

# F. IMPLEMENTATION

## OVERVIEW AND APPROACH

The implementation strategy for the UB Facilities Master Plan is guided by the overall vision for its three campuses: The Downtown Campus as a Medical School the South Campus as a Professional Education Campus for the schools of Social Work, Architecture, Law and the North Campus for Engineering and the Arts.

## PHASING SUMMARY

Some key elements of the academic realignment plan are already in motion and will allow the backfill of buildings vacated on the North Campus. Other moves will depend upon the construction of new Medical School facilities Downtown and the demolition of several buildings on the South Campus. In addition to “academic realignment” initiatives there are “campus life” and “campus infrastructure” projects which are not strictly linked in sequence, but nevertheless have a high priority for the University.

The following events are significant in the phasing strategies for each of UB’s campuses. Tentative move dates are as follows:

- 2016 - Medical School Downtown
- 2018 - Demolish Cary Farber Sherman (School of Public Health and Communicative Disorders & Sciences must move out first)
- 2013 - 2023 - Parker Renovation
- 2025 - Nursing and Public Health to downtown
- 2030 - Pharmacy to Downtown
- Beyond - Dentistry to Downtown

## SURGE SPACE

Flexibility in land and space, because of recent projects, enables significant parallel development with minimal new surge space needed. In a few cases, such as with Parker Hall on South Campus, the plan recommends completing the construction of the PEC



Figure F -178: Nursing will move to Downtown Campus and join the other Health Professions (<http://ubphoto.smugmug.com>).

prior to starting the renovation and addition to Parker Hall – to allow for surge space. Similarly, on the North Campus, demolition of the Commons and Bookstore can only occur when replacement space has been constructed on the Furnas Lot.

The descriptions of phasing strategies that follow include, when appropriate, an outline of the surge space where needed.



Figure F -179: School of Social Work will be apart of the Professional Education Schools on the South Campus (<http://ubphoto.smugmug.com>).



Figure F -180: North Campus will have an Engineering, Sciences and Arts focus (<http://ubphoto.smugmug.com>)



[F. IMPLEMENTATION]

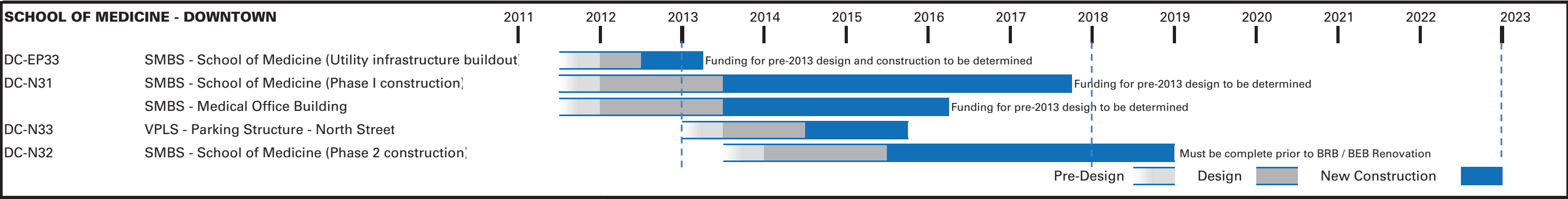


Table F -14. Downtown Phasing Implementation.

CPG SMBS Space Program Summary (08-30-11)				
	Department/Functions	Phase 1	Phase 2	SMBS Total
1.00	Academic Commons and Medical Education	85,550	28,965	114,515
2.00	Core Areas	39,460	3,700	43,160
3.00	Dean of Medicine	28,945	0	28,945
4.00	Biochemistry	15,240	2,020	17,260
5.00	Biotechnical and Clinical Laboratory Sciences	0	0	0
6.00	Microbiology and Immunology	13,860	3,000	16,860
7.00	Pathology and Anatomical Sciences	13,640	2,400	16,040
8.00	Pharmacology and Toxicology	14,200	800	15,000
9.00	Physiology and Biophysics	15,480	860	16,340
10.00	Additional Research Labs	35,000	10,500	45,500
11.00	Centers	1,050	0	1,050
12.00	Other Space in Existing SMBS	0	30,000	30,000
13.00	Anesthesiology	0	1,400	1,400
14.00	Dermatology	0	1,400	1,400
15.00	Emergency Medicine	0	1,400	1,400
16.00	Family Medicine	0	1,400	1,400
17.00	Gynecology-Obstetrics	0	1,400	1,400
18.00	Medicine	0	1,400	1,400
19.00	Neurology	0	1,400	1,400
20.00	Neurosurgery	0	1,400	1,400
21.00	Nuclear Medicine	0	1,400	1,400
22.00	Ophthalmology	0	1,400	1,400
23.00	Orthopediacs	0	1,400	1,400
24.00	Otalarynology (ENT)	0	1,400	1,400
25.00	Pediatrics	0	1,400	1,400
26.00	Psychiatry	0	1,400	1,400
27.00	Radiation Oncology	0	1,400	1,400
28.00	Radiology	0	1,400	1,400
29.00	Surgery	0	1,400	1,400
30.00	Urology	0	1,400	1,400
31.00	Clinical Department Research	0	30,000	30,000
32.00	Building Services	9,275	4,000	13,275
33.00	Simulation Centers	13,870	0	13,870
34.00	Library	6,220	0	6,220
35.00	Lab Animal Facilities	12,000	33,000	45,000
Total Net Square Footage		303,790	174,445	478,235
Total Gross Square Footage		520,043	305,257	825,300

Table F -15. SMBS Projected Program Summary Table (UB Capital Planning Group, May 2011

SMBS Comparison	
FMP 2023 SMBS Needs Assesement / CPG SMBS Space Program summary (08-30-11)	
Total SMBS Program Phase I & II per CPG (NSF)	478,235
Total SMBS per Phase III Needs Assesement (ASF)	598,283

Table F -16. SMBS Comparison.

DOWNTOWN CAMPUS – PHASING STRATEGIES  
Implementation and Phasing Schedule

Refer to Table F-14 for the Downtown Campus Implementation and Phasing Schedule that outlines the projects planned for the 2013-2023 planning period.

UB has the clear goal of establishing its School of Medicine and Biological Sciences at the Downtown Campus within the 2011-2023 planning period. The new School of Medicine will be constructed in two phases:

- Phase 1: 520,000 GSF Basic Sciences / Medical Education / Research
- Phase 2: 305,000 GSF Clinical Research / Vivarium
- Total: 825,000 GSF (based on 475,000 NSF program)

Refer to the following table F-16 and F-17 for the anticipated program developed by UB’s Capital Planning Group (CPG) for Phases 1and 2 of the School of Medicine and Biological Sciences at the Downtown Campus.

This program compares favorably with the Consultant’s Phase III Needs Assessment analysis which indicates a total of 598,283 ASF for the SMBS at year 2023. The difference between this Consultant’s projection (598,283 ASF) and the CPG program (475,000 NSF) can be attributed to an assumption of greater anticipated growth in research space and to variances between the CPG program and the Needs Assessment in guidelines for office space and building services space.

Future moves, beyond the 2023 timeframe, will include the following allied schools moving to the downtown Campus:

- School of Nursing
- School of Public Health and Health Professions
- School of Dentistry

In the longer term, the last component to move Downtown will be the School of Pharmacy, which will initially be moving from the North Campus to its new home on the South Campus.

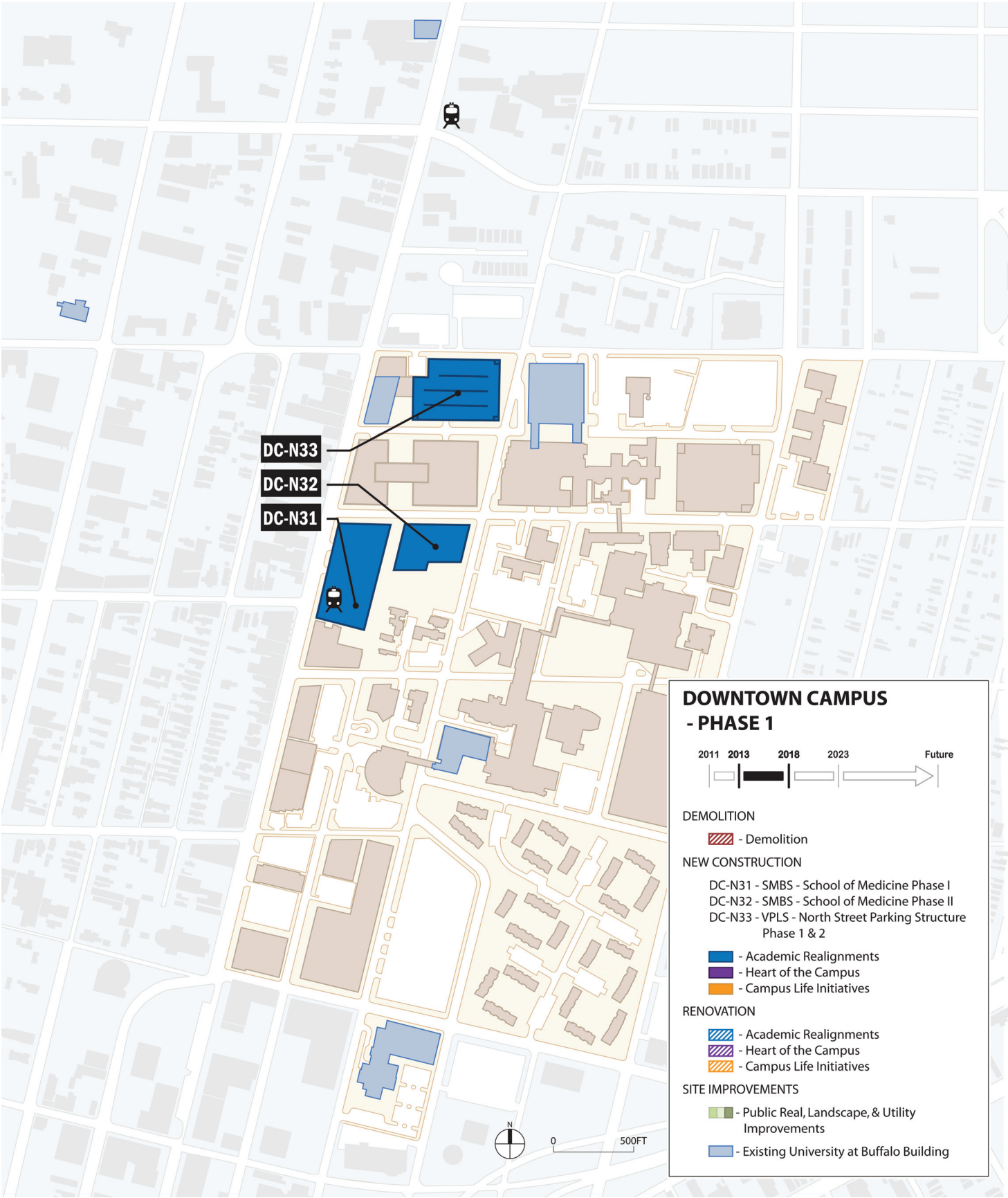


Figure F -181: Downtown Campus Phase I.

