



## FACILITIES MASTER PLAN 2013 -2023

### PHASE V FINAL RECOMMENDATIONS APPENDIX A-C

November 22, 2011

State University Construction Fund  
Project No. 30884



**RTKL**



# PHASE V: APPENDIX

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# PHASE V:

## PHASE V APPENDIX A - COSTING STUDY

PHASE V		Capital Budget Plan		
		2013-2018	2018-2023	Total
BUDGET SUMMARY				
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



FINAL RECOMMENDATION				Project Budget Types			Capital Budget Plan					
				Area (GSF)	Unit Cost / GSF	Reno Costs	New or Addition Costs	Site Costs	2013-2018	2018-2023	Beyond 2023	Total
Construction Budget Costs												
A. Program / Department												
DC-N41	AA - Add - RIA Expansion - RIA - Health Sciences	47,090	\$ 345.36		\$ 16,262,852			\$ 16,262,852		\$ 16,262,852		
SC-R24	APB - Reno - Biomedical Research Building Phase 2 - Centrally Scheduled Space - Health Sciences	74,000	\$ 257.51	\$ 19,055,649			\$ 19,055,649			\$ 19,055,649		
SC-N3	APB - New - Professional Education Conference Center - Centrally Scheduled Space - Professional	120,000	\$ 342.00		\$ 41,040,460		\$ 41,040,460			\$ 41,040,460		
SC-N22	APB - New - Future Academic Building - To Be Determined - Professional	150,000	\$ 315.18		\$ 47,277,000			\$ 47,277,000		\$ 47,277,000		
SC-R11	ARCH - Reno - Wende Hall - Architecture - Professional	46,000	\$ 208.56	\$ 9,593,543				\$ 9,593,543		\$ 9,593,543		
SC-N21	ARCH - New - Hayes Hall-Crosby Connector/Arch Shop - Architecture - Professional	33,150	\$ 367.49		\$ 12,182,177		\$ 12,182,177			\$ 12,182,177		
NC-R5	ART - Reno - Baldy Hall - Media Study / Humanities - CAS	99,734	\$ 242.09	\$ 24,144,112			\$ 24,144,112			\$ 24,144,112		
NC-N8	ART - Arts and Humanities Expansion (includes arts lofts) Arts and Humanities - CAS	202,000	\$ 325.91		\$ 65,833,726			\$ 65,833,726		\$ 65,833,726		
NC-N27	CAS - New - Multi-Disciplinary Research Facility - CAS - CAS	100,000	\$ 378.22		\$ 37,821,600		\$ 37,821,600			\$ 37,821,600		
DC-N38	DENT - New School of Dentistry - Dentistry - Health Sciences	229,228	\$ 392.97		\$ 90,079,523			\$ 90,079,523		\$ 90,079,523		
SC-R9	DENT - PHHP - Reno - Biomedical Education Building Phase 1 - Dental and Public Health - Health Sciences	96,000	\$ 252.14	\$ 24,205,824			\$ 24,205,824			\$ 24,205,824		
SC-R18	DENT - PHHP - Reno - Biomedical Research Building Phase 1 - Dental and Public Health - Health Sciences	79,000	\$ 297.74	\$ 23,521,817			\$ 23,521,817			\$ 23,521,817		
SC-R30	EDU - SW - Reno - Parker Hall Renovation - Education & Social Work - Professional	45,000	\$ 236.05	\$ 10,622,237			\$ 10,622,237			\$ 10,622,237		
SC-N23	EDU - SW - New - Parker Hall Addition - Education & Social Work - Professional	77,000	\$ 315.18		\$ 24,268,860		\$ 24,268,860			\$ 24,268,860		
NC-R4	ENG - Reno - Furnas Building Wide Restoration - Engineering - Professional	105,729	\$ 253.49	\$ 26,800,736			\$ 26,800,736			\$ 26,800,736		
NC-R4A	ENG - Reno - Bell Backfill - Engineering - Professional	89,235	\$ 201.85	\$ 18,012,024			\$ 18,012,024			\$ 18,012,024		
NC-R4B	ENG - Reno - Bonner Backfill - Engineering - Professional	70,884	\$ 201.85	\$ 14,307,887			\$ 14,307,887			\$ 14,307,887		
NC-N18	ENG - New - Multi-Disciplinary Research Facility - Engineering - Professional	100,000	\$ 312.50		\$ 31,249,762		\$ 31,249,762			\$ 31,249,762		
NC-N28	ENG - New - Engineering C - Engineering - Professional	121,810	\$ 309.82		\$ 37,738,594			\$ 37,738,594		\$ 37,738,594		
NC-R7	HUM - Reno - Clemens Hall -Humanities - CAS	117,414	\$ 201.85	\$ 23,699,936			\$ 23,699,936			\$ 23,699,936		
NC-N19	HUM - New - Humanities Center - Humanities - Humanities	80,000	\$ 312.50		\$ 24,999,810			\$ 24,999,810		\$ 24,999,810		
NC-R6	LAW - Reno - O'Brian Hall Classrooms - Law - LAW	164,697	\$ 260.19	\$ 42,852,702			\$ 42,852,702			\$ 42,852,702		
SC-N1	LAW - New - Law School Building - Law - Professional	181,000	\$ 317.86		\$ 57,533,092			\$ 57,533,092		\$ 57,533,092		
NC-N20	MAN - New - School of Management - Management - Professional	62,000	\$ 237.39		\$ 14,718,236			\$ 14,718,236		\$ 14,718,236		
DC-N34	NURS - New - School of Nursing - Nursing - Health Sciences	179,141	\$ 379.56		\$ 67,994,255			\$ 67,994,255		\$ 67,994,255		
NC-N4	OP - New - Fieldhouse - Athletics - Athletics	220,000	\$ 299.09		\$ 65,798,855		\$ 65,798,855			\$ 65,798,855		
NC-N4A	OP - New - Varsity Tennis Complex - Athletics - Athletics	7,000	\$ 313.17		\$ 2,192,178		\$ 2,192,178			\$ 2,192,178		
NC-N6	OP - New - Recreation & Wellness Center - Athletics - Athletics	200,000	\$ 315.18		\$ 63,036,001		\$ 63,036,001			\$ 63,036,001		
SC-R19	OP - Reno - Clark Hall Renovation - Athletics	83,500	\$ 258.85	\$ 21,613,972			\$ 21,613,972			\$ 21,613,972		
SC-N4	OP - New - Clark Hall Addition - Athletics - Athletics	42,000	\$ 254.83		\$ 10,702,708		\$ 10,702,708			\$ 10,702,708		
DC-N35	PHHP - New - School of Public Health and Health Professions - Public Health - Health Sciences	176,639	\$ 379.56		\$ 67,044,603			\$ 67,044,603		\$ 67,044,603		
DC-N39	PHAR - New - School of Pharmacy - Pharmacy - Health Sciences	179,141	\$ 369.50		\$ 66,192,251			\$ 66,192,251		\$ 66,192,251		
NC-R3	SCI - Reno - Cooke/Hochstetter - Biology / Geology - CAS	554,770	\$ 250.80	\$ 139,137,875			\$ 139,137,875			\$ 139,137,875		
NC-R30	SCI - Reno - Green House - CAS	8,800	\$ 238.06	\$ 2,094,941			\$ 2,094,941			\$ 2,094,941		
NC-N9	SCI - New - Natural Sciences Expansion A (Research Lofts) - Sciences - CAS	115,000	\$ 346.03		\$ 39,793,152			\$ 39,793,152		\$ 39,793,152		
NC-N10	SCI - New - Natural Sciences B - Sciences - CAS	78,000	\$ 367.82		\$ 28,690,098			\$ 28,690,098		\$ 28,690,098		
NC-N10A	SCI - New - Natural Sciences (Greenhouse) - CAS	5,000	\$ 249.46		\$ 1,247,308			\$ 1,247,308		\$ 1,247,308		
NC-N26	SCI - New - Natural Sciences Expansion C - Sciences - CAS	193,000	\$ 378.22		\$ 72,995,689			\$ 72,995,689		\$ 72,995,689		
SC-R22	SCI - Reno - Foster Hall - CHD & CDS - Administration	69,178	\$ 237.39	\$ 16,422,227			\$ 16,422,227			\$ 16,422,227		
DC-N31	SMBS - New - School of Medicine Phase I - SMBS - Health Sciences	531,497	\$ 457.35		\$ 243,078,187		\$ 243,078,187			\$ 243,078,187		
DC-N32	SMBS - New - School of Medicine Phase II - SMBS - Health Sciences	425,758	\$ 447.29		\$ 190,436,174		\$ 190,436,174			\$ 190,436,174		
SC-R12	SW - Reno - Townsend Hall - Social Work - Professional	25,000	\$ 115.34	\$ 2,883,562			\$ 2,883,562			\$ 2,883,562		

