

Assessment of State Land and Facility Inventory Practices

September 2019

Prepared by

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University of Delaware

In coordination with

Office of State Planning Coordination

State of Delaware



UNIVERSITY OF DELAWARE

**BIDEN SCHOOL OF PUBLIC
POLICY & ADMINISTRATION**

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Preface

As the director of the Institute for Public Administration (IPA) at the University of Delaware, I am pleased to provide this report, *Assessment of State Land and Facility Inventory Practices*. This study was funded by the Office of State Planning Coordination (OSPC) in support of the work of the State of Delaware's Government Efficiency and Accountability Review (GEAR) Board, and this report is the result of information obtained through a robust engagement process involving multiple state agencies. The purpose of this study is to examine current policies and procedures related to the collection and management of state-owned land and facility data. Additionally, information obtained through stakeholder engagement and research is utilized to explore the opportunities and barriers of implementing a centralized inventory of state-owned land and facility data.

IPA is committed to supporting the state of Delaware through collaborative, practical research that aides in the development of policies beneficial for all Delawareans. It is my hope that this report will help to build on recent successes in data sharing and collaboration among state agencies.

Jerome R. Lewis, Ph.D.

Director, Institute for Public Administration

Acknowledgements

The authors of this report thank the state of Delaware's Office of State Planning and Coordination, Office of Management and Budget, and Government Efficiency and Accountability Review Board for their support of this important work.

Additionally, the authors thank the numerous professionals from state agencies who participated in the initial screening survey and follow-up conversations. Their candid and insightful responses were extremely valuable, and the completion of this report would not have been possible without their support. These individuals work daily to ensure that state lands and facilities are well maintained, utilized effectively, and able to support the missions of their respective organizations. All Delawareans benefit greatly from their efforts.

The project team would also like to thank their IPA colleagues Lisa Moreland Allred and Sarah Pragg for editing and formatting this report.

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Executive Summary

As part of the state of Delaware's Government Efficiency and Accountability Review, the Office of State Planning Coordination (OSPC) contracted with the University of Delaware's Institute for Public Administration (IPA) to assess current agency practices for collecting, maintaining, and sharing information on state lands and facilities. IPA's assessment consisted of researching state data sharing practices, benefits, and barriers; administering a screening questionnaire to gather background information on state agency data collection processes and procedures; and interviewing state agency representatives to detail questionnaire responses and discuss the potential benefits of and barriers to implementing a statewide facility and land inventory. Land and facility information covered in this study includes buildings, land, lease information, rights-of-way, and preservation easements.

Based on this research and analysis, IPA recommends that the state generate a business case to request the development or acquisition of appropriate technologies for launching a centralized database of state-owned or state-occupied lands and facilities. As part of this process, the state should develop appropriate procedures to ensure the utility, accuracy, and security of this database, including management processes to vet and prioritize agency requests for space and maintenance; data sharing agreements to define appropriate internal and public uses of land and facility information; and ongoing training and collaboration methods to ensure accurate, consistent, and timely database updates.

Potential Benefits of a Centralized Database of State Lands and Facilities

Based on IPA's review of other states' experiences with property management, along with feedback collected from Delaware's state agencies, the following benefits may be realized from establishing a centralized database of state-owned or state-occupied lands and facilities.

Authoritative Inventory of State Lands and Facilities

Considered across state agencies, the current methods for inventorying land and facility information are ad hoc, with each agency generally collecting and updating information using methods and timing deemed appropriate to each particular agency's needs. While the largest individual lists of properties appear to reside with the Department of Finance's Division of Accounting and the Department of Human Resources' Insurance Coverage Office, there are multiple Excel workbooks and Access databases across Delaware's state agencies that store relevant information. OSPC has compiled many of these agency datasets into a more comprehensive database, though the continued accuracy of this database depends on prompt and complete sharing of agency information and updates.

There is considerable variation across these Excel workbooks and Access databases, with some agencies collecting parcel identifier information and others omitting it; some agencies focusing on buildings rather than sites; and various approaches to reporting the external and internal conditions of properties. Auditing and updating procedures also vary across agencies, resulting in lists with different timestamps. Generally speaking, there are no clear procedures in place for information sharing on this topic across state agencies, so any attempts to coordinate information tend to rely on the quality of professional relationships rather than simple adherence to detailed guidelines.

While it is unclear how many public or inter-agency requests are made about state properties, it is clear that the current approach can require a cumbersome process to arrive at definitive answers. A centralized database could offer relief by providing ready access to information that is regularly updated, contains a core set of variables useful across state government, and is supplemented with information on the origin and status of data.

