

# **Annual Report on Major Capital Projects Implementation**

**Fiscal Year 2020-2021** 

# **Annual Report on Major Capital Projects Implementation**

### Fiscal Year 2020-21

University of California Office of the President Capital Asset Strategies & Finance

Executive Summary	2
Completed Projects	3
Active Projects	4
Presidential Process and Regents Process	8
Appendices	

Appendix A – List of Completed Major Capital Projects 2020-21 Over \$20 million Appendix B – List of Active Major Capital Projects as of June 30, 2021 Over \$20 million

### **Figures**

Figure 1: Project Distribution by Budget Category - All Completed

Figure 2: Project Distribution by Budget Category – All Active

Figure 3: Completed Projects - Year over Year Comparison (Budget of \$20+ Million)

Figure 4: All Active Projects - Year over Year Comparison (\$20+ Million)

Figure 5: Active Major Capital Projects by Campus (\$20+ Million)

Figure 6: Investment by Use (Active Projects \$20+ Million)

Figure 7: Presidential vs. Regental Process Active & Complete (\$10+ Million)

Cover Photo: UCSF Bakar Precision Cancer Medical Building

Photo Credit: Noah Berger

### **EXECUTIVE SUMMARY**

The **Annual Report on Major Capital Projects Implementation Fiscal Year 2020-21** provides an update on the progress of the University's Capital Improvements Program. The report provides the status of all major capital projects<sup>1</sup> that were completed in fiscal year 2020-21<sup>2</sup> and active major capital projects in design or construction as of June 30, 2021. The document includes additional details for projects with a budget of over \$20 million.

Figure 1 and 2 illustrate the full range of capital projects (Figure 1 Completed Projects and Figure 2 Active Projects), grouped by thresholds of under \$10 million, \$10-\$20 million, and over \$20 million. Projects with budgets over \$20 million account for the majority of the funds related to capital. Reported budgets may vary from those initially approved, as a result of augmentations. The reasons for augmentations vary, but are generally caused by unfavorable bid conditions in the over-heated California construction market. Reported schedule delays result from reasons that include unexpected site conditions, scope changes and redesign, delay in external approvals, weather, and unanticipated mitigation work. The impacts from the COVID-19 pandemic that began in the second half of FY 2019-20 continued its effect through the end of FY 2020-21. In FY 2020-21 the impacts from COVID-19 were the leading cause of project delays.

<sup>&</sup>lt;sup>2</sup>Completion is measured at the point that the project achieves substantial completion.



Photo: Construction walk at UCSF Research and Academic Building at Zuckerburg San Francisco General Hospital

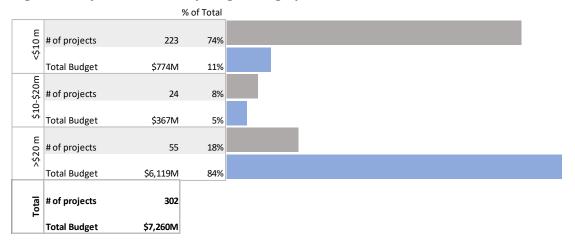
Credit: Barb Ries

<sup>&</sup>lt;sup>1</sup>Major Capital Projects are capital projects with budgets of \$1 million or more.

% of Total # of projects 92 76% Total Budget \$297M 11% \$10-\$20 m # of projects 5% **Total Budget** \$91M 4% # of projects 23 19% **Total Budget** \$2,247M 85% # of projects 121 **Total Budget** \$2,635M

Figure 1 - Project Distribution by Budget Category - All Complete





### **COMPLETED PROJECTS:**

The quality of projects completed last year remains exceptional by many measures including innovative design to support world-class academic and research programs. Education and general campus renovation projects were an area of focus, as was expanding and improving project delivery methods.

### **All Projects**

**Budget:** 121 capital projects with a cumulative budget of \$2,635 million were completed in fiscal year 2020-21. Of the 121 projects, 32 (27%) completed projects required budget

augmentations while 72 (60%) were on budget and 16 (13%) achieved budget savings. Budget projections provided at substantial completion indicate that the aggregate final budget for completed projects will be approximately \$2.5 million or 13% more than their original approved budget.

