

2018 STATEWIDE FACILITY INVENTORY & CONDITION ASSESSMENT REPORT

Prepared for:
Office of Budget & Program Planning
and
Legislative Finance Committee

Prepared by:
Architecture & Engineering Division
Department of Administration

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REPORT SUMMARY

This report begins the process of providing the Office of Budget and Program Planning and Legislative Finance Committee the current status on the State-Owned Facility Inventory and the LRBP-eligible building Facility Condition Assessments as passed in Senate Bill 43 of the 65th Legislature.

Facility Condition Assessment processes as required in §17-7-202 MCA provides an opportunity to foresee and strategize ways to address the inevitable deterioration of built assets. "Buildings and components deteriorate and need repair and replacement; this is unavoidable."

Using data collected by qualified assessors, condition information and the associated cost of repairs/replacements or capital renewal needs can be prioritized to timely mitigate liabilities – if resources are consistently provided rather than corrective action being deferred into a more expensive or crisis-management stage in the future (a.k.a. deferred maintenance backlog).

Facilities publications suggest there is a \$4-to-\$1 return on investment by implementing a planned approach to timely addressing deferred maintenance backlogs (i.e. the \$1) as opposed to postponing the cost to the point of capital replacement (i.e. the \$4). The cost of upgrades, major repairs, and improvements are exponentially proportional to the time lag between the need and the deferral period due to the accumulation of the effect on additional building systems. For instance, deferral of a roofing membrane needing replacement is more likely to as result in damage to the underlying insulation, roof structure, parapets, or interior spaces.

The issue of the condition of State-Owned assets is not a recent topic of discussion. The above quote from the November 2000 Legislative Audit Division's (LAD) findings continues to make the business case that funding to address deferred maintenance is actually a cost avoidance that alleviates financial strain and debt load on future biennia. "As a result (of unavoidable deterioration regardless of day-to-day maintenance activities), money is needed to maintain State-Owned facilities. The University Facilities Management performance audit addressed the issue of funding for deferred maintenance. Specifically, the report recommends the legislature examine the LRBP and establish an increased and consistent funding source to address deferred maintenance liabilities." LAD's recommendation remains an unaddressed topic of concern within the Long-Range Building Program, which has remained structurally unchanged since it was established in 1963. The "State Infrastructure Budgeting and Funding" report prepared by the Legislative Fiscal Division (LFD) in June 2016 provides similar input regarding State-Owned building and facility infrastructure³.

Considerable investment has been made by the State to construct its vertical infrastructure portfolio and it is anticipated the Facility Condition Assessment process for LRBP-eligible buildings will confirm the LAD and LFD perspectives on the need to establish a definitive and consistent level of funding into the LRBP to address the increasing deferred maintenance backlog. Deferred maintenance funding options are not covered by this report.

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¹ Facilities Management of State-Owned Buildings," Legislative Audit Division limited scope performance audit, November 2000, page S-3.

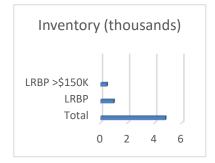
²"Facilities Management of State-Owned Buildings," Legislative Audit Division limited scope performance audit, November 2000, page S-3.

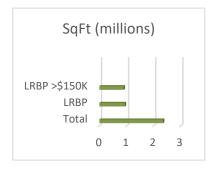
³ "State Infrastructure and Funding," Legislative Fiscal Division report, June 2016, page 4.

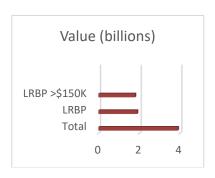
The Architecture & Engineering (A&E) Division of the Department of Administration is tasked with the primary responsibility for establishing and conducting the Facility Condition Assessment (FCA) program as well as managing LRBP funds for projects as they are appropriated each legislative session.

The following provides a brief summary of the detailed content, status, and progress provided within the body of this report:

Current Status







State agencies continue to collaborate and assist A&E with review of current inventory data, analyzing the scope needs of the FCA, and help define a