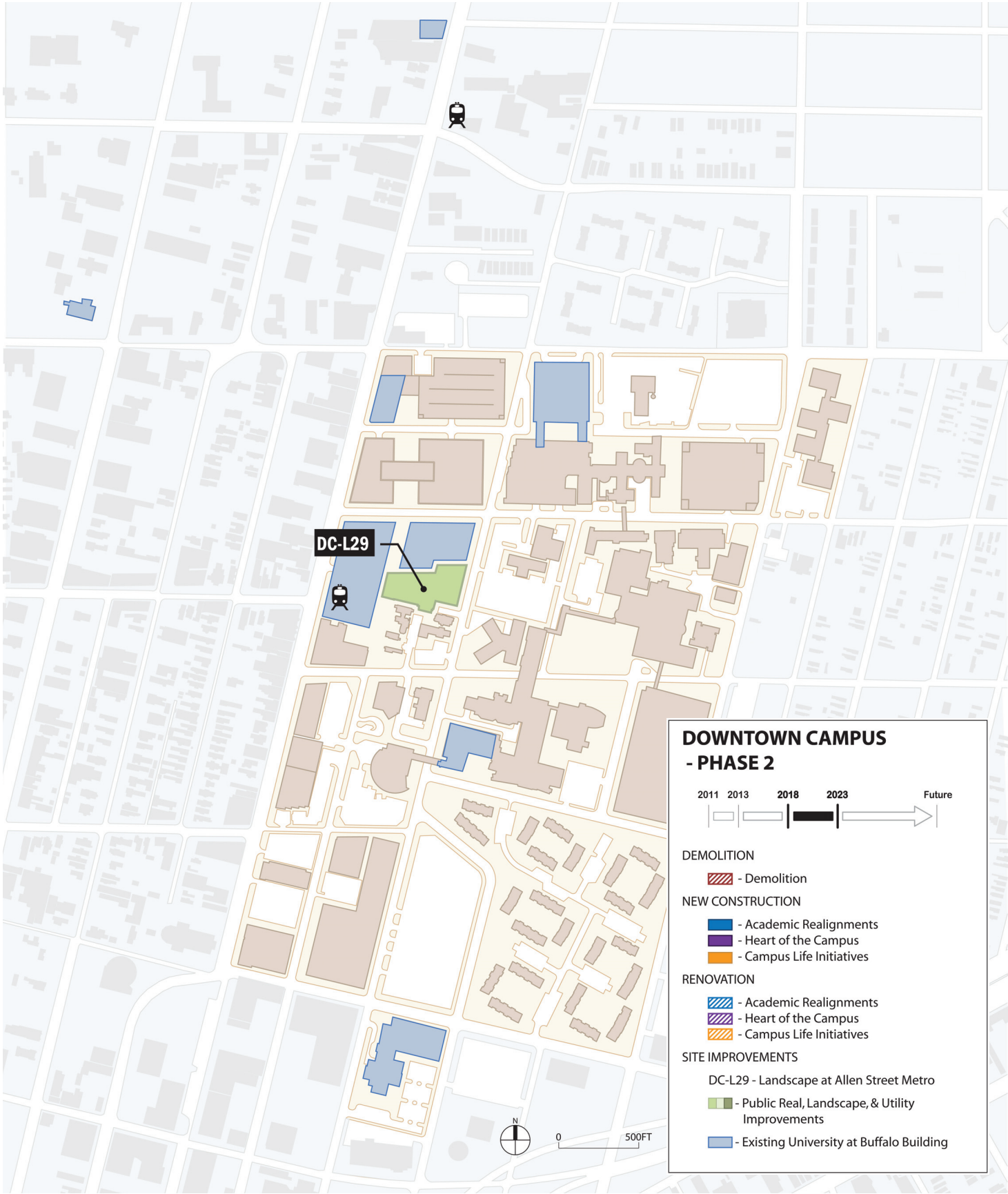


Figure F -182: Downtown Campus Phase II.



**SOUTH CAMPUS – PHASING STRATEGIES**

Over time, the Health Sciences Schools on South Campus, starting with the School of Medicine and Biomedical Sciences, and followed (after 2023) by the School of Public Health and Health Professions and the School of Nursing, will depart for Downtown Campus. The Schools of Law, Education, and Social Work will take their places. It is expected that the School of Dental Medicine and the School of Pharmacy and Pharmaceutical Sciences will remain on South Campus for some time before moving downtown.

**Implementation and Phasing**

Refer to Tables F-17, F-18, F-19, F-20, and F-21 for an Implementation and phasing diagram that outlines the projects planned for the 2013-2023 planning period. This diagram lists all of the South Campus initiatives for the planning period. Some highlights are described below.

**Education and Social Work Precinct**

In order to facilitate the move of the Schools of Social Work and the School of Education to South Campus, the Plan includes repurposing of Parker and Townsend Halls. To accomplish this it is necessary to provide swing space for the occupants of these two buildings, and we propose that the Professional Education Center (PEC) be constructed as a priority, early in the 2013-18 planning period. This will also have the added benefit of having additional classroom and lecture space available on the South Campus when the Cary Farber Sherman complex is demolished.

**Cary/Farber/Sherman Demolition**

The demolition of the C-F-S Complex will have a significant impact on the look and feel of the South Campus and will enable the sequencing of several road improvement and site restoration projects, including the completion of the Loop Road. Prior to this significant demolition project, there are relocations other than those of the SMBS moves to the Downtown Campus. The Center for Dental Studies (CDS) would need to be moved prior to demo of Cary/Farber /Sherman and the College of Arts and

Sciences (CAS) would want to be ahead of the curve in regard to planning and programming. CDS needs and considerations include both academic (currently in C-F-S complex) and clinical (currently in BEB).

**Demolition of Annexes**

The demolition of the several annex buildings will pave the way for extensive road and landscape improvements that will allow the campus loop road to be completed and restore the lawns and quadrangle originally envisaged in the E.B. Green master plan

**BRB, BEB and Kimball Hall renovations**

As the School of Public Health and Health Professions, and the School of Dentistry will not move to their final destination Downtown within the 2013 – 2023 timeframe, it is necessary for renovation work to take place in the Biomedical Research Building, the Biomedical Education Building and Kimball Hall.

**South Campus Site Restoration**

The South Campus Site Restoration Projects are critical maintenance initiatives that include replacement and/or renewal of campus underground utility infrastructure as well as public realm landscape and hardscape improvements. The South Campus requires rehabilitation of these components in order to reduce a large deferred maintenance backlog, and to prevent increased costs associated with further deterioration. In addition, improvements in the areas of handicap accessibility and pedestrian circulation are needed. The demolition of outmoded buildings is planned as soon as is practical to reduce operational and maintenance costs. One of the key improvements will be the creation of a fully connected campus loop road, which will be possible once the Cary Farber Sherman complex is demolished.

Refer to Table F-21 for an Implementation and Phasing Schedule that outlines the South Campus Sitework projects planned for the 2013-2023 planning period.



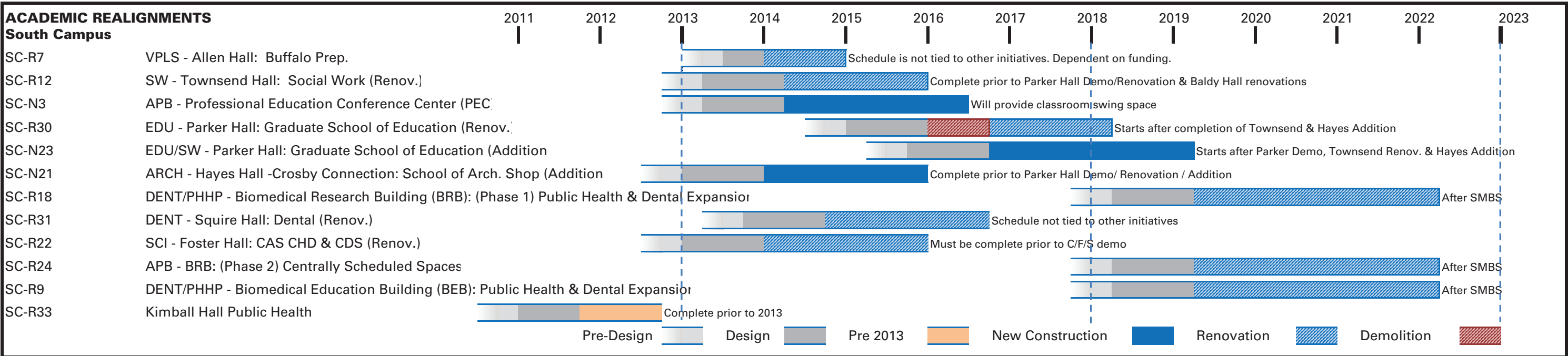


Table F -17. South Campus Academic Phasing Implementation.

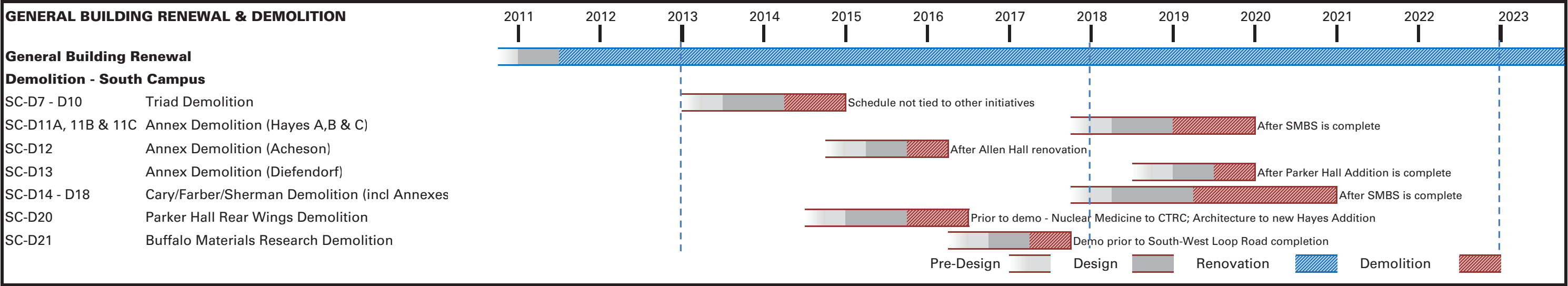


Table F -18. South Campus General Building Renewal and Demolition.

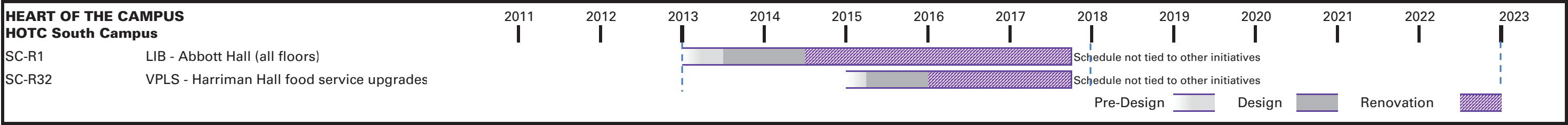


Table F -19. South Campus Heart of The Campus Phasing.