The \$2,635 million in completed projects in 2020-21 increased from \$1,582 million completed in 2019-20. New construction comprised 66 percent of the cumulative budget for completed projects. Of the 121 completed projects, 92 had budgets under \$10 million, and those were predominantly renovations and infrastructure projects, with a total completed budget of \$297M. Seven seismic related projects were completed in FY 2020-21, with a total completed budget of \$341M.

Schedules: Schedule performance for projects completed in 2020-21 while improved from past years remains a challenge. The percentage of late projects, defined as more than 90 days behind their approved schedule<sup>1</sup>, was 45 percent in 2020-21, compared to 54 percent in 2019-20, 59 percent in 2018-19, 59 percent in 2017-18, and 53 percent in 2016-17.

COVID-19 related delays were the leading cause of extended schedules, responsible for delays in 18 of the 55 delayed projects (33% of all delayed projects). Reasons for delays in the remaining delayed projects are similar to previous years, and include unforeseen conditions, scope and

programmatic changes, reviews by outside agencies, and weather related delays.

### **Projects with Budgets Over \$20 Million**

Budget: The twenty-three completed projects with budgets over \$20 million totaled \$2,247 million. Six were seismic related projects. Nine required augmentations (Appendix A contains the list of major capital with budgets over \$20 million projects completed in FY2020-21). Figure 3 provides a comparison between fiscal year 2019-20 and fiscal year 2020-21 of complete projects with budgets over \$20 million. These figures indicate an increase in the number of projects completed as well as an increase in the funds used for augmentations.

**Schedules:** Seven projects encountered delays and one completed early as compared to the approved schedules. Reasons included COVID-19 impacts, unforeseen conditions, and redesign to meet budget.

Figure 3 – Completed Projects – Yearly Comparison (Budget \$20+ Million)

	2019-20	2020-21
# of Complete Projects	11	23
Original Budgets Total	\$1.23 B	\$1.96 B
<b>Current Budgets Total</b>	\$1.26 B	\$2.25 B
% Budget Augmentation	2%	13%
% Projects Delayed 90+ Days	55%	30%

<sup>&</sup>lt;sup>1</sup>The substantial completion date is compared to the substantial completion date estimated at the time of construction contract award to determine if a complete project is delayed.

### **ACTIVE PROJECTS:**

### **All Projects**

**Budgets:** Fiscal year 2020-21 saw a year over year decrease in the number of active projects. There were 302 active projects with a cumulative

budget of \$7.2 billion as of June 30, 2021, compared to 330 project with budget of \$7.1 billion in active projects on June 30, 2020.

Auxiliary projects accounted for 31 percent of the total active project investment; projects in support of Education and General Use made up 27 percent. Medical and health sciences constituted the remaining 43 percent of the total active project investment.

As of June 30, 2021, augmentations have been required for 65 of the 302 active projects, equal to 22 percent of the active project portfolio, for a cumulative budget increase of approximately 5 percent over the original approved budgets. The cumulative augmentations for active projects totaled \$350 million. Augmentations were not required for 237 active projects (78%).

### **Projects with Budgets Over \$20 Million**

**Budget:** At the end of fiscal year 2020-21, 55 active projects with budgets of \$20 million or higher totaled \$6.2 billion. This represents a 6 percent increase from the \$5.8 billion cumulative investment in fiscal year 2019-20. (refer to **Figure 4**).

As of June 30, 2021, augmentations have been required for 11 of the 55 projects.) However, two large buildings at Irvine – the *Center for Child Health* medical building and the *Interdisciplinary* 

Science and Engineering Building education building – account for \$242 million (79%) of augmentations. The reasons for those two augmentations were the result of changes in scope and cost escalation. Scope changes and cost escalation in the construction market accounted for the majority of augmentations for projects with budgets over \$20 million.

Schedules: Of the 55 active projects, 12 (22%) have experienced delays while 78 percent are currently anticipated to be completed either on time or ahead of schedule. Reasons to date for delays ranged and included scope changes and redesign, unexpected site conditions, COVID-19 impacts, and delay in approval of accessibility requirements by the Division of the State Architect.

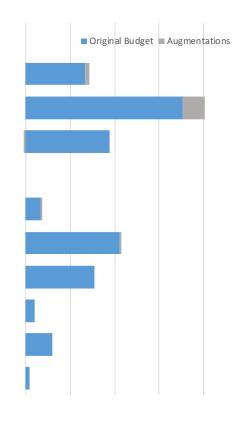
# Investment by Campus for Active Projects Over \$20 Million: As shown on Figure 5 on the following page, capital project investment varies by campus, with the four largest programs at *Irvine, San Diego, Los Angeles, and San Francisco,* accounting for almost 78 percent of the total dollar value for FY 2020-21. Two Los Angeles projects, Le Conte Apartments and LeKretz Botany Building Renovation, had budget reductions which combined total \$22M.

