle Modernization*	2/11/2020	Design Phase
6. Cathedral City High Modernization*	2/11/2020	Design Phase
7. DHS HS Locker-room HVAC	12/11/2018	Completed 2021
8. Palm Springs High Seismic Renovation	12/12/2017	Construction (95%)
9. Proposition 39 Lighting & HVAC projects	5/24/2016	Construction (95%)
10. Central Plant Replacement Richards Center	7/28/2020	Construction (50%)

* Design only – construction expenses part of Measure I.

3. Measure E Bond Projects

Name of Project	Board Approval Date	Status
11. Updated Facilities Master Plan	12/13/2016	On-going
12. Elementary Shade Structures & Trees	12/12/2020	Construction (95%)
13. District-wide Drinking Fountains	12/11/2018	99% Complete
14. Purchase new elementary site/Desert Hot Springs	5/24/2016	On hold
15. Parking lot renovation at Della Lindley Elementary	12/11/2018	Completed 2021

3. Measure E Bond Fund Balance

Project	Expenditures Thru 6/30/2021	FY22 Budget	FY23 Budget	Project Budget	Total Cost to Bond Measure
Desert Hot Springs Locker-room HVAC	502,247	297,753	0	800,000	800,000
Central Plant Replacement Richards Center	147,257	1,902,743	0	2,050,000	2,050,000
District-wide Prop 39 HVAC/Lighting Projects	3,846,811	1,110,189	0	4,957,000	4,957,000
Palm Springs High Seismic Renovation	26,571,615	15,058,385	0	41,630,000	41,630,000
Desert Learning Academy (500 Bldg.) design only, split-funded with Developer fees	85,195	414,805	700,000	1,200,000	1,200,000
District-wide Drinking Fountains	1,917,139	82,861		2,000,000	2,000,000
Facilities Master Plan Update	263,525	186,476	0	450,000	450,000
Elementary Shade Structures & Tree's	2,887,659	412,341	0	3,300,000	3,300,000
Della S. Lindley E. S. Modernization – design only, incl. fire alarm budget	814,604	744,626	64,333	1, 623,563	1,623,563

3. Measure E Bond Fund Balance

Project	Expensed thru 6/30/2021	FY22 Budget	FY23 Budget	Project Budgets	Total Cost to Bond Measure
Landau E. S. Modernization - design only, incl. fire alarm budget	96,267	1,226,932	231,625	1,554,824	1,554,824
Sunny Sands E. S. Modernization - design only, incl. fire alarm budget	92,323	1,260,128	238,858	1,591,309	1,591,309
Bubbling Wells E. S. Modernization – design only	37,677	715,000	247,323	1,000,000	1,000,000
James Workman M. S. Modernization – design only	90,400	1,867,700	1,291,900	3,250,000	3,250,000
Cathedral City H. S. Modernization – design only, incl. fire alarm budget	115,948	2,031,103	2,384,052	4,531,103	4,531,000
Other Bond Costs	250,618	100,000	100,000	450,618	450,618
DHS land for elementary school – on hold with approved budget			0	2,000,000	2,000,000
Remaining Budgets for closed-out Projects – Ed Wenzlaff F&E, Nellie Coffman Middle Mod, & Aqua Caliente Reconstruction		261,668		261,668	261,668

\$3,671,539 Balance of Fire Alarms Upgrade 3.8 million budget was distributed to DSL MOD, LAN MOD, SS MOD, CCHS MOD

3. Measure E Bond Fund Balance

Project	Expensed thru 6/30/2021	FY22 Budget	FY23 Budget	Project Budget	Total Cost to Bond Measure
Estimated Total Project Amounts	37,719,283	27,672,711	5,258,091	70,650,085	70,650,085
Interest Revenues	217,823	100,000	20,000		
Other Revenues / Refunds	0	0	0		
Estimated Total Revenues	217,823	100,000	20,000		
Funding Source:					
Measure E Bond Funds	FY 2021	FY 2022	FY 2023		
Cash balance 7/1/2021	34,930,661				
Estimated net change FY22		(27,572,711)			
Estimated net change FY23			(5,238,091)		
Estimated Cash balance 6/30/23				\$2,119,859	

