



December 2, 2016

MEMORANDUM

TO: Senator Philip Berger, President Pro Tempore

Representative Tim Moore, Speaker of House of Representatives

Co-Chairmen of the Joint Legislative Commission on Governmental Operations

FROM: Tim Walton

Director

SUBJECT: 2016 Session Law 119 (2016 S.L. 119)

In order to fulfill the directives stated in the 2016 Session Law 119 (2016 S.L. 119) the Department of Administration issued a request for proposals which was awarded to CBRE, Inc. in September, 2016.

CBRE, Inc. was tasked to evaluate the State's current real estate procedures, management structure, and advise how the State can increase efficiencies, reduce costs, and improve service delivery through better real estate management practices.

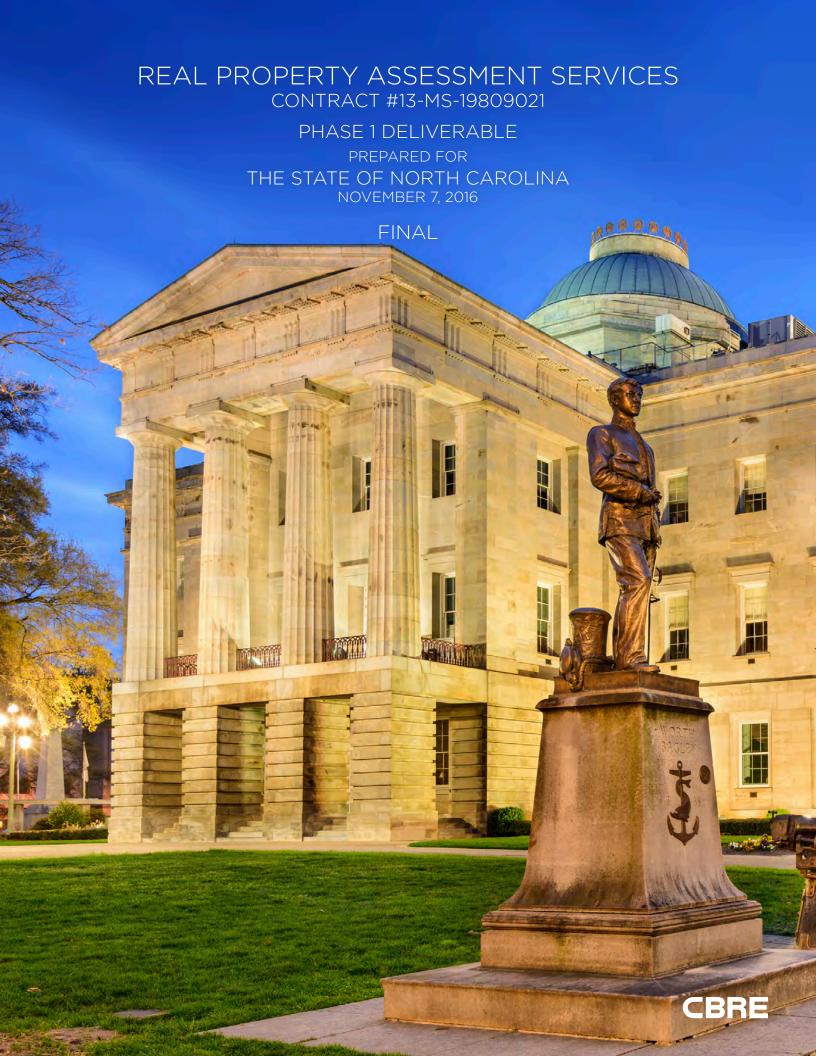
Attached is the phase 1 deliverable prepared by CBRE, Inc., in response to the contract which was awarded.

In addition, the Department of Administration implemented the North Carolina Identity Management service as recommended by 2016 Session Law 119 (2016 S.L. 119).

TW/

Cc: Fiscal Research Division, Program Evaluation Division





COMMERCIAL REAL ESTATE SERVICES

Troudy Vaughan Mid-Atlantic Manager

CBRE, Inc.

Public Institutions and Education Solutions



750 9th Street, NW Suite 900 Washington, DC 20001

+1 202 783 8200 Tel

+1 202 783 1723 Fax +1 202 747 4979Cell

troudy.vaughan@cbre.com www.cbre.com

NC Department of Administration Attn: John LaPenta Deputy Secretary, Asset Management 1301 Mail Service Center Raleigh, NC 27699-1301

Dear Mr. LaPenta,

Please find enclosed Phase 1 of the Real Property Assessment Services Contract (#13-MS19809021) for the State of North Carolina. Phase 1 is the first of three deliverables to assist the State Property Office (SPO) with responding to Session Law 2016-119 (2016 S.L. 119) requiring the Department of Administration more actively manage the State's leased and owned real estate.

Phase 1 is a high level diagnosis of how the State's current management methods influence its utilization of real estate. Our assessment focuses on 3 recommendations for better real estate management:

- 1. Centralized management of all real estate functions by SPO
- 2. A more robust and dynamic data management platform
- 3. Updated space standards that reflect current industry trends

As you are already aware, the project team for this assignment included individuals based in Raleigh and out of market from both CBRE and Gensler. Gensler and CBRE have a strong history of working together on similar state government assignments in South Carolina and Florida.

This Phase 1 deliverable is the final version. Since the draft version submitted on November 7, we have made revisions based on comments from your staff, and inserted our findings in Task Order #4 regarding recommended modifications to the Facility Information (FIS) database, which was due November 15, 2016.

Thank you for the opportunity to partner with the State of North Carolina on this very important initiative.

Sincerely,

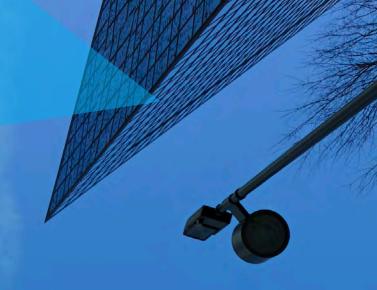
Troudy Vaughan Mid-Atlantic Manager

Troudy Varyban

CBRE Public Institutions & Education Solutions



TABLE OF CONTENTS



EXECUTIVE SUMMARY

TASK ORDER #1: EXISTING METHODS

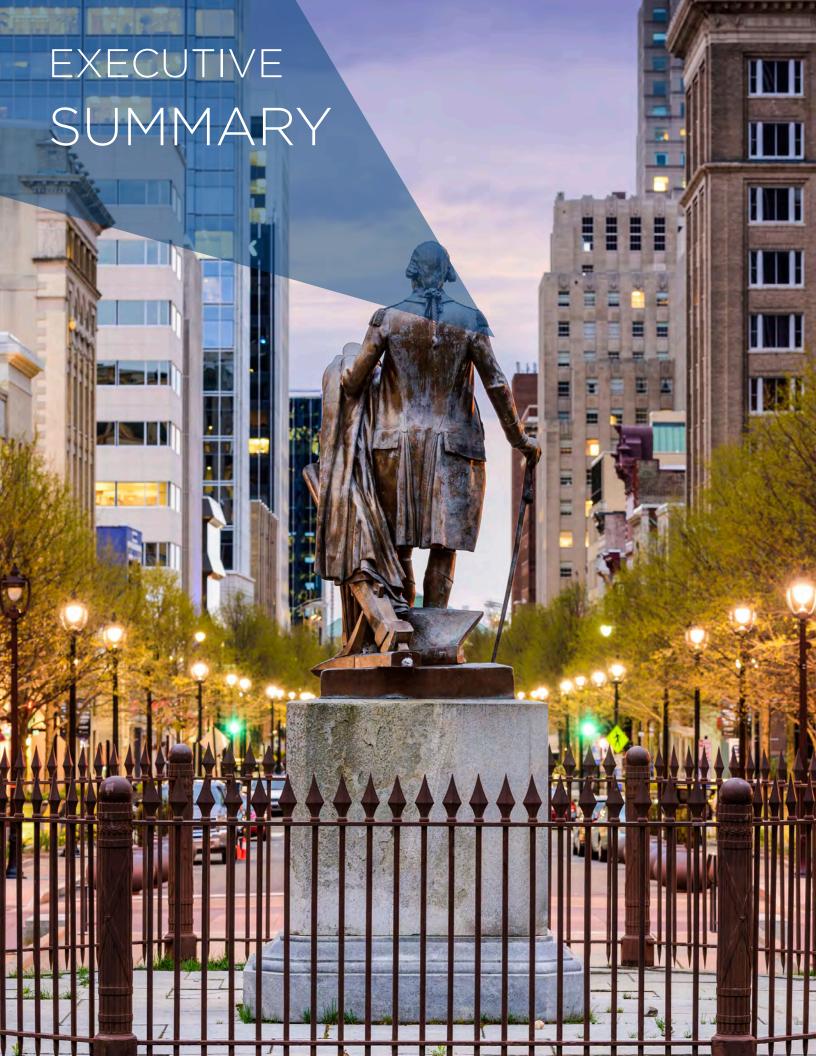
TASK ORDER #2: RECOMMENDED BENCHMARKS

TASK ORDER #3: RECOMMENDED SPACE PLANNING STANDARDS

TASK ORDER #4: RECOMMENDED MODIFICATIONS
TO REAL PROPERTY DATABASE

EXHIBITS

A WORKPLACE GUIDELINES: TRENDS & BEST PRACTICES



EXECUTIVE SUMMARY

BACKGROUND

North Carolina Contract Agreement 13-MS19809021, Real Property Assessment Services ("Assessment Services Contract"), was awarded to CBRE, Inc. in September, 2016 by the Department of Administration (DOA). The purpose of the Assessment Services Contract is to evaluate the State's current real estate procedures, management structure, and advise how the State can increase efficiencies, reduce costs, and improve service delivery through better real estate management practices. The requirements of the Assessment Services Contract are per 2016 Session Law 119 (2016 S.L. 119) mandating that DOA more actively manage its leased and owned real estate portfolio.

The Contract is organized into three phases:

- Phase 1: The subject of this document, Phase 1 is an assessment of how current real estate management practices influence portfolio performance. Perhaps more importantly, it also includes a set of recommendations regarding space standards, portfolio benchmarks, and database management. Phase 1 is scheduled to deliver November 7, 2016 (the recommendations regarding the State's Facility
- Phase 2: Phase 2 is an assessment of the State's current real estate management structure and organization and includes an implementation plan for the Phase 1 recommendations. Phase 2 also requires the Contract Team to develop a plan for unannounced site visits to a facility for each State agency that is overseen by DOA. Phase 2 is scheduled to deliver February 15, 2017.
- <u>Phase 3</u>: Phase 3 involves the development of a 5-year plan to manage, acquire, and dispose of real estate assets (leased and owned) to fully support the State's service delivery requirements. It also requests a recommendation for a portfolio management system to track performance.

CONTRACT PARTICIPANTS

The participants for the Assessment Services Contract include members from CBRE, Gensler, and the State of North Carolina. CBRE is the primary vendor and point of contact for the State with Gensler serving as a subcontractor ("CBRE Team"). CBRE is the world's largest provider of commercial real estate services with more than 70,000 employees located across 400 offices globally. Gensler is a leading global architecture, design and strategic planning firm with more than 5,000 employees located in 46 offices throughout Asia, Europe, the Middle East, and the Americas.