FINAL RECOMMENDATION		Area (GSF)   Unit Cost / GSF		Project Budget Types		Capital Budget Plan						
				Reno Costs	New or Addition Costs	Site Costs	2013-2018	2018-2023	Beyond 2023	Total		
Construction Budget Costs												
SC-R21	VPR - Reno - Kapoor Hall, Academic / Incubator Space - Research - Professional	147,000	\$      216.60	\$	31,840,557			\$	31,840,557	\$	31,840,557	
B. Not Typically State Capital Funded												
NC-N7	VPDAR - New - University Club Alumni Restaurant - None - Administration	44,000	\$      324.57	\$	14,281,007			\$	14,281,007	\$	14,281,007	
NC-N16	VPEA - New - Hotel & Conference Center - None - Administration	143,750	\$      336.64	\$	48,391,866			\$	48,391,866	\$	48,391,866	
DC-N33	VPLS - New - North Street Parking Structure Phase 1&2 - Parking - Administration	675,500	\$      71.49	\$	48,288,460	\$      48,288,460				\$	48,288,460	
DC-N40	VPLS - New - McCarley Gardens Parking Structure - Parking - Administration	450,450	\$      73.50	\$	33,106,856			\$	33,106,856	\$	33,106,856	
DC-N47	VPLS - New - University Housing A - Res Life - Student Affairs	262,500	\$      326.58	\$	85,727,284			\$	85,727,284	\$	85,727,284	
NC-N5	VPLS - New - Bookstore and Living-Learning quarter - Res Life - Student Affairs	250,000	\$      309.82	\$	77,453,809	\$      77,453,809				\$	77,453,809	
NC-N11	VPLS - New - Lee Road Residence Hall A - Res Life - Student Affairs	150,000	\$      309.82	\$	46,472,285			\$	46,472,285	\$	46,472,285	
NC-N12	VPLS - New - Lee Road Residence Hall B - Res Life - Student Affairs	150,000	\$      309.82	\$	46,472,285				\$	46,472,285	\$	46,472,285
NC-N15	VPLS - New - Lee Road Garage - Parking - Student Affairs	224,640	\$      81.61	\$	18,333,208			\$	18,333,208		\$	18,333,208
NC-N17	VPLS - New - Lee Road Residence Hall C - Res Life - Student Affairs	150,000	\$      309.82	\$	46,472,285				\$	46,472,285	\$	46,472,285
NC-N23	VPLS - New - Flint Garage - Parking - Student Affairs	239,400	\$      64.11	\$	15,347,684			\$	15,347,684		\$	15,347,684
NC-N24	VPLS - New - Coventry Garage - Parking - Student Affairs	199,500	\$      64.78	\$	12,923,520			\$	12,923,520		\$	12,923,520
NC-N25	VPLS - New - Natural Sciences North Housing - Res Life - CAS	269,340	\$      336.64	\$	90,670,366				\$	90,670,366	\$	90,670,366
NC-N29	VPLS - New - Hamilton Garage - Parking - Student Affairs	128,800	\$      64.11	\$	8,257,233			\$	8,257,233		\$	8,257,233
SC-N7	VPLS - New - University Housing A - Res Life - Student Affairs	92,000	\$      309.82	\$	28,503,002				\$	28,503,002	\$	28,503,002
SC-N8	VPLS - New - University Housing B - Res Life - Student Affairs	90,000	\$      309.82	\$	27,883,371				\$	27,883,371	\$	27,883,371
SC-N9	VPLS - New - University Housing C - Res Life - Student Affairs	90,000	\$      309.82	\$	27,883,371				\$	27,883,371	\$	27,883,371
SC-N10	VPLS - New - Squire North Garage - Parking - Student Affairs	290,000	\$      71.82	\$	20,828,033				\$	20,828,033	\$	20,828,033
SC-N12	VPLS - New - Winrige Garage - Parking - Student Affairs	382,200	\$      64.11	\$	24,502,442	\$      24,502,442				\$	24,502,442	
SC-R15	VPLS - Reno - Goodyear Hall, Partial conversion to graduate housing - Res Life - Student Affairs	151,300	\$      257.51	\$	38,961,077				\$	38,961,077	\$	38,961,077
SC-R16	VPLS - Reno - Clement Hall, Partial conversion to graduate housing - Res Life - Student Affairs	183,300	\$      253.49	\$	46,463,836				\$	46,463,836	\$	46,463,836
DC-N42	VPR - New - Incubator / Research Park A - Research - Health Sciences	120,000	\$      310.49		\$      37,258,300				\$	37,258,300	\$	37,258,300
DC-N43	VPR - New - Incubator / Research Park B - Research - Health Sciences	120,000	\$      310.49		\$      37,258,300				\$	37,258,300	\$	37,258,300
DC-N44	VPR - New - Incubator / Research Park D - Research - Health Sciences	120,000	\$      310.49		\$      37,258,300				\$	37,258,300	\$	37,258,300
DC-N45	VPR - New - Incubator / Research Park E - Research - Health Sciences	120,000	\$      310.49		\$      37,258,300				\$	37,258,300	\$	37,258,300
DC-N36	None - New - Private Development B - None - Administration	150,000	\$      325.91		\$      48,886,430				\$	48,886,430	\$	48,886,430
DC-N37	None - New - Private Development A - None - Administration	150,000	\$      325.91		\$      48,886,430				\$	48,886,430	\$	48,886,430
C. Administration / Support Services												
NC-R1	AA - LIB - Reno - Lockwood, HOTC* - Pre 2013 - Administration	36,225	\$      230.68	\$	8,356,562	\$      8,356,562				\$	8,356,562	
NC-R1A	AA - LIB - Reno - Lockwood, HOTC* - Phase 2 - Administration	216,417	\$      230.68	\$	49,924,142	\$      49,924,142				\$	49,924,142	
NC-R2	AA - LIB - Reno - Capen Hall, HOTC* - Pre 2013 - Administration	115,523	\$      300.43	\$	34,706,216	\$      34,706,216				\$	34,706,216	
NC-R2A	AA - LIB - Reno - Capen Hall, HOTC* - Phase 2 - Administration	170,016	\$      300.43	\$	51,077,379	\$      51,077,379				\$	51,077,379	
NC-R8	AA - LIB - Reno - Norton, HOTC - HOTC - Administration	34,554	\$      228.00	\$	7,878,400	\$      7,878,400				\$	7,878,400	
NC-R8A	AA - LIB - Reno - Norton, (IT) Computing Center - Administration	1,000	\$      303.11	\$	303,109	\$      303,109				\$	303,109	
NC-R10	AA - LIB - Reno - Talbert, HOTC - HOTC - Administration	39,212	\$      257.51	\$	10,097,434	\$      10,097,434				\$	10,097,434	
NC-N30	AA - LIB - Add - Capen Hall, HOTC*, North and South Entry Additions - HOTC - Administration	10,000	\$      268.91		\$      2,689,089	\$      2,689,089				\$	2,689,089	
SC-R1	AA - LIB - Reno - Abbott Hall, HOTC - HOTC - Administration	89,325	\$      303.11	\$	27,075,236	\$      27,075,236				\$	27,075,236	
SC-R17	AA - LIB - Reno - Abbott Hall - Phase 2 HOTC - HOTC - Library / Administration	11,671	\$      299.09	\$	3,490,629	\$      3,490,629				\$	3,490,629	
NC-R9	ART - Reno - Center for Tomorrow for Environmental Education & Research - Administration	17,420	\$      257.51	\$	4,485,803				\$	4,485,803	\$	4,485,803
SC-R31	DENT - Reno - Squire Hall - Dental - Health Sciences	78,750	\$      242.42	\$	19,090,604	\$      19,090,604				\$	19,090,604	
NC-N13	UF - New - Helm Building Expansion - Infrastructure	52,000	\$      312.50		\$      16,249,876				\$	16,249,876	\$	16,249,876