3. Measure E & I Bond Authorization

Measure E \$516,000,000		Series	Authorized Amount	Total Bonds Issued	Remaining Authorization
November 2010	A	19,539,035	19,539,035		
November 2010	B	110,000,000	129,539,035		
November 2013	C	70,000,000	199,539,035		
July 2016	D	100,000,000	299,539,035		216,460,965
Measure I* \$216,460,965		Series	Authorized Amount	Total Bonds Issued	Remaining Authorization
April 14, 2021	A	118,000,000	118,000,000		98,460,965

***Voters approve Measure I in November 2016**

3. Measure I Bond Fund Balance

Project	FY22 Budget	FY23 Budget	FY24 Budget	Project Budgets	Total Cost to Bond Measure
Della Lindley E. S. Modernization	6,125,000	8,000,000	10,067,500	18,250,000	18,250,000
Landau E. S. Modernization	0	17,000,000	20,410,000	37,410,000	37,410,000
Sunny Sands E. S. Modernization	0	17,000,000	21,215,800	38,215,800	38,215,800
Ongoing Bond Cost Measure I	7,500	7,500	7,500	22,500	22,500

3. Measure I Bond Fund Balance

Project	FY22 Budget	FY23 Budget	FY24 Budget	Project Budget	Total Cost to Bond Measure
Estimated Total Project Amounts	6,132,500	42,007,500	51,700,800	99,840,800	99,840,800
Interest Revenues	175,000	150,000	100,000		
Other Revenues / Refunds					
Estimated Total Revenues	175,000	150,000	100,000		
Funding Source: Measure I Series A					
Estimated Cash balance 6/30/21	118,000,000				
Estimated net change FY22	(6,307,500)				
Estimated net change FY23		(41,857,500)			
Estimated net change FY24			(50,700,000)		
Estimated balance 6/30/24				\$ 19,135,000	



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4. Desert Learning Academy Project

PRESENTED AT JANUARY 28, 2020 FACILITIES STUDY SESSION

4. Desert Learning Academy Reuse

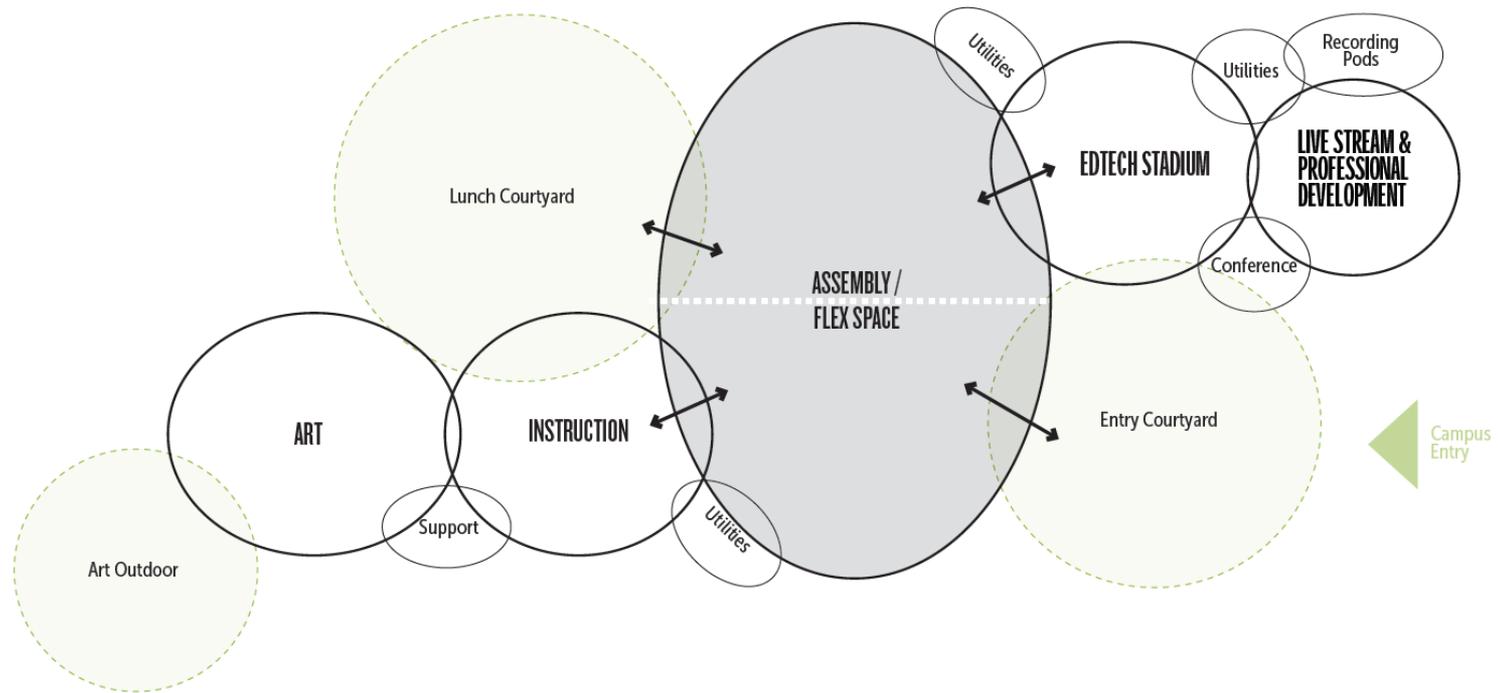
- At the November 14, 2017 Facilities Study Session review of the Brandow & Johnston study for Palm Springs High Seismic project of buildings constructed prior to 1980.
- The 500 building (MPR) at Desert Learning Academy built in 1963 was part of the initial review but was removed from the PSHS seismic project due to structural issues. The 500 building is a steel braced frame with flexible diaphragms which the report identified had structural impacts.
- The costs associated with a full seismic structural upgrade were found to be more expensive than to replace the building. Replacement was the best option.



