# NDUS System-Wide Master Plan Implementation of the Recommendations and Findings, draft 08-28-14

## Section 1: Revise Institutional Master Planning Procedures

Currently, each institution prepares its 6 year master plan based on an established template which includes categories of information vital for successful planning efforts. Although informative, the lack of consistency between institutions makes review, coordination, and comparison of the master plan goals difficult. The System Wide Master Plan (SWMP) findings, resulting from review of the institutional master plans, established goals, objectives, and recommendations that have been approved by the SBHE. Implementation of the changes must be managed within a structured time frame encompassing 3 biennial cycles as follows:

First biennial Planning Cycle: July 2015 through September 2016 - Strategic Planning and facility Master Planning

July 2015: NDUS Senior Staff and SBHE complete the strategic planning process.

November 2015: Institutions complete a strategic planning process.

February 2016: Institutions complete their 6 year facility Master Plan.

March 2016: SBHE approves institution facility Master Plans

April 2016: Institutions complete their 2 year capital plans.

July 2016: NDUS reviews and Chancellor prioritizes institution capital project recommendations.

September 2016: SBHE approves capital project priorities

Second Biennial Planning Cycle: April 2018 through September 2018 - Capital Planning

April 2018: Institutions complete their 2 year capital plans.

July 2018: NDUS reviews and Chancellor prioritizes institution capital project recommendations.

September 2018: SBHE approves capital project priorities.

Third Biennial Planning Cycle: April 2020 through September 2020 - Capital Planning

April 2020: Institutions complete their 2 year capital plans.

July 2020: NDUS reviews and Chancellor prioritizes institution capital project recommendations.

September 2020: SBHE approves capital project priorities.

Goals, Responsibilities, and Timeline for Revision of the Institutional Master Plans
Goal 1 - Encourage an Integrated and Data-Driven Planning Process

Action Item 1: The NDUS, at the direction of the SBHE, will engage in a strategic planning process that develops a comprehensive evaluation of higher education needs in the state, identify a vision, and define strategies and policies which most effectively and efficiently achieve them.

Responsible Party: NDUS Senior Staff and SBHE

Completion Date: July 1, 2015

Action Item 2: The NDUS should evaluate the mission goals of each institution, and subsequently establish/encourage strategic alliances between institutions.

Responsible Party: Chancellor, NDUS Senior Staff

Completion Date: September 1, 2015

Action Item 3: Each institution will engage in a strategic planning effort whereby key issues are identified, a 6 year (or more) vision for the future is established that aligns with the SBHE/NDUS strategic plan, and prepares institutional strategies to achieve that plan. The strategic goals will be included within a dedicated section of the master plan for that purpose, with categories in the section that 1) discuss the goals, 2) identify how the goals are driving facility solutions posed elsewhere in the master plan, and 3) strategic partnerships which are being pursued or enhanced. This section will also include the primary planning assumptions and drivers for the master plan.

Responsible Party 1: NDUS Facilities Planning department will prepare templates for the Master Plan which includes the aforementioned categories. In addition, the Facilities Planning department will facilitate workshops and meetings whereby the process of completing this and other sections of the master plan can be discussed and clarified.

Completion Date: November 1, 2015

Responsible Party 2: Institution leadership will be responsible for convening the strategic planning efforts and ensure the information is used as required for the master plan.

**Completion Date: November 15, 2015** 

Action Item 4: A section in the institutional master plan template (tentatively titled "Planning Assumptions and Drivers") will be developed for an institutional narrative which describes process used by the institution for engaging the internal and external stakeholders and produce the master plan.

Responsible Party 1: NDUS Facility Planning department will prepare the section for the master plan template and include methods that may be used by the institutions to identify and engage key stakeholders. In addition, the Facilities Planning department will provide discussion points for stake holder meetings or other planning events.

Completion Date: November 1, 2015

Responsible Party 2: Institution leadership will engage the stakeholders and document as an institutional procedure the discussion points and results of the planning sessions for inclusion within the aforementioned master plan section.

**Completion Date: January 15, 2016** 

Action Item 5: Emphasize data collection and data driven planning decisions. Master plans will include enrollment projections that are supported by high school graduation and historical enrollment data over a prescribed period of time. Other metrics include space utilization data, deferred maintenance information, and research expenditures.

Responsible Party 1: NDUS Facility Planning department will prepare guidelines for how supporting data is to be included throughout the master plan. The Planning Assumptions and Drivers section will contain information on graduation rates and enrollment projects, whereas deferred maintenance and space utilization data will be included in those respective sections.

Completion Date: November 1, 2015

Responsible Party 2: Institution leadership will be responsible for obtaining the correct data for supporting their planning assumptions. The NDUS will assist in providing this data in instances where it currently exists or is being collected.

Completion Date: December 1, 2015

Goal 2 – Promote Consistency on Institutional Master Plans

Action Item 1: The NDUS will prepare general templates for the institutional master plan which will be used by each institution, with flexible outlines that allow for the variation in missions, planning resources, and circumstance. The templates will include an instructional narrative which will guide the development of the master plan.