[APPENDIX A]

FINAL RECOMMENDATION		Area (GSF)    Unit Cost / GSF		Project Budget Types			Capital Budget Plan				
				Reno Costs	New or Addition Costs	Site Costs	2013-2018	2018-2023	Beyond 2023	Total	
		Construction Budget Costs									
NC-N21	UF - New - Public safety facility - Administration	26,000	\$        325.91	\$	8,473,648		\$	8,473,648	\$	8,473,648	
NC-N22	UF - New - University Support Additions - Administration	75,000	\$        324.57	\$	24,342,626		\$	24,342,626	\$	24,342,626	
SC-R13	UF - Reno - Beck Hall for Admin Support - Administration	7,000	\$        234.71	\$	1,642,960		\$	1,642,960	\$	1,642,960	
SC-R32	VPLS - Reno - Harriman Hall - Administration	56,924	\$        301.77	\$	17,177,847	\$	17,177,847		\$	17,177,847	
SC-R7	VPEA - Reno - Allen Hall - Buffalo Prep - Administration	40,000	\$        249.13	\$	9,965,053	\$	9,965,053		\$	9,965,053	
SC-R23	VPLS - Reno - Squire Hall, Academic / Campus Life - Administration	239,660	\$        241.08	\$	57,777,034			\$	57,777,034	\$	57,777,034
SC-N6	VPLS - New - Transit Pavilion - Parking - Student Affairs	3,600	\$        220.63	\$	794,254	\$	794,254		\$	794,254	
D. Site Improvement Projects											
DC-EP32	Land Costs (Phase 3) - Administration	1	\$        -		\$        -		\$        -		\$        -	\$        -	
DC-EP35	Land Costs (Phase 1& 2) - Administration	1	\$        -		\$        -	\$	-		\$	-	
DC-L29	Landscape at Allen Street Metro - Administration	63,100	\$        23.96		\$    1,512,000		\$    1,512,000		\$	1,512,000	
DC-L31	McCarley Gardens Quad - Administration	54,700	\$        10.77		\$    589,000		\$    589,000		\$	589,000	
DC-L32	Land Costs for McCarley Gardens - Administration	1	\$        -		\$        -		\$        -		\$	-	
DC-RW30	Road Realignment - Administration	145,300	\$        14.18		\$    2,061,000		\$    2,061,000		\$	2,061,000	
NC-D2	Demo Bissell Hall - Student Affairs	9,150	\$        27.10		\$    248,000		\$    248,000		\$	248,000	
NC-D3	Demo Campus Mail Center - Administration	10,344	\$        27.26		\$    282,000		\$    282,000		\$	282,000	
NC-D4	Demo Bookstore - Student Affairs	21,273	\$        27.17		\$    578,000	\$	578,000		\$	578,000	
NC-D5	Demo Commons - Student Affairs	98,185	\$        28.15		\$    2,764,000	\$	2,764,000		\$	2,764,000	
NC-D6	Demo Flint Village - Administration	93,600	\$        27.16		\$    2,542,000		\$    2,542,000		\$	2,542,000	
NC-L20	Red Jacket open Space Enhancements - Administration	233,500	\$        9.81		\$    2,290,000	\$	2,290,000		\$	2,290,000	
NC-L21	Fargo/Porter Open Space Enhancements - Administration	70,500	\$        11.62		\$    819,000	\$	819,000		\$	819,000	
NC-L22	Creek restoration and tree planting - Administration	25,000	\$        647.80		\$    16,195,000		\$    16,195,000		\$	16,195,000	
NC-L23A	Audubon Recreation Trail (Middle Segment) - Administration	1,380,103	\$        1.93		\$    2,657,000		\$    2,657,000		\$	2,657,000	
NC-L23B	Audubon Recreation Trail (North Segment) - Administration	1,025,900	\$        2.99		\$    3,066,000		\$    3,066,000		\$	3,066,000	
NC-L23C	Audubon Recreation Trail (South Segment) - Administration	1,060,057	\$        2.79		\$    2,961,000		\$    2,961,000		\$	2,961,000	
NC-L24	Lake LaSalle Ecological Improvements - Administration	1	\$ 8,629,000.00		\$    8,629,000		\$    8,629,000		\$	8,629,000	
NC-L26	Site Restoration The Oval - Administration	278,420	\$        2.55		\$    709,000		\$    709,000		\$	709,000	
NC-L27	Remove Lee Road Berm - Administration	26,000	\$        15.27		\$    397,000		\$    397,000		\$	397,000	
NC-L28	Marshall Court and Kanazawa Island Enhancement - Administration	208,000	\$        9.99		\$    2,077,000	\$	2,077,000		\$	2,077,000	
NC-L29	Richmond/ Spaulding Open Space Enhancements - Administration	220,000	\$        6.53		\$    1,436,000	\$	1,436,000		\$	1,436,000	
NC-PR20A	Realign Putman Way (Putnam Way North) - Administration	95,000	\$        15.77		\$    1,498,000		\$    1,498,000		\$	1,498,000	
NC-PR20B	Realign Putman Way (Putnam Way East) - Administration	73,000	\$        11.40		\$    832,000		\$    832,000		\$	832,000	
NC-PR20C	Realign Putman Way (Putnam Way South) - Administration	61,200	\$        7.84		\$    480,000		\$    480,000		\$	480,000	
NC-PR21	Lee Road Streetscape - Administration	60,000	\$        4.12		\$    247,000		\$    247,000		\$	247,000	
NC-PR22	Rensch Plaza - Administration	59,000	\$        7.08		\$    418,000		\$    418,000		\$	418,000	
NC-PR23	Capen Hall - Administration	15,000	\$        27.53		\$    413,000		\$    413,000		\$	413,000	
NC-PR24	Science Corridor - Administration	47,000	\$        8.28		\$    389,000		\$    389,000		\$	389,000	
NC-PR25	Founders Plaza and Academic Spine - Administration	228,000	\$        16.18		\$    3,689,000		\$    3,689,000		\$	3,689,000	
NC-PR26	Social Sciences Quad - Administration	76,955	\$        10.97		\$    844,000	\$	844,000		\$	844,000	
NC-PR27	Lockwood Library Spine - Administration	40,500	\$        17.51		\$    709,000		\$    709,000		\$	709,000	
NC-PR28	Center for the Arts Spine - Administration	27,500	\$        40.40		\$    1,111,000		\$    1,111,000		\$	1,111,000	
NC-PR29	Student Union Corridor - Administration	85,000	\$        23.04		\$    1,958,000		\$    1,958,000		\$	1,958,000	
NC-PR30	Richmond Quadrangle - Administration	13,500	\$        14.37		\$    194,000	\$	194,000		\$	194,000	
NC-PR31	Red Jacket Quadrangle - Administration	12,700	\$        15.28		\$    194,000	\$	194,000		\$	194,000	