[F. IMPLEMENTATION]

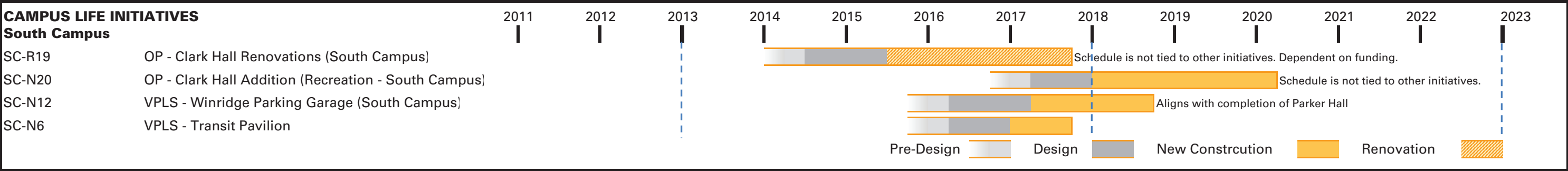


Table F -20. South Campus, Campus Life Phasing.

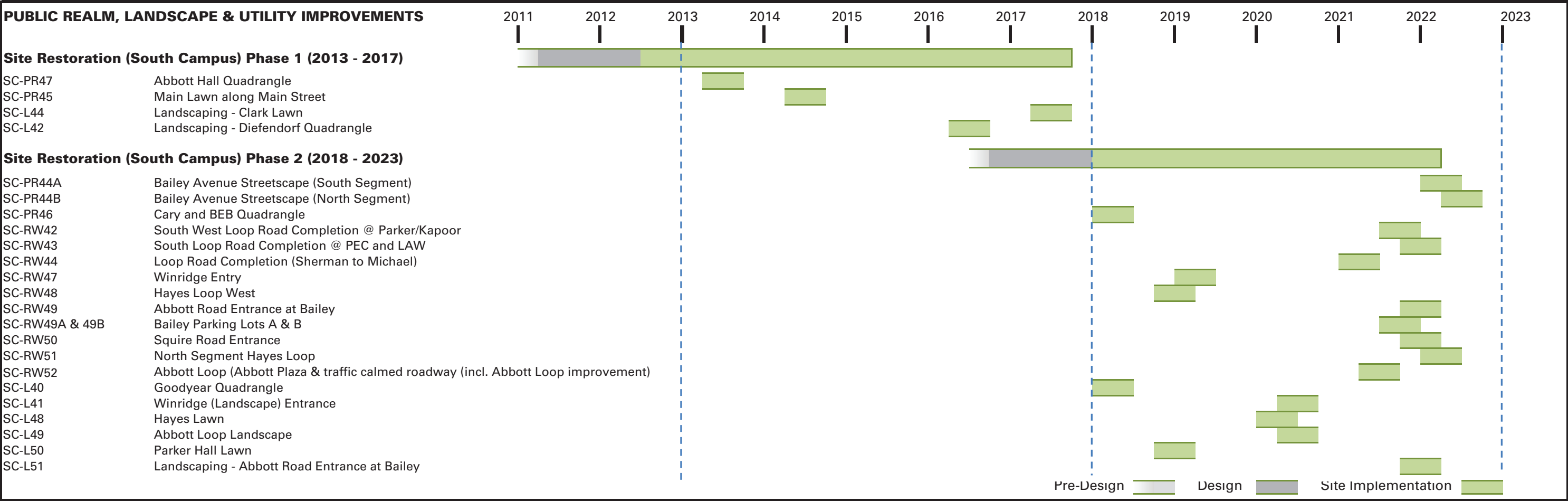


Table F -21. South Campus Landscape and Utility Phasing.



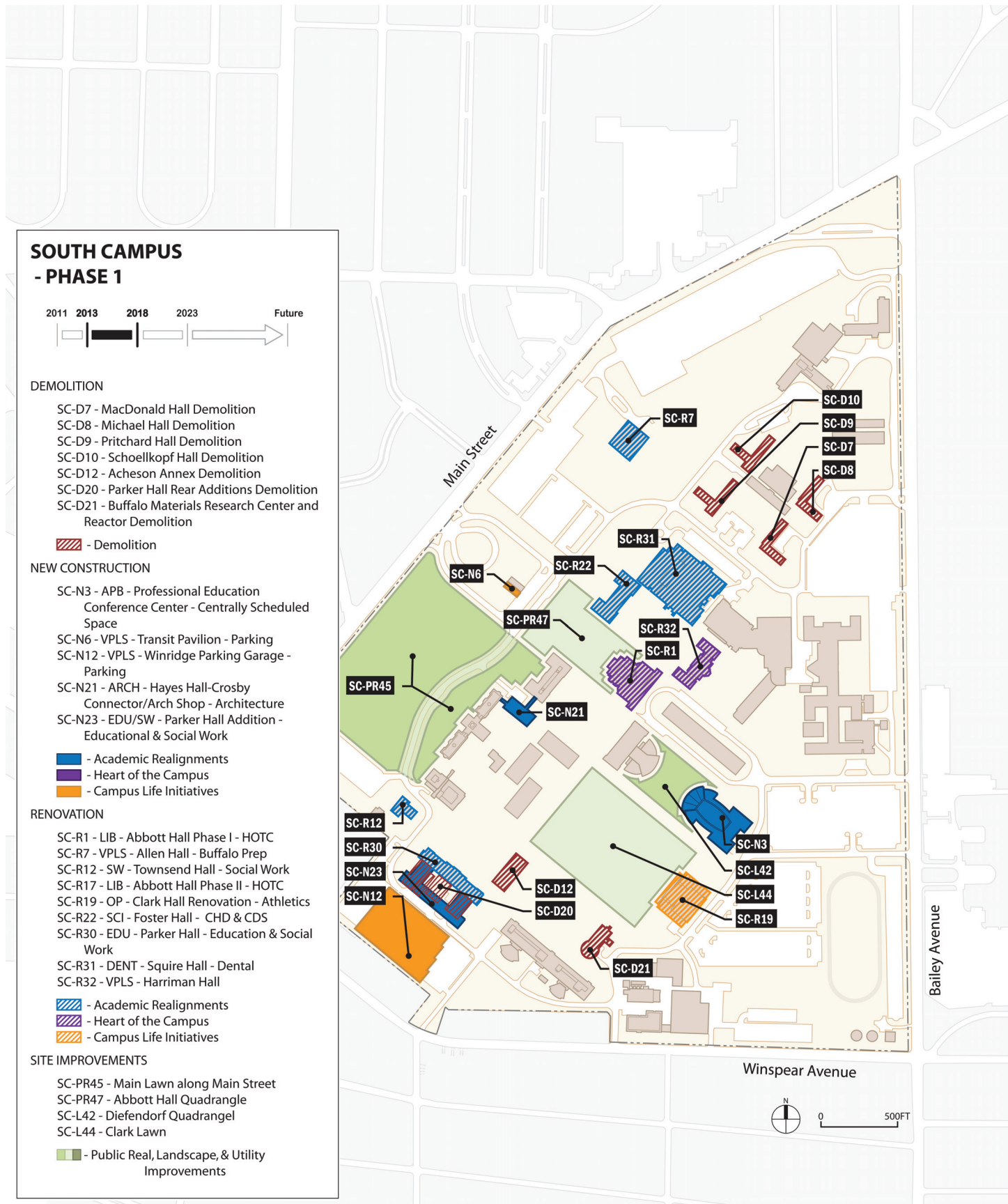


Figure F -183: South Campus Phase I.

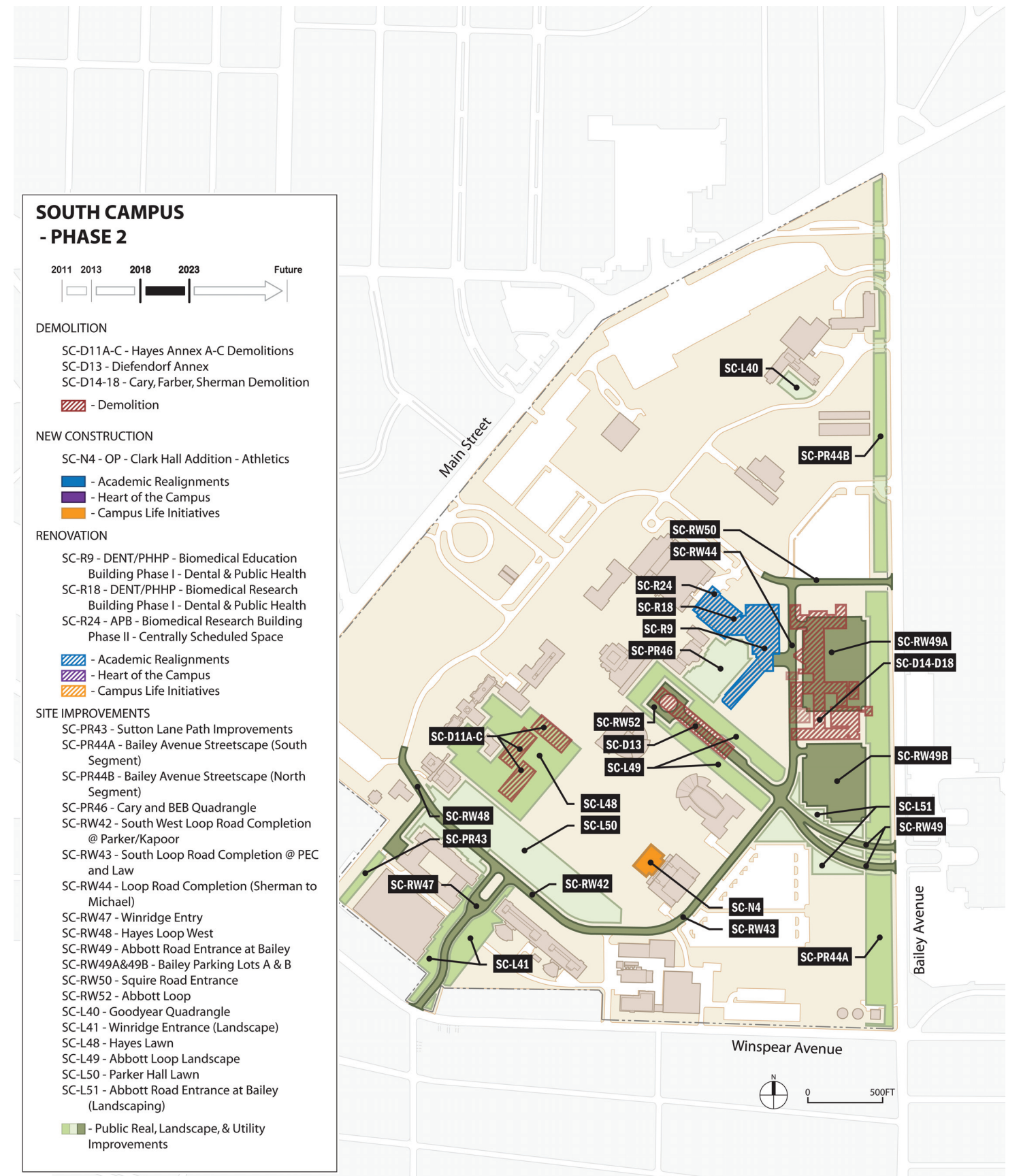


Figure F -184: South Campus Phase II.