Institutionalized, Cross-Agency Knowledge

At the agency scale, many of the efforts to collect and maintain land and facility information are managed by personnel with lengthy tenures in their positions. As such, many of the agency-level approaches to this topic benefit from a substantial degree of expertise gained from experience. While this is a current benefit for the maintenance of this information in Delaware's agencies, the standard operating procedures developed in individual agencies do not always create ample and easy opportunities for coordination across agencies. Through the creation of a centralized database and mechanisms to encourage cross-agency coordination on this topic, knowledge of state land and property procedures may be institutionalized across agencies in a way that guards against potential operational challenges that may result from the ongoing and eventual retirements of incumbents in these positions.

Efficiencies in Land and Facility Acquisition, Reporting, and Disposition

The most valuable impacts of a centralized database could stem from efficiencies related to the acquisition, reporting, and disposition of lands and facilities across state agencies. Provided proper procedures and guidelines are established, a common reporting framework for land and facility information could result in (1) cost savings through the re-use, adaptation, and cross-agency sharing of existing state lands and facilities; (2) improved maintenance of existing facilities, including prioritized application of maintenance funds across state facilities; (3) more effective decisions about opportunities to dispose of state property; and (4) enhanced ability to analyze and report on state property activity for internal planning purposes and external transparency-related purposes.

Implementation Barriers and Cautions

Acceptability of Status Quo

As mentioned, personnel managing state property information in Delaware tend to be experienced professionals with lengthy tenures. Apart from reported inability to quickly report on the status of state facilities, the current system seems to be operating without major issues. As such, it could be challenging to convince all parties of the necessity for action on this topic. However, the majority of individuals interviewed for this study indicated that they favored the creation of a centralized inventory and envisioned benefits resulting from it.

Initial and Ongoing Costs

At least in the short term, building and maintaining a centralized database will cost more than not taking action on this topic. While no new staff are anticipated as a result of a centralized database, one-time costs would be necessary for building or acquiring technology, and ongoing expenses will likely be necessary for training staff, coordinating among agencies, and maintaining software. Over time, and with effective management processes in place, these expenses are likely to be recouped through efficiencies in land and facility management.

Need to Integrate with Management Processes

Without efforts to integrate the centralized database into statewide management processes, the benefits of centralization are likely to be limited to the ability to more easily compile an authoritative inventory of state lands and facilities. Even then, inadequate incentives for agencies to report information regularly and accurately could result in an out-of-date or incomplete inventory. The creation of a centralized database should be paired with management procedures such as the following: (1) data sharing agreements that specify what data should be provided to a centralized inventory, on what time schedules, and to whom this information will be accessible; (2) approaches for vetting and prioritizing facility and space requests; (3) approaches for evaluating and prioritizing agency requests for maintenance funds; and (4) approaches for identifying and disposing of excess property.

Anticipated and Proposed Next Steps

Present and Discuss Findings

OSPC will present this study to GEAR for their discussion and consideration.

Form Core Team to Develop Business Case

As appropriate, a core team of cross-agency stakeholders should be formed to develop and advance a business case, with focus areas including agreeing on data contents and necessary sharing agreements; reviewing examples of relevant initiatives from other states to identify desirable characteristics; and assessing initial cost and ongoing training and maintenance parameters.

Purpose and Methodology

At the request of the Office of State Planning Coordination (OSPC), the University of Delaware's Institute for Public Administration (IPA) conducted research on current state agency activities related to inventorying real property and facility data. This study aimed to determine the feasibility and utility of developing a centralized inventory of state-owned or state-occupied properties and facilities for Delaware.

The project team engaged in three activities to complete this study:

- Background research – The project team conducted a review of professional literature on state data sharing practices, benefits, and barriers. Additionally, the team worked collaboratively with OSPC to determine state agency contacts that maintain property or facility data.
- Screening questionnaire – IPA administered a questionnaire to gather background information on state agency data collection processes and procedures for state-owned or state-occupied properties and facilities. IPA used the information obtained to prepare for follow-up interviews with each of the respondents.
- Interviews – During follow-up interviews with questionnaire respondents, the project team reviewed responses with state agency representatives and then discussed their thoughts on the benefits of and barriers to implementing a statewide facility inventory.

The following report is a summary of the information acquired through this process.

Landscape of Current Delaware Facility Data and Procedures

Table 1 lists each agency that participated in this study by submitting a questionnaire response or participating in a phone or in-person interview. Fifteen state agencies or divisions participated in this study, with 17 questionnaire responses submitted, 12 interviews conducted, and 20 individuals directly engaged through either completing a questionnaire or an interview.

Agencies maintain information on state-owned buildings and land, purchased development rights, preservation easements, rights-of-way, and leased office space and facilities. The Division of Accounting maintains the single largest list of the state's capital assets, with approximately 3,100 buildings and properties contained in the database obtained for this study, which also records information on the acquisition costs and any transfers of these assets. The Insurance Coverage Office also maintains a large list of state-owned buildings, with the spreadsheet obtained for this study containing information on approximately 1,550 buildings, with a focus on basic size, construction, and insured value information. OMB's Facilities Management Division maintains a list of real property leases entered into by various departments of state government. This list contains information on tenants, facility addresses, lease terms and owner information, and the size of the space leased.