FINAL RECOMMENDATION		Area (GSF)    Unit Cost / GSF		Project Budget Types		Capital Budget Plan				
				Reno Costs	New or Addition Costs	Site Costs	2013-2018	2018-2023	Beyond 2023	Total
		Construction Budget Costs								
NC-PR32	Porter Quadrangle - Administration	8,800	\$        21.36			\$        188,000	\$        188,000			\$        188,000
NC-PR33	Fargo Quadrangle - Administration	15,500	\$        12.65			\$        196,000	\$        196,000			\$        196,000
NC-PR34	Wilkeson Quadrangle   - Administration	14,700	\$        13.20			\$        194,000	\$        194,000			\$        194,000
NC-PR35	Spaulding Quadrangle - Administration	10,300	\$        16.50			\$        170,000	\$        170,000			\$        170,000
NC-PR36	Landmark Tower and Pergola at Oval - Administration	1	\$ 1,609,000.00			\$        1,609,000		\$        1,609,000		\$        1,609,000
NC-PR37	Hardscape Improvements - Administration	1	\$ 1,213,000.00			\$        1,213,000	\$        1,213,000			\$        1,213,000
NC-RW20	Existing Surface Parking Improvements - Administration	3,167,548	\$        10.66			\$        33,778,000		\$        33,778,000		\$        33,778,000
NC-RW21	Coventry Intersection Improvements - Administration	44,959	\$        14.90			\$        670,000		\$        670,000		\$        670,000
NC-RW22	Coventry Loop Improvements   - Administration	184,328	\$        5.80			\$        1,070,000			\$        1,070,000	\$        1,070,000
NC-RW24	Webster Road Extension - Administration	24,000	\$        20.63			\$        495,000			\$        495,000	\$        495,000
NC-RW25	Webster Road Roundabout and Swing Lot - Administration	81,235	\$        43.24			\$        3,513,000		\$        3,513,000		\$        3,513,000
NC-RW26	Reconfigure Hamilton Loop (Hamilton Way) - Administration	168,900	\$        6.16			\$        1,040,000		\$        1,040,000		\$        1,040,000
NC-RW27	Hamilton Road Intersection - Administration	41,844	\$        18.26			\$        764,000			\$        764,000	\$        764,000
NC-RW28	Reconfigure Flint Loop and Roundabout - Administration	85,526	\$        13.80			\$        1,180,000		\$        1,180,000		\$        1,180,000
NC-RW29	Flint loop Improvements - Administration	68,422	\$        15.61			\$        1,068,000		\$        1,068,000		\$        1,068,000
NC-RW30	I-990 Roundabout - Administration	113,766	\$        16.42			\$        1,868,000		\$        1,868,000		\$        1,868,000
NC-RW31	Rensch Road roundabout - Administration	36,638	\$        46.10			\$        1,689,000		\$        1,689,000		\$        1,689,000
NC-RW31	Millersport / Audubon Roundabout - Administration	187,555	\$        19.29			\$        3,618,000			\$        3,618,000	\$        3,618,000
NC-RW32	Hadley Road Extension to Service District - Administration	60,000	\$        6.35			\$        381,000			\$        381,000	\$        381,000
NC-RW38	Service Center road Intersection (including path to service neighborhood) - Administration	27,291	\$        18.69			\$        510,000	\$        510,000			\$        510,000
NC-U21	NC Site & Underground Utility Restoration, Phase I - Administration	1	\$        -			\$        -	\$        -			\$        -
NC-U22	NC Site & Underground Utility Restoration, Phase II - Administration	1	\$        -			\$        -	\$        -			\$        -
NC-U23	Ellicott Complex Tunnel Improvements - Administration	54,000	\$        -			\$        -	\$        -			\$        -
SC-D7	Demolish MacDonald Hall - Administration	37,117	\$        28.53			\$        1,059,000	\$        1,059,000			\$        1,059,000
SC-D8	Demolish Michael Hall - Administration	36,525	\$        28.53			\$        1,042,000	\$        1,042,000			\$        1,042,000
SC-D9	Demolish Pritchard Hall - Administration	37,117	\$        28.53			\$        1,059,000	\$        1,059,000			\$        1,059,000
SC-D10	Demolish Schoellkopf Hall - Administration	37,117	\$        28.53			\$        1,059,000	\$        1,059,000			\$        1,059,000
SC-D11A	Demolish Hayes Annex A - Administration	12,070	\$        22.87			\$        276,000		\$        276,000		\$        276,000
SC-D11B	Demolish Hayes Annex B - Administration	12,140	\$        22.73			\$        276,000		\$        276,000		\$        276,000
SC-D11C	Demolish Hayes Annex C - Administration	12,376	\$        22.79			\$        282,000		\$        282,000		\$        282,000
SC-D12	Demolish Acheson Annex   - Administration	10,140	\$        24.85			\$        252,000	\$        252,000			\$        252,000
SC-D13	Demolish Diefendorf Annex - Administration	26,600	\$        20.98			\$        558,000		\$        558,000		\$        558,000
SC-D14	Demolish Sherman Hall - Administration	80,628	\$        28.50			\$        2,298,000		\$        2,298,000		\$        2,298,000
SC-D15	Demolish Sherman Annex - Administration	31,982	\$        28.52			\$        912,000		\$        912,000		\$        912,000
SC-D16	Demolish Farber Hall - Administration	210,903	\$        28.49			\$        6,008,000		\$        6,008,000		\$        6,008,000
SC-D17	Demolish Farber Annex - Administration	5,751	\$        30.78			\$        177,000		\$        177,000		\$        177,000
SC-D18	Demolish Cary Hall - Administration	147,298	\$        28.50			\$        4,198,000		\$        4,198,000		\$        4,198,000
SC-D19	Demolish Kimball - Administration	136,120	\$        29.83			\$        4,060,000			\$        4,060,000	\$        4,060,000
SC-D20	Demolish Parker Hall Rear additions only - Professional	25,000	\$        28.48			\$        712,000	\$        712,000			\$        712,000
SC-D21	Demolish Buffalo Materials Research Center and Reactor - Administration	24,698	\$        204.51			\$        5,051,000	\$        5,051,000			\$        5,051,000
SC-D22	Demolish Squire Hall West Addition - Administration	102,000	\$        30.47			\$        3,108,000			\$        3,108,000	\$        3,108,000
SC-D23	Demo Squire loop and Squire Lot - Administration	25,200	\$        4.84			\$        122,000			\$        122,000	\$        122,000
SC-L40	Goodyear Quadrangle   - Administration	17,000	\$        16.41			\$        279,000		\$        279,000		\$        279,000
SC-L41	Winridge (Landscape) Entrance - Administration	43,000	\$        6.56			\$        282,000		\$        282,000		\$        282,000
SC-L42	Diefendorf Quadrangle - Administration	85,320	\$        9.20			\$        785,000	\$        785,000			\$        785,000
SC-L43	Southeast Recreation Fields - Administration	583,542	\$        1.55			\$        902,447			\$        902,447	\$        902,447
SC-L44	Clark Lawn - Administration	309,638	\$        5.66			\$        1,753,000	\$        1,753,000			\$        1,753,000