The following organization chart shows roles and responsibilities of the participants from the CBRE Team:





Name	Role	Title
TROUDY VAUGHAN (CBRE)	Project Manager (State and Local Government Best Practices)	Mid-Atlantic Manager, CBRE PIES
LEE CLYBURN (CBRE)	Project Leader (Local Market Expert)	Senior Vice President, CBRE Raleigh
JOHN DALY (CBRE)	Project Leader (Local Market Expert)	Senior Vice President, CBRE Raleigh
ROLF KEMEN (CBRE)	State and Local Government Best Practices Lead	Senior Vice President, CBRE PIES
MIKE MCSHEA (CBRE)	Executive Oversight (CBRE National Practice Group Leader for State and Local Government)	Executive Vice President/National Practice Leader for CBRE PIES
BOB PECK (GENSLER)	Lead Workplace Strategist	Principal/Co-Leader for Gensler's Government Practice Area
SHARON CRAWFORD (GENSLER)	Workplace Strategist/Interior Design	Studio Director, Gensler- Raleigh
LEE LINDAHL (GENSLER)	Lead Programmer	Senior Associate

The CBRE Team worked closely with the DOA to complete Phase 1 of the Assessment Services Contract. John LaPenta, Deputy Secretary of Asset Management, provided executive oversight and was supported by Tim Walton (Director of State Property), John Webb (Manager of Leasing and Space Planning, State Property), Mike Moser (Manager of Real Property Section, State Property), and John Cox (Manager of Facilities Information Section, State Property).

PHASE 1 REQUIREMENTS & PROJECT APPROACH

Phase 1 of the Assessment Services Contract contains 4 task orders:

- 1. Assess current procedures employed by State agencies for utilization of leased and owned real estate.
- 2. Recommend procedures to more effectively utilize leased and owned real estate.
- 3. Recommend space planning standards to promote more efficient utilization of State real estate.
- 4. Identify and recommend modifications to the Facility Information System (FIS) database required to comply with 2016 S.L. 119.

The CBRE Team's approach to Phase 1 was to first document how current management procedures influence utilization of State real estate as required by Task Order #1. The team focused heavily on the State's acquisition procedures because this is the best opportunity for DOA to promote efficient and cost effective space utilization. For Task Order #2, the recommended procedures advised to improve the State's portfolio efficiency and utilization benchmarks



EXECUTIVE SUMMARY

generally require SPO to 1) have a more centralized management structure and 2) more actively manage real estate acquisitions than is currently the case.

Task Order #3 is the recommended space planning standards, which were developed by Gensler. Bob Peck (Gensler) is a former Commissioner of the Public Building Services for GSA and is uniquely qualified to advise standards that are based on Federal guidelines as directed by the task order. Gensler's workplace guidelines are consistent with general utilization benchmarks achieved by GSA in recent transactions.

The approach to Task Order #4 was to inspect the FIS database to determine what modifications are needed so that basic portfolio benchmarks can be generated as a report. The primary value of data collected in a system like FIS is if it can be used to generate reports. Likewise, the portfolio reports currently generated and distributed by SPO are the roadmap for the type of data that needs to be collected. As part of the Assessment Services Contract, the CBRE Team will recommend reports that will require modifications to FIS. Task Order #4 is scheduled to be delivered November 15, 2016 per the State's instructions. It will be included in the final version of this Phase 1.

CONCLUSIONS

SPO MANAGEMENT STRUCTURE

The State's current real estate management structure is fragmented and understaffed, which impedes effective portfolio management. The CBRE team recommends increased staffing for SPO so that most if not all real estate functions are managed centrally.

A larger presence by SPO will also facilitate implementation of recommendations regarding database management and workplace standards. Gensler's recommended space standards can only be effective if they are implemented (and enforced) consistently by SPO. Recommendations for a more robust database platform will require proactive management by SPO to ensure accurate data and reporting.

WORKPLACE STANDARDS

The space standards recommended by Gensler are intended primarily for administrative office space. By contrast, standards for special purpose spaces (such as a fire station or a customer service counter) should be tailored to the service delivery requirements of the location. Administrative office use, however, permits a set of space standards that can be recommended across a range of facilities regardless of the service delivery requirements, facility size or location.

The overall utilization benchmarks targeted by Gensler's are not simply a function of capping the amount of net square footage per person. They are a product of managing the ratio of open workstations to closed offices, creating uniform workstation sizes, determining the amount of collaborative spaces required, and establishing alternative workplace strategies.

The space planning recommendations provide flexibility depending on the type of work environment best suited for the using agency. For example, an office that houses mostly field staff



EXECUTIVE SUMMARY

should be able to achieve an efficient design by implementing unassigned "touchdown" seats for those who work mostly outside the office. Conversely, an office intensive environment that mandates a high percentage of walled offices will likely result in a less efficient utilization.

Gensler's space standard recommendations contain a range of utilization targets depending on the administrative office environment:

Field Staff Space	General Office	Office Intensive
Small workstations:	Small workstations:	Small workstations:
65-75%	10-15%	20-35%
Standard workstations:	Standard workstations:	Standard workstations:
5-10%	60-70%	15-20%
Offices:	Offices:	Offices:
15-20%	15-20%	30-50%
Target USF: 145-180	Target USF: 175-210	Target USF: 215-265

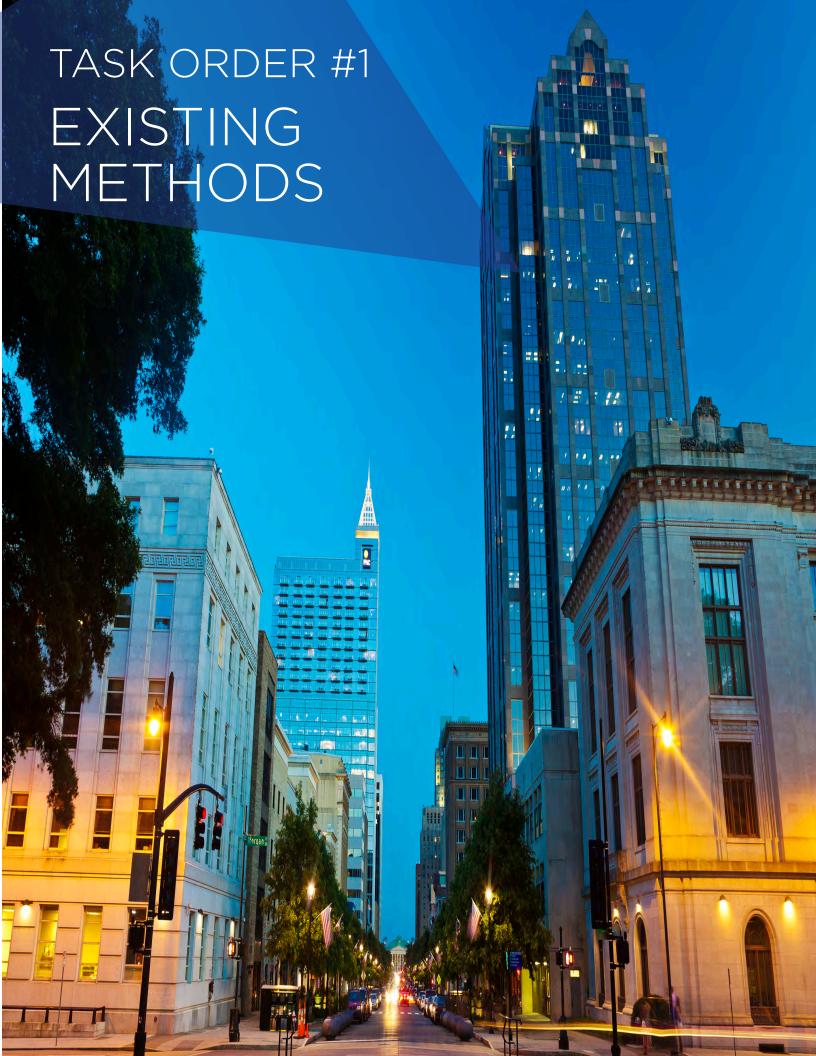
DATABASE MANAGEMENT

The portfolio management requirements described in 2016 S.L. 119 warrant significant changes to the FIS database used to manage the State's owned and leased portfolio. The current system is static and not robust. Reporting generated from FIS is limited to the "Inside Outside" report shared with the State Legislature annually.

The database should be modified (or replaced) to capture more data in order to reflect a more complete picture of the State's real estate portfolio. Examples of data not currently captured in FIS include operating expenses, capital improvements, and facility maintenance issues.

Another observation regarding data management is the lack of dynamic updates to the database. Data is currently uploaded or "inventoried" to FIS once the acquisition of real property is completed. Very little is done to update data over the life of the SPO file for a particular property. More needs to be done to maintain current data so that reporting is accurate and SPO fulfills its responsibilities per the new legislative mandates.





TASK ORDER # 1 ASSESS EXISTING METHODS FOR UTILIZATION OF OWNED AND LEASED REAL ESTATE

Assess the existing methods employed by agencies with the State government subject to the oversight of DOA under G.S. 143-341, concerning current methods and procedures for utilization of State owned and State leased property.

REAL ESTATE PROCEDURES ASSESSMENT

The State's current real estate procedures exhibit a logical framework for acquiring and managing real estate in an efficient manner. There exists a process for a using/acquiring State agency ("SA-I") to request space and for SPO to approve the request based on a set of standards. The CBRE Team's assessment of these procedures is organized into three categories, and the call to action implied in some is more about modifying steps already being taken by the State, whether it is re-assigning responsibility or changing the order in which they occur. In other cases, the observations suggest new procedures currently not in place at SPO are needed.

Three observations regarding current real estate procedures that influence the State's portfolio performance:

- 1. Inadequate staffing at SPO
- 2. Inconsistent application of State space standards
- 3. Minimal post-transaction data management

1. INADEQUATE STAFFING AT SPO

Current staffing at SPO is insufficient to support a centralized real estate function that can produce better overall portfolio performance. As a result, SPO does not have the capability or luxury to proactively manage the State's leased and owned assets. Instead, SPO's limited bandwidth compel a more reactive approach by SPO to address the most immediate needs of the State.

Increased staffing at SPO will benefit the State's portfolio management in several ways. First, it will help keep the leased portfolio in good standing by avoiding "out of lease" tenancies that are month to month because the leases have expired. Second, more resources at SPO will enable proactive activities that can improve efficiencies and performance. For example, with adequate staffing, SPO can establish a business objective that requires each Real Property Agent to conduct a site visit at each facility for which it is responsible. In this manner, better information regarding utilization, facility conditions and performance can be tracked by SPO. Third, a larger staff will lead to better controls at SPO which in turn will promote better real estate strategy and decision making. For example, a centralized management structure at SPO will yield better data regarding facility performance, space utilization and cost that can facilitate how and where SPO can right-size the State's leased and owned portfolio.

Reduced staffing at SPO has necessitated some form of minor assistance by the SA-I's, especially in the case of small lease acquisitions but also with purchase acquisitions. In the instance of small lease acquisitions, allowing for some latitude in terms of the SA-I's involvement and variance in the application of standards is sensible because it promotes a more efficient procurement process that ultimately benefits the State. The result of this approach is a reduction in "market friction" that would otherwise limit the market's response to a requirement from the State. For example, an Agency Lease has a minimal rent obligation of \$5,000 annually and a



TASK ORDER # 1 ASSESS EXISTING METHODS FOR UTILIZATION OF OWNED AND LEASED REAL ESTATE

lease term of less than 3 years. It would be unreasonable to impose institutional standards on this type of lease nor would it serve the State's interest to do so.