VIEW OF KINDERGARTEN CLASSROOM
DELLA LINDLEY ELEMENTARY
MODERNIZATION

4. Desert Learning Academy Reuse

- Opportunity to reimagine the building to serve future student needs.



ADJACENCY DIAGRAM

BakerNowicki PALM SPRINGS UNIFIED SCHOOL DISTRICT
design studio

DELLA LINDLEY ELEMENTARY
MODERNIZATION

4. Desert Learning Academy Reuse

- Opportunity to reimagine the building to serve future student needs.



FLOOR PLAN

4. Desert Learning Academy Reuse



Open assembly space for student and staff trainings needs. Edtech Stadium for E-Sports Competitions

4. Desert Learning Academy Reuse



Live stream and professional development recording and editing



4. Desert Learning Academy Reuse

Reimagined building to serve future student needs.





5. Battery Storage

5. PSUSD Battery Storage Objectives

- The battery analysis provided by a third party, estimated the district would save money by using stored energy to offset SCE bills.
- Battery storage time is roughly 4 hours. This stored energy can be used at night when solar is not available and when central plants are turned on triggering large amounts of energy consumption.
- Reduce the high demand load charges by using energy made by solar during the day and stored in the battery.
- When the highest need for electricity is identified at each school, use the batteries-stored energy instead of SCE energy.
- Smoothing out the electricity demand throughout the day, will reduce the district's electric bills.



PSUSD Storage: 5 Site Portfolio

Portfolio Financial Highlights

Battery System Size	1240kW (2480kWh)
Purchase Price	\$2,136,226
SGIP Incentive Value	\$868,000
<hr/>	
Year 1 Utility Savings	\$161,291
Year 1 Expenses (O&M)	\$34,960
Year 1 Net Savings	\$560,331
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15 Year Cumulative Cash Flow	\$3,681,087
Average Simple Payback	7.4 Years
Storage Lifecycle	15 Years

Purchase Key Terms

Project Ownership
PSUSD

Self Generation Incentive Program
PSUSD Collects SGIP

Annual Fees
Includes All O&M, software, and monitoring services

Depreciation
PSUSD cannot monetize tax benefits

Warranties
Includes manufacturers and workmanship warranty for term of contract

*Net Savings is EBITDA – inclusive of all cash flows and non-tax incentives
*Equipment pricing is valid for 30 days.