**NORTH CAMPUS – PHASING STRATEGIES**

**Implementation and Phasing Schedule**

Refer to Tables F-22, F-23, F-24, F-25 and F-26 for an Implementation and Phasing Schedule that outlines the projects planned for the 2013-2023 planning period. This schedule lists all of the North Campus initiatives for the planning period. Some highlights are included below.

**College of Arts and Sciences**

The completion of the move of the School of Pharmacy and Pharmaceutical Sciences to the South Campus in the summer of 2012 will vacate approximately 87,000 NSF in the Cooke- Hochstetter complex on the North Campus. With a significant portion of the building vacant, a phased rehabilitation of the entire building will be possible, developing full systems and finish upgrades, modernizing the building and addressing a considerable number of deferred maintenance issues. Cooke and Hochstetter are currently the most poorly rated academic buildings on the North campus per the Facilities Condition Index (FCI) and due to their significant square footage, also affect, in significant fashion, the overall campus rating. The estimated budget for the project includes both the engineering infrastructure costs to modernize the buildings as well as programmatic changes required to accommodate consolidation and growth plans for the College of Arts and Sciences, and specifically Biology, Chemistry and Geology.

**School of Engineering & Applied Sciences (SEAS) Backfill:**

The move of the Departments of Electrical Engineering (EE) and Computer Science and Engineering (CSE) and Deans offices into the new Davis Engineering Building in Fall of 2011 will leave approximately 48,000 NSF vacant within various buildings on North Campus, the majority of the space can be found in Bell and Bonner Halls. A programming and space utilization exercise is underway by UB regarding possible backfill options. This conceptual study will provide a test fit for the school’s programmatic objectives by applying approved space standards while considering future

SEAS departmental growth. Above and beyond the backfill plan, consideration will also be given to evaluating the need for systems upgrades and full building modernization while significant portions of Bell and Bonner Halls are vacant. This project will consolidate more than 34,000 NSF of engineering program that now reside in seven buildings outside of the Engineering Quad to space within the Engineering precinct of the campus. Additionally, Furnas Hall is recommended for building wide renovation for SEAS.

**North Campus Site Restoration**

The North Campus Site Restoration is a two-phase critical maintenance initiative that encompasses substantial replacement and renewal of campus underground infrastructure, as well as public realm landscape and hardscape projects. Phase I focuses on the renewal of landscape/ hardscape elements in two primary areas, along the academic spine and surrounding the Ellicott Complex, with limited underground utility work addressing faulty utility runs. Phase II encompasses subsurface and utility work beyond the Academic Spine and the Ellicott Complex. Within the current scope of work, these projects will revitalize campus landscapes by simplifying maintenance, renewing campus ecosystems, and minimizing storm water impacts. In addressing the renewal of areas within the academic spine and Ellicott Complex, Phase I in particular will take steps to improve the quality of the public realm and outdoor spaces on campus.

Refer to Table F-26 for an Implementation and Phasing Schedule that outlines the North Campus site related projects planned for the 2013-2023 planning period.



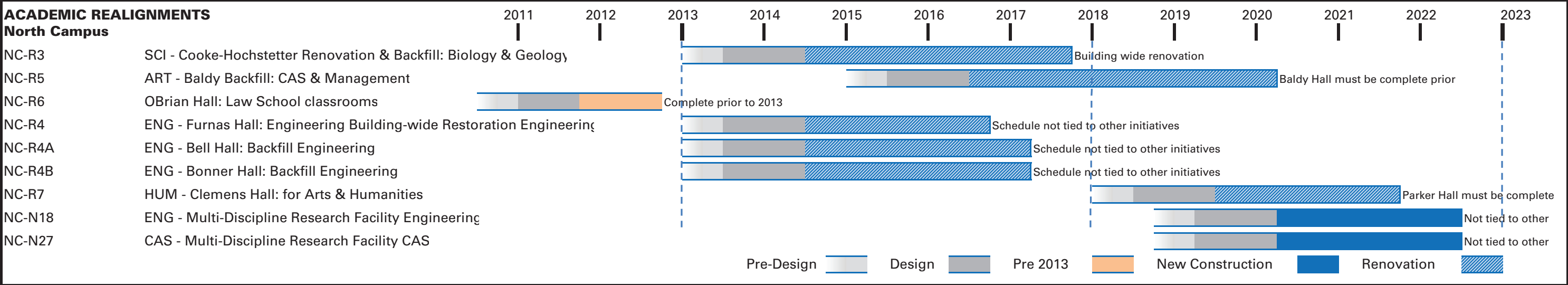


Table F -22. North Campus Academic Phasing Implementation.

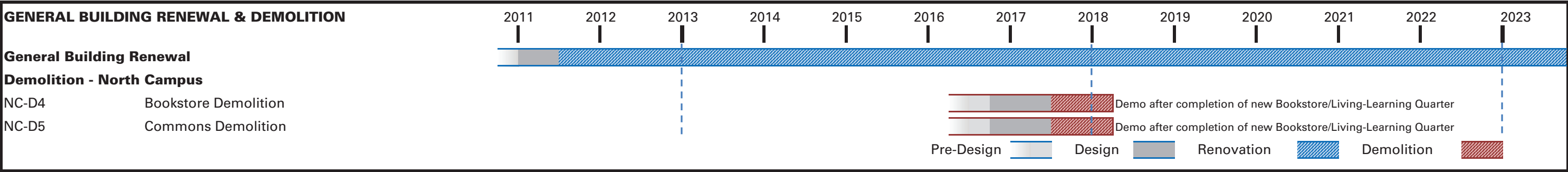


Table F -23. North Campus General Building Renewal and Demolition.

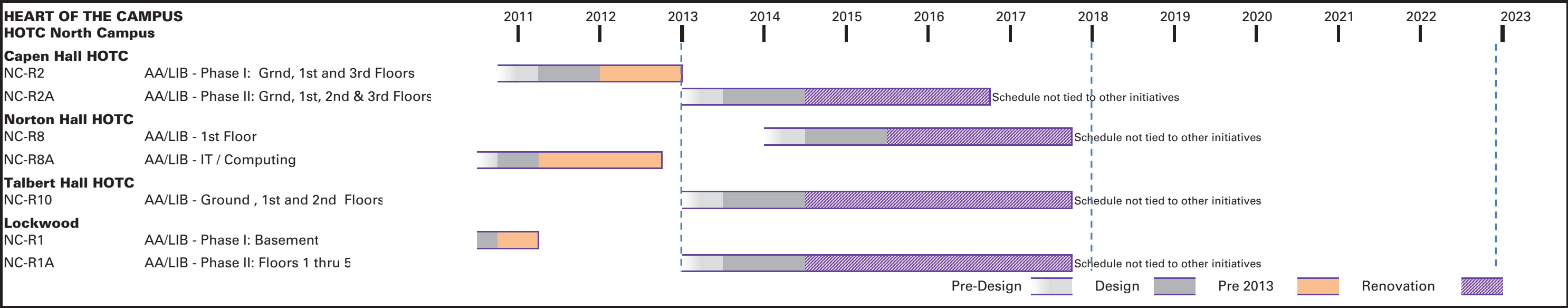
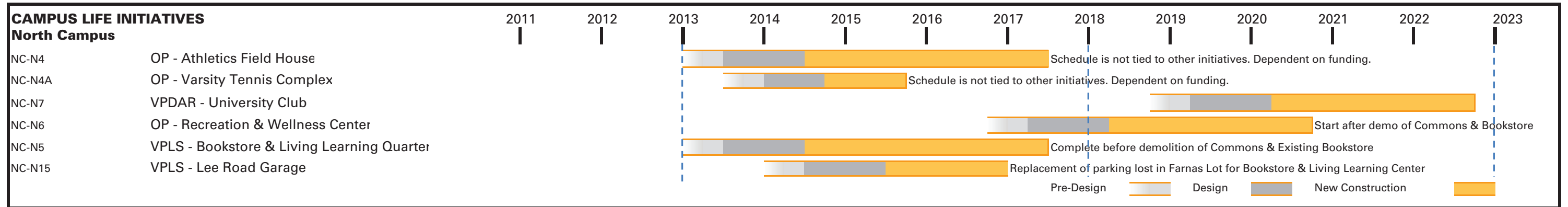
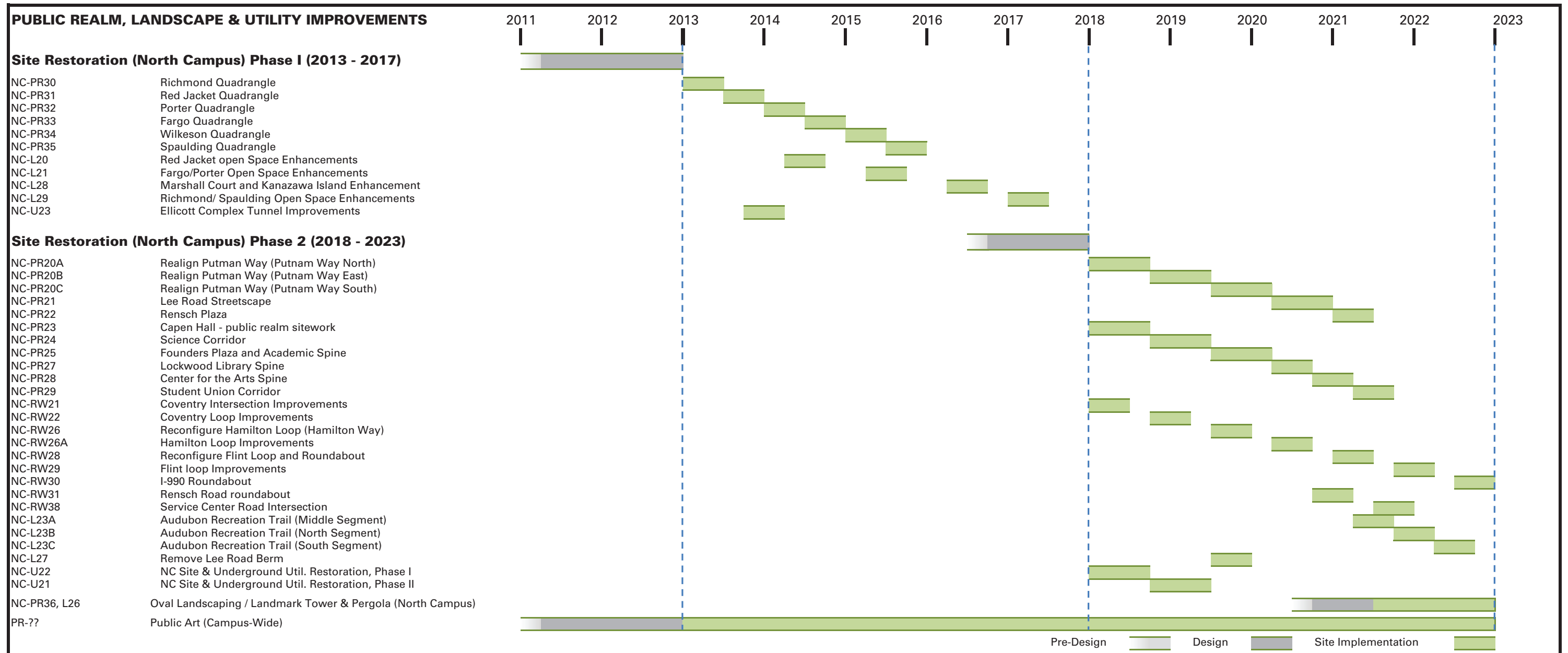


Table F -24. North Campus Heart of The Capus Phasing.