It should be noted that the CBRE Team recommends that SPO control all aspects of the procurement of larger leases (Advertised Lease). Current State procedures do delegate a small amount of market engagement responsibilities to the SA-I that should preferably be controlled by SPO. As an example, the SA-I serves as the primary point of contact for market inquiries to an RFP. The nature of the inquiries at this stage of the procurement is largely clerical. Another example is regarding owned real estate acquisitions; the owned acquisition process indicates that the SA-I is responsible for identifying property to be purchased.

The lack of real estate expertise on the part of the SA-I is a disadvantage to the State in cases where the SA-I interacts with the market. It could limit the number of proposals submitted for the SA-I's consideration because the nature of the real estate requirement is not properly communicated to the market. Or, it could result in less favorable deal terms because market standard landlord concessions are not negotiated. Another potential negative outcome is the SA-I seeks the most expedient option that is simply not in the State's best interest. An example could be the SA-I steering the site selection towards a predetermined location that might not represent the best value in terms of cost or service delivery.

2. INCONSISTENT APPLICATION OF STATE SPACE STANDARDS

The CBRE Team observed that current State space standards are not consistently applied in practice. For example, Gensler compared the State's space guidelines dated February 25, 2008 with two recent RFP's issued by the State. The most significant discrepancy identified was the open workstation sizes. Open workstations represent 70-90% of staff workstation requirements. The 2008 guidelines provide one (1) workstation size whereas the RFP's contained five (5) different sizes.

State of North Carolina Existing Space Standards



In the example above, several of the size allocations for open workstations requested by the SA-I



TASK ORDER #1 ASSESS EXISTING METHODS FOR UTILIZATION OF OWNED AND LEASED REAL ESTATE

are less than the State standard of 80 square feet. Only one allocation – 130 square feet – exceeds the 80 square feet standard contained in the 2008 guidelines. This might suggest that the variances from the 2008 standard will yield better space utilization. Yes, but the lack of uniform size allocations for open workstations and closed offices will make future space reconfigurations demanded by evolving organizational and operating requirements of the SA-I cost probative. And, the variances from the State standard establish a precedent that defeats the purpose of standards that are intended to promote consistency throughout the portfolio.

3. MINIMAL POST TRANSACTION DATA MANAGEMENT

The FIS database is currently static for the most part because of inadequate staffing and resources allocated to this section. The State would benefit if the SPO had the resources to execute a comprehensive update of the current data set and perform regular updates on an ongoing basis. For example, the FIS database might capture the number of staff at a location when the SPO file is initially uploaded but how are changes in staffing captured afterwards? This is particularly problematic if the SPO is responsible for assessing whether the State has existing underutilized space before approving the procurement of new space.

The lack of a dynamic database that regularly captures current cost and utilization data is not just problematic for acquisitions. It prevents SPO from executing effective portfolio management in general. Strategic decisions regarding which facilities to dispose, repurpose, or right size are not only a matter of having current data regarding utilization benchmarks (i.e., square feet per person) but also accurate occupancy cost information that shows which location is best in terms of cost per person. Or, which locations have the most maintenance problems such HVAC, roof leaks and/or pest control to name just a few typical facility issues.

Having dynamic data is arguably the most important challenge if SPO is to successfully meet the requirements as defined in 2016 S.L. 119. Current data is necessary if for no other reason than SPO can reasonably report basic portfolio metrics to the State legislature in order to facilitate decision making.



TASK ORDER #1 ASSESS EXISTING METHODS FOR UTILIZATION OF OWNED AND LEASED REAL ESTATE

CURRENT STATE ACQUISITION PROCEDURES

OWNED ACQUISITIONS

Property acquisition procedures follow traditional protocols including 1) site investigation, 2) appraisal 3) offer/negotiations, 4) due diligence including title, environmental, etc. 5) funding confirmation and 6) closing. The below flow-chart represents a common list of established procedures required to execute a property acquisition:

1 Pre-Market	2 Marketing and Site Selection	3 Negotiation	4 Transaction Approval and Contract Close	5 Post-Contract Close
SA-I performs market due diligence	SA-I identifies the location	SA-I submits a PO-1 form to SPO for assignment to AGT AGT makes determination regarding SA-I's needs justification AGT certifies SA-I's funding AGT performs site due diligence and contracts for an appraisal AGT prepares a preliminary offer based on the appraisal for review by SPO Once approved, AGT negotiates with Landowner until offer is mutually acceptable	After execution by seller and confirmation of SA-I funding, contract to acquire is submitted for approval by Governmental Operations and Council of State. Attorney General's Office (AGO) confirms clean title. AGT may contract for environmental survey if recommended by AGO Closing performed by State's Closing Attorney	Project file submitted to SPO FIS

LEASED ACQUISITIONS

The requesting State agency (SA-1) informs the SPO of its request for real estate. The State Leasing Manager at SPO assigns the request to a Real Property Agent (AGT). Once assigned, the AGT determines if there is existing leased or owned space that can accommodate the new request. If not, a new lease procurement is approved.

There are three classes of State leases, each of with its own guidelines for procurement:

Agency Lease:

Agency leases are those that do not exceed \$5,000 annually and do not exceed 3 years in term (including renewal options). No Council of State approval required. The requesting State agency (SA-I) identifies and negotiates the lease.



TASK ORDER # 1 ASSESS EXISTING METHODS FOR UTILIZATION OF OWNED AND LEASED REAL ESTATE

Department of Administration Lease:

A Department of Administration lease is required if the annual rent is between \$5,000 and \$25,000 annually and the lease term does not exceed 3 years (including renewal options). The process is described in the flow-chart below.

1 Pre-Market	2 Marketing and Site Selection	3 Negotiation	4 Transaction Approval and Lease Execution	5 Post-Lease Execution
-SA-I performs market due diligence	-SA-I identifies the location	-SA-I negotiates terms	-AGT must review and approve the following 60 days before occupancy • State Form PO-1 identifying fund source. • State Form PO-27 justifying space need • Lease Terms: • Location • Organizational Chart • Square Footage • Rental rate • Floor plans • Landlord work letter • Fire and Safety checklist	-SA-I /AGT inspects and approves construction and landlord work prior to lease commencement -Project file submitted to SPO FIS



TASK ORDER #1 ASSESS EXISTING METHODS FOR UTILIZATION OF OWNED AND LEASED REAL ESTATE

Advertised Lease:

An Advertised Lease is required if the annual rent exceeds \$25,000 or the lease term exceeds 3 years. An Advertised Lease is not required if the above conditions exist but the lessor is a government entity. The process is described in the flow-chart below.

1 Pre-Market

The SA-I submits to the AGT the following information at least 9-12 months prior to lease commencement:

- State Form PO-1 identifying fund source
- State Form PO-27 justifying space need
- Organizational Chart
- Special purpose space needs

Marketing and Site Selection

SA-I performs the following:

- Advertise in a newspaper of general circulation in the area of the requirement
- Inform the local elected leaders (Mayor, Town Council, etc)

SPO AGT posts link to the SPO website. The agency serves as the point of contact for inquiries.

Lease proposals received and compiled by SPO. Proposals are submitted via State Form PO-28 with an attached floor plan. All responsive proposals are scheduled for a site visit.

If projected lease value exceeds \$150,000 per year, a proposer's conference is hosted.

Attendees have the opportunity to submit a best and final bid.

Proposal selection is based on numerous factors, including agency service delivery, buildings that are historically significant or owned by Historically Underutilized Businesses, and price. Economics are most heavily weighted factor.

3 **Negotiation**

 Lease negotiations with the selected proposer

4 Transaction Approval and Lease Execution

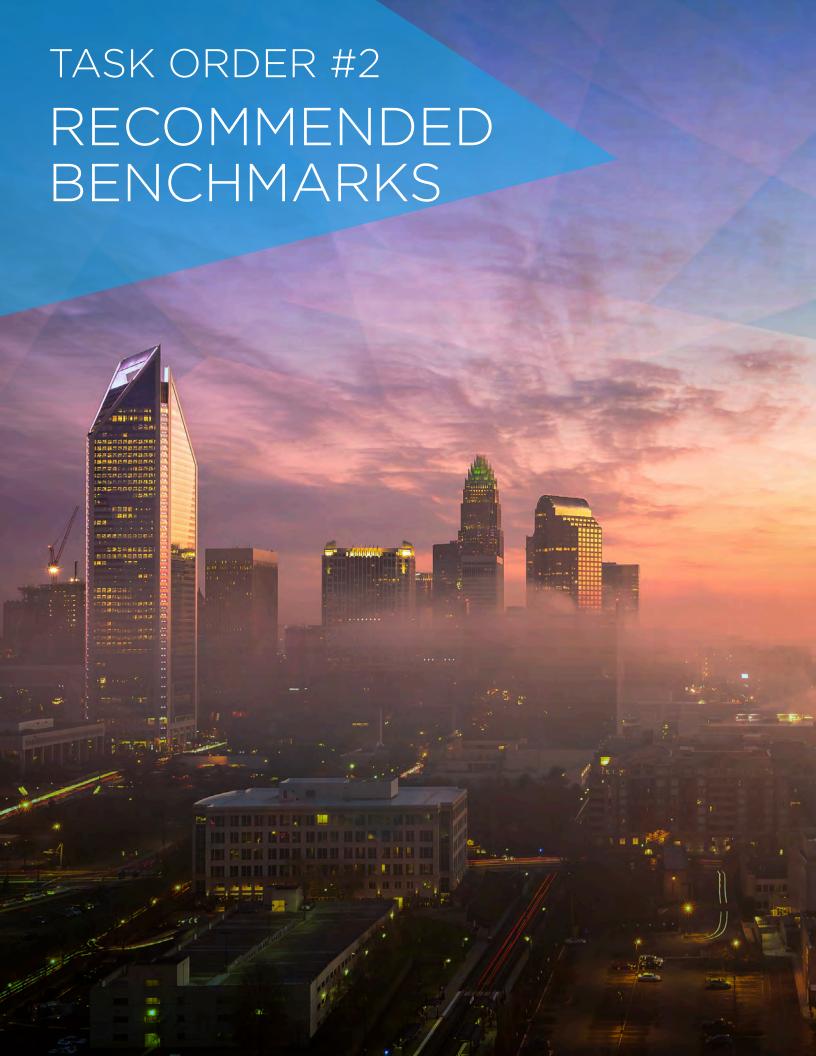
- Once negotiated, the lease transaction is submitted to the Council of State for approval.
- Once approved, the lease is forwarded to the landlord first for signature and then second to the Governor (attested by the Secretary of State) and the Attorney General's Office for full execution.

Post-Lease Execution

5

- Project management is performed by landlord
- Construction and landlord work inspected and approved by AGT prior to lease commencement and occupancy
- Project file submitted to SPO FIS





RECOMMENDED BENCHMARKS

<u>Develop recommended procedures and methods to more effectively utilize State-owned and leased real property, which shall include the following requirements:</u>

- a. <u>Based on the percentage of useable square feet in a facility that is used for State agency functions or for storage, or on other trade industry standards of utilization measurement.</u>
- b. Adjusted as appropriate for each type of facility owned or leased by the State.
- c. <u>Designed to yield an easily understandable index or ratio of facility utilization.</u>
- d. <u>Developed in consultation with State agencies.</u>

RECOMMENDATIONS

The CBRE Team recommends the State modify its current management methods to more effectively utilize its real property. The recommendations pertain to 1) management structure, 2) database management, and 3) space planning principles. The recommendations generally align with the assessments from Task Order #1.