Apart from the statewide inventories listed in the previous paragraph, multiple departments and offices maintain inventories of property and facilities for their own purposes. The most common use for this inventory information is to maintain internal operational information and plan for maintenance and renovation, with nearly every agency that participated in this study collecting information for these purposes. Other agencies, such as the Division of Historic and Cultural Affairs, track both maintenance information and easement and covenant information, which must be monitored and reported according to state and federal requirements. The Delaware Department of Transportation (DelDOT) manages inventories of lands and facilities covering leases, development rights, and building and land ownership. In addition to offices for DelDOT employees, this inventory covers facilities for maintenance yards and material storage, land for wetland mitigation, stormwater, soil sources, and rights-of-way for roads and bridges. The funding sources used to acquire these lands generally dictate how these properties must be reported on, used, and disposed of.

As part of their effort to coordinate state land use and facility decisions, OSPC staff have developed a database that contains many of these separate inventories. While many of the inventories do not contain parcel information, the OSPC database does contain this information.

Table 1. List of State Agencies Participating in Questionnaire or Interviews

Agency, Department, or Division
Delaware Army National Guard
Delaware State Housing Authority
Delaware State Police
Department of Agriculture, Forest Service
Department of Education
Department of Finance, Division of Accounting
Department of Health and Social Services
Department of Human Resources, Insurance Coverage Office
Department of Natural Resources and Environmental Control, Delaware State Parks
Department of Natural Resources and Environmental Control, Division of Fish & Wildlife
Department of Services for Children, Youth, and Their Families
Department of State, Division of Historical and Cultural Affairs
Department of Transportation (including DMV and DTC)
Office of Management and Budget, Facilities Management
Office of State Planning Coordination

Principal Findings from Review of State of Delaware Activities

Based on questionnaire responses and interviews, three principal findings about Delaware's land and facility inventory practices emerge.

Lack of an Authoritative Inventory of State Lands and Facilities

Considered across state agencies, the current methods for inventorying land and facility information are ad hoc, with each agency generally collecting and updating information using methods and timing deemed appropriate to each particular agency's needs. While the largest single lists of properties appear to reside with the Department of Finance's Division of Accounting and the Department of Human Resources' Insurance Coverage Office, there are multiple Excel workbooks and Access databases across Delaware's agencies that store relevant information. Measures for ensuring the integrity and security of individual agency's datasets are unclear, and it is also unclear what security measures are taken when sharing these data among agencies.

There is considerable variation across these Excel workbooks and Access databases, with some agencies collecting parcel identifier information and others omitting it; some agencies focusing on buildings rather than sites; and various approaches to reporting the external and internal

conditions of properties. Auditing and updating procedures also vary across agencies, resulting in lists with different timestamps. Generally speaking, there are no clear procedures in place for information sharing on this topic across state agencies, so any attempts to coordinate information tend to rely on the quality of professional relationships rather than simple adherence to detailed guidelines. When inter-agency or public requests are made about state properties, it is clear that the current approach can require a cumbersome process to arrive at definitive answers about ownership status.

Need to Institutionalize Inventory Practices

At the agency scale, personnel with lengthy tenures in their positions tend to manage many of the efforts to collect and maintain land and facility information. Currently, agency-level approaches to this topic benefit from a substantial degree of expertise gained from experience, as well as significant individual knowledge of overall state practices. The ad hoc nature of statewide approaches to this topic does create significant danger, however, as summarized below:

Organizations spend a lot of time and resources developing knowledge and capability. While some of it gets translated into procedures and policies, most of it resides in the heads, hands, and hearts of individual managers and functional experts. Over time, much of this institutional knowledge moves away as people take on new jobs, relocate, or retire. (Ashkenas, 2013)

Two of the interviews conducted for this study were with individuals who have since retired from their positions. Invariably, the new individuals in these positions will take slightly different approaches to their work, and it is likely that at least some valuable knowledge will not be transferred to them. Staff turnover does create opportunities to develop both cross-agency, standard operating procedures for managing state lands and facilities and improved technological solutions for storing, sharing, and updating land and facility information.