Figure 4 - All Active Projects - Year over Year Comparison (\$20+ Million)

	2019-20	2020-21	% Change
# of Active Projects	60	55	-8%
Original Budgets	\$5.5 B	\$5.9 B	7%
FY 19-20 Budgets	\$5.8 B	\$6.2 B	7%
% Budget Augmentation	7%	5%	-2%
% Projects Delayed 90+ Days	27%	22%	-5%

Figure 5 - Active Major Capital Projects (\$20+M)

	· ·	eči <sup>s</sup> .	audge <sup>te</sup>	ations	sudget"
Active	*of proi	Original	dudgett Augment	Current	audget*
ANR	0	0	0	0	N/A
UC Berkeley	0	0	0	0	N/A
UC Davis	14	668	50	719	108%
UC Irvine	8	1,767	242	2,010	114%
UC Los Angeles	7	945	-22	922	98%
UC Merced	0	0	0	0	N/A
UC Riverside	5	162	20	181	112%
UC San Diego	9	1,061	17	1,078	102%
UC San Francisco	6	769	0	769	100%
UC Santa Barbara	1	97	0	97	100%
UC Santa Cruz	3	295	0	295	100%
	2	47	0	47	100%
UCOP/Systemwide  Total	55	5,811	307	6,118	105%



<sup>\*</sup> in millions



Photo: UCSD North Pines Living and Learning Neighborhood

Credit: Darren Bradley

# **Investment by Use for Active Projects Over \$20**

Million: As illustrated in Figure 6, which shows investment by use category, the investment in Medical Center & Health Sciences facilities increased compared to FY 2019-20, while Auxiliary (e.g., housing, dining, and parking) stayed about the same, and Education and General Use decreased.

About 84 percent (\$5.1 billion) of the total \$6.1B investment in projects over \$20 million is for new buildings and about 16 percent (\$1.0 billion) is for building renovation and infrastructure renewal. Seismic renovation and infrastructure projects comprised 5.8% (\$353M) of the total investment in active projects over \$20M.

Figure 6 - Investment by Use - Active Projects (\$20m+)



In billions

### PRESIDENTIAL PROCESS AND REGENTS PROCESS:

The authority to approve projects from \$10 million up to \$70 million is delegated to the Chancellors, subject to a certification checklist review by the Office of the President to ensure policy compliance. This is referred to as the Presidential Process in this report. The authority to approve projects with budget above \$70 million lies with the Board of Regents, and is referred to as the Regental Process in this report.

The Presidential Process increases campus autonomy, and provides for campus accountability for capital project delivery while streamlining the capital approval process.

As reported in previous years, and as shown in **Figure 7**, the 2020-21 budget and schedule performance reports for active and completed projects over \$10 million indicate that projects approved under the Presidential Process were more likely to receive an augmentation (26%), than were those approved under the Regents Process (22%). Projects approved under the Presidential Process had a lower percentage of augmentation (6%) compared to their original budgets than did projects approved under the Regental Process (8%).

Figure 7 - Presidential vs. Regental Process Active & Complete (\$10+ Million)

	<b>Presidential Process</b>	Regents Process
# of Projects	85	23
Original budget	\$2,379 M	\$5,821 M
Cumulative approved budget changes (+/-)	\$148.7 M	\$4474.4 M
Year-end budget change from original	6%	8%
Projects with budget augmentations	22	5
Projects with budget savings	3	1
% of Projects with budget savings	4%	4%
% of Projects with budget augmentations	26%	22%



Photo: UCSC Cowell Ranch Hay Barn Credit: Cesar Rubio

# Appendix a – list of completed major capital projects over \$20 million (2020-21)

Notice of Substantial Completion or Certificate of Occupancy issued between July 1, 2020 and June 30, 2021