The recommendation for database management is particularly important for portfolio benchmarking as described in the instructions for Task Order #2 above. The State's FIS database should be expanded to capture more data related to expenses, facility maintenance, and staffing levels. A more robust technology platform will allow the State to measure current conditions and track future progress with regards to benchmarking.

The goal for portfolio benchmarks should be very high level to start: total portfolio cost for leased and owned real estate, square feet per full time employee (FTE), total occupancy cost per FTE. Later, more specific benchmarks can be targeted. For example, energy cost per SF per location to identify which candidate facilities for energy initiatives. Or, for customer facing locations that require a large amount of open space to accommodate public interaction, a different type of benchmark based on service delivery is probably more appropriate. An example of this might be a Department of Motor Vehicles service center. Rather than benchmark performance for this type of facility based on SF/FTE, a better metric might be total occupancy cost per client transaction.

CENTRALIZED MANAGEMENT STRUCTURE

Broadly speaking, the CBRE Team recommends a centralized management structure where SPO has administrative control regarding all aspects of State real estate. This will require additional resources in terms of staffing and technology. Government entities have historically worked in silos when planning their real estate needs. This is changing. By comparison, the real estate function at most large corporations is already centralized to facilitate strategic decision making that reduce costs and improve operational efficiencies.

A centralized role for SPO will benefit the State's utilization of real estate in several ways:

- Improved portfolio strategy and decision making
- Uniform space standards implementation
- Dynamic and/or real time data management
- Better economic results through best practice methods developed by SPO

Consolidating most of the State's real estate function under SPO should reduce the amount of



RECOMMENDED BENCHMARKS

market engagement currently performed by the SA-I that was noted in Task Order #1. In particular, for larger property acquisitions (owned and leased), SPO should serve as the point of contact for market surveys, RFP solicitations and advertising, and market inquiries. Doing so will improve overall economic terms for the State.

DATABASE MANAGEMENT

Recommendations regarding database management are categorized as 1) types of data to be captured and 2) how and when data is captured. Task Order #4 of this document addresses the former while the recommendations below in this Task Order #2 address the latter.

"How and when" data is captured is a matter of data integrity. The State's current FIS database captures most real property data when the property - leased or owned - is acquired. Thereafter, database updates to ensure information and reporting are current are minimal. The CBRE Team recommends that the platform for data management (whether FIS or an alternative solution) be more integrated to permit real time data entry by both SPO and the SA-I's on an ongoing basis.

Task Order #4 will address in detail the types of data recommend to be captured, but the platform should be more robust than just a static inventory of facility locations showing size, State agency, lease expiration, etc. The data managed should encompass all real estate aspects that influence portfolio performance and service delivery. For example, facility maintenance issues, operating and capital expenses, and current staffing.

SPO should administer the database system, but access to the database should be more shared so that the individual SA-I's can update data as appropriate. In this manner, the database will be more real time, or dynamic. Dynamic data will better provide meaningful feedback concerning portfolio operations and property performance in the form of better reporting.

SPACE PLANNING PRINCIPLES

Closed Offices

Best practice workplace guidelines usually provide for no more than two office sizes in an agency building, apart from Cabinet appointees. North Carolina has 6 in addition to the two largest for Cabinet appointees. Limiting the number of office sizes makes space planning easier and more space- efficient. It also means that there is less need to reconfigure office space when someone is promoted or a unit is reorganized.

Best practice is for a larger office of approximately 150 to 180 square feet and a smaller one of 120 to 150 square feet. Maintaining a square footage that is a multiplier of 10 to 12 in depth and 10 to 15 feet in width allows for optimal planning in buildings with typical column grids of 20×20 , 20×30 or 30×30 . Moreover, the 120 to 180 foot sizes are readily interchanged as either offices or 4 to 6 person meeting or huddle rooms.

In the interest of re-using existing furniture that is not designed for contemporary office sizes, we recommend larger standard offices. We also heard that a number of agencies need to accommodate both employees and visitors in wheelchairs and that argues for larger offices, too. Accordingly, we propose 150 st offices.

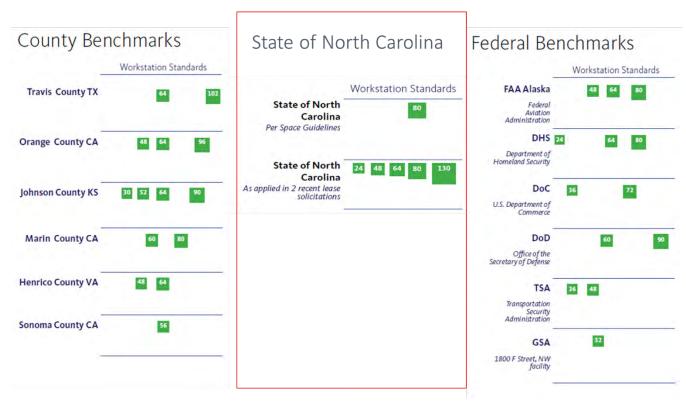


RECOMMENDED BENCHMARKS

Open Workstations

The standard workstation size in the State of North Carolina guidelines is 80 square feet, while in most government and private sector workplaces today 48 to 64 square feet is the norm and most furniture manufacturers are concentrating on this size workstation. This size provides more than sufficient room for workers, one or two monitors, a landline phone and work surface.

A comparison of the State's 2008 open workstation standard compared to other public sector peer groups indicates North Carolina's open workstations are relatively large. In today's office environment, standards regarding open workstations have the greatest impact because the average ratio of open to closed workstations is approximately 80% (see below for more regarding workstation ratios). See below for public sector benchmarks regarding open workstations.



Closed Office to Open Workstation Ratios

Although the guidelines note the need for differing circulation ratios depending on the size of a lease, we much more often see and use exclusively ourselves circulation to workspace ratios based on the amount of closed to open work areas.

The federal GSA does not prescribe a ratio of closed (office) to open work areas for every agency or building. The Federal government recognizes that different agencies have differing missions requiring different work environments. However, Federal agencies are typically declaring target "utilization ratios" of employees to square footage. These are typically in the 150 to 175 square feet per person range. And in this range, that generates a closed to open ratio of around 20% and a circulation factor of 35% - 40%. Note that circulation is calculated as a percentage of the



RECOMMENDED BENCHMARKS

total usable square footage, not as an add- on to net square footage.

Shared Spaces

The current guidelines suggest that conference rooms be based on the number of people in a unit no matter how infrequently they meet as a group. Contemporary guidelines more typically state the number of conference room seats as a ratio of assigned individual work seats. And the guidelines typically tilt toward supplying focus rooms for 1 to 2 people and team rooms for 4 to 6 people. Research has shown that smaller conference rooms are used much more intensively than larger ones. Larger conference rooms are presumed to be shared among units and are provided based on the number of people at a building location. The proposed guidelines provide recommended ratios that follow these principles.

The guidelines provide recommendations for combined copy/fax areas and the 80 to 120 square feet are sufficient, with contemporary copy rooms on the smaller size. Smaller copiers can be provided in small alcoves with even smaller square footage. We recommended the size be left open and be based on actual floor layout.

The guidelines recommend that kitchenettes be enclosed and not used for eating. The areas in the guidelines are smaller than contemporary pantries that serve both as eating areas and informal meeting areas, satisfying some of the meeting area square footage requirement.

What the current guidelines refer to as "itinerant offices" are known more commonly as "touchdown" or hoteling spaces and are typically provided in benching furniture layouts. These can be provided on a basis of 30 sf per seat.

Finally, the guidelines refer to the need for adequate numbers of bathroom fixture but express bathroom requirements in square footage related to the square feet in the leased location. Typical practice is to rely on the state or local building codes, which provide required ratios of fixtures to occupancy on a floor. It is recommended that the State require that the landlord affirm that the space they are offering the State is in compliance with the number of toilet room fixtures required for the proposed occupancy, thereby putting the responsibility on the landlord and not the State staff.





TASK ORDER #3 RECOMMENDED SPACE PLANKING STANDARDS

<u>Develop recommended agency space planning standards for determining workplace size and to govern use of shared space in State-owned and lease real property.</u>

- a. <u>Such standards shall be based on Federal GSA's Office of Real Property Management Performance Measurement Division Workspace Utilization and Allocation Benchmark report unless Vendor recommends, and DOA approves, the use of another efficient industry standard upon which such standards should be based.</u>
- b. <u>Such standards shall be consistent with the utilization procedures and methods developed in accordance with subsection 2) above. (Task Order #2).</u>

WHY WORKPLACE GUIDELINES

IMPORTANCE OF THE STATE'S WORK SPACES

The State of North Carolina occupies thousands of square feet of space in which its agencies provide services to the citizens of North Carolina. State employees, citizens and other visitors depend on this space to get their business done efficiently and effectively. Whether the space is in a State-owned building or a building leased from a private owner, the quality of the space can have a significant impact on the quality of the work performed and the quality of the interaction with the public.

DEVELOPMENTS IN WORKPLACE DESIGN

The contemporary workplace in the public and private sectors has changed significantly since North Carolina last developed workplace guidelines. Changes in the way work is accomplished, especially through the vastly expanded use of technology to communicate and deliver information, have changed not just the tools used in the workplace but also the way people use the workplace. Understanding of how the workplace can affect the morale, performance and health of workers has also evolved.

TECHNOLOGY AND THE WORKPLACE

These Workplace Guidelines take these developments into account. Implementation of the Guidelines would ideally be accompanied by State of North Carolina employees having access to the technology tools—laptops, smartphones, Wi-Fi and VPN, etc.—that contemporary workers need to operate most effectively in the workplace that these Guidelines create. But most of the benefits that the Workplace Guidelines provide will accrue even in a less robust technological environment.

For example, without VPN or Wi-Fi workers will still be able to experience a choice of workplace settings by undocking a laptop and using it offline in a variety of collaborative or individual settings. If they do not have a laptop, they can still collaborate and do focus work in a variety of settings. They will still have an environment that encourages collaboration and provides more light and views to the overwhelming majority of employees, enhancing their workplace performance.

TELEWORK

North Carolina employees may apply for telework with approval from their supervisors and department heads. In order to implement seat-sharing for telework participants, a significant number of people need to be regularly out of the office more than 2 days per week. With the



RECOMMENDED SPACE PLANNING STANDARDS

assumption that this level of participation is not currently in place, these Guidelines assume that each employee has an assigned seat. However, if an office has more than one regular teleworker and their teleworking schedules mesh correctly, the office can consider assigning those workers to a shared standard workstation.

WORKPLACE GUIDELINES: GOALS AND GUIDING PRINCIPLES

The State of North Carolina's Workplace Guidelines, reflecting best practices in contemporary public and private sector workplaces, are designed to create State workplaces that maximize performance by State employees, minimize the size of the real estate portfolio and serve the public as efficiently and cost-effectively as possible. The guidelines should be interpreted in accordance with the following objectives:

PROVIDING A WORKPLACE THAT IS WELCOMING, ENGAGING AND HOSPITABLE TO STAFFAND VISITORS

This helps the State maintain the level of citizen support and engagement that is a hallmark of North Carolina. It also aids in recruiting and retaining talented State staff. The State workplace should be a place where the public finds it convenient to obtain service.

PROVIDING A CHOICE OF WORK SETTINGS IN THE WORKPLACE

The choice of work settings should accommodate employees who predominantly work in the office and also those who often work off-site; it should accommodate different tasks that often benefit from being done in different and tailored environments, for example, focus (individual) work versus collaborative (team) work.