Current Approach Characterized by Lack of Security, Transparency, and Resiliency

The state's current approach to managing land and facility information is prone to disruption. A decentralized, agency-level approach to managing these data means that the departure of one employee can radically affect the functioning and effectiveness of the state's entire approach. Further, the lack of one clear go-to database, organization, or set of procedures puts the state at risk of significant disruption in the event of an unforeseen disaster that requires rapid, prioritized response in addressing facility concerns. Current technological approaches also raise concerns, as inconsistently formatted Excel workbooks or Access databases are not appropriate

for ensuring the integrity of data or enabling effective, data-driven decisions about lands and facilities. Finally, the current approach tends to result in agency-level expertise on particular sets of data, while sacrificing transparency across a broad set of state agencies and departments. Though there are often no official barriers to sharing these data across agencies, the lack of official approaches to sharing means that these data are often hidden within agencies and only uncovered through significant coordination. Further, lack of IT platform interoperability across agencies may further reinforce data silos. This insularity and lack of transparency minimizes the potential for valuable, statewide efforts on fronts such as facility acquisition and maintenance, land preservation, and the prioritization of capital improvements, while reinforcing the adoption of agency-specific approaches to using facility data.

Other Governments' Activities on This Topic

The regular collection and maintenance of state-owned facility and property data is becoming standard practice for many governmental bodies in the United States. According to a January 2019 study completed by the Tennessee Advisory Commission on Intergovernmental Relations, 21 states require an inventory of state-owned real property to be completed. Of those 21 states, 15 also require that agencies report how they are using the property on a regular basis, and 10 require that agencies report future needs and strategic plans. Other states also inventory state-owned property without legal requirement. In practice, the processes used to collect the data, and the actual information that is retained, differ by governmental body (Moreo, Keiser, Chaudhry, Owen, & McAdoo, 2019). Appendix A lists links to sample asset management approaches reviewed for this study.

Federal Government

The federal government requires all agencies to regularly “submit descriptive information on the nature, extent, and use of their real property assets” to the Federal Real Property Profile Management System (FRPP MS) database. This database was created in 2004 by Executive Order 13327 to:

lead to an increased level of agency accountability for asset management, allow comparing and benchmarking across various types of real property assets, and give decision-makers the accurate, reliable data needed to make asset management decisions, including disposing of unneeded Federal properties. (U.S. General Services Administration, 2018)

The database is overseen by the U.S. General Services Administration’s Real Property Policy Division. A summary report is produced annually, and information can be viewed by the public as a spreadsheet or interactive map on the division’s website (U.S. General Services Administration, 2018).

Florida

The Florida Department of Environmental Protection’s Division of State Lands oversees the Florida State-Owned Lands and Records Information System (FL-SOLARIS). The system includes information on lands and facilities “that are owned, leased, rented, or otherwise occupied by any state government entity.” Recently, “federal, county, municipal, special districts, and other entities” have begun to provide data to the system as well. The FL-SOLARIS consists of five components, and an online mapping service integrates multiple types of data in an intuitive way. The following descriptions are from the FL-SOLARIS website (Florida Department of Environmental Protection, 2019).

1. **Facility Inventory Tracking System (FITS)** – Available since 2012, containing all Florida state facility and facility lease data for Florida state agencies, water management districts, Board of Governors (BOG) universities, Florida College System (FCS) colleges, and the judicial branch, not including Department of Transportation (DOT) transportation facilities. There is an annual data refresh requirement; all updates must be completed by June 30.
2. **Lands Inventory Tracking System (LITS)** – Available since 2013, with land data (owned, leased, disposed, otherwise occupied, and surplus) for Florida state agencies, water management districts, FCS colleges, and the judicial branch, not including DOT right-of-way land. There is an annual data refresh requirement; all updates must be completed by June 30.
3. **Conservation Lands, Easements and Recreation (CLEAR)** – Available since September 2017, containing conservation owned and conservation easement lands for federal, municipal, county, special districts, and other entities as specified in Florida Statutes section 253.87. The data refresh requirement is every five years.
4. **Land and Facilities Inventory Search (FL-SOLARIS Public Interface)** – Available to the public since 2014, allows for a view of the entire state to see owned lands (shaded for each agency) and lands designated as surplus. Also provides facility lease details and surplus property data for both state lands and facilities via the department’s website. Facility Leases are not entered via the Facility Inventory Tracking System (FITS). Most agencies’ leasing operations are already under Department of Management Services (DMS) purview and that leasing data will be transmitted to FITS by DMS.
5. **Public Lands Inventory (PLI)** – Available since 2012, allows viewing the publicly held inventory lands within the state as reported by the individual county tax offices.

Oregon

Oregon’s Department of Administrative Services’ Facilities Planning Unit in the Chief Financial Office conducts regular facilities inventories. The unit regularly collects information on facility conditions, space utilization, and operating costs and reports that the collection of data is a critical component of Oregon’s facility management strategy. The information is used to develop a facilities strategic plan that considers factors such as “facility condition (facility condition assessment), optimization (program/location effectiveness), workspace strategy (efficient/productive office space), and natural hazards (seismic and flooding risks).” This strategic planning process allows the state to prioritize future capital investments in a manner that addresses critical maintenance needs while ensuring that limited space is utilized efficiently and effectively; facilities are located in areas that allow agencies to best fulfill their missions; and facilities are resilient to natural disasters (State of Oregon Department of Administrative Services, Chief Financial Office, Facilities Planning Unit, 2017).