Campus	Project Project	New, Renovation, Both, Infrastructure	Original Approved Budget	Augmentations	Current Budget	% Cost Increase	Reason(s) for Augmentation	Reason for Delay
Totals			1,958,925,000	288,642,000	2,247,567,000			
SF	Joan and Sandford I. Weil Neurosciences Building	New	357,600,000	177,400,000	535,000,000	50%	Added scope and financing costs, changes by public utility	
SD	North Torrey Pines Living and Learning Neighborhood	New	509,450,000	0	509,450,000	0%		
SF	Minnesota Street Graduate Student and Trainee Housing	New	222,700,000	15,400,000	238,100,000	7%	Unforeseen conditions and higher bids	
SD	Ridge Walk Academic Complex	New	168,138,000	0	168,138,000	0%		Delays due to COVID-19
SF	Clinical Sciences Building (CSB) Seismic Building	Infrastructure	91,468,000	59,722,000	151,190,000	65%	Project delayed with change in contractor	
SD	Design and Innovation Building	New	67,000,000	0	67,000,000	0%		
SB	Jeff and Judy Henley Hall	New	56,000,000	9,010,000	65,010,000	16%	Bid Overage	
LA	Franz Hall Tower Seismic Renovation	Renovation	50,000,000	-700,000	49,300,000	-1%		
MC	Downtown Center	New	45,116,000	0	45,116,000	0%		
DV	Roseville Clinic II Tenant Improvement	Renovation	40,000,000	0	40,000,000	0%		
BK	Giannini Hall Seismic Safety Corrections	Renovation	39,200,000	0	39,200,000	0%		Unforeseen conditions requiring repairs
SF	2 North Point Seismic and Tenant Improvements	Renovation	35,144,000	0	35,144,000	0%		COVID-19 impacts
LA	CHS South Tower Post- Occupancy Improvements (Levels 2-7)	Renovation	43,100,000	-9,500,000	33,600,000	-22%	Phase 2 reduced scope	
DV	Walker Hall Renewal and Seismic Corrections	Renovation	31,157,000	2,212,000	33,369,000	7%	Scope Changes	Complex historic structure
ВК	Northern Regional Library Facility Phase 4 Expansion, Systemwide	New	32,500,000	0	32,500,000	0%		
SF	Post Street Faculty Housing Seismic Retrofit	Renovation	18,490,000	13,046,000	31,536,000	71%	High bids, additional design fees, and interest during construction	
DV	UCDH Point West Clinics	Renovation	27,930,000	0	27,930,000	0%		

Campus	Project	New, Renovation, Both, Infrastructure	Original Approved Budget	Augmentations	Current Budget	% Cost Increase	Reason(s) for Augmentation	Reason for Delay
Totals			1,958,925,000	288,642,000	2,247,567,000			
RV	Plant Growth Environment (PGE) Facility	New	27,405,000	0	27,405,000	0%		Project paused while design revised to stay within budget
OP	1100 Broadway TI	Renovation	20,000,000	5,400,000	25,400,000	27%	Change in Scope and Design	COVID-19 impacts
DV	UCDH Call Center	Renovation	25,300,000	0	25,300,000	0%		
DV	Cruess Hall North Renovation	Both (New Construction & Renovation)	21,250,000	2,700,000	23,950,000	13%	Bids higher than estimate, CM terminated and re-bid as design build	
DV	Electrical Substation Transformer Addition	Infrastructure	23,351,000	0	23,351,000	0%		Unforeseen site conditions, late start for contractor, weather conditions
SF	M,L Long Hospital Operating Room HVAC System Upgrades	Infrastructure	6,626,000	13,952,000	20,578,000	211%	Increase in scope and higher bids	

## APPENDIX B – LIST OF ACTIVE MAJOR CAPITAL PROJECTS OVER \$20 MILLION (2020-21)

Projects in design or construction with approved budgets (excludes projects in planning, programming and design without approved budgets)