[APPENDIX A]

FINAL RECOMMENDATION		Area (GSF)    Unit Cost / GSF		Project Budget Types			Capital Budget Plan			
				Reno Costs	New or Addition Costs	Site Costs	2013-2018		2018-2023	Beyond 2023
		Construction Budget Costs								
SC-L45	Reclaim the Main Street Lawn - Administration	711,022	\$        3.98			\$    2,828,000		\$    2,828,000	\$    2,828,000	
SC-L46	Reclaimed Cary Site - Administration	40,000	\$        9.33			\$     373,000		\$     373,000	\$     373,000	
SC-L47	Professional Education Center Quad - Administration	46,905	\$       12.05			\$     565,000		\$     565,000	\$     565,000	
SC-L48	Hayes Lawn - Administration	518,811	\$        1.59			\$     826,000	\$     826,000		\$     826,000	
SC-L49	Abbott Loop Landscape - Administration	1	\$   487,000.00			\$     487,000	\$     487,000		\$     487,000	
SC-L50	Parker Hall Lawn - Administration	1	\$   570,000.00			\$     570,000	\$     570,000		\$     570,000	
SC-L51	Abbott Road Entrance at Bailey - Administration	1	\$   588,000.00			\$     588,000	\$     588,000		\$     588,000	
SC-L53	Landscape Baily Parking A and B lots - Administration	120,000	\$        2.30			\$     276,000		\$     276,000	\$     276,000	
SC-PR43	Sutton Lane Path Improvements - Administration	35,000	\$        5.17			\$     181,000		\$     181,000	\$     181,000	
SC-PR44A	Bailey Avenue Streetscape (South Segment - Administration)	247,088	\$        2.64			\$     653,000	\$     653,000		\$     653,000	
SC-PR44B	Bailey Avenue Streetscape (North Segment - Administration)	247,088	\$        1.51			\$     372,000	\$     372,000		\$     372,000	
SC-PR45	Main Lawn along Main Street - Administration	458,000	\$        1.52			\$     698,000	\$     698,000		\$     698,000	
SC-PR46	Cary and BEB Quadrangle - Administration	58,200	\$       13.57			\$     790,000	\$     790,000		\$     790,000	
SC-PR47	Abbott Hall Quadrangle - Administration	1	\$   803,000.00			\$     803,000	\$     803,000		\$     803,000	
SC-PR48	Demo Southeast Parking replace with Recreation Area - Administration	1	\$   1,094,000.00			\$    1,094,000		\$    1,094,000	\$    1,094,000	
SC-RW40	Existing Surface Parking Improvements (Townsend lot) - Administration	46,000	\$       14.98			\$     689,000		\$     689,000	\$     689,000	
SC-RW41	Goodyear Road - Administration	77,761	\$       34.52			\$    2,684,000		\$    2,684,000	\$    2,684,000	
SC-RW42	South West Loop Road Completion at Parker/Kapoor - Administration	99,305	\$       27.28			\$    2,709,000	\$    2,709,000		\$    2,709,000	
SC-RW43	South Loop Road Completion at PEC and LAW - Administration	62,289	\$       10.77			\$     671,000	\$     671,000		\$     671,000	
SC-RW44	Loop Road Completion (Sherman to Michael) - Administration	54,653	\$       12.55			\$     686,000	\$     686,000		\$     686,000	
SC-RW45	Reconfigured NFTA Park and Ride lot and Allen Road - Administration	155,215	\$       18.94			\$    2,940,000		\$    2,940,000	\$    2,940,000	
SC-RW46	Main Circle Improvements and Transit Plaza - Administration	42,821	\$       25.24			\$    1,081,000		\$    1,081,000	\$    1,081,000	
SC-RW47	Winridge entry - Administration	1	\$   1,629,000.00			\$    1,629,000	\$    1,629,000		\$    1,629,000	
SC-RW48	Hayes Loop west - Administration	1	\$     750,000.00			\$     750,000	\$     750,000		\$     750,000	
SC-RW49	North Abbott Road Entrance Parking Lots A & B at Bailey - Student Affairs	1	\$   2,233,000.00			\$    2,233,000	\$    2,233,000		\$    2,233,000	
SC-RW49A	Bailey Parking lot A - Administration	93,000	\$       18.59			\$    1,729,000	\$    1,729,000		\$    1,729,000	
SC-RW49B	Bailey Parking lot B - Administration	53,400	\$       30.04			\$    1,604,000	\$    1,604,000		\$    1,604,000	
SC-RW50	Squire Road Entrance - Administration	1	\$     390,000.00			\$     390,000	\$     390,000		\$     390,000	
SC-RW51	North Segment Hayes Loop - Administration	1	\$   1,955,000.00			\$    1,955,000	\$    1,955,000		\$    1,955,000	
SC-RW52	Abbott Loop (Abbott Plaza & traffic calmed roadway (incAbbott Loop improvement) - Administration	137,805	\$        4.80			\$     661,000	\$     661,000		\$     661,000	
Sub-Total Construction Budget Costs				\$   839,282,921	\$   2,441,361,071	\$   190,027,447	\$   1,411,494,188	\$   313,951,591	\$   1,745,225,661	\$   3,470,671,440
Other Project Budget Costs										
	Professional Fees, Equipment Costs, Contingencies Budgeted @									



# PHASE V: APPENDIX

## PHASE V APPENDIX B - RESPONSE TO PHASE IV COMMENTS

### RESPONSE TO PHASE IV COMMENTS DOWNTOWN

#### PHASE I & II OF MEDICAL SCHOOL MOVE DOWNTOWN

The Entire SMBS desires to move Downtown prior to 2023. Phase I will include Administration, School of Medicine, science and research. Phase II will consist of additional growth, faculty, research labs, and animal labs. The total gross area of phase 1 and 2 construction is anticipated to be 800-850k sq. ft. in addition to CTRC and COE. There was a minimal 3% difference between the independent space needs reports of The UB Capital Planning Group and the UB Facilities Master plan Phase III report by consultant Paulien and Associates. On the South Campus, BRB will still be utilized by the School of Medicine. The Cary/Farber/Sherman complex will be demolished. BRB, BEB, Kimball, and Diefendorf will remain to service biomedical functions. The later move beyond 2023 includes other health sciences programs such as: the Public Health, Pharmacy, Dental, and Nursing Schools. A more systematic planning effort, similar to what has occurred for the School of Medicine, is planned for the other health science schools to ensure proper sequencing of realignment, demolition, and new construction.