## [F. IMPLEMENTATION]



*Table F -25. North Campus. Campus Life Phasing.*



*Table F-26. North Campus Landscape and Utility Phasing.*



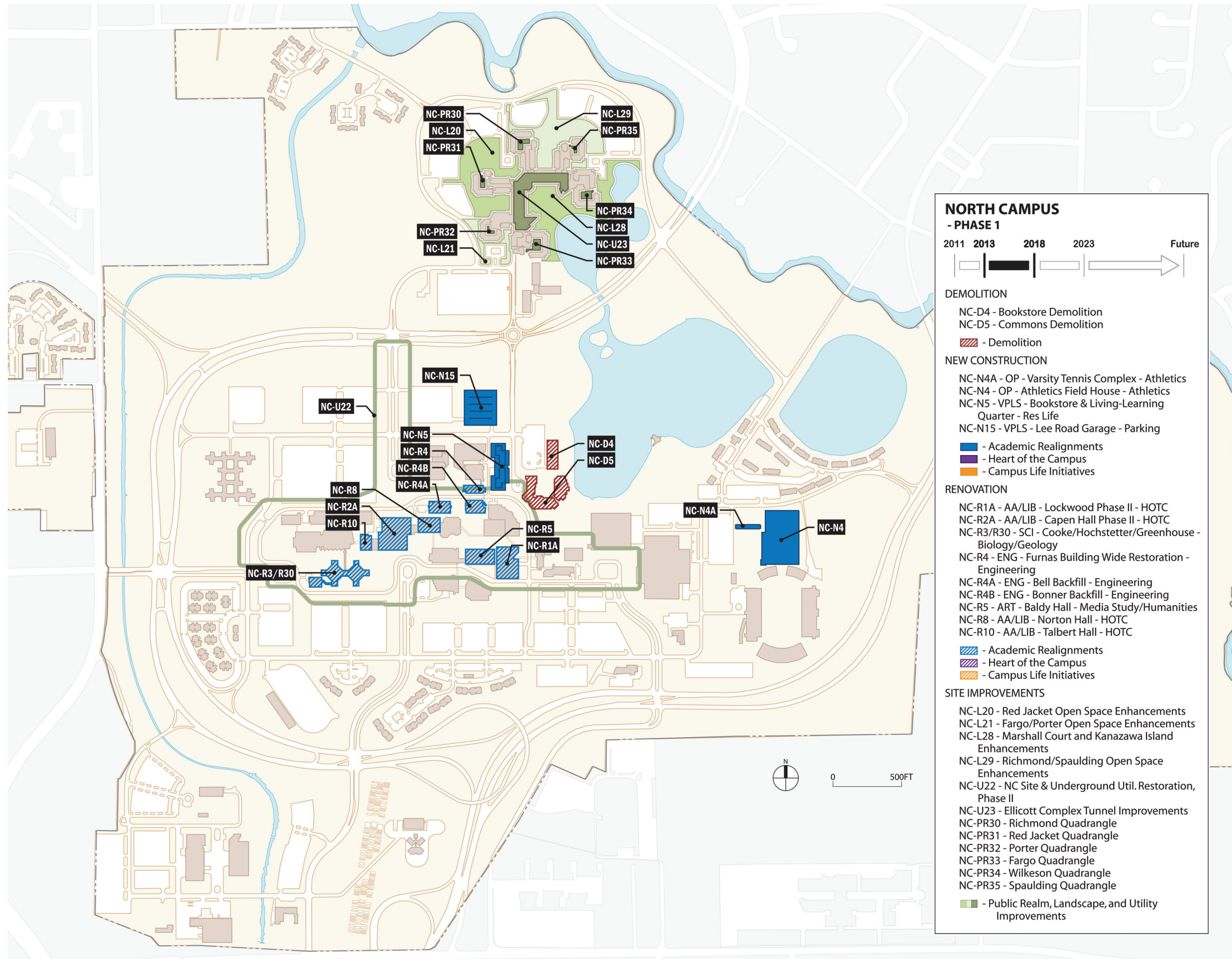
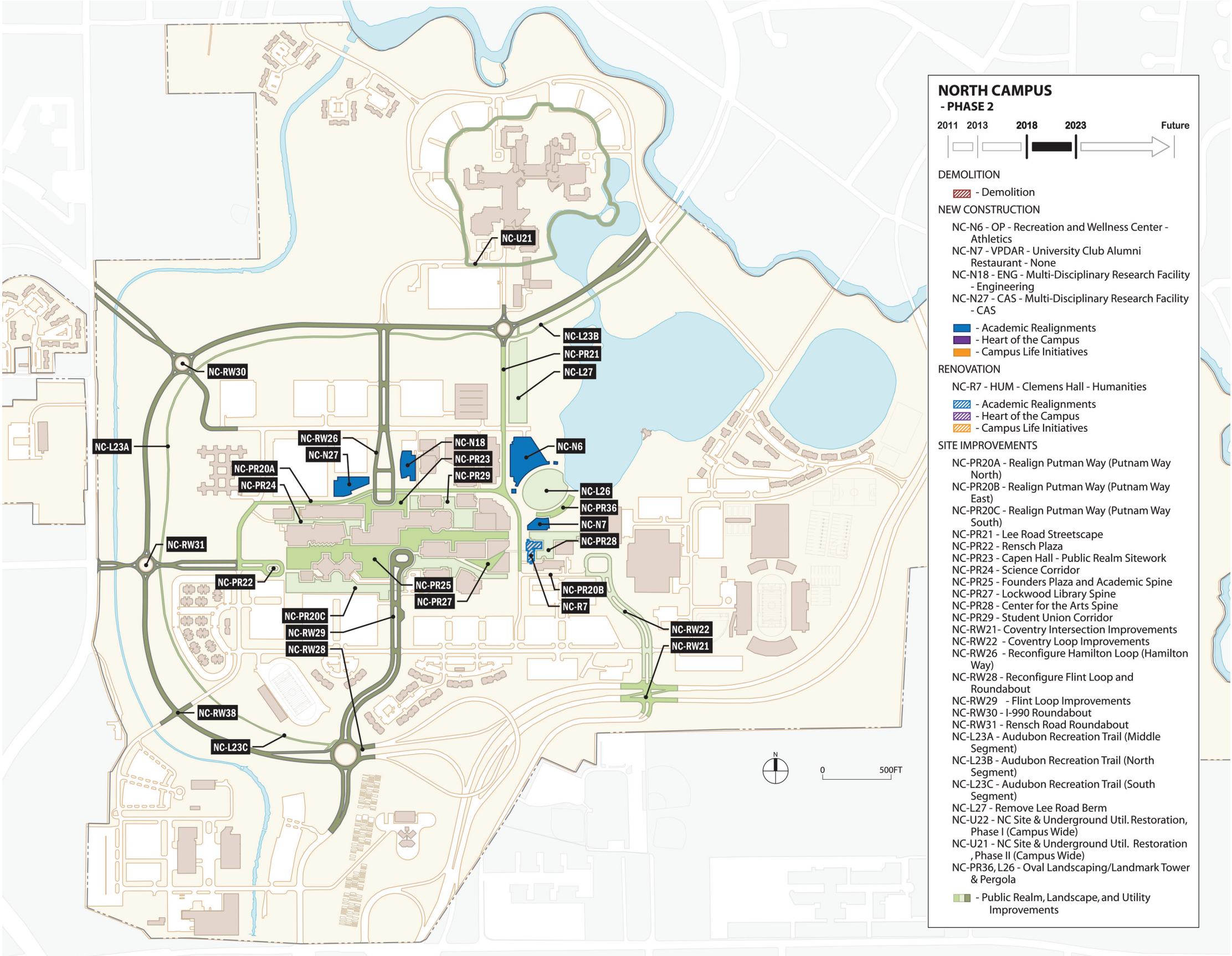


Figure F -185: North Campus Phase I.







ONGOING STUDIES

SMBS - IMPLEMENTATION

Over time, the Health Sciences Schools on South Campus, starting with the School of Medicine and Biomedical Sciences, and followed (after 2023) by the School of Public Health and Health Professions and the School of Nursing, will depart for Downtown Campus. The schools of law, education, and social work will take their places. It is expected that the School of Dental Medicine and the School of Pharmacy and Pharmaceutical Sciences will remain on South Campus for some time before moving downtown.

Selected Bibliography

The UB Capital Plan Agenda 2011-2013:  
University at Buffalo, the State University of New York.