PROVIDING ACCESS TO DAYLIGHT AND OUTSIDE VIEWS

The maximum number of staff should have access to daylight and views. Research shows that such access enhances attentiveness and performance and reduces fatigue.

PROMOTING INNOVATION THROUGH COLLABORATION

The workplaces design should increase opportunities for both formal and informal collaboration within and among work units.

INTEGRATING OFFICE TECHNOLOGY

Workplace design should take advantage of and provide accommodations for the performance-enhancing office technology of today and be flexible enough also to accommodate technology of the foreseeable future.

ASSIGNING INDIVIDUAL WORKSPACE BASED ON FUNCTIONAL NEED RATHER THAN POSITION TITLE

The amount and type of space an employee is provided should depend on what is needed for them to do their work and not on status.



TASK ORDER #3 RECOMMENDED SPACE PLANNING STANDARDS

RETAINING THE CONCEPT OF A SPECIFICALLY ASSIGNED SEAT FOR THOSE WHO ROUTINELY WORK IN THE OFFICE

The Guidelines provide a work seat for all who spend most of their time in the office. The State does not support routine teleworking and so seat-sharing is not an option. The Guidelines do provide unassigned "touchdown" seats for those who spend most of the workday or workweek outside the office.

ENSURING THAT SPACE ASSIGNMENT IS AS UNIFORM AND EQUITABLE AS POSSIBLE ACROSS DEPARTMENTS AND ACROSS STATE FACILITIES

By providing Guidelines that apply to all State agencies and office workplaces, staff in all agencies will have access to the same quality and choice of spaces. As important, uniform space assignment will allow space assigned to one agency to be converted seamlessly to use by another agency.

ENCOURAGING SHARING OF COLLABORATION SPACES

By promoting shared use of meeting spaces, the State will maximize their use and thereby reduce the amount and cost of space devoted to underutilized real estate.

REDUCING THE TIME AND EXPENSE REQUIRED TO RESPOND TO ORGANIZATION CHANGE

When State-wide or departmental reorganizations take place, the workplace should accommodate the changes with a minimum of alteration. The uniform component parts that the Guidelines incorporate help minimize the amount of alteration needed to respond to organization change.

PROVIDE A SAFE AND SECURE ENVIRONMENT FOR EMPLOYEES AND VISITORS

The Guidelines incorporate an approach to security that enhances employee security and reduces security operating costs by separating staff workspace from areas where interaction with the public takes place.

APPLYING WORKPLACE GUIDELINES

Where do the Guidelines apply?

These Workplace Guidelines generally apply to office, permitting and counseling functions. They are to be applied, following their effective date, whenever a State agency significantly renovates its space or moves to new space, whether the space is State-owned or leased. They assume that the altered space or lease will be in place for about ten years and provide the flexibility to adapt to a ten-year span of organizational and process changes.

This Guideline applies to all State departments and offices.

The Guidelines do apply to office functions in health and public safety functions. They do not apply to in-patient settings or to the non-office functions of public safety facilities. If it is not clear whether these Guidelines apply, contact the Department of Administration.



RECOMMENDED SPACE PLANNING STANDARDS

How are the Guidelines Applied?

The Guidelines are designed to facilitate the planning and design of new office settings. They do not in themselves contain everything required to plan and design a new workplace. The workplace components included in the Guidelines are building blocks that define individual or team work settings. The components have to be fitted to in each location by a professional space designer within unique building dimensions and constraints, such as column spacing, window mullion spacing, distance between perimeter and core, floorplate shape, etc.

To accommodate those variances, each component in the Guidelines is expressed in a range of dimensions, such as 120-150 square feet, rather than as one specific size. Along with placing the work components in a layout on each floor, a professional space designer will add circulation spaces between the components. In addition, the designer will include the following kinds of support spaces:

- Reception areas
- Copy/printing rooms
- Break rooms/pantries
- Storage rooms
- Computer server rooms

- Paper filing rooms
- Large training or conference rooms
- Mothers' rooms
- IT/Special function rooms
- Special storage-securable rooms

These Guidelines suggest sizes and allocation ratios for copy/ print/supply rooms, break rooms/pantries and mothers' rooms. The sizes of these and other support spaces and components ultimately depend on the function being housed and the configuration of the building. Reception areas should be consolidated as much as possible to serve multiple organizational units in a facility. Note that service counters, for which a standard is provided, may also be appropriate for reception areas. If additional space is needed for such functions, the standard workstation can be tailored with options and layouts as required. Or, if budget permits, custom furniture can be purchased.

The Guidelines provide ratios of employees to meeting rooms that generally encourage work units to share the meeting rooms. In general, sharing meeting rooms and other support spaces is more appropriate to work units on the same floor than to those on different floors. An exception to this is large meeting rooms; they should be provided sparingly and often are best located where visitors can easily access them without having to cross through employee work areas. For all large conference rooms operable partitions should be considered to maximize functionality and utilization.



TASK ORDER #3 RECOMMENDED SPACE PLANKING STANDARDS

RECOMMENDED SPACE STANDARDS

It is recommended that the State set USF/ person target densities for space occupancy with variances allowed to accommodate the different requirements for field staff space and office-intensive spaces.

The percentage of staff in offices and workstations shown in the planning targets below illustrate a hypothetical distribution of workplace assignments using the workplace sizing and assignment approach outlined in the following pages in the Planning Considerations section.

Field Staff Space	General Office	Office Intensive
Small workstations:	Small workstations:	Small workstations:
65-75%	10-15%	20-35%
Standard workstations:	Standard workstations:	Standard workstations:
5-10%	60-70%	15-20%
Offices:	Offices:	Offices:
15-20%	15-20%	30-50%
Target USF: 145-180	Target USF: 175-210	Target USF: 215-265



RECOMMENDED SPACE PLANNING STANDARDS

PLANNING CONSIDERATIONS

Space Type	Size	Recommended Allocation
Workstation	48 - 64 SF	Default staff space assignment
Drop in Workstation	25 - 36 SF	Staff who are mostly out of the office
Service Counter	3 to 5 linear feet of counter space	Service counter positions
Function-based Office	100 - 120 SF	For privacy concerns
Senior-level Office with adjacent	120 - 150 SF Office + 120 - 150 SF	Leadership/ceremonial function
Team Room	Team Room	
Management/Counseling Office	150 - 175 SF Office	For management and functions requiring multiple visitors within offices

The meeting space guidelines listed below are minimums based on industry standards, additional meeting space can be provided as needed

Meeting Space

Meeting space		
Focus Room (1-2 people)	70 - 80 SF	1 per 15-30 workstation seats. At least one provided per location
Team Room (4 -6 people)	100 -225 SF	1 per 30-75 personnel seats. At least one provided per location
Conference Room (up to 8 people)	250 -275 SF	1 per 30-75 personnel seats
Conference Room (10-12 people)	300 - 375 SF	1 per 30-75 personnel seats
Conference Room (14-16 people)	400 - 500 SF	1 per 100-150 personnel seats
Extra-large Conference Room (18+ people)	varies	As needed. Determined by detailed departmental programming.
Multipurpose Conference Room (50+ people)	varies	As needed determined by detailed departmental programming. Placement to be determined by designer with consideration for security and public use. May be comprised of adjacent smaller rooms separated by operable partitions.

The support space guidelines listed below are minimums based on industry standards. Additional support space can be provided as needed.

Support Space

Copy/print/supply Room	120 - 180 SF	1 per 50-75 personnel seats	
Pantry/informal Work Area	150 -400 SF	1 per 100-150 personnel seats	
Mother's Room	80 - 110 SF	1 per facility	



RECOMMENDED SPACE PLANNING STANDARDS

DEDICATED OFFICE SPACE WORKSTATION

Assignment Criteria:

- Default assignment for all State personnel without a functional requirement for another type of space
- Staff who are in the office more than 50% of the time
- · For collaboration or focus work styles
- · Can be used in a reception area



48-64SF

Panel Height:

- 42" 48"
- If approved by The State for higher panels, the material above 42" is to be translucent
- Refer to page 27 in the Workplace Design Guidelines for additional information



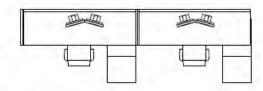
- Can accommodate:
 - · Dual monitors (shown)
 - Desk top phone (not shown)
 - Desktop computer or docking station (not shown)

Storage:

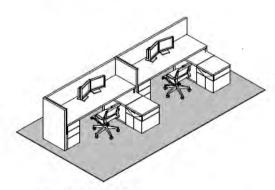
- Storage under worksurface can be open shelving or locking lateral file drawers
- Coat closet in nearby coat closet

Options:

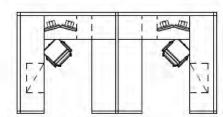
- Functions requiring large document layout to have adjacent 3-high lateral files, shelving or flat files for shared reference space
- Workstations may be enclosed in a suite for departmental privacy or security
- Desk return can serve as collaboration seat for side by-side work with others
- Additional configurations and options can be provided as needed and for reception or other functions



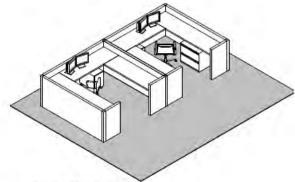
Example layout 1



Example layout 1 3-D view



Example layout 2



Example layout 2 3-D view



TASK ORDER #3 RECOMMENDED SPACE PLANKING STANDARDS

DEDICATED OFFICE SPACE: DROP-IN WORKSTATION

Assignment Criteria:

- Staff who are out of the office more than 50% of the time, e.g., field inspectors
- Call center positions
- · High-collaboration work styles
- Seasonal staff
- Staff on rotation with another assigned seat
- Data entry position, or paperless processing

Size:

25 - 36 SF

Panel Height:

42" or less.

Equipment:

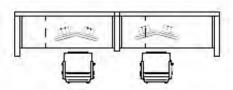
- Can accommodate:
 - Dual monitors
 - Desktop phone (not shown)
 - Desktop computer or docking station (not shown)

Storage:

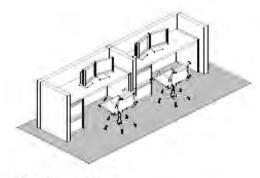
- Limited storage under worksurface
- Coat storage in nearby coat closet

Options:

- Positions requiring large document layout to have adjacent 3-high lateral files, shelving or flat files for shared reference space
- Additional adjacent storage (for tools, etc.) can be provided



Example layout



Example layout 3-D view



RECOMMENDED SPACE PLANNING STANDARDS

DEDICATED OFFICE SPACE: SERVICE COUNTER

Assignment Criteria:

- Staff who serve the public at a counter position
- · Can also be used in a reception area
- This seat can be assigned as a permanent seat or as a temporary seat for someone who has a seat elsewhere
- Can be assigned to someone on a rotational assignment

Size:

3 to 5 linear feet of counter space

Equipment:

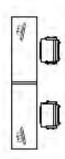
- Can accommodate:
 - Monitor
 - Desk top phone (not shown)
 - Desktop computer or docking station (not shown)

Storage:

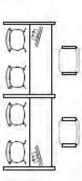
- · Limited storage under worksurface
- Coat storage in nearby coat closet

Options:

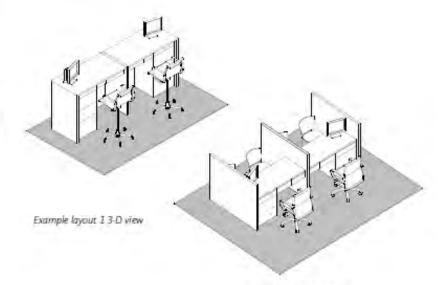
- Standing or seated height counter
- Staff chair or stool
- 1 or 2 guest chairs
- Privacy panel between service positions (approximately 2' from top of counter)