#### ROOSEVELT BUILDING

The first floor of the Roosevelt building will be dedicated to the development of UB's Institute for Healthcare Informatics. In cooperation with Dell, the renovated first floor will accommodate Dell's high powered computers and 100 employees from UB, Dell, CTG (a Buffalo based technology company), and UB Associates (the management service organization supporting the 450 physicians in the UBMD medical

practice plans). Medical informatics is an emerging health care field centered on using information technology to analyze and share patient information among health care practitioners and across health care institutions. Such analysis leads to better monitoring of patient care, enhanced measures to prevent disease and identification of more-effective treatments, which leads to better patient outcomes and reduced medical costs.

#### SHARED AMENITIES

The following is a list of components within the SMBS Program that should be central to the BNMC campus as they offer the greatest opportunities for shared use.

- SMBS Program
  - Lab Animal Facility
  - Simulation Center
  - Medical Library
  - Conference Facility
  - Café
  - Fitness Center
  - Museum
- Other
  - Parking
  - Medical Office Building
  - Open Space
  - Signage/Wayfinding
  - Transit BNMC Entry

To the greatest extent possible these shared program elements will be executed within Phase 1 of the

move downtown. While Option 1a’s location is ideal for shared use between SMBS and other partnering institutions, proximity to the Health Science schools located on the McCarley Gardens site is stretched. This decentralized approach provides the opportunity for UB to maximize synergies with partnering institutions.

**DISTRIBUTED VS CONSOLIDATED**

The distribution of UB program across the BNMC campus varies greatly between options presented within Phase IV. UB2020 as well as this Facilities Master Plan envision a campus where relationships between UB and partnering institutions are equally as important as those between UB’s own Medical School and Health Science Schools. It is expected that collaboration opportunities will be generated as a result of proximity. Therefore, options that distribute program to some extent throughout the BNMC were favored. The selection of Option 1a recognizes this, as the Allen Street station location is ideal for shared used between SMBS and other partnering institutions.

**CAMPUS IDENTITY**

While cooperation amongst BNMC partnering institutions is encouraged, there is no plan in the next 10 years to create a collective identity between UB, Kaleida, BNMC, and others within the downtown campus. Within the next 10 years focus will be on creating an identity for UB. Important cooperative opportunities are listed below.

- Ellicott Street as a connection through the campus is being well received and Ellicott Street Linear Park is currently under construction. Strategic programing of Ellicott Street will be a very important collaborative effort that the BNMC should promote.
- The greatest promise for retail is along Main Street. Ellicott has potential for service related retail (Medical hardware, clothing, and hospital support). High Street could potentially have retail that would serve the neighborhood but the Fruit Belt neighborhood may not have the density to support it.

- The Ellicott Street gateways are currently hard to find. Strategic open spaces linked along Ellicott Street by 5 minute walks and the HOTC shared amenities should be planned in such a way that they connect the Ellicott spine to Main Street.

**COMMUNITY CONNECTIONS**

Residents are concerned about a wall (parking garages and central plant) along Michigan Avenue. Development should continue to encourage the neighborhood’s rich culture. Lowrise development at Michigan and Virginia should open up to the newly created Virginia Street Park. This space should be seen as a public community entrance onto the BNMC campus. The streetscape along the south side of Michigan should be developed at a pedestrian scale and open up to the adjacent community to the East.

By partnering with local communities to enhance areas, create multi-family residences, and live-work housing along High Street, UB might be able to attract researchers, doctors, and other staff. This concept of creating an “Educational Pipeline” is vital to UB’s future success. One of the top 5 public schools (grades five through twelve) in the country has just relocated to the area. UB should continue exploring the benefits of creating a similar medical magnet school in the area.

The site at High and Ellicott currently identified as DC-N32 and DC-L29 may be contaminated and may require soil to be removed. This type of extensive excavation would make below grade parking a more achievable possibility. Option 1a, the final option, indicates structured parking at North and Ellicott Street. In addition to this site, UB may be required to provide a fair number of accessible spaces adjacent to the facility.

**1001 MAIN STREET**

In terms of visitors, the SMBS is seen as a semi-public facility with continuing education programs and grand rounds. A street level presence is important. The Allen Street transit site and adjacent sites selected in the

final option provide UB the desired street presence and strengthen a connection from Main to Ellicott. Air rights over the Allen Street Subway should continue to be discussed as this site has great potential in becoming the “front door” to the BNMC campus.

**MCCARLEY GARDENS SITE**

While attractive due to its location, size, and proximity to highway 33, the McCarley Gardens site does not provide the proximity to Kaleida, Buffalo General Hospital, the CTRC that the SMBS (when located at the Allen Street Transit site) and other UB Health Science schools desire. Due to its visibility, accessibility and size, this site would be particularly attractive for a use that is affiliated with but not necessarily incorporated with the rest of the BNMC. Its location would provide opportunities for the correct building scale and a separate entrance required for a research park. The final option envisions development of McCarley occurring beyond 2023 for select health science schools and research incubators.

**PILGRIM VILLAGE SITE**

Pilgram village is attractive due to the direct adjacencies to Buffalo Niagra Hospital and Kaleida. However in contrast to McCarley it would not be a great site for a research park due to its more restricted access and less visible separate entry. Acquisition of Pilgrim Village would also be much more difficult to achieve considering UB already has an option to purchase McCarley. This FMP presents a combination of the Allen Street Transit site and McCarley Gardens as the best development scenario for UB.

**BNMC PARKING LOT**

The importance of the BNMC parking lot site to UB is elevated once McCarley Gardens is purchased. The BNMC lot contains very valuable frontage along Ellicott Street. UB should work diligently to collaborate with other partnering institutions to develop this site.

SOUTH CAMPUS

In response to questions that arose from the FMP Deans and VP meeting that occurred on June 21<sup>st</sup> 2011 and recorded within the FMP Phase IV Chapter F, the following South Campus items have been addressed within this Phase V report.

SURVEY OF HEALTH SCIENCE SCHOOL COMPONENTS

In the fall of 2010 the UB Capital Planning group surveyed the current School of Medicine spaces to determine space utilization and project future needs. UB’s Capital Planning Group has begun conducting a space utilization survey for the remaining schools. The preliminary findings of this survey have informed this FMP to the greatest extent possible, however the final results of the survey were not available to be reported here. Due to the fact that the mechanical systems for Cary Farber and Sherman are all linked the phased demolition of them would be prohibitively difficult. As a result, the completion of BEB and BRB construction will need to be phased in such a way that portions of the building will be habitable for those moving out of Cary Farber and Sherman prior to final completion of the renovation. The BEB classroom and office wing will be kept and used for additional space.

