

HEALTHCARE WORKFORCE INITIATIVE UPDATE



SCHOOL OF MEDICINE & HEALTH SCIENCES
ADVISORY COUNCIL

The University of North Dakota
School of Medicine
& Health Sciences



Agenda for Today's Presentation

- Update of the Second Biennial Report
- Overview of the Healthcare Workforce Initiative (HWI) and progress to date
- Building options & recommendations
- Your questions

Second Biennial Report

- Updated data and expanded analysis of the state of health of North Dakota and of our health care delivery system
- Expanded analysis of non-physician providers
- Expanded analysis of health care needs associated with the oil boom especially in the western part of the state
- Re-endorsement of the need to fully adopt the HWI and associated facility expansion



Projected Workforce Shortages

- North Dakota will experience a minimum 210 physician shortage by 2025 based on the current baseline and trend.*
- This estimate could easily double if the projected population growth occurs

* 2008 base year



Effective Workforce Strategies

- Reduce the disease burden
- Retain increasing numbers of those we train
- Train more physicians and other health professionals



Health Care Workforce Initiative (HWI)

- Reduce disease burden
 - Master of Public Health program
 - Geriatrics training program
 - Neurology program
- Enhance retention of graduates
 - Integrated longitudinal clerkship (Minot)
 - > 70% retention rate of residency graduates
 - 58% of UND SMHS graduates practicing in-state go out of state for residency and return
 - RuralMed program
 - Pipeline activities
 - New Center for Family Medicine facility in Bismarck





Health Care Workforce Initiative (HWI)

- Train More Health Care Providers

Phase 1 of HWI – On-going

- 8 medical students
- 15 health science students
- 9 residency slots
- RuralMed program
- MPH Program
- Geriatrics Training Program
- Pipeline activities
- Updated admission process

Phase 2 of HWI - Pending

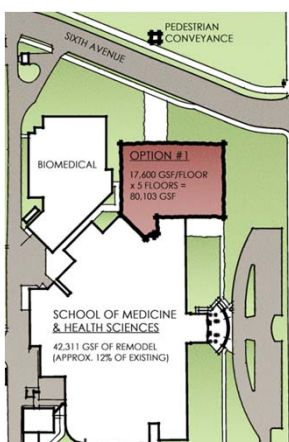
- 16 medical students (8 more than current)
- 30 health science students (15 more than current)
- 17 residency slots (8 more than current)
- Additional facility to house the > 200 new students, faculty and staff associated with full HWI



Facilities Space Study Conclusions

- Current facility utilization is at or above national benchmarks
- Current facility as it stands is unable to absorb any further influx of students, faculty, and staff associated with full implementation of the HWI
- Extensive renovation of the current 60-year old converted hospital building is inadvisable

Capital Construction Options



Option #1

- Minimizes investment in new facilities while maximizing renovations to meet the basic needs of the enrollment increase
- Maintains existing level of service
- 42,311 square feet of renovation
- 80,103 square feet addition
- \$38.5M

Capital Construction Options

Option #2



- Balances investment in new facilities and renovations
- Optimizes the educational experience and meets established national educational standards
- 48,332 square feet of renovation
- 169,390 square feet addition
- \$68.3M

Capital Construction Options

Option #3



- Entirely new facility that provides exceptional space
- Sustains growth for years to come with a highly valued edifice
- 376,812 square feet of new space
- \$124.0M

Cost of Various Options

Costs	As-Is	Option #1	Option #2	Option #3 (Demolition)
Construction	\$0.0	\$38.5	\$68.3	\$124.0

UND SMHS September 10, 2012



UND SMHS September 10, 2012

- The SMHS main instructional building in Grand Forks was under generator power for 3 days due to failure of a 60-year old 1,000 amp circuit
- Classrooms were moved, rescheduled, cancelled, and delayed
- Lost productivity
- Damaged equipment
- Financial loss



40-Year Life Cycle Costs

Costs	As-Is	Option #1	Option #2	Option #3 (Demolition)
Construction	\$0.0	\$38.5	\$68.3	\$124.0
Maintenance				
Deferred maintenance				
Utility				
F&A				
Demolition				
Life-Cycle Cost				
Incremental Cost				
Efficiency				



40-Year Life Cycle Costs

Life-Cycle Costs	As-Is	Option #1	Option #2	Option #3 (Demolition)
Construction	\$0.0	\$38.5	\$68.3	\$124.0
Maintenance	\$33.2			
Deferred maintenance	\$41.8			
Utility	\$27.7			
F&A	\$0.0			
Demolition	\$0.0			
Life-Cycle Cost	\$102.7			
Incremental Cost	Baseline			
Efficiency	-			

40-Year Life Cycle Costs

Life-Cycle Costs	As-Is	Option #1	Option #2	Option #3 (Demolition)
Construction	\$0.0	\$38.5	\$68.3	\$124.0
Maintenance	\$33.2	\$41.1		
Deferred maintenance	\$41.8	\$49.5		
Utility	\$27.7	\$34.7		
F&A	\$0.0	\$0.0		
Demolition	\$0.0	\$0.0		
Life-Cycle Cost	\$102.7	\$163.8		
Incremental Cost	Baseline	\$61.1		
Efficiency	-	-		