Tennessee

Tennessee's interests in this area are to ensure that state-owned property is used "efficiently and responsibly." A recent report noted that it is critical that government property be managed in a way that leads to it achieving its "highest and best use." As mentioned in the report "a property's highest and best use could include public purposes, including schools, courts, and recreational or other green space. But in other cases, a property's highest and best use may be achieved through private ownership." According to the report, "determining a property's highest and best use involves evaluating what uses are legally permissible for the property, possible based on site characteristics, financially feasible, and produce the highest value." By collecting and maintaining land and facility data regularly, the state is equipped to determine how to best utilize its capital assets. The information can be used to prioritize future capital projects, identify potential property for surplus, and develop strategic long-term capital plans (Moreo, Keiser, Chaudhry, Owen, & McAdoo, 2019).

Key Takeaways

As noted in the research review, governmental bodies collect and maintain property data for the following purposes:

- Ensuring that facilities and properties are utilized in a way to fulfill their "highest and best use."
- Identifying opportunities to more effectively utilize current facility and property space.
- Prioritizing investment for capital improvement projects (maintenance and renovations).
- Promoting transparency with the public.
- Providing the state with information needed to engage in long-term strategic facilities and property planning (new construction, property/facility acquisition, and surplus).

The collection and maintenance of data alone is not enough to realize the benefits of effective property and facility management. The Mossavar-Rahmani Center for Business and Government at Harvard's Kennedy School published a study in 2013 that established a framework for effective asset management that included rules, institutional arrangements, management incentives, and market engagement. According to the study, real property data collection is a critical component to excelling in all four areas of this framework. Table 2 lists real property data's role in each of these elements (Garmendia & Kapur, 2013). Used in coordination with one another, along with regular data collection, these four items allow states to manage their capital assets more effectively.

Table 2. Framework for Effective Asset Management

Dimensions/Factors	Data Relevance
<i>Rules</i>	<ul style="list-style-type: none"> • Policy formation requires knowledge of what property is owned and a consistent method to value that property. • Policy evaluation and updating require accurate asset management and performance data. • Administrative rules and procedures delineate who controls and owns certain information and accountability for accuracy.
<i>Institutional Arrangement</i>	<ul style="list-style-type: none"> • Delegation of authority to agencies relies on agency's ability to manage data effectively and filter relevant analyses for executive leadership. • Consolidated property data is required for centralized decision-making and authority. • Data and information sharing is necessary to coordinate varying bodies involved in asset management and planning. • Centralized database is primary method of sharing property information within government, between government jurisdictions, and with the public. • Effective platforms reduce duplication in data creation, input, and storage and facilitate integration of various data inputs.*
<i>Management Incentives</i>	<ul style="list-style-type: none"> • Agencies justify their resource choices based on data. • Efficient program delivery and effective funding is measured by performance standards defined by data-driven metrics.
<i>Market Engagement</i>	<ul style="list-style-type: none"> • External market players have information needs to prospect properties and evaluate their developmental potential: search, investment, negotiation, financing, network maintenance. • Functional and user-friendly information management tools for packaging of attribute and geo-spatial information attracts and enables external market players.

Table Source: Enhancing Government Property Management with Data and Technology, Garmendia & Kapur, 2013. *Note: This bullet is sourced from Hentschel, John and Marilee Utter. "U.S. Cities- An Entrepreneurial Approach to Municipal Real Estate Asset Management." Edited by Olga Kaganova and James McKeller. Managing Government Property Assets. The Urban Institute Press: Washington, D.C., 2006. 172.

Expected Benefits of a Centralized Inventory of State Lands and Facilities

This section summarizes benefits that might be realized from creating a centralized inventory of the state of Delaware's land and facility information for. Expected benefits are summarized in two sub-sections—potential benefits identified by state agency participants in the interview component of this study and benefits that emerged from IPA's research and analysis.

Benefits of a Centralized Land and Facility Database as Identified by State Agencies

Maximize Efficiency of State Land and Facility Usage

Several interviewees acknowledged that a statewide inventory and shared database could help agencies to identify and better utilize available public lands and facilities. It was also recognized that it could be easier and more cost effective to acquire land from other state agencies than it is from the private sector. A standardized template was recognized as a potentially helpful tool in efforts to consistently keep track of buildings, including renovation records and monitoring of utilization rates. Many respondents saw a centralized inventory and database as a means to more efficient future land development and acquisition. Additionally, some mentioned that this may be a means by which to maximize the use of available public office space, subsequently reducing the use of fleet vehicles and the need for leases.

Shared Facilities Maintenance

A central database was seen by some as a way to improve communications about land and property issues, as well as a means by which to centralize facilities maintenance and save on repair costs and general upkeep.