PHASE V BUDGET SUMMARY		Capital Budget Plan		
		2013-2018	2018-2023	Total
Construction Budget Costs				
A.	Program / Department	\$ 990,683,523	\$ 140,498,939	\$ 1,131,182,462
	DOWNTOWN CAMPUS			
	School of Medicine & Biological Sciences	\$ 433,514,361		\$ 433,514,361
	NORTH CAMPUS			\$ -
	Renovations	\$ 267,350,278	\$ 23,699,936	\$ 291,050,214
	New Buildings	\$ 131,027,033	\$ 69,071,362	\$ 200,098,395
	SOUTH CAMPUS			\$ -
	Renovations	\$ 70,597,646	\$ 47,727,641	\$ 118,325,287
	New Buildings	\$ 88,194,205		\$ 88,194,205
B.	Not Typically State Funded	\$ 150,244,711	\$ 69,142,652	\$ 219,387,363
	DOWNTOWN CAMPUS			
	School of Medicine & Biological Sciences	\$ 48,288,460	\$ -	\$ 48,288,460
	NORTH CAMPUS			
	Renovations	\$ -	\$ -	\$ -
	New Buildings	\$ 77,453,809	\$ 69,142,652	\$ 146,596,461
	SOUTH CAMPUS			
	Renovations	\$ -	\$ -	\$ -
	New Buildings	\$ 24,502,442	\$ -	\$ 24,502,442
C.	Administration / Support Services	\$ 242,625,954	\$ -	\$ 242,625,954
	NORTH CAMPUS			
	Renovations	\$ 162,343,243	\$ -	\$ 162,343,243
	New Buildings	\$ 2,689,089	\$ -	\$ 2,689,089
	SOUTH CAMPUS			
	Renovations	\$ 76,799,369	\$ -	\$ 76,799,369
	New Buildings	\$ 794,254	\$ -	\$ 794,254
D.	Site Improvement Projects	\$ 23,901,000	\$ 103,601,000	\$ 127,502,000
	DOWNTOWN CAMPUS			
	Sitework	\$ -	\$ 1,512,000	\$ 1,512,000
	NORTH CAMPUS			
	Sitework	\$ 10,325,000	\$ 67,240,000	\$ 77,565,000
	Demolition	\$ 3,342,000	\$ -	\$ 3,342,000
	SOUTH CAMPUS			
	Sitework	\$ -	\$ 19,864,000	\$ 19,864,000
	Demolition	\$ 10,234,000	\$ 14,985,000	\$ 25,219,000
Sub-Total Construction Budget Costs		\$ 1,407,455,188	\$ 313,242,591	\$ 2,310,213,097
Other Project Budget Costs				
	Professional Fees, Equipment Costs, Contingencies Budgeted @ 35%	\$ 492,609,316	\$ 109,634,907	\$ 602,244,223
	Sub-Total Project Costs	\$ 1,900,064,504	\$ 422,877,498	\$ 2,322,942,002
	Escalation through Year 4 of Funding Cycle (Beginning 01/01/2011) @ Rate/Year 3.75%	\$ 558,519,674	\$ 234,889,138	\$ 793,408,812
Total Projected Budget Costs		\$ 2,458,584,178	\$ 657,766,636	\$ 3,116,350,814

Table F -27. Budget Summary.