Example layout 2



Example layout 2.3-D view



TASK ORDER #3 RECOMMENDED SPACE PLANNING STANDARDS

DEDICATED OFFICE SPACE: FUNCTION-BASED OFFICE

Assignment Criteria:

- Staff who handle confidential calls or inperson counseling more than 50% of the time
- Confidential topics include:
 - Investigations
 - Youth legal matters
 - Child/family matters
 - Law enforcement matters
 - Health matters
 - Financial information
- May be provided to a department of one within an agency that requires functional privacy (e.g., human resources position)



100 - 120 SF

Wall Material:

- Transparent material where possible
- Optional translucent privacy band to block visibility into the office
- Transparent and opaque material can be combined as needed based on function

Equipment:

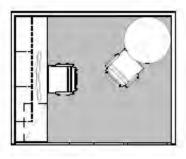
- Can accommodate:
 - Dual monitors
 - Desktop phone & desktop computer or docking station (not shown)

Storage:

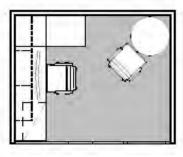
- Locking pedestal with personal and file drawer
- Coat storage in nearby coat closet

Options:

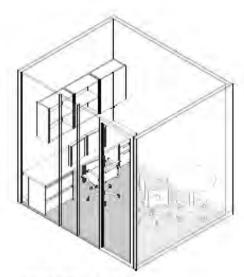
- Storage under worksurface can be open shelving or locking lateral file drawers
- · Overhead shelving can be open or closed
- Furniture orientation is flexible



Example layout 1



Example layout 2



Example layout 1 3-D view



RECOMMENDED SPACE PLANNING STANDARDS

DEDICATED OFFICE SPACE: SENIOR-LEVEL OFFICE W/ADJACENT TEAM ROOM

Assignment Criteria:

- Occupant meets one or more of the following additional requirements:
 - Division Director
 - Significant ceremonial function
 - State department head function with frequent meetings
- Team room is to be available to other staff when not in use by assigned occupant except for appointed positions

Size:

- 120 150 SF Office
- 120 150 SF Team room

Wall Material:

- Transparent material where possible
- Optional translucent privacy band to block visibility into the office
- Transparent and opaque material can be combined as needed based on function

Office Equipment:

- Can accommodate:
- Dual monitor
- Desktop phone and desktop computer or docking station (not shown)

Team Room Equipment:

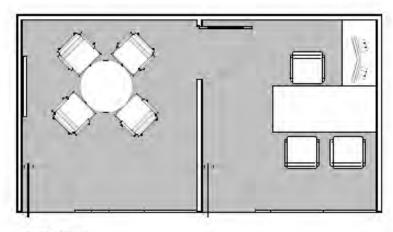
- Four to six chairs and table
- Wall mounted monitor with plug & play capability
- Speaker phone

Storage:

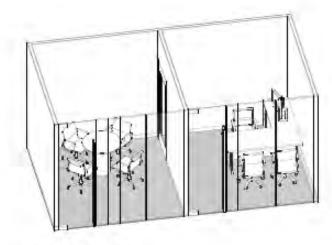
Locking pedestal with personal & file drawer

Options:

- Storage under work surface can be open shelving or locking lateral file drawers
- Overhead shelving can be open or closed



Example layout



Example layout 3-D view



TASK ORDER #3 RECOMMENDED SPACE PLANNING STANDARDS

DEDICATED OFFICE SPACE: MANAGEMENT/COUNSELING OFFICE

Assignment Criteria:

- Manager office
- Positions needing to accommodate multiple counseling visitors

Size:

150 - 175 SF Office

Wall Material:

- Transparent material where possible for visibility
- Optional translucent privacy band to block visibility into the office
- Transparent and opaque material can be combined as needed based on function



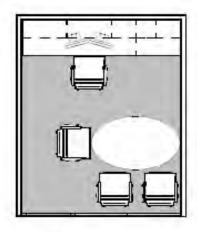
- Can accommodate:
 - Dual monitors
 - Desk top phone (not shown)
 - Desktop computer or docking station (not shown)

Storage:

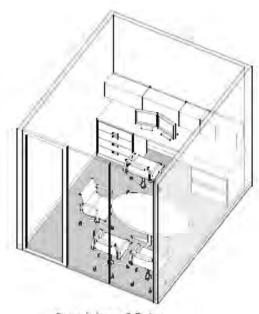
- Locking pedestal with personal and file drawer
- Coat storage in nearby coat closet

Options:

- Storage under worksurface can be open shelving or locking lateral file drawers
- Overhead shelving can be open or closed



Example layout



Example layout 3-D view



RECOMMENDED SPACE PLANNING STANDARDS

SHARED SUPPORT SPACE: FOCUS ROOM

Description:

The focus room is a small private space for:

- Private phone calls
- Virtual meetings
- Focus work
- Two person collaboration

Assignment Criteria:

Based on agency need

Size:

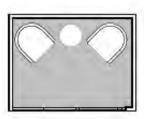
70-80 SF

Wall Material:

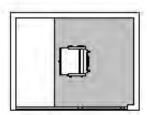
- Transparent material where possible
- Optional privacy band to block visibility into the room
- Transparent and opaque material can be combined as needed based on function

Furniture & Equipment:

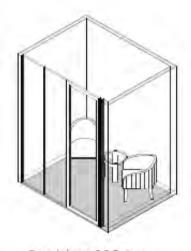
- One to two chairs
- Table
- Speakerphone (not shown)



Example layout 1



Example layout 2



Example layout 1 3-D view



Example layout 2 3-D view



RECOMMENDED SPACE PLANNING STANDARDS

SHARED SUPPORT SPACE: TEAM ROOM

Description:

Collaborative space that provides a semi-formal venue for:

- Team meetings
- · Larger meeting break out sessions
- Focus work area
- Virtual meetings

Assignment Criteria:

Based on agency need

Size:

100 - 225 SF interchangeable with offices

Wall Material:

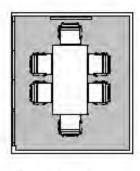
- Transparent material where possible
- Optional privacy band to block visibility into the room
- Transparent and opaque material can be combined as needed based on function



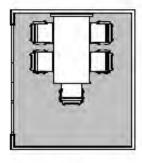
- Four to six chairs
- Table
- Wall-mounted monitor with plug & play capability
- Speakerphone (not shown)

Options:

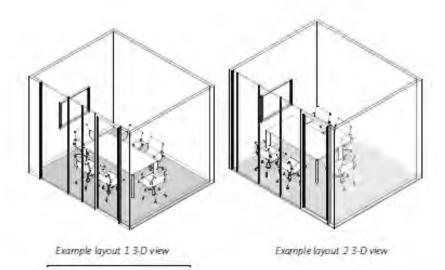
- · Desk or counter height furniture options
- Wall mounted phone
- Dry erase board
- Pin up wall



Example layout 1



Example layout 2





TASK ORDER #3 RECOMMENDED SPACE PLANNING STANDARDS

SHARED SUPPORT SPACE: MEETING ROOM

Description:

Collaborative space for:

- · Large meetings
- · Larger meeting break-out space
- · Virtual meetings

Assignment Criteria:

· Based on agency need

Size:

250 - 375 SF, potentially convertible to two offices

Wall Material:

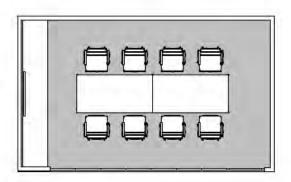
- Translucent material where possible for visual security
- Optional privacy band to block visibility into the room
- Transparent and opaque material can be combined as needed based on function

Equipment:

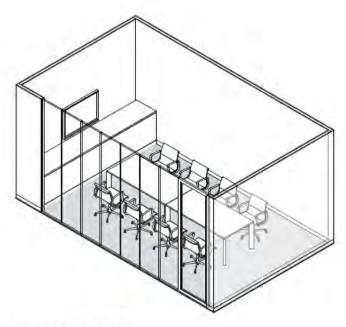
- Eight to 12 chairs
- Table(s)
- Wall-mounted monitor(s) with plug & play capability
- Speakerphone (not shown)

Options:

- · Perimeter seating to expand room capacity
- Wall mounted phone
- Dry erase board
- Pin up wall



Example layout



Example layout 3-D view



SHARED SUPPORT SPACE: LARGE MEETING ROOM

Description:

Large collaborative space that can provide a formal venue for:

- Large meetings
- Virtual meetings

Assignment Criteria:

· Based on agency need

Size:

400 - 500 SF

Wall Material:

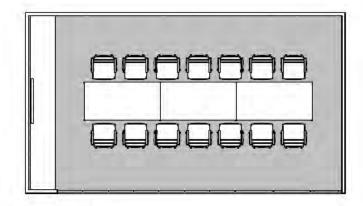
- Translucent material where possible for visual security
- Optional privacy band to block visibility into the room
- Transparent and opaque material can be combined as needed based on function

Equipment:

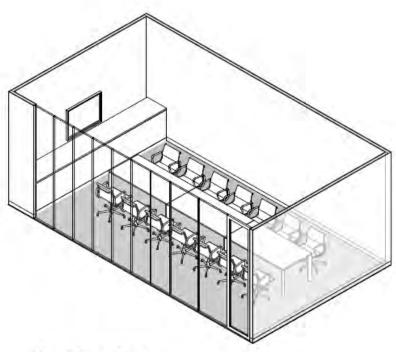
- 14 to 16 chairs
- Table(s)
- Wall-mounted monitor(s) with plug & play capability
- · Speakerphone(s) (not shown)

Options:

· Perimeter seating to expand room capacity



Example layout



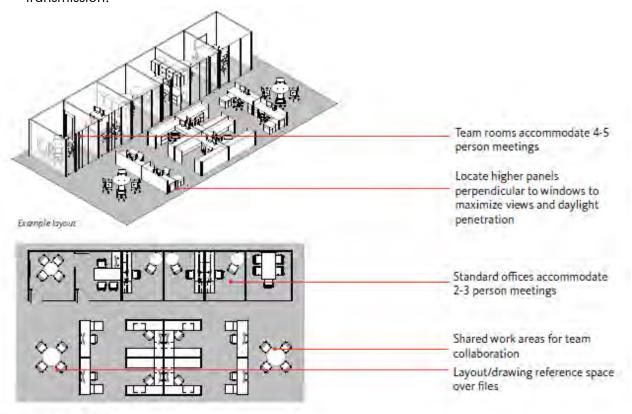
Example layout 3-D view



TASK ORDER #3 RECOMMENDED SPACE PLANKING STANDARDS

EXAMPLE: SAMPLE LAYOUT

In reviewing the office and workstation standards, it is important to understand that these individual spaces are supplemented by support spaces that provide additional functionality for work tasks. The design of the space can accommodate varied types of work needs. Neighborhood-based design is a mix of open and closed focus areas, and open and closed collaboration spaces. Each neighborhood should also provide the support spaces needed in close proximity to the group who will be working in it. As shown below, open collaborative space can be provided as reference/layout areas or small meeting areas with conventional tables and chairs. In addition, in close proximity there are also closed teaming and focus areas to provide places to focus, collaborate and have private meetings and conversations. Shared fi ling areas will be located within the neighborhood areas, if required. The band of closed spaces (offices or team rooms) can provide a buffer between neighborhoods and help to mitigate sound transmission.