Address Issues of Miscoded Property Ownership

There is a reported history of the miscoding of state-owned properties at the county level, which leads to confusion as to the ownership of lands and facilities. A centralized record could serve to clarify the history and current ownership of these miscoded properties, though significant coordination with Delaware's three counties would be necessary.

Shared Conservation Responsibilities across State Departments

For the purpose of historic and land preservation, a centralized inventory could help to make clear the connections among adjacent or proximate land parcels and unite state agencies in efforts to preserve historic properties and natural and agricultural lands.

Cost Savings

As previously mentioned, some perceive that cost savings are likely to be achieved through efficiencies found through better land and facility record keeping and data sharing statewide, as well as in the centralization of facilities management. While some acknowledged that there would likely be increased upfront cost, it was also asserted that the cost of new state employees may be less than the cost of contractors who carry out the same functions (i.e., some agencies have to contract out for all facilities maintenance matters and sharing them across the state could be more cost effective).

Centralized Responses to Crises or Disasters

Centralized land and facility records and management are seen as potential benefits relative to emergency preparedness and response, including efforts to deal with debris management and post-disaster repairs.

Expected Benefits Derived from Research

Authoritative, Secure Inventory of State Land and Facilities

A centralized database could offer relief from existing issues by providing ready access to information that is regularly updated, contains a core set of variables useful across state government, and is supplemented with information about the origin and status of data. This dataset is also likely to benefit from transparency—even if this transparency is only internal to the state—as more eyes on state land and facility data are likely to result in a more accurate, higher-quality dataset. In turn, a higher-quality dataset may result in more confident use of land and facility data as part of evidence-based decision-making processes on fronts such as facility acquisition, maintenance, and capital improvements prioritization.

Institutionalized, Cross-Agency Knowledge

Through the creation of a centralized database and mechanisms to encourage cross-agency coordination on this topic, knowledge of state land and property procedures may be institutionalized across agencies. This would guard against potential operational challenges that may result from the ongoing and eventual retirements of incumbents in these positions. Further, this cross-agency knowledge may lead to greater efficiencies in land and facility acquisition, reporting, and disposition, as discussed below.

Efficiencies in Land and Facility Acquisition, Reporting, and Disposition

The most valuable impacts of a centralized database could stem from efficiencies related to the acquisition, reporting, and disposition of lands and facilities across state agencies. Provided proper procedures and guidelines are established, a common reporting framework for land and

facility information could result in (1) cost savings through the re-use, adaptation, and cross-agency sharing of existing state lands and facilities; (2) improved maintenance of existing facilities, including prioritized application of maintenance funds across state facilities; (3) more effective decisions about opportunities to dispose of state property; and (4) enhanced ability to analyze and report on state property activity for internal, planning purposes and external transparency-related purposes, including tracking and reporting on the value of the state's assets.

Potential Barriers to Implementing a Centralized Land and Facility Database

This section summarizes potential barriers to creating a centralized inventory of state land and facility information for the state of Delaware. As with the benefits section, this information is presented in two sub-sections—barriers identified by state agency participants in the interview component of this study and barriers that emerged from IPA’s research and analysis.

Barriers to a Centralized Land and Facility Database as Identified by State Agencies

Cooperation of All State Agencies

It is possible that the centralized collection of land and facility data will not be seen as a priority, or even necessary, because not all who are expected to participate see the purpose or benefit of such an initiative to their organization. Given that most agencies collect and maintain their own data on lands and facilities, some saw this effort as potentially redundant. Additionally, agencies’ data needs vary, and some were concerned about the additional workload that may be required for collecting data seen as extraneous to their missions.

Cost

Cost was seen as a primary concern of many of those interviewed. Expected financial investment in the initiative and staff time spent on the collection and maintenance of data for a statewide inventory and database were seen as significant barriers to the success of such an effort. The logistics of potential cost-sharing amongst agencies for this project or centralized facilities maintenance was an additional, lesser concern.

Confidentiality and Security Concerns

While most information on state lands and facilities can be made public, security concerns were raised about complete transparency on certain facilities, such as state police facilities, archaeological sites, or school floorplans. Further, agencies with many categories of lands and facilities, such as DeIDOT, stressed the need to flag lands and facilities that may have their future use and disposition dictated by the source of the funds used to acquire them. General concern was expressed around the need for agencies to know where the data were going, what it would be used for, and who would have the ability to access or update it.

Organizational Change Challenge

Many of the other concerns raised as likely barriers were related to organizational change, such as sufficient staffing, technology, and user access/ability to make changes to a centralized

database. Many agencies already collect land and facility data using a variety of applications that vary significantly in terms of technological complexity. It is unlikely that a single platform will be compatible with all of the applications currently used by state agencies for this purpose. An additional challenge is appropriately addressing regulatory requirements, which may dictate agency processes for acquiring, disposing of, or reporting on lands or facilities.