Appendix	B - Active Projects						
Campus	Project	New, Renovation, Both, Infrastructure	Original Approved Budget	Augmentations	Current Budget	Reason(s) for Augmentation	Major Delays & Reason
			5,811,085,000	307,645,000	6,118,730,000		
IR	Irvine Campus Medical Complex	New	1,073,000,000	0	1,073,000,000		
SD	Theatre District Living & Learning	New	565,000,000	0	565,000,000		
LA	Southwest Campus Apartments	New	383,290,000	0	383,290,000		
SF IR	MB Block 34 Clinical Building	New	335,843,000	0	335,843,000		
SF	Verano 8 Graduate Student Housing UCSF Research Building at ZSFGH	New New	284,581,000 275,115,000	0	284,581,000 275,115,000		
Ji	OCSI Research building at 251 GH	INCAA	273,113,000	U	273,113,000		
LA	Lot 15 Residence Hall	New	237,449,000	0	237,449,000		
IR	Center for Child Health	New	32,365,000	188,880,000	221,245,000	The project scope changed from a 33,150 GSF pediatric center to a 168,500 GSF medical office building	Expansion of scope and budget also changed project schedule.
SC	Kresge College Non-Academic	Both	205,650,000	0	205,650,000		Bidding Phase coincided with the start of the pandemic in March 2020. Needed to rebid multiple times because of poor bid responses and overages, supply chain delays etc.
LA	10995 Le Conte Apartments	New	209,640,000	-20,679,000	188,961,000		
SD	Franklin Antonio Hall	New	185,000,000	0	185,000,000		
IR	Interdisciplinary Science & Engineering Building	New	120,000,000	53,691,000	173,691,000	Augmentations in 2017 (shell space addition), 2018 (shell buildout), and 2020 (parking lot addition) total \$53,691,000.	
-11	Susan & Henry Samueli College of		120,000,000	33,031,000	1,3,031,000	total 955,051,000.	
IR	Health Sciences Building	New	113,000,000	0	113,000,000		
DV	Emerson Hall Replacement	New	109,300,000	0	109,300,000		
SB	Classroom Building	New	97,133,000	0	97,133,000		

11	B - Active Projects	New,					
		Renovation,	Original				
		Both,	Approved			Reason(s) for	
Commune	Duciost			Augmontations	Current Budget		Major Dalova & Bosson
Campus	Project	Infrastructure	Budget	Augmentations	Current Budget	Augmentation	Major Delays & Reason
			5,811,085,000	307,645,000	6,118,730,000		
D) /	Ambulatory Care Center with	D - III	07 500 000	0	07.500.000		
DV	Expansion	Both	87,500,000	0	87,500,000		
DV	Teaching and Learning Complex	New	86,337,000	0	86,337,000		
	Sue and Bill Gross Nursing and						
IR	Health Sciences Hall	New	72,000,000	0	72,000,000		
						MEP changes were	Unforeseen Site conditions
						required to meet	required redesign and
OV	UCDH Office of the Future	••	59,500,000	8,509,000	68,009,000	Campus standards	mitigation
SF	MB Block 34 Parking Garage	New	65,980,000	0	65,980,000		
SD	Pepper Canyon Amphitheater, Public Realm, and Field House	New	61,180,000	0	61,180,000		
RV	Student Success Center	New	60,430,000	0	60,430,000		
( )	Revelle College Seismic Corrections	INCVV	00,430,000	U	00,430,000		
SD	(Mayer Hall and York Hall)	Renovation	58,908,000	0	58,908,000		
	Hot Water Quad Loop and		,,		,,		
DV	Hutchison Conversion	Infrastructure	55,200,000	0	55,200,000		Unforeseen conditions
							Unforeseen Site conditions
D) /	De die e Charateur A	Name	F2 2F0 000		52 250 000		required redesign and
DV	Parking Structure 4	New	53,350,000	0	53,350,000		mitigation
SC	Kresge College Academic	Both	53,000,000	0	53,000,000		
	Student-Athletics Performance						
V	Center	New	52,328,000	0	52,328,000		
							Program w 18 projects, all
							complete but 2 to be complete
SD	Campus Life Safety Improvements	Infrastructure	51,055,000	0	51,055,000		during FY 21-22
ΟV	Chemistry Addition & 1st Floor Renovation	Renovation	46,921,000	0	46,921,000		
J V	Mt. Zion Main Hospital Buildings A &	Kenovation	40,921,000	U	40,921,000		
	B Seventh Floor Renovations for						
SF	Inpatient Psychiatric Services	Renovation	46,000,000	0	46,000,000		
	Humanities & Social Sciences		, ,		, ,		
SD	Building Repair	Infrastructure	43,200,000	0	43,200,000		
						Unanticipated site	
						conditions, revised	
	SIGNIL DAY : 5					scope, CA Coastal	Unforeseen site and building
	SIO Bldg D Marine Conservation		25.042.000	47.047.000	42.066.000	Commission	conditions and changes to
SD	Facility	Renovation	25,813,000	17,047,000	42,860,000	requirements	seawater system design.