PSUSD Portfolio Breakdown

	Rancho Mirage High School	Palm Springs High School	Desert Hot Springs High School*	Admin Center	Cathedral City High School
Battery System Size	248kW (496kWh)	248kW (496kWh)	248kW (496kWh)	248kW (496kWh)	248kW (496kWh)
Purchase Price	\$478,923	\$442,551	\$423,565	\$392,571	\$398,616
SGIP Incentive Value	\$173,600	\$173,600	\$173,600	\$173,600	\$173,600
Year 1 Utility Savings	\$33,776	\$34,252	\$27,040	\$35,512	\$30,711
Year 1 Expenses (O&M)	\$6,992	\$6,992	\$6,992	\$6,992	\$6,992
Year 1 Net Savings	\$113,584	\$114,060	\$106,848	\$115,320	\$110,519
15 Year Cumulative Cash Flow	\$893,477	\$785,393	\$607,125	\$691,363	\$703,729
Simple Payback	6.9 Years	7.1 Years	9.2 Years	7.1 Years	6.9 Years
Storage Lifecycle	15 Years	15 Years	15 Years	15 Years	15 Years

*EnergyStar school

*Net Savings is EBITDA – inclusive of all cash flows and non-tax incentives
*Equipment pricing is valid for 30 days.



PSUSD Portfolio Breakdown

Rancho Mirage High School		REVENUES/SAVINGS	Year 1	Year 2	Year 3	Year 4	Year 5
		Storage Incentive SGIP	\$86,800	\$50,077	\$36,723	\$0	\$0
Battery System Size	248kW (496kWh)	Storage Demand Savings	\$21,848	\$22,851	\$24,184	\$24,963	\$25,758
Purchase Price	\$478,923	Storage Energy Arbitrage	\$11,927	\$18,724	\$32,225	\$31,918	\$31,586
SGIP Incentive Value	\$173,600	TOTAL REVENUES	\$120,576	\$91,652	\$93,132	\$56,881	\$57,344
Year 1 Utility Savings (Storage Demand + Arbitrage)	\$33,776	EXPENSES					
Year 1 Expenses (O&M)	\$6,992	Storage Annual O&M	\$3,012	\$3,102	\$3,195	\$3,291	\$3,390
Year 1 Net Savings	\$113,584	Storage Software & Monitoring	\$3,980	\$4,013	\$4,047	\$4,081	\$4,116
15 Year Cumulative Cash Flow	\$893,477	TOTAL EXPENSES	\$6,992	\$7,115	\$7,242	\$7,372	\$7,506
Simple Payback	6.9 Years	Net Saving	\$113,584	\$84,537	\$85,890	\$49,508	\$49,838
Storage Lifecycle	15 Years						

*EnergyStar school

*Net Savings is EBITDA – inclusive of all cash flows and non-tax incentives
*Equipment pricing is valid for 30 days.

5. PSUSD Battery Construction Schedule

Battery project construction begins as follows:

- 1/03/22 at Palm Springs High School.
- 1/10/22 at Cathedral City High School.
- 1/17/22 at Desert Hot Springs High School.
- 1/24/22 at District Administration Center.
- 1/31/22 at Rancho Mirage High School.

All battery units will be craned in place at the same time once the concrete pads are completed at each site, estimated second week of February.



6. Electric Vehicle Charging Stations



6. CCHS Electric Vehicle Charging Stations

Cathedral City High School is one of 38 school sites to get EV chargers through a new SCE pilot.

Cathedral City High School is the first school to benefit from a state-approved \$10 million Southern California Edison pilot to provide electric vehicle charging stations, including all necessary electrical infrastructure, to K-12 schools within the utility's service area.