Accuracy of Data

Some raised the concern of data being reported inaccurately and inconsistently in any kind of inventory or shared database. It was suggested that only authorized users with expertise in the subject matter have access to input or edit data to maintain consistency and increase the likelihood that data are accurate.

Uncertainty of Ownership and Lease Arrangements

As mentioned above, county data are not always labeled properly for ownership, which some cited as a potential barrier. The expectation is that any data included in the inventory would be accurate, so a significant amount of verification would be required to ensure accuracy.

Potential Barriers Derived from Research

Perceived Acceptability of Status Quo

Apart from reported inability to quickly and accurately report on the status of state facilities, the current system seems to be operating without major issues. At least some of the returns on investment from implementing a centralized approach are in the area of avoiding the disruption of staff turnover, rather than redressing egregious lapses in efficient practices. Perhaps in part due to the lengthy tenure of staff in these positions, agencies formally tasked with maintaining more facilities information tended to be more likely to report that the current, decentralized approach was adequate, while agencies with fewer formal responsibilities in this area saw more potential for improvement. In light of this, it could be challenging to convince all parties of the necessity for action on this topic. However, the majority of individuals interviewed for this study indicated that they favored the creation of a centralized inventory and envisioned that benefits would result from it.

Initial and Ongoing Costs

At least in the short term, building and maintaining a centralized database will cost more than not taking action on this topic. While no new staff are anticipated as a result of a centralized database, one-time costs would be necessary for building or acquiring technology, and ongoing expenses will likely be necessary for training staff, coordinating among agencies, and

maintaining software. Over time, and with effective management processes in place, these expenses are likely to be recouped through efficiencies in land and facility management.

Common Barriers to Data Sharing

Many of the barriers to implementing a centralized inventory are likely to be related to challenges common to many intra- and inter-governmental data sharing initiatives. This subsection recounts some of these common challenges that are likely to be encountered if the state pursues a centralized inventory.

Governance Policy Challenges

Data sharing creates a need for data governance, which refers to the policies and procedures required for the management of data assets. These include determining who can use the data, who “owns” the data, and when, and for what purpose, the data can be used. Areas of data governance policy identified as common challenges in statewide data sharing by the Center for Regional Economic Competitiveness (CREC) include interpretation of legal restrictions, establishment of effective data governance models, and management of legislative activity to promote data sharing (Poole & Harpel, 2018).

Data Sharing Process Management Challenges

The implementation of increased data sharing has the potential to cause management challenges. These may include responsibilities for creating and responding to data sharing requests, reviewing eligibility and appropriateness of use, preparing data sharing agreements, and verifying that data usage remains within bounds of said agreements. The capacity to maintain security of data is of utmost importance when engaging in data sharing. Common challenges of data sharing process identified by CREC include streamlining the data sharing process, building staff capacity to respond to data sharing requests, and granting access to business data within administrative records (Poole & Harpel, 2018).

Information Technology Challenges

The compatibility of available technologies with identified data sharing needs represents a crucial piece of a successful transition into expanded data sharing in the state. Current technology has the potential to ease the transition to increased data sharing. Components of information technology that the CREC has classified as common challenges to increased data sharing include distinguishing common identifiers to match different data files, establishing appropriate safeguards to protect shared data, and accessing the IT resources necessary to manage complex data systems (Poole & Harpel, 2018).

User Understanding and Access Challenges

Engaging key stakeholders, state leaders, and those in managerial positions is critical in the success of data sharing initiatives as well as making the best use of administrative data in

policymaking. Educating program leaders about the significance of data in program evaluation and evidence-based policymaking can help to garner support for increased data sharing. Additionally, the fluency of users of any data sharing system is key to successful utilization and access to the potential benefits of data sharing. Challenges in user understanding and access include informing data users of what data are available and what data are not, educating public officials about the importance of data sharing, and establishing data warehouses/hubs to manage data access (Poole & Harpel, 2018).

Recommended Path Forward

IPA recommends that the state of Delaware generate a business case to request the development or acquisition of appropriate technologies for launching a centralized database of state-owned or state-occupied lands and facilities. As part of this process, the state should develop appropriate procedures to ensure the utility, accuracy, and security of this database, including management processes to vet and prioritize agency requests for space and maintenance; data sharing agreements to define appropriate internal and public uses of land and facility information; and ongoing training and collaboration methods to ensure accurate, consistent, and timely database updates. This concluding section summarizes key design elements that should be considered in advancing a centralized inventory, along with outlining the critical need to integrate an inventory with management incentives and processes. As appropriate, a core team of state agency officials should facilitate efforts to agree upon and prioritize these key design elements and management processes.