Responsible Party: The NDUS Facilities Planning department will prepare the templates and provide the educational outreach to all institutions for preparing the plans.

Completion Date: November 1, 2015

Goal 3 – Identify Space Needs

Action Item 1: Facilitate the development of an accurate space and classroom inventory, and a comprehensive classroom utilization study

Responsible Party 1: The NDUS Facilities Planning department will initiate a process whereby institutions will complete a room by room inventory of all spaces (at a minimum) that are supported by general fund appropriations. The process will include instruction on entering data into existing facility management software, as well as providing common criteria for the identification of rooms and other spaces using established room code conventions.

Completion Date: November 1, 2014

Responsible Party 2: The NDUS CTS will assist in the data population of Ad Astra software to ensure institutions are able to correctly enter classroom utilization information

Completion Date: November 1, 2015

Responsible Party 3: Institution leadership must identify those individuals who will be responsible for collecting and entering facility inventory data, and ascertain that the data is complete and included within the institutional master plans.

Completion Date to identify individuals: September 15, 2014

Completion Date to enter facility inventory information: November 1, 2014

Completion Date to include information in institutional master plans: November 1, 2015

Action Item 2: Include space utilization information (inventory and use) within the institutional master plans as a requirement for demonstrating space needs.

Responsible Party 1: The NDUS Facilities Planning department will provide benchmark information for utilization by each institution as it relates to student and/or faculty based utilization/inventory rates. The benchmarks will be optimized for the type of instruction delivered at each institution, as well as other factors including research and community outreach programming.

### Completion Date: December 1, 2015

Responsible Party 2: Institution leadership will include the space utilization and benchmark information within the master plans as decision making criteria.

#### February 15, 2016

Action Item 3: Master plans will include a space utilization analysis with a projection of space needs based on the major drivers of facility need.

Responsible Party: Institution leadership will include within the institution master plan a space need analysis and projection. The analysis will include reference to existing space inventory and utilization as compared to benchmarks, and will specify the drivers (including supporting data) which are pushing the demand, including but not limited to the following, as required:

- Enrollment, current and projected with supporting documentation.
- Pedagogical changes needing facility or system support.
- Deferred maintenance where deferred maintenance is causing a space utilization problem due to lack of system performance, condition, etc.
- Housing needs, as related to supply, condition, location, or other relevant need.

**Completion Date: February 2016** 

## Goal 4 – Revise the Planning Process

Action Item 1 – Revise the Master Planning cycle to coincide with strategic planning at both the system and institution level.

Responsible Party: The NDUS Facilities Planning department master plan template will reflect a macro planning process which describes future facility needs, but does not include the specific planning and programming necessary for accurate cost development. The institutional master plans become high-level planning documents which focus on the facility needs necessary for implementation of the institutional strategic plans.

Completion date: October, 2014 (reflecting approval of the revised cycle.)

Action Item 2 – Develop an institutional capital planning procedure which will be used on a biennial basis in preparation for new capital needs. The procedures include, but are not limited to, the following efforts:

 Preparation of a scoping and programming document for each capital project request based on a standard NDUS template. For new construction, the programming documents will provide program specific, data driven reasons to justify the new space.

Responsible Party: NDUS Facility Planning will prepare a template that will be used by each institution for establishing scope and program information for each capital project request.

Completion Date: February, 2016

- Separation of the capital project requests into the following three categories:
  - 1. Program, Enrollment, or Accreditation Driven Capital Projects
  - 2. Life-Safety Capital Projects
  - 3. Maintenance Driven Capital Projects

Responsible Party: The institution master plan template prepared by the NDUS Facilities Planning Department will be restructured to allow for separation of capital projects into the abovementioned categories.

Completion Date: November 1, 2015

• Establishment of a separate prioritization process for each at the system level

Responsible Party: The NDUS Facility Planning Department, in consultation with the Administrative Affairs Council, will establish ranking criteria for recommendation to the Chancellor and SBHE. Approved ranking criteria to be used by the NDUS Facility Planning Department in preparing capital project prioritization lists for the Chancellor.

Completion Date: April, 2016

#### Goal 5 – Refine Assessments of Deferred Maintenance

Action Item 1: Define the backlog of deferred maintenance by establishing a target percentage of Current Replacement Value (CRV) for which institutions should structure its deferred maintenance engagement.

Based on the current building inventory age and condition, the NDUS Facility Planning Department recommends establishing a deferred maintenance target of 30% CRV for all system buildings.

Action Item 2: Complete the Facility Audits of all NDUS facilities maintained by state general funds. Include the Facility Audits as appendices to the institution Master Plans, and reference specific information in the audits for requesting capital projects.

Responsible Party 1: Funding for completion of the facility audits is included within the 2015-17 budget requests. If funded, the audits can be initiated in June, 2015 and completed within 6 months. The NDUS Facilities Planning department will coordinate the audits with individual institutions.

Completion Date: December, 2016

Responsible Party 2: Institution leadership will ascertain that facility audits are referenced in capital project requests, and that deferred maintenance values as a percentage of CRV are updated as a result of deferred maintenance expenditures.