Example layout 3-D view



Workplace Design Guidelines

OFFICES	All enclosed offices are the same size. Where the staff function includes a ceremonial aspect or very frequent small meetings an adjacent team room is provided. This allows the team root to be easily converted to shared usage if the function or incumbent changes.	s, om
	Wherever possible, offices should be located in the interior of floor, so they do not obstruct views. They should be provided with glass fronts to maximize the transmission of light, wheth from daylight or internal lighting.	l
WORKSTATIONS	Solid panels between workstations should not exceed 48" in height from the floor. That height provides visual privacy whi the occupant is seated but does not obstruct light.	le
	A transparent panel may be added on top of the solid 48" panel. Requests should be referred to DOA	
	Computer monitors can serve visual privacy needs.	
COPY/PRINTING ROOMS	To minimize energy use, copy and printing stations should be provided in lieu of personal printers.	е
	Copy/printing rooms should be provided sparingly throughor the work areas to encourage staff to get up and walk around. These rooms are meant to be occupied only briefly, do not not adaylight and can be located in interior and irregularly shaped spaces that do not accommodate other functions.	d. ieed
	Copy/printing rooms should not also accommodate coffee a food.	ınd
BREAK ROOMS	In order to provide a healthy break space, these rooms shou be located near direct daylight and views.	ld
	Access to daylight and appropriate tables or benches and ch permits these spaces to do double duty as meeting spaces.	airs
STORAGE	Paper storage on-site should be minimized. Technology pern many documents to be stored electronically.	nits
	Where hard copies are required, storage for them should be limited to copies required for active work, with other copies s	ent



RECOMMENDED SPACE PLANNING STANDARDS

	to off-site storage that permits retrieval on short notice. Office space is much more expensive to own or lease than storage space.
	Workstation and office furnishings should provide sufficient storage for immediate hard copy needs.
	Where storage for large items, such as construction drawings, is required, it can be provided in filing units inserted between or adjacent to workstation settings. The filing units, which should be no higher than table height, can serve as layout surfaces for the plans, as well.
	Personal storage at personal workspaces should be able to accommodate a change of clothes and personal effects.
MOTHER'S ROOM	The mother's room should include a sink, counter, soap & towels, storage (cabinets or shelving), refrigerator, phone, indirect lighting and a comfortable large chair or small couch. Walls and doors need to provide privacy and security.
SPECIALTY SPACES	Within the departments of the State of North Carolina there are many specialized functions that are not addressed by this workplace guideline document. For example, Emergency Operations has unique needs that will require additional attention and analysis to ensure its functional needs are met. Questions should be directed to the Department of Administration.
ACOUSTIC PRIVACY	Studies show that acoustic privacy requires both quiet and sound—enough quiet to be able to be heard in a conversation and enough ambient sound that a conversation cannot easily be overheard.
	Acoustic privacy in glass-front offices and meeting rooms can be provided by paying attention to insulation between glass panels and to floor and ceiling connections.
	Acoustic privacy in open office settings depends on the sound- transmitting qualities of the building and fit-out materials. White noise generators can be installed if ambient sound levels are insufficient to mask conversations.
	Huddle rooms are provided to accommodate confidential conversations and extended phone calls.
FURNITURE	Furniture depicted in workplace component drawings in these



TASK ORDER #3

RECOMMENDED SPACE PLANNING STANDARDS

Guidelines are for illustrative purposes only. Furniture from numerous manufacturers can meet the requirements of the Guidelines. The actual furniture selected in a workplace setting may thus look different from what is illustrated. Furniture in a given location should, to the maximum extent possible, be modular products from the same manufacturer. Office furniture ordinarily has a useful life of around fifteen years. If, as part of an office relocation or renovation. consideration is going to be given to re-using existing furniture, the decision should be made after a comprehensive furniture survey is completed. The survey will indicate whether the existing furniture's remaining life and functionality allow it to meet or to be economically altered to meet these Guidelines. Modular furniture can be readily re-configured to meet varying office layouts and the needs of specific individuals, all within the dimensions of the Guidelines' workplace components. Desks can be linked together side-by-side and perpendicular returns, incorporating storage units and work or seating surfaces, can be attached at any point to form L- or U-shaped desk environments. Modular furniture that incorporates power outlets and cabling in its spine or under-surface for interlocked workstations is preferred to maximize ease of integrating IT needs with workplace layout. Modular tables for huddle rooms and meeting rooms permit the furniture to be easily combined to meet the needs of different size rooms. The furniture should provide a simple structure, easy to assemble and disassemble, that grows or contracts to support a variety of work settings. Desks and tables combined with individual or group storage modules, panels and screens create the basic workplace structure, able to accommodate individual work and short-term collaboration at a workstation. Task lights for individual workstations should be used to the maximum extent possible. In combination with workstations that

LIGHTING

Task lights for individual workstations should be used to the maximum extent possible. In combination with workstations that have access to daylight, task lights minimize energy usage and provide a sustainable and balanced lighting solution and permit overhead, ceiling- mounted lighting to be reduced.



TASK ORDER #3

RECOMMENDED SPACE PLANNING STANDARDS

UNIVERSAL DESIGN & ACCESSIBILITY	All workplaces, areas, meeting rooms, technologies and components will meet current ADA standards and will ideally meet universal design guidelines.
TECHNOLOGY	Technology provided will be based on approved departmental budget.
	Coordination with the State's IT department is crucial to implementing and maintaining the technology needed to support an efficient workplace.
	Accommodating the office technology of today and the future is essential to capitalizing on the enhanced workplace performance afforded by these Guidelines.
	In order to maximize staff's opportunity to have the choice of workplace settings that these Guidelines provide, there should be Wi-Fi throughout the workplace, including reception areas, break rooms, pantries and outside terraces.
	Laptops and docking stations are the preferred computer technology for individual employees to maximize their use of alternate work settings and also to make office moves easy. Some tasks and network access protocols still require PC's wired to a network.
	Headsets should be provided for use by staff in open settings who participate in long telephone calls. Headphone use is in accordance with departmental policy.
	Virtual private network (VPN) systems that permit staff to access office systems while away from the office are essential to providing the performance enhancements that a "work anywhere" culture and workplace can deliver.
	Offices and workstations should accommodate landline phones; these Guidelines assume that each employee is provided a smart phone or landline phone or both; smart phones maximize access to alternate work settings during the day.
	Huddle and meeting rooms should have landline phones; in meeting rooms, the phones should have speakerphone capability.
	To the maximum extent possible, meeting rooms should have video screens and "plug and play" capability to facilitate meetings in which documents and plans are the subject of the meeting. If costs do not permit, at least one meeting room in a



RECOMMENDED SPACE PLANNING STANDARDS

¥			work unit should have a screen and plug-and-play access.
		•	Meeting rooms should have either built-in whiteboards or smart boards and writeable wall or glass surfaces, or access to mobile whiteboards or smart boards, in order to foster collaboration.
		•	In workplaces with multiple conference rooms, a conference room reservation system should be used that is accessible to all employees, to foster sharing of the conference rooms. These Guidelines assume that meeting rooms are shared among work units wherever possible, especially for units on the same floor, to maximize utilization of meeting room space.
		•	Please refer to the State of North Carolina's IT Administrative Regulations for more information.
	SECURITY		State facilities must be accessible to the citizens that they serve but also must ensure the security of the State's employees. There are varied populations served by the State, each with their own set of needs and issues. The departments that serve them also have different requirements to accommodate these groups and their needs. Each facility requires a unique security assessment based on the unique features of the building and the unique departmental functions housed within. The following are general considerations to guide security planning. Detailed and site specific security recommendations will be provided by State security and design personnel.
		Publi	c / Private areas: Provide clear delineation between public and staff areas. Each staff work area entry should be staffed or equipped with secure doors. The location of security enclosures must be in compliance with mandated fire exit access and cannot be installed without a building code review.
			Locate shared meeting rooms to have access to the main corridors to limit traffic through staff work areas.
			Provide consultation rooms adjacent to counter areas to accommodate meetings within the public zone.
		Work	Area Security: Provide visibility into offices in which meetings with the public occur.
			Employees who counsel/interview in high-risk situations should

CBRE

FINAL 36

be provided offices in which their seat is located near the door

TASK ORDER #3

RECOMMENDED SPACE PLANNING STANDARDS

to allow a quick escape if a situation within the office escalates.

Reception areas for high-risk populations should provide security partitions for those staffing the area.

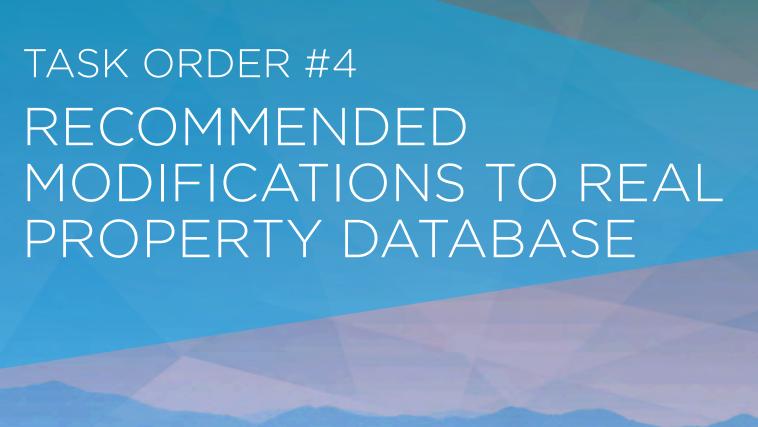
Filing & Document Security:

Each employee should have a personal lockable storage space. Employees who are regularly handling secure paperwork will have those spaces at their work area; others who access it less frequently can have this filing in a remote or centralized location.

Physical Separation:

Public areas can be isolated in a facility from work areas either by a vertical separation—restricting the public to a particular floor or floors—or a horizontal separation—restricting the public to a part of the floor. In either case, a security key or card is required to gain access to the employee work areas.







Assist DOA State Property Office, to the extent requested, to identify modifications needed in real estate databases required for such databases to comply with the amendments enacted to G.S. 143-341(4), and contained in Section 2.(a) of 2016 S.L. 119, with recommendations made pursuant to subsection 2) and 3) above.

CURRENT DATA MANAGEMENT SYSTEM

The State of North Carolina Facilities Information System (FIS) database is a proprietary database of owned and leased properties managed by the State Property Office (SPO). The original intent of FIS database was to maintain a complete and current inventory of real property owned or leased by the State. The core of this data was collected during the late 1970's and early 1980's by SPO staff with assistance from client agencies.

In 1988 FIS was migrated to a Geographic Information Systems (GIS) platform. The system was upgraded again in 2007 from a UNIX based system to a Windows system. FIS currently manages real property assets and project management. FIS also has document storage to capture the workflow of SPO agents during the data driven process of acquiring and disposing of real property.

CURRENT DATA MANAGEMENT MODEL

Under 2016 S.L. 119 (SB 747), additional data elements and a comprehensive systematic review of the real estate holdings of the State of North Carolina is required. In order to comply with 2016 S.L.119, FIS will be required to maintain and update the following data points concerning real property assets. The commentary under each data point reflects our observations on maintaining the appropriate information.