Key Design Elements of a Centralized Inventory

Define Core Variables for Tracking in Inventory

At least six categories of information should be tracked, as appropriate, for lands and facilities included in a centralized database:

1. **Legal disposition** information that speaks to how the state relates to the property in question in terms such as fee-simple ownership, lease, or easements.
2. **Utilization** information that speaks to the character of the state's occupancy of a given property, in terms such as square footage devoted to offices or storage, number and types of specialized facilities accommodated, and number of employees currently or potentially at a site.
3. **Facility characteristics** information that speaks to the location of the property, including address and parcel identifier, construction and building characteristics, and the size of the land or facility expressed in terms such as acres or square footage, with consideration given to tracking individual facilities on properties with unique identifiers.
4. **Facility condition** information that speaks to maintenance records and current assessments of repair and maintenance schedules and needs.
5. **Financial** information that defines conditions of ownership or occupancy status, including asset value information, information on outstanding debt, and lease terms.
6. **Security** information that defines whether or not security concerns govern access to the facility in question, a characteristic that may be particularly true for assets occupied by agencies such as the Department of Corrections and the Delaware State Police.

In addition to these core variables, many of which may be blank for particular land or facility entries, any chosen inventory solution should allow for agency-specific variables to be collected. At the discretion of individual agencies, and any data sharing agreements that may result from this effort, these agency-specific variables may be available only to select, authenticated users, while core variables would be made available to a broader user group.

Identify Appropriate IT Platform

Choices about the appropriate user interface and software for a centralized inventory should be based in part on the goals prioritized through GEAR, core team insights, and engagement of potential user groups. The statewide inventory examples reviewed for this study may serve as useful starting points for these necessary design discussions.

Management Incentives and Processes

Without efforts to integrate the centralized database into statewide management processes, the benefits of centralization are likely to be limited to the ability to more easily compile an authoritative inventory of state lands and facilities. Even then, inadequate incentives for agencies to report information regularly and accurately could result in an out-of-date or incomplete inventory. Generally speaking, the creation of a centralized database should be paired with management procedures such as the following: (1) data sharing agreements that specify what data should be provided to a centralized inventory, on what time schedules, and to whom this information will be accessible; (2) approaches for vetting and prioritizing facility and space requests; (3) approaches for evaluating and prioritizing agency requests for maintenance funds; and (4) approaches for identifying and disposing of excess property. Key potential incentives and processes are outlined in the remainder of this section.

Form Land and Facility Data Working Groups

While a centralized inventory could be maintained exclusively by one agency, a more likely scenario—given the state’s current approach—is that individual agencies maintain significant responsibilities for collecting and maintaining these data. However, a centralized approach will demand a more standardized effort—in terms of how, when, and what software is used—to update these data. As such, the formation of a statewide working group of agency-level land and facility data managers is advisable. Such a group would provide for networking among and education of land and facility data managers on standardized practices. Engagement of this group in the planning process for a centralized inventory could also prove valuable for the necessary creation of data governance policies and data sharing agreements. These policies and agreements are needed to specify what data should be reported to a centralized inventory, how these data will be verified, and who may edit or gain access to these data records and select variables.

Institute Data-Driven Facility Management Practices to Incentivize Data Reporting and Maintenance

Requests for maintenance and capital improvement funds should be driven by the merits of facility needs rather than the unconnected merits of agency goals. Currently, agencies that are more sophisticated in their management of facilities data may have an advantage in their ability to make the case for either maintenance funds or the need for additional space. More transparency in statewide land and facility information and conditions should make possible an approach that allows for cross-agency prioritization of maintenance and space requests, ultimately resulting in cost savings through improved building maintenance and space utilization. To ensure that agencies readily participate in data collection and maintenance efforts, the state should consider tying approval for any facility funding requests to the requirement that agencies contribute to the centralized inventory in a satisfactory manner, as measured by factors such as the accuracy of submissions and the completion of agency audits of land and facility data and associated maintenance records.

Systematize Land and Facility Disposition Practices

The state should consider developing processes that will use centralized land and facility information to systematically identify and dispose of lands and facilities no longer needed by the state. These processes may be best developed and managed by a group representing the agencies that would be appropriate participants in the suggested working group of facility and land data managers.

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Appendix A. Sample Inventories and Asset Management Resources

Federal Government: Federal Real Property Management System

<https://www.gsa.gov/policy-regulations/policy/real-property-policy/data-collection-and-reports>

Florida: Florida State-Owned Lands and Records Information System

<http://prodenv.dep.state.fl.us/DslPi/splash?Create=new>

Oregon: Real Estate Planning and Oversight Resources for Agencies

<https://www.oregon.gov/das/Facilities/Pages/ResLandPIng.aspx>

Tennessee: State of Tennessee Real Estate Asset Management

<https://www.tn.gov/generalservices/real-estate-.html>

Washington: Facilities Inventory

<https://www.ofm.wa.gov/facilities/state-agency-facility-oversight/facilities-inventory>



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