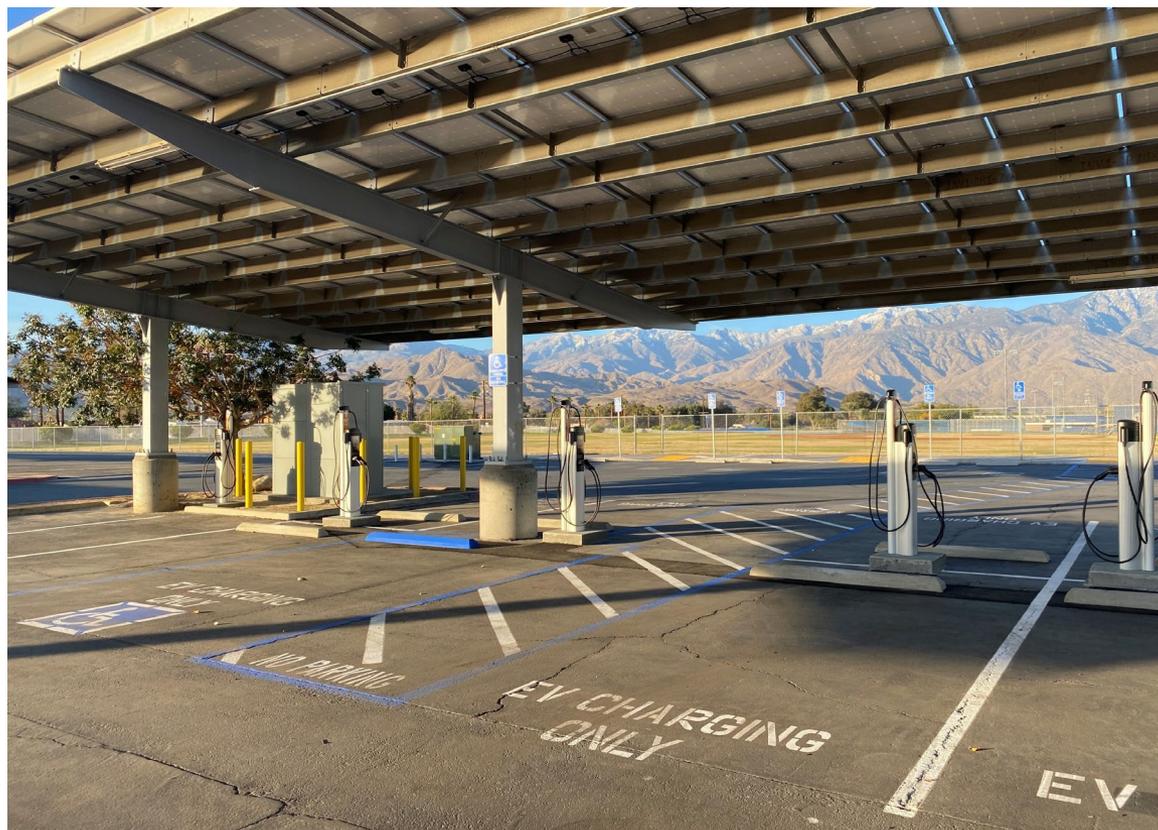
 Location of 12 EV stations.



6. CCHS Electric Vehicle Charging Stations

PSUSD's first electric charging stations:

Project Scope: 12 EV charging stations, construction started August 2021 and completed December 2021.





7. Potential New Actions For Bond & Redevelopment Funds Per PSUSD Facilities Master Plan

7. Potential Actions Pending BOE Direction

1. Desert Hot Springs High School lighting for walkways and parking lot at stadium area, estimated \$450,000 – Redevelopment Funds.
2. Ratify Districtwide Furniture Replacement Funding \$1,950,000 for 2 years – Total \$3,900,000 – Redevelopment Funds.
3. Palm Springs High School Classroom 900 and 901 update to current standards, estimated \$960,000 – Unused PSHS Seismic Project Bond Funds.
4. Locker rooms at Nellie Coffman Middle School, estimated \$2,000,000 – Unused PSHS Seismic Project Bond Funds.

3. Redevelopment Fund Potential Options Pending BOE Direction

Project	Amount Requested	Redevelopment Funds Balance
Estimated Balance as of 6/30/2023		16,536,338
Desert Hot Springs High School lighting at the walkways and parking lot of the stadium area.	< 450,000>	16,086,338
Ratify Districtwide Furniture Replacement Funding of \$1,950,000 for 2 years.	< 3,900,000>	12,186,338
Totals:	\$ 4,350,000	\$ 12,186,338

5. Measure E Bond Fund Potential Options Pending BOE Direction

Project	Amount Requested	Estimated Bond Fund Balance
Estimated Measure E Fund Balance as of 6/30/2023.		1,584,392
Release \$3M of PSHS \$41 M Seismic project funds approved 12/12/2017.	3,000,000	4,584,392
PSHS Classroom 900 and 901 classroom updates	< 960,000>	3,624,392
Locker rooms at Nellie Coffman Middle Upgrades	< 2,000,000>	1,624,392
Total:	\$ 2,960,000	\$ 1,624,392



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Questions or
comments?