- Facility location, including latitude and longitude.
 - Where possible, local street address information should be provided.
- Operational description supported by the building.
 - Operational information should indicate atypical functions that require specialized buildings and equipment
- State agency or agencies that occupy the building.
 - Agency information should be identified by area occupied, so utilization can be calculated with staffing data
- Facility ownership.
 - For owned properties, this should reflect ownership specific to agencies
 - Leased property ownership is important to identify landlords with good track records
- Facility and/or demised premises size.
 - Owned space square footage should be verified to improve the viability of

CBRE

benchmarking data

- Measurements of both leased and owned assets are per the State's definition of useable square footage
- Facility description
 - Building descriptions should state classify by mission critical, underutilized, waiting
 for renovation funding or surplus and, as well as other categories that describe the
 importance of the asset and the prospects for a long term hold.
- Facility condition assessment, including the estimated cost to make needed repairs and renovations.
 - Building condition assessments and cost estimates should be used to support realistic year-over-year capital requests for deferred maintenance.
 - The date of the most recent facility condition assessment should be captured
- Facility operating expenses.
 - Annual operating costs should be tracked using industry standards so that benchmarking with similar occupiers of space can be used
 - All common area costs need to be included.
 - Expenses such as administrative and staffing that are spread between several buildings should be allocated between structures to identify the true cost of operating each building.
 - Annual maintenance costs should be tracked using industry standards so that benchmarking with similar occupiers of space can be used
- Number of closed and open workspaces.
 - Useable spaces should include "drop-in" workstations for field staff
 - Useable work space counts need to include empty offices and cubicles used for storage.
 - Uncounted spaces that are being used for file and furniture storage distort true utilization metrics.
- The number of full-time equivalent positions.
 - When identifying headcount in a given space, classifications should include FTEs, vendors, interns, telecommuters and drop-in field staff.
- The amount of the building that is utilized, measured in accordance with the procedures developed pursuant to G.S. 143-341.2(a) (3).
 - Building measurements need to be reconfirmed so that comparisons across the portfolio are accurate.
- Maintenance record, including replacement and maintenance schedules for all major mechanical systems.
 - Maintenance records need to be part of the overall database management system for real estate
 - All maintenance records should be linked to field location of the maintenance

CBRE

electronically and to the property accounting systems

- Parking and employee facilities.
 - Parking data should indicate number of spaces assigned to each building and identify the number of handicapped and visitor stalls
 - Employee facilities should identify shared spaces including food service, training and meeting centers that accommodate users from other departments or buildings and enhance utilization
- Any other information deemed relevant by the Department of Administration.
 - Measure what matters A key factor to remember in the gathering of data is that too
 much information can tie up staff resources in tracking and reviewing extraneous
 data that does not support the mission of maximizing utilization while reducing
 costs.

While many of these elements are currently captured, some are not up-to-date, are stored in separate data bases or not tracked at all. Examples of expenses not captured in the FIS database include operating expenses, maintenance costs and condition assessments. Operating expense data for owned properties is tracked by the State Fiscal Office while the State Construction Office handles building assessment and capital expense information. Staffing data by location is not regularly updated.

- Staffing numbers by location that include FTE positions, contractors, and interns are typically benchmarked only when an agency or department moves into space (owned or leased). This lack of up-to-date information concerning actual staff utilization of space hampers the State's ability to assess utilization levels, identify occupancy needs and compare square foot per person metrics with industry averages on an ongoing basis.
- Building operational data (rent, operating and capital expenses) is not evaluated throughout the occupancy of a space, so the State cannot benchmark performance year-over-year. For owned space, this data is useful in identifying which buildings are performing well, properties that may need equipment upgrades and real estate that is beyond repair and should be sold or demolished.
- A more complete tracking of property data can be used to show agencies the true cost of their occupancy. Generally, an occupancy cost charge back to budgets incentivizes agencies to reduce space and lower overall occupancy costs.

The dispersed property management model extends to the tracking of revenue, expenses, capital costs and real estate benchmarks. These critical data points are handled by different departments and are not tracked in a single location or in a consolidated format that could be used to support portfolio-wide planning decisions.

FIS can interface with the NC State Constructions Office InterSCOPE system to retrieve Facilities Condition Assessments for State Owned buildings over 3,000 GSF. There is also the



possibility of retrieving additional more comprehensive condition assessment data from the larger independent State Agencies i.e. UNC-Chapel Hill, NCSU etc.

RECOMMENDED MODIFICATIONS TO FIS

DATABASE STRUCTURE AND FUNCTIONALITY

The current database can be modified to perform more tasks and create customized screens for reviewing data. What is lacking is a comprehensive repository of owned and leased information that can provide the State with data to make informed decisions that will optimize the use of its property. Cost per square foot by building and cost per person by building are basic benchmarks that identify building and utilization efficiencies.

A pilot project using the State Government Center could be undertaken to test the viability of data integration between platforms. After developing a building information model for the downtown buildings data integration efforts could be extended to State leases within Wake County. This project would include procuring and/or developing a system to actively manage owned and leased space (establish a move management process) within Wake County and extending it out to other areas once the system is established.

OWNED PROPERTY DATA

Baseline data that should be captured for owned properties includes:

- Real time property maintenance data that is fed into a central database as the work is being executed. This information should roll-up to the operating expenses tracked by facilities management and fiscal accounting departments.
- Operating expenses for owned property should be tracked using the industry recognized Standard Chart of Accounts (SCA). This standard uses the following standard expense categories:
 - Administrative costs
 - Janitorial services and supplies
 - Repairs & maintenance

- Utilities
- Security
- Roads & grounds
- Staffing by building and agency should be kept current to provide real estate staff the opportunity to identify when a property is underutilized. This will help in the identification of opportunities for consolidation and collocation.

LEASED PROPERTY DATA

- Similar to owned properties staffing in occupied leased space should be kept current to provide real estate staff the opportunity to identify when a property is underutilized. This will help in the identification of opportunities for consolidation and collocation.
- Historical lease cost information should be available to assist in the identification of favorable buildings and markets.

CBRE





WORKPLACE GUIDELINES: TRENDS AND BEST PRACTICES

CURRENT TRENDS: Less Space Per Person to Reduce Costs

For several years, the amount of space in use per employee in private sector firms has, on the whole, been decreasing. The ratio of closed office seats to open work seats has also been decreasing while the ratio of collaborative (meeting room) seats to individual work seats has been increasing.

This is true in the corporate headquarters of financial firms and manufacturing firms, in the offices of consulting firms, advertising firms and even law firms. CoreNet Global, the private nonprofit organization representing corporate real estate, reports that from 2010 to 2012, the average square foot per person dropped from 225 to 176 and that it could drop to as low as 100 sf/person by 2017.

The Federal government has followed suit. Beginning in 2010, highlighted by the design of renovations of the historic (1917) GSA headquarters in Washington, the Federal Government has been moving toward a more efficient use of its owned and leased inventory. In May of 2013, the White House Office of Management and Budget issued a directive directing agencies to "Freeze the Footprint." This means that even where an agency finds a need to expand its space in one program or location, it must compensate by reducing somewhere else.

While the Federal Government as a whole does not have a numerical cap on space per person, a number of agencies, including the Department of Health and Human Services and the Department of the Interior, have issued guidelines suggesting no more than 170 square feet of occupiable space per person. The Federal Government many decades ago abandoned workplace rules that assigned square footage according to pay grade or civil service rank. Decisions about who gets how much space, as in the majority of private sector firms, are made on the basis of functional needs instead. A high-ranking economist who does most of his or her work individually at a computer may not need as much space as a lower-level employee who supervises many people and does most of his or her work in meetings.

Driving these changes is not just a desire to reduce real estate costs, though that is a large factor. Obviously, the less space occupied, the lower the occupancy costs, whether operating and maintenance costs of an owned building, or rent costs in a leased building. GSA has found that even considering the costs involved in "densifying" space, the payback occurs relatively rapidly. For the GSA headquarters building, an investment of approximately \$165 million in the building's first phase of renovations (including high security add-ons) and perhaps another \$15 million in furniture, allowed the agency to shed \$20 million in annual lease costs and reduce operating costs in the GSA building.

It is also true that occupying less square footage per capita serves the interest of saving natural and man-made resources. The energy and resources expended building and maintaining space are important environmental costs.

Driving the reductions in space even more are functional considerations. Actual observations by Gensler in numerous work settings, corroborated by other workplace researchers, show that on a typical workday it is unusual for as many as 65% of assigned workers to be in the workplace. (At



WORKPLACE GUIDELINES: TRENDS AND BEST PRACTICES

the GSA headquarters, using data from the security badging system, Gensler never found more than 55% of the employee population badging into the main headquarters building.) The rest are doing their jobs off-site or on travel, are in training, at conferences, or taking time off. Moreover, it is normal to find no more than 50% of the people who are at the work location at their work seat at any given time. The rest are in meetings, whether large or small, formal or impromptu, or taking a break. So only around 35% of the office population is in their seats at any given time.

GSA has an aggressive alternative work program. Many employees work 4-day workweeks or routinely work from home. Nonetheless, most of the occupancy figures cited above are for companies without aggressive alternative work programs.

CURRENT TRENDS: Collaboration, Daylight, Choice of Settings

One of the other prime drivers of the "new" workplace in America has been the realization that for most office workers an increasing amount of their work is done collaboratively with others, often in teams. That fact of workplace life has led designers to create environments that encourage collaboration. Key features of that office environment are more open settings. Workers who see each other are more likely to engage with each other. A collaborative environment is thought to be a deterrent to things "falling through the cracks", which often occurs when one part of an organization fails to check in with another key part of the organization.

Design elements that foster collaboration include "open" workstations (even though they may be partially enclosed) and offices with glass walls. Well-designed workstations, whether semienclosed or more open benches, permit workers to see each other and the activities around them.

Open environments, consisting of workstations and glass- wall offices and meeting rooms, have one other huge advantage over closed environments: they allow natural light to penetrate deep into the workspace, giving everyone or nearly everyone access to daylight and views. There is significant evidence that access to natural daylight permits workers to focus more productively on their work for longer periods of time.

For this reason—permitting daylight to suffuse the workplace—when an organization adopts an open workplace, we recommend relatively low workstation panel heights: around 42" is an ideal height that allows light to penetrate everywhere while permitting the seated employee to focus on his or her work without constantly seeing and being seen by other seated workers nearby. It is also possible to add 6" of glass above the 42" workstation partitions to add more visual privacy. Higher workstation

panels provide only the illusion of privacy to one inside while those outside can hear and often see what is going on and those high panels prevent daylight from penetrating and brightening the workplace.

The open workplace requires, however, small private places where workers can meet without distracting others and places where the individual worker can go to get away to make personal calls, take conference calls, or to do work that requires relatively longer periods of concentration. Often called huddle rooms, these rooms are mixed in with larger meeting rooms. Ideally these rooms are placed near the open workstations so they are readily available, but not so near that



WORKPLACE GUIDELINES: TRENDS AND BEST PRACTICES

they lose acoustic privacy.

Gensler's 2013 US Workplace Survey found that American workers struggle to get their individual work done unless the work environment provides a choice of spaces for them to work in. The size of the workstation, whether workstation or bench, is not as significant as is the availability of a place to go to when one has to focus. It does not seem to matter so much whether the workstation size is 8x8 or 64 square feet (quite common) or 6x8 (48) or 6x6 (36), which are becoming increasingly common, as merely whether the workplace offers these alternative focus settings.

And so, given the desirability of a choice of workplaces and the need for huddle rooms and meeting rooms, the open work environment does not produce as large a space reduction as it otherwise might. There need to be sufficient meeting and huddle rooms so that finding an unoccupied one is rarely difficult. But on balance, the open work environment still saves space over the previous closed work environment: on the order of 25 to 30% less space.