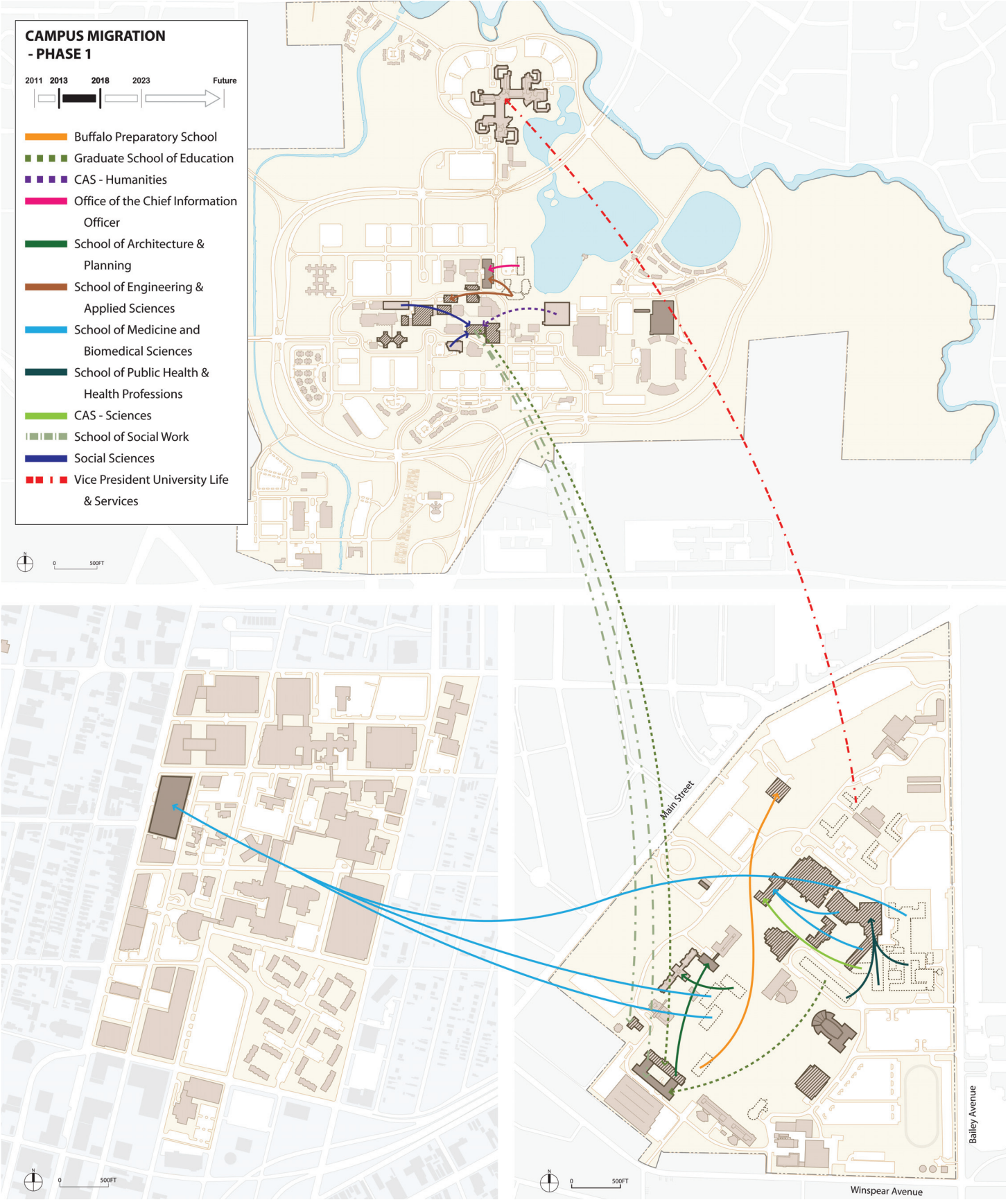
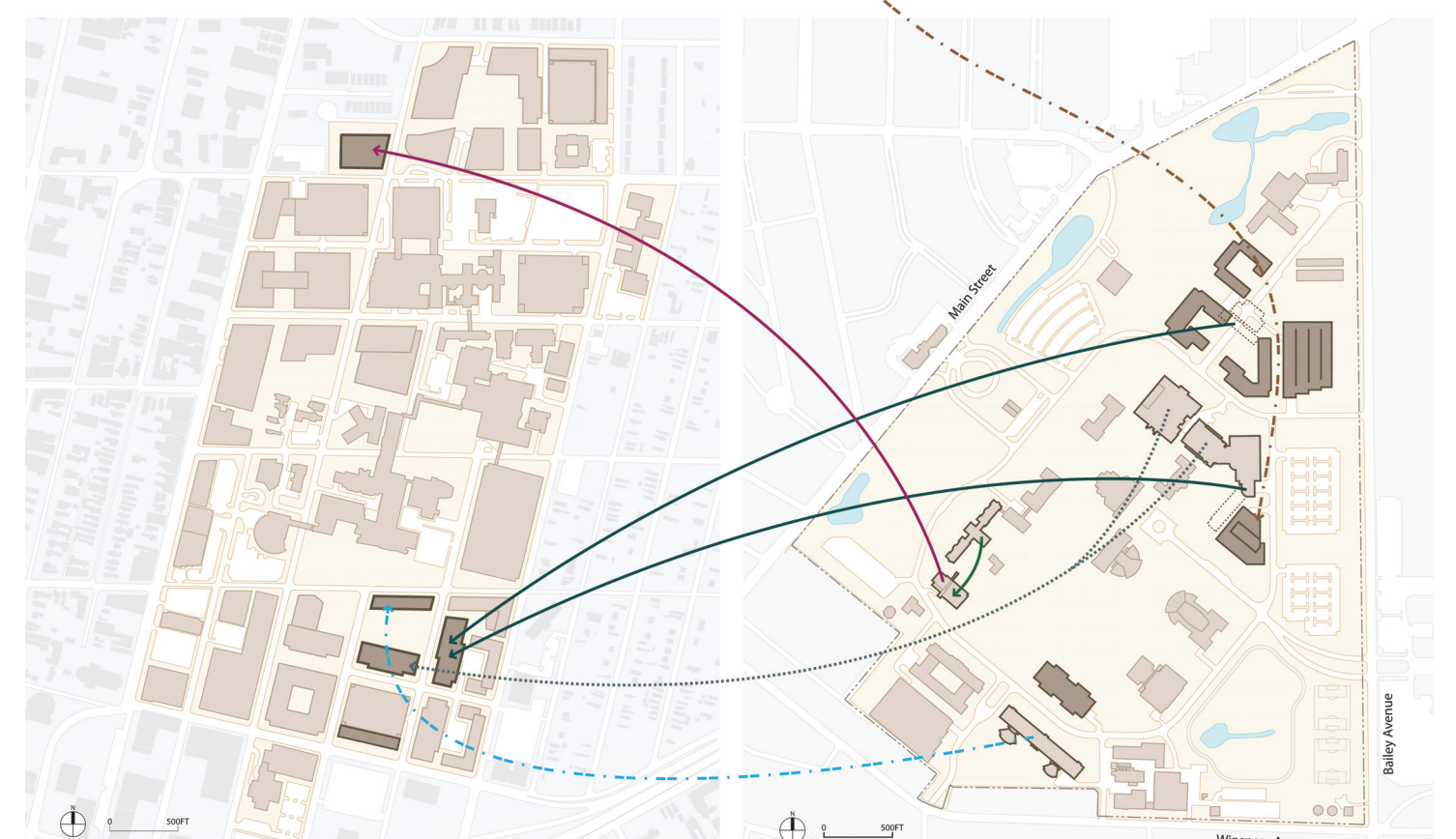
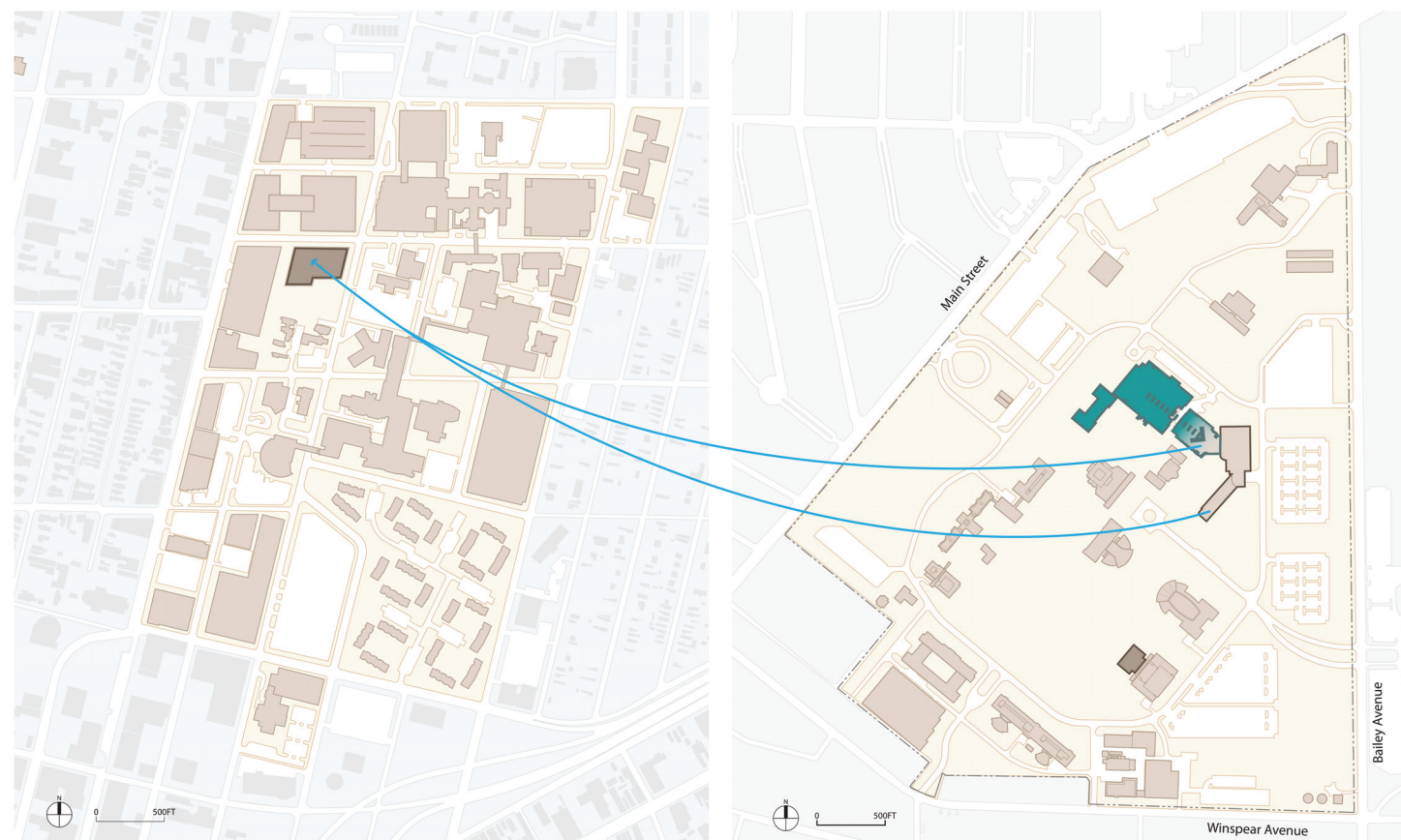
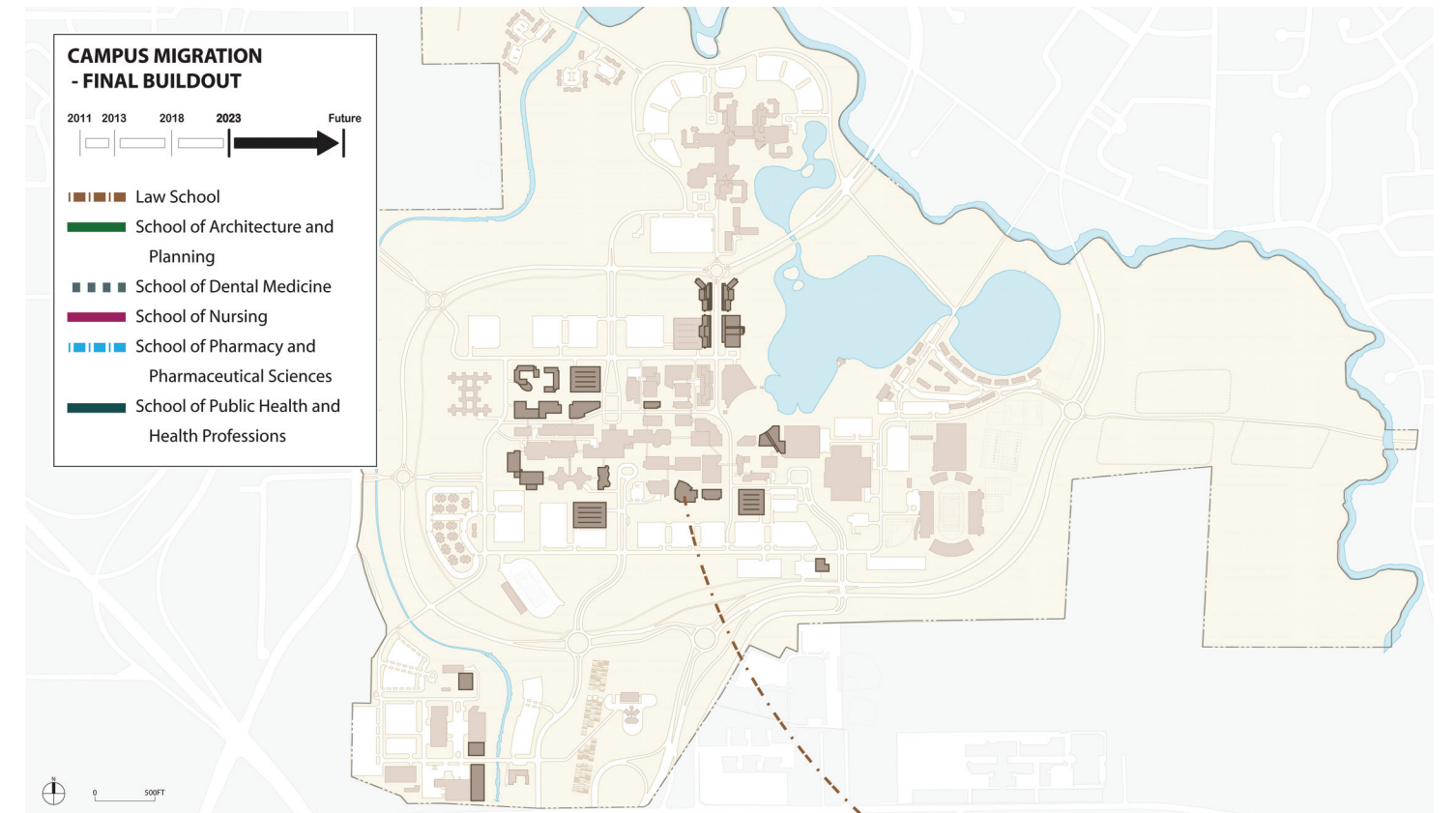
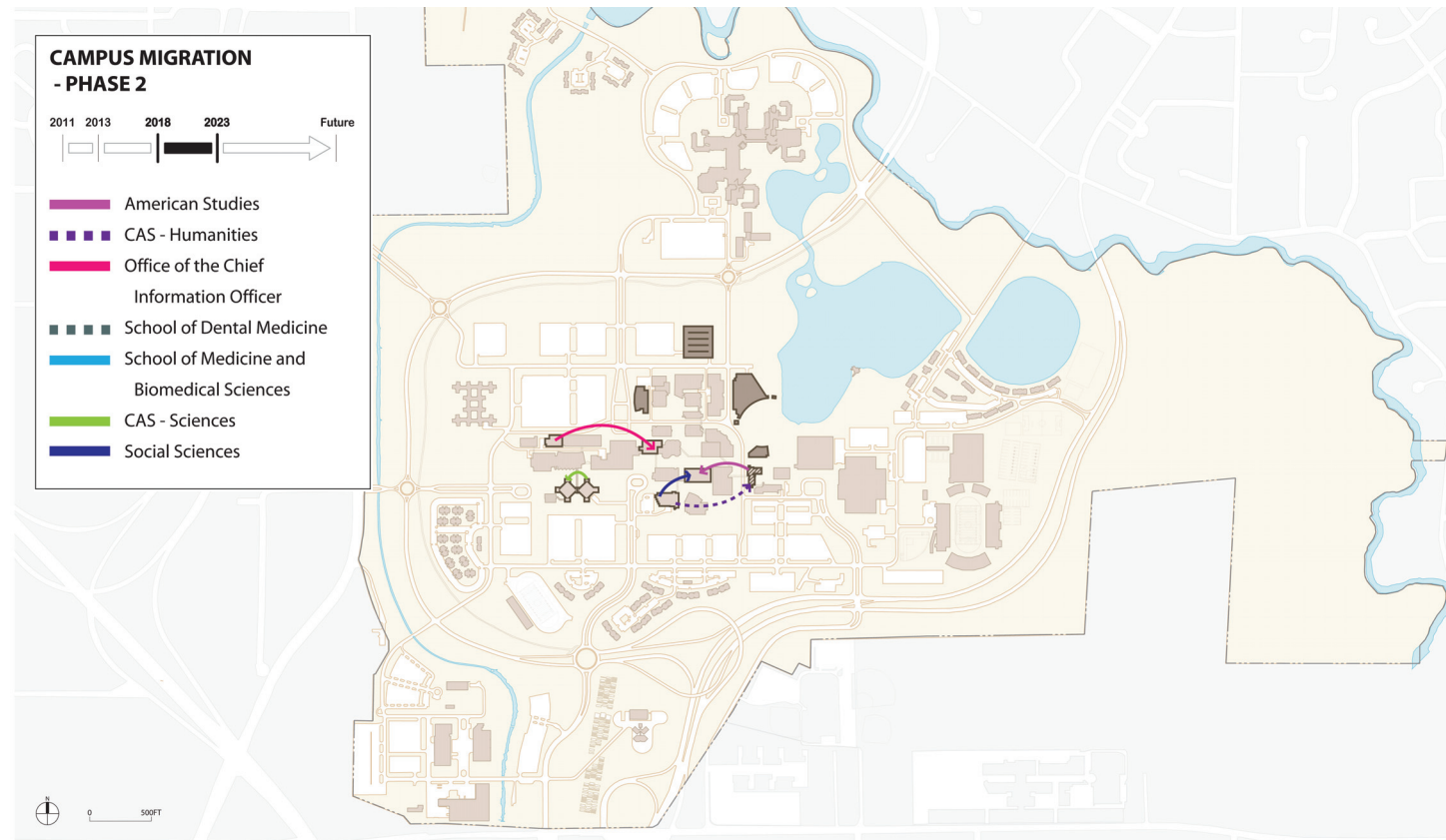


Figure F -187: North Campus Phase I.