DENTAL SCHOOL & ANATOMY LABS

The Dental School move to downtown is projected to be beyond 2023 and therefore the demolition of the anatomy lab portion of Squire Hall is no longer being recognized as a demolition occurring within the 2023 timeframe.

LARGE MULTI-USER CLASSROOM SPACE

In general UB has a need for more centrally scheduled classroom space. This need will be met early on by the PEC. Centrally located, it will provide large classroom space for all schools on South Campus to utilize.

PROFESSIONAL EDUCATION CENTER (PEC)

The PEC has been located adjacent to Abbott Road across from Diefendorf Hall. This location is not only central to most schools on campus, it allows for

completion of the PEC before the Cary Farber Sherman Demolition as population on campus increases from the School of Social Work and School of Education. Classrooms within the PEC may be able to meet the large conference space needs of Dental and Public Health. The program for this building includes a small boutique hotel and large lecture hall for public engagements and distinguished speakers.

STUDENT OCCUPANCY

The intent of this FMP is to load campuses in a way that populations remain stable so that they would do no harm to the surrounding area. Before the Medical School moves downtown, a slight student upsurge will exist on South Campus. The North Campus will lose some occupancy while the Downtown Campus grows. The population on the South Campus is projected to stay the same in the long term.

RETAIL AND DINING

The learning landscape plans presented as a major component of UB2020 have been included within this FMP for each campus. These plans have been updated to represent components that are included within the 2023 scope of this plan.

CLARK HALL RENOVATION

The Clark Hall addition and renovation is a priority campus life initiative. Public Health and Exercise Science facilities may also be able to utilize the space for Exercise Science programs. If necessary, Clark may be renovated before and independently of a later addition.

ABBOTT HALL

As the physical center of campus Abbott Hall is a very important part of the student experience on South Campus. The renovation of Abbott Hall aims to open it up more so that it is experienced as an open square to both the Northwest and Southeast entrances. Upper floors will contain the future library and learning commons areas while lower floors are to be academic focused. The ground floor is to be a one stop location for student services, home to admissions

and will include a cafe serving both visitors and undergraduates. In order to transform Abbott Hall into a true HOTC it will need to become a place where students want to come rather than a place they have to come.

BAILEY AVENUE

To improve the Bailey Avenue streetscape, a bicycle and pedestrian friendly recreational path has been provided along Bailey Avenue. Entrances at Abbott Road and Squire Road will open up to Bailey Avenue to provide a pleasant welcoming experience and a sense of arrival.

NFTA TRANSIT PAVILION

Relocation of UB shuttle drop is currently being discussed with NFTA authorities. UB busses will not be allowed to enter the lower loop on Main, which may be upgraded in the future to accommodate more NFTA busses.

PARKING

One parking garage was intended to be constructed within the FMP timeframe. The Winridge Garage, located at Winridge Road on the south side of the campus would accommodate about 1,100 spaces on three levels and allow for the removal of other surface lots on campus. Additionally, with the creation of the Abbott Road entrance, the Sherman lot would be removed and replaced with surface parking constructed on the site of the demolished Cary and Farber Halls. These lots, identified as Abbott Lots A and B, would be located between the new Hayes Loop Road and Bailey Avenue and accommodate about 400 parking spaces. The Diefendorf Lot, located in front of Diefendorf Hall, may also be relocated if the decision is made to site a building in this space. In this case, the replacement surface parking would likely be constructed north of the new Abbott Lots A and B. In addition to these parking facilities, metered parking would be installed along Hayes Loop road.

The analysis of parking demand and supply included all of these changes, in addition to numerous small

accessory parking lots that would be removed when the adjacent building was demolished. This analysis shows that in all years there would be a surplus of parking of over 800 to 1,150 spaces. The south campus parking table, D-8, summarizes the South Campus parking projections.

RETAIL/RESIDENTIAL

Retail/residential along Bailey Ave is not viable and therefore must be inwardly focused on campus. Art and sculpture can be used to minimize the presence of parking structures along Bailey.

PEDESTRIAN PATTERNS

The VA Hospital currently leases parking from UB on South Campus. A parking garage by VA is being planned as a replacement. VA visitors currently arrive to the VA at the NFTA metro and cross the UB Campus. This pedestrian circulation pattern has been identified within this FMP.

NORTH CAMPUS

ACADEMIC VS CAMPUS LIFE

In order for academic units to grow and realign into more consolidated precincts as professional schools move to the South Campus, a large number of academic buildings are being renovated within the 2023 timeframe. All new building projects respond to the needs indicated in the Phase III report for campus life improvements. While this FMP intends to distribute improvements across departments, there is an emphasis on “campus life” as it has the largest need for space. Academic needs are being met through large comprehensive consolidation and renovation projects.

SCHOOL OF ENGINEERING

The Phase III report indicates that the School of Engineering will still have unmet space needs even after considering Davis Hall, and the Bell & Bonner renovations. This need is primarily driven by faculty growth and research space. Because there is a need to distribute improvements across departments, a new multi discipline research facility is being planned within the 2023 timeframe to accommodate the growing research needs of the School of Engineering.

LAYERS OF ENTRY

The planned entry sequence to North Campus begins with a wild perimeter that stands out from the surrounding suburban environment. This wild perimeter gradually feathers into a more manicured landscape and is accented by a celebrated traffic circle that includes a recognizable monument, sculpture, and lighting. Programmed functions in strategically placed buildings near Capen will activate the central portion of campus, but are beyond the 2013-2023 timeframe of this FMP.

- Flint Entry: Proposed as location for admissions in the Capen Hall renovations. Beyond 2023 Signature library with museum function planned.
- Coventry Entry: Site restoration to create a more consistently manicured landscape at Coventry Entry, and connect open space to the oval is

included within the 2023 timeframe. While Coventry is the primary entry for athletic events it has the shortest queuing distance. This FMP recommends that further studies take place to improve traffic circulation in this area during events.

- Hamilton Road: Wayfinding signage will be required to help alleviate current issues with getting to the first node of Hamilton Road entry. To achieve the envisioned iconic entry framed by landscape, significant renovation to the Capen Hall façade will be required to elevate the terminus of this axis. A new engineering building beyond 2023 may help define entry and add program to enliven this space.
- Highway Signage: This FMP recommends current discussions with DOT continue to attempt to improve campus signage on nearby highways.

WAYFINDING WITHIN CAMPUS

Due to continuing maintenance requirements and impending resurfacing, closure of the inner loop of Audubon Parkway and installation of traffic circles has been included within the 2023 timeframe. The I-990 and Flint loop traffic circles are priorities that must be completed by 2023. Traffic circles on Millersport are less of a priority and may creep beyond the 2023 timeframe. As the outer loop is resurfaced and traffic circles are completed, the inner loop should be reconstructed as a bike/recreation path.

The long awaited completion of an underground route East/West across campus will be achieved through the Center for Arts Spine (NC-PR28) project in 2018-2023. By completing this small segment of tunnel the entire campus can now be traversed along the East/West axis without being exposed to the weather.

Recent campuswide lighting improvements at both the pedestrian and vehicular scale will greatly improve wayfinding at night on campus.