40-Year Life Cycle Costs

Life-Cycle Costs	As-Is	Option #1	Option #2	Option #3 (Demolition)
Construction	\$0.0	\$38.5	\$68.3	\$124.0
Maintenance	\$33.2	\$41.1	\$49.1	
Deferred maintenance	\$41.8	\$49.5	\$55.5	
Utility	\$27.7	\$34.7	\$41.2	
F&A	\$0.0	\$0.0	\$0.0	
Demolition	\$0.0	\$0.0	\$0.0	
Life-Cycle Cost	\$102.7	\$163.8	\$214.1	
Incremental Cost	Baseline	\$61.1	\$111.4	
Efficiency	-	-	++	

40-Year Life Cycle Costs

Life-Cycle Costs	As-Is	Option #1	Option #2	Option #3 (Demolition)
Construction	\$0.0	\$38.5	\$68.3	\$124.0
Maintenance	\$33.2	\$41.1	\$49.1	\$34.7
Deferred maintenance	\$41.8	\$49.5	\$55.5	\$0.0
Utility	\$27.7	\$34.7	\$41.2	\$34.1
F&A	\$0.0	\$0.0	\$0.0	(\$36.9)
Demolition	\$0.0	\$0.0	\$0.0	\$4.0
Life-Cycle Cost	\$102.7	\$163.8	\$214.1	\$159.9
Incremental Cost	Baseline	\$61.1	\$111.4	\$57.2
Efficiency	-	-	++	++++

40-Year Life Cycle Costs

Life-Cycle Costs	As-Is	Option #1	Option #2	Option #3 (Demolition)
Construction	\$0.0	\$38.5	\$68.3	\$124.0
Maintenance	\$33.2	\$41.1	\$49.1	\$34.7
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Incremental Cost	Baseline	\$61.1	\$111.4	\$57.2
Efficiency	-	-	++	++++

Deliverables of HWI

- Adequate supply and distribution throughout ND of caring, team-oriented primary and sub-specialty care practitioners schooled in inter-disciplinary care
 - 40% from increased retention
 - 40% from class size expansion
 - 20% from hiring more clinical faculty
- Direct economic impact of increased employment of health care providers

Deliverables of HWI

- Direct economic impact of grants and contracts associated with growth of faculty
 - Our modeling suggests a \$2 ROI for every \$1 appropriated by the ND Legislature
- Direct economic impact of enhanced federal indirect cost return (F&A) on grants and contracts from UND if new building is constructed
- Indirect positive economic impact

Health Care Workforce Initiative (HWI)

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Phase 2 of HWI - Pending

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Life-Cycle Costs Table

Life-Cycle Costs	*As-Is	Option #1	Option #2	Option #3 (w/ demolition)**
Construction	\$0.0	\$38.5	\$68.3	\$124.0
Maintenance	\$33.2	\$41.1	\$49.1	\$34.7
Deferred Maintenance	\$41.8	\$49.5	\$55.5	\$0.0
Utility	\$27.7	\$34.7	\$41.2	\$34.1
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Life-Cycle Costs	\$102.7	\$163.8	\$214.1	\$159.9
Incremental Cost	Baseline	\$61.1	\$111.4	\$57.2
Efficiency	-	-	++	++++

*HWI enrollment increase **CANNOT** be accommodated in the existing facility. This is the estimated cost to operate the facility "As-Is" for 40 years, and is to be used for baseline considerations.

**Consideration of demolition of the existing facility versus repurposing should occur as part of the proposed North Dakota University System master planning initiative. The estimated cost of demolition is included for reference only.

Notes:

1. All scenarios/costs are over a 40 year life cycle.
2. Costs are in millions of dollars, and do not include adjustments for inflation.



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Definitions & Clarifications

Initial Construction Costs

These are the Project Costs for each Option. They are detailed in the Executive Summary & Space Utilization Study.

Maintenance Costs

Determined based on UND historical rates of:

- \$0.58/SF/YR (general maintenance)
- \$1.32/SF/YR (housekeeping)

Arrived at final numbers by multiplying (Maintenance Rate x SF x 40 Years)

Deferred Maintenance (Existing Facility)

2013: \$4.0M

2023: \$12.9M (1953 area exceeds 70 yrs)

2033: \$34.7M (major additions exceed 50 yrs)

2043: \$41.8M (1953 area end of service life)

*Options 1 & 2 will require additional future work to major building systems, effectively increasing deferred maintenance from baseline.

Utility Costs

Existing Building: \$1.15/SF/YR

New Construction: \$0.68/SF/YR

Arrived at final numbers by multiplying (Utility Rate x SF x 40 Years)

F&A Returns

UND SMHS has estimated the return on F&A over a 40 year span. This rate's return increases as State funded construction replaces Federal funded construction. Option 3 is the only option that would create this additional funding.