Completion Date: February, 2016

Action Item 3: Establish a standard template for use by institutions for maintenance project funding requests that include appropriate scoping, planning, and budget information. The capital project maintenance funding requests may include like projects on a campus wide scale, such as roof replacements. In addition, the requests may be for engineering studies for establishing accurate work scopes and estimates.

Responsible Party: The NDUS Facility Planning department will prepare a standard template with associated examples for requesting maintenance driven capital project funding.

Completion Date: February, 2016

Action Item 4: Integrate facility assessment information into the capital planning process as a means to inform the scope of work and budget for renovation or demolition; update biennial capital requests with periodic evaluations of maintenance issues related to planned renovation projects.

Responsible Party: Institution leadership will ascertain that capital project renovation requests include consideration of deferred maintenance needs, and evaluate each project for return on investment as it relates to renovation vs. removal. In addition, as capital plans are updated on a biennial basis, institution leadership will ascertain that maintenance work completed over the prior two years has been included in the project budget estimate if appropriate.

Completion Date: April, 2016

Action Item 5: Include a campus wide assessment of energy use with the deferred maintenance strategies, and identify potential energy cost savings for various deferred maintenance solutions. As an example, replacement of a chiller should consider the type of unit, the energy efficiency, and the lifecycle pay-back on energy cost for various options.

Responsible Party 1: The NDSU Facility Planning department will include within maintenance driven project request templates a section for providing energy cost information.

Responsible Party 2: Institutional leadership will ascertain that energy efficiency and initial cost are balanced in all capital planning efforts.

Completion Date: April, 2016

Action Item 6: Facility assessments will highlight deferred maintenance liabilities having significant life-safety implications. The information will be used in prioritization of capital projects.

Responsible Party: Institution leadership will ascertain life safety repairs are clearly identified within the capital project requests, reference the specific areas of the facility assessment that identifies the life safety issue, and determine the implications of not addressing the life safety issue, and provide options for correcting the life safety issue outside of the capital project request if it is only part of a larger renovation or repair.

Completion Date: April, 2016

# Section 2 - Establish Design, Construction and System Standards and Metrics

Goals, Responsibilities, and Timeline for establishing construction and system standards and metrics.

Goal 1 – Establish a standard software system for maintaining consistent space information. Establish design standards at each institution, and ensure that new construction meets state building code requirements.

Action Item 1: Implement the FAMIS software system at each institution for maintenance and space inventory information

Responsible Party: (see separate space utilization directive, August 2014)

Action Item 2: Ascertain Ad Astra is populated with the correct classroom data throughout the NDUS, and that the information is consistent and can be used to establish credible classroom utilization information.

Responsible Party: Chancellor and SBHE to determine best practices for establishing consistency within Ad Astra.

**Completion Date: November, 2015** 

Action Item 3: Establish Design Standards at each institution.

Responsible Party 1: NDUS Facility Planning office will prepare a general template to be used by each institution for design standards. The design standards can include both specific and general items of construction, but will be intended to provide architects and engineers with guidelines approved by each institution for materials and practices that establish consistency and efficiency. In addition, the requirement for preparing a design standard will be included within SBHE 900 policy sections.

Completion Date: July, 2015

Responsible Party 2: Institution leadership will ascertain that design standards are provided to design professionals retained for institution projects, and subsequently ensure that standards are met in construction.

**Completion Date: November, 2015** 

Action item 4: Establish consistency in enforcement of building codes for construction.

Responsible Party: Institutions will have two options by policy for ensuring new construction is in compliance with state building codes.

Option No. 1 The local municipality can be retained to conduct a code review of the project plans if the municipality has competent staff trained in building code requirements. Retaining the local municipality does not imply that the municipality has obtained legal authority over the enforcement of building codes, but instead is being retained as a service.

Option No. 2 The institution will retain through the architect or engineer a third party code review at the completion of design development (or at a point sufficient to review for code) to make a determination as to compliance with state building code.

Completion Date: July, 2015

## Section 3 - Core Technology Services / Information Technology

Goals and Responsibilities for Core Technology Services

Note: Unless specified otherwise, all goals and action items to be the responsibility of the CTS senior staff.

- Goal 1 Identify the service provided by the NDUS, to whom, and how successfully.
- Goal 2 Prioritize projects and focus on fixing those projects already in process.
- Goal 3 Revisit and restructure the governance arrangements to have the campuses play a more active role in the governance process.

Goal 4 – Focus on activities that may provide quick, positive returns, such as;

- Off –site retreats to build trust among and between campuses.
- Focus on IdM and federation as key infrastructure components for shared services.
- Chose a new service such as HPC or shared SOC and use the new governance framework as a mechanism for design and roll out.
- Build on system-wide standards such as UND's standard for Smart Classrooms or standards for low-voltage and IT related to new building construction as these encourage sharing across campuses and provide immediate value.

Goal 5 – Continue to stimulate collaboration and team building in a face –to –face environment that encourages trust and participation.