STUDENT HOUSING

While the Phase III report indicates little to no growth in student population, private developers have already

acted on the predicted growth illustrated in UB2020. As a result, UB will soon have even more competition for housing. Reaching a critical mass of students on the North Campus is very important to UB’s vision of an active campus in the future. On campus residences have the potential to provide the critical mass UB is looking for, if they are implemented with the correct mix of programs and in strategic locations around campus.

The only housing within this FMP is the mixed use facility slated to be located on Furnas lot site. This mixed program building is a strategic move to thicken the spine and start establishing a connection from the spine towards Lee Road. The project is slated to occur earlier within the 10 year timeframe as this facility will house decanted UB commons programs and make way for the creation of The Oval.

As future housing is needed due to Governors or other complexes reaching the end of their useful life, this FMP recommends that new housing be built along the West side of Lee Road. Concentrating populations along Lee Road will enliven the East side of campus and establish a very important connection between the academic spine and Ellicott complex. New housing along Lee Road and an enlivened lake front will also make public/private partnerships such as the Hotel and Conference Center more viable

UTILITIES

Utilities along Lee Road have already been upgraded, which further supports this FMP’s recommendation to concentrate development there. UB has current plans to upgrade utilities that cross the Audubon Loop and may present opportunities to follow up with traffic circles and outer loop repaving. The new fieldhouse will require an extension of utilities, as will buildings beyond the 2023 timeline that “thicken the spine.”

In general, North Campus has ample electrical capacity and sufficient water supply to support all new construction indicated within the 2023 timeframe. This FMP recommends that further studies be conducted

on the sanitary system as the Amherst plant on Sweet Home Road may be reaching its capacity. All new construction will need to conform to new storm water mitigation regulations.

**CAMPUS LANDSCAPE**

This FMP echoes the UB2020 in recommending that soil improvement of existing clay soil be concentrated in strategic locations. Planting in clusters, rather than formal linear arrangements, will protect trees from wind damage. Landscape projects should seek to minimize the need for snow removal, maximizing pedestrian safety, and overall landscape potential.

**PEDESTRIAN AND BICYCLE IMPROVEMENT**

Circulation on campus is currently impeded, particularly in winter, by incomplete sidewalks. This FMP places the completion of these pedestrian paths a priority. As the site restoration projects along Putnam Way occur, particular attention should be paid to the campus’s comprehensive bicycle and pedestrian network. Traffic circles implemented along the Audubon Loop will reduce traffic speed and allow pedestrians and bicyclists opportunities to cross. At intersections where signals are present, pedestrian and bicycle activation buttons must be present. The completion connection of the Ellicott Complex bike path with the larger Amherst bike path is a fairly low cost project that has a high impact potential of connecting the campus to the community. As a result, this project should be completed in the near future. All future pathway considerations should seek to minimize snow removal maintenance.

**SECURITY**

UB has recently been active in adding blue light locations as part of a campus wide lighting improvement program in response to a risk assessment. Blue phone locations across campus include integrated speakers for emergency communications that are networked together and monitored in a central location.

**FOOD SERVICE**

UB is continually improving its eating environment. Currently, Ellicott’s two cafeterias are being combined to form one market style eating venue. Food venues are moving towards cooking on site while the existing commissary is being used for food storage. As future food venues are planned, more local storage at the venues should be planned for.

Food venues currently located within the UB commons will be moved to the new mixed-use facility across the street to make way for a more comprehensive Health and Wellness Facility at The Oval. Dining associated with the Health and Wellness Facility should take advantage of lakeside views. The need for more formal dining may be met by the proposed University Club. As additional residences are added to Lee Road more dining facilities will be required.

Currently the South East portion of campus and the areas near the Bean Center are underserved in terms of food options. In general, the West end of the Academic Spine is in need of additional dining venues. These needs are projected to be met by the substantial learning landscape that is intended to thread through campus.

**HELM STORAGE WAREHOUSE**

The Helm Storage Warehouse does not currently have adequate space. UB has considered renovation of the commissary to storage in the future. This renovation is not included within the 10 year timeframe of this report, but should continue to be studied.

**PARKING**

Parking improvements scheduled within the 10 year period are minimal. While campus wide parking demands may not justify additional spaces for parking structures other issues such as densification of the core, and proximity to population concentrations may be used to justify parking. One example of this is the displacement of the Furnas Lot for the mixed use facility on Lee Road. Concentrated development along lee road may require a new parking structure.

**SPEAKING VENUES / CONFERENCE FACILITIES**

There currently is a need for a space to house a distinguished speaker with large audiences. The Hotel / Conference Center is planned to meet this need in the long-term.



# PHASE V:

## PHASE V APPENDIX C - CROSSWALK SUMMARY

This crosswalk summary rolls up individual units into the larger school or department. A detailed crosswalk including all existing UB space at the individual unit level has been provided digitally with this FMP.

FINAL RECOMMENDATION PROGRAM RECONCILIATION SUMMARY											Consultant Guideline ASF 2023	Difference ASF Guide and Existing	Existing or Proposed	Change in Total (Proposed - Existing)	Totals	NORTH CAMPUS TOTAL	SOUTH CAMPUS TOTAL	DOWNTOWN CAMPUS TOTAL	Cape Hall, HOC, North and South Entry Additions	Fieldhouse	Varsity Tennis Complex	Recreation & Wellness Center	Bookstore and Living Learning quarter	Lee Road Garage	University Club	NORTH CAMPUS TOTAL NEW CONSTRUCTION	Wingrise Garage	Transit Pavilion	Hayes-Crosby Connector/Arch quarter	Parker Hall Addition	Professional Education Conference Center	Clark Hall Addition	SOUTH CAMPUS TOTAL NEW CONSTRUCTION	School of Medicine Phase I	School of Medicine Phase II	North Street Parking Structure	DOWNTOWN CAMPUS TOTAL NEW CONSTRUCTION	TOTAL NEW CONSTRUCTION (EXCLUDES RESIDENTIAL & PARKING STRUCTURES)				
April 2011 NASF Less Existing ASF										0.00	0.00	0.00	0.00	0	64,157.00	105,324.00	95,471	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0					
DEPARTMENT / DISCIPLINE USE										0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
College of Arts and Sciences:										Guideline	0	0	Existing	0	25,984	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
										23,937	-2,047	Proposed	0	25,984	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Fine & Performing Arts										Guideline	294,149	-212,327	Existing	0	506,476	229,344	23,894	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
													Proposed	0	506,476	229,344	23,894	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Humanities										Guideline	73,549	-15,225	Existing	0	88,774	43,961	0	426	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
													Proposed	0	115,888	57,518	0	426	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sciences										Guideline	579,928	-130,714	Existing	0	710,642	324,375	30,339	607	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
													Proposed	0	812,900	366,502	39,341	607	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Social Sciences										Guideline	161,243	-32,913	Existing	0	194,156	94,884	2,194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
													Proposed	0	194,250	94,931	2,194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Graduate School of Education										Guideline	96,312	-46,634	Existing	0	142,946	60,153	11,320	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
													Proposed	0	192,624	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Law School										Guideline	53,776	-65,256	Existing	0	119,032	52,720	3,146	3,650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
													Proposed	0	119,032	52,720	2,565	4,231	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
School of Architecture and Planning										Guideline	111,681	-73,383	Existing	0	185,064	0	92,532	0	0	0	0	0																				