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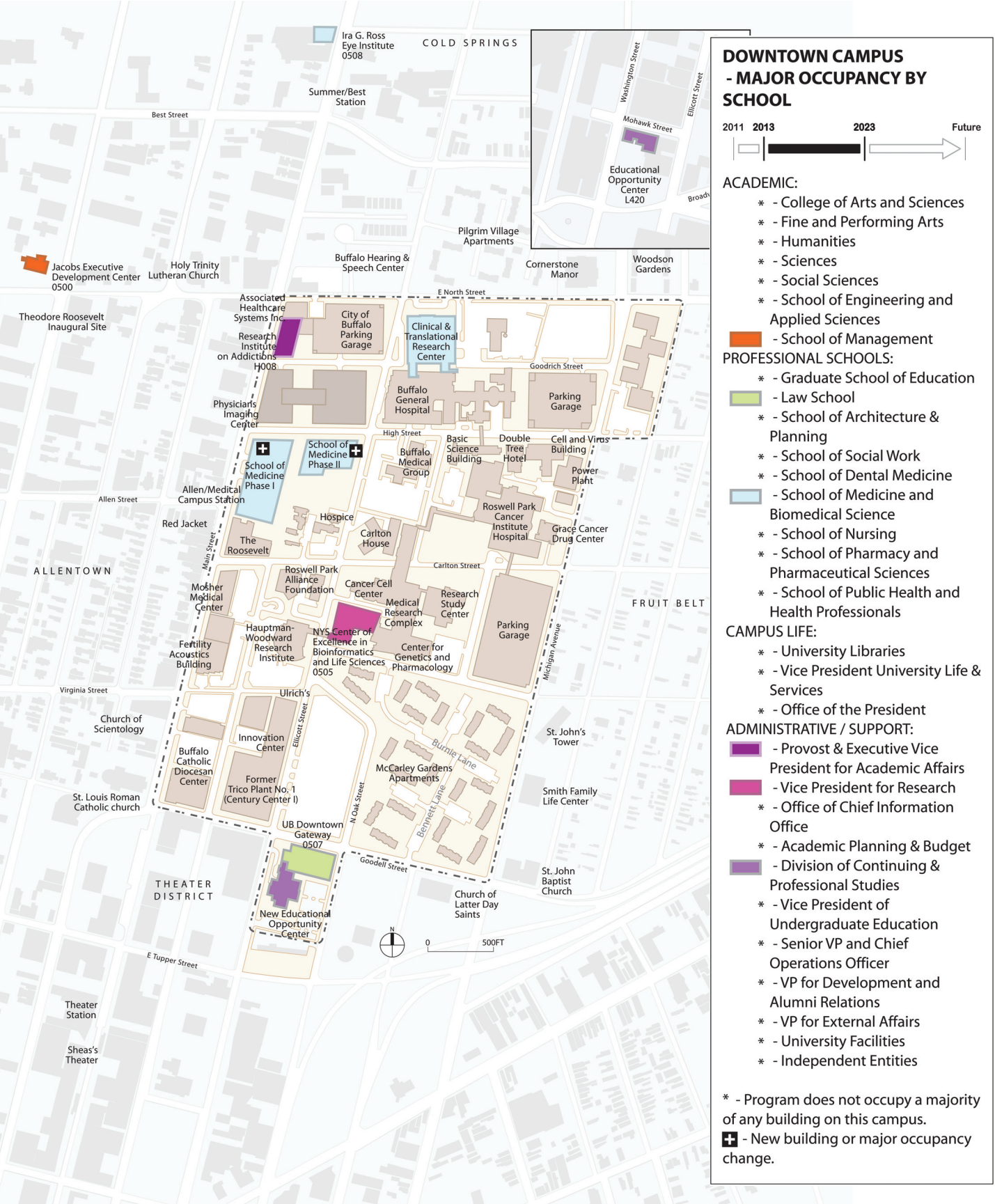


Figure F -189: Downtown Campus Occupancy by Department.

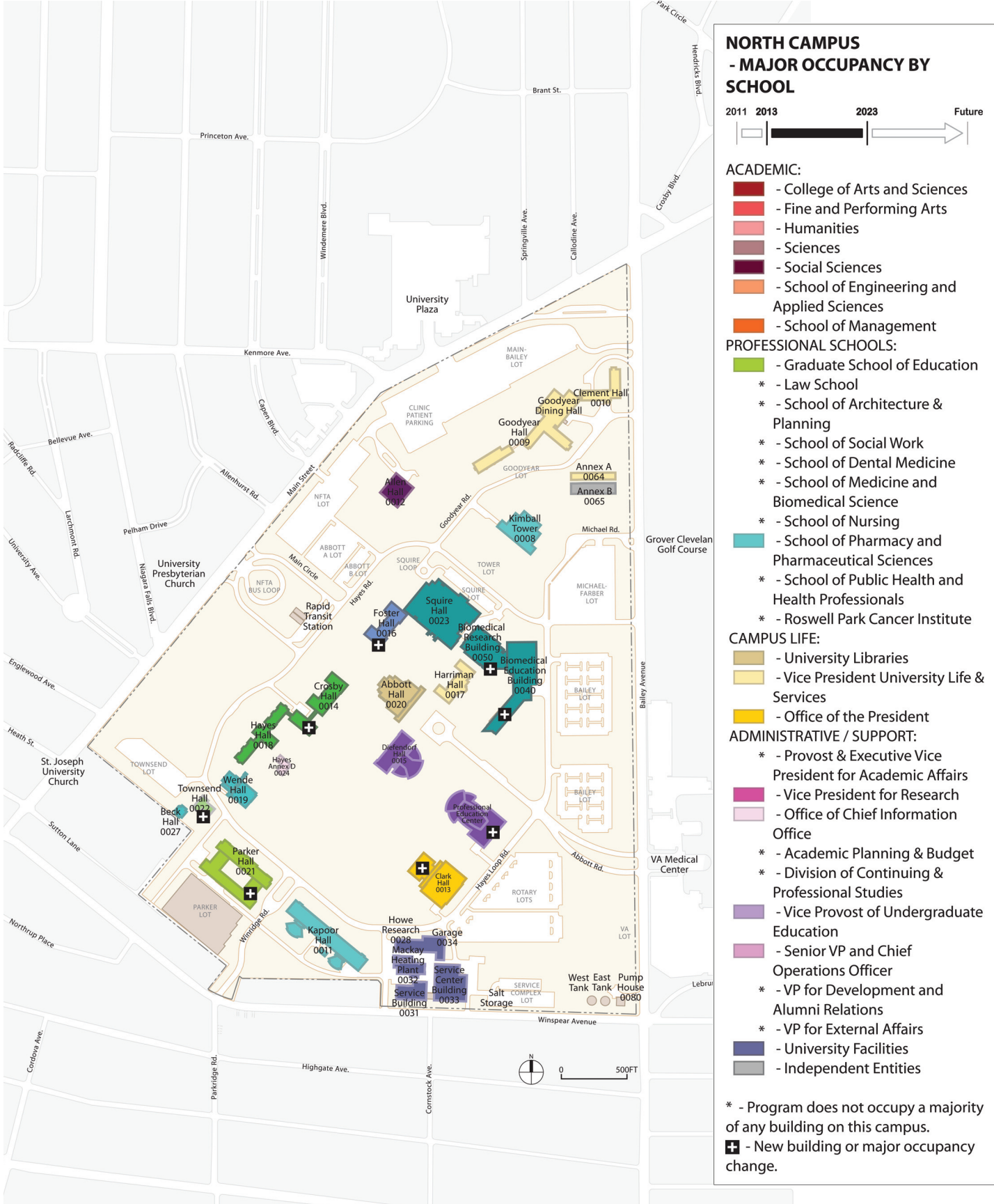


Figure F -190: South Campus Occupancy by Department.



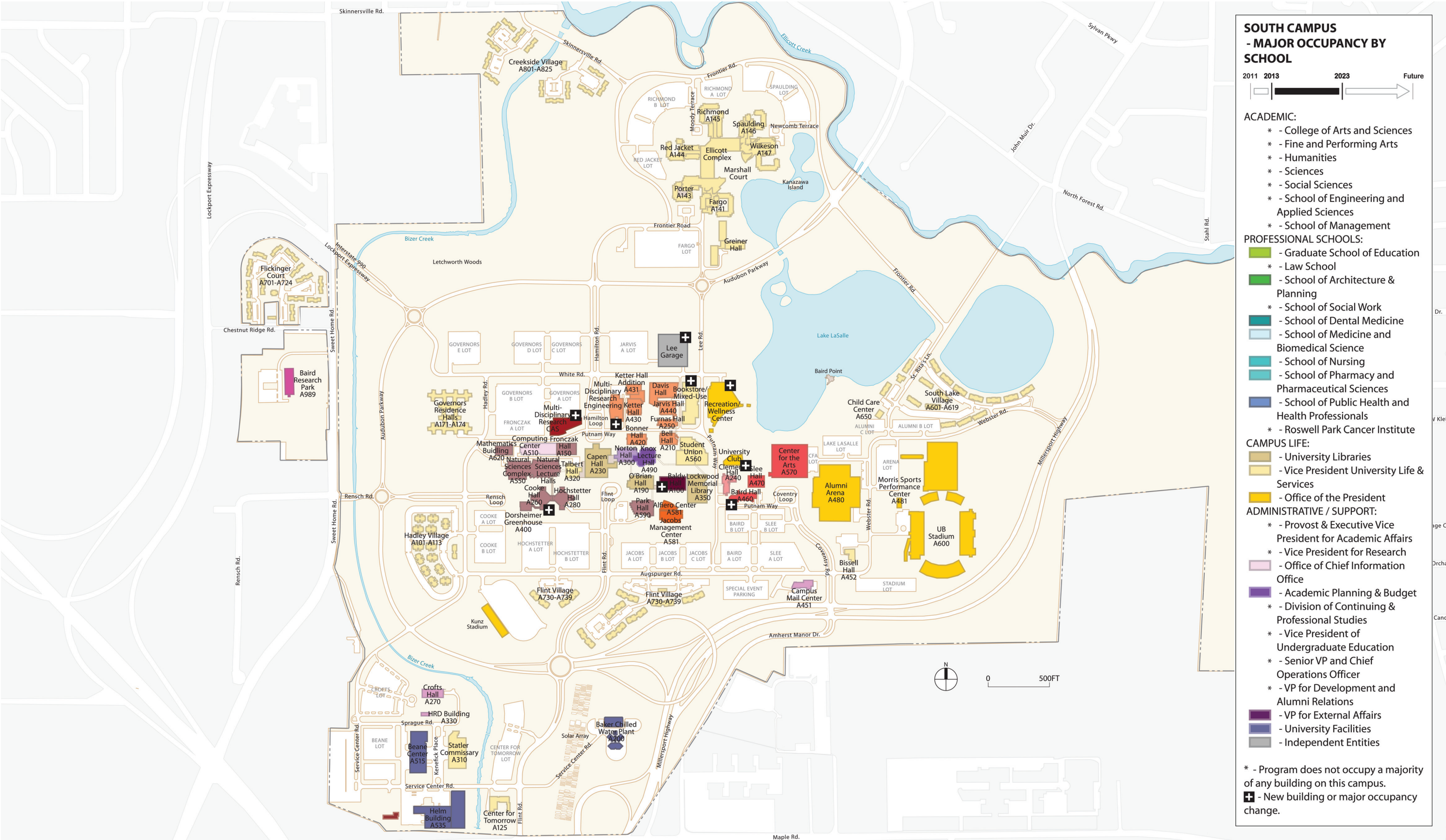


Figure F -191: North Campus Occupancy by Department.