Appenaix	B - Active Projects						
		New,					
		Renovation,	Original				
		Both,	Approved			Reason(s) for	
Campus	Project	Infrastructure	Budget	Augmentations	Current Budget	Augmentation	Major Delays & Reason
			5,811,085,000	307,645,000	6,118,730,000		
	Central Utility Plant Expansion -		3,011,003,000	307,043,000	0,110,730,000		
SD	Chiller Addition	Infrastructure	41,170,000	0	41,170,000		
	Pierce Hall Infrastructure	dot. dotal c	11,270,000		12/27 0/000		
RV	Improvements	Renovation	34,680,000	3,922,000	38,602,000	Bids exceed estimates	
	Capital Renewal Infrastructure						
IR	Improvement Program Phase 3B	Infrastructure	37,100,000	0	37,100,000		
_A	LaKretz Botany Building Renovation	Renovation	38,420,000	-1,820,000	36,600,000		
	Hospital Seismic Upgrade Stair					Project delays, escalation, revisions to scope, failed bid	
DV	Tower & Exit	Infrastructure	12,945,000	23,355,000	36,300,000	attempts.	
	Rachel Carson College Dining						
SC	Expansion Renovation	Renovation	36,200,000	0	36,200,000		
	B3, 3rd Fl, Conversion to Tele/Med-		,,		, ,		
IR	Surg	Renovation	35,000,000	0	35,000,000		
	University Tower 2nd Floor					Delays and	
DV	Operating Room Remodel	Renovation	21,214,000	10,881,000	32,095,000	construction issues	
							Re-design after contract awar
RV	Parking Structure 1	New	31,844,000	0	31,844,000		due to neighbor legal action
	Distributed France Dans (DED)					Campus received a	
<b>.</b> D	Distributed Energy Resources (DER)	Information at the	20 500 000	450,000	20.050.000	second grant form CA	
SD	Connects and Microgrid	Infrastructure	29,500,000	450,000	29,950,000	Energy Commission	Futonded wedling documen
۸	Public Affairs Building Seismic	Ponovation	28,800,000	0	28,800,000		Extended working drawing
LA	Improvements	Renovation	20,000,000	U	28,800,000	Project merged with another project for an increase of \$8.8M, bids exceeded estimates for a \$6.8M	phase
RV	Batchelor Hall Building System	Renovation	11,512,000	15,607,000	27,119,000	increase	
SYS	UC Sacramento 1115 11th Street	Renovation	26,100,000	0	26,100,000		
SF	Integrated Center for Design and Construction at PHts	Renovation	24,400,000	0	24,400,000		
	Rosenfeld Hall Expansion and						
LA	Renovation	Renovation	24,000,000	0	24,000,000		
RV	Pierce Hall Interiors	Renovation	23,425,000	122,000	23,547,000	Renovation of laboratory storage	
IV	FIEICE HAII IIILEHOIS	Neilovation	23,423,000	122,000	23,347,000	laboratory storage	

		New,	Ovicinal				
		Renovation, Both,	Original Approved			Reason(s) for	
Campus	Project	Infrastructure	Budget	Augmentations	Current Budget	Augmentation	Major Delays & Reason
			5,811,085,000	307,645,000	6,118,730,000		
						space on the second floor was required	
	Health Sciences Emergency Power						
_A	System Upgrade	New	23,395,000	0	23,395,000		
DV	Main Hospital East 2 and 3 Pulmonary and GI Remodel	Renovation	15,700,000	7,680,000	23,380,000	Unanticipated construction costs resulting from OSHPD approval to reactivate additional beds	
ΟV	Briggs Hall Roof & Electrical Renovations	Infrastructure	23,149,000	0	23,149,000		Design changes and added scope
, v		iiiiastiuctuie	23,149,000	0	23,149,000		scope
ΟV	Veterinary Medical Center: All Species Imaging Center	Both	22,650,000	0	22,650,000		Design changes
ΟV	Engineering Student Design Center	Renovation	22,178,000	0	22,178,000		
SF.	1100 Van Ness ITL Renovation	Renovation	21,935,000	0	21,935,000		Coordination of design and construction details with landlord
OP	1111 Franklin TI	Renovation	20,700,000	0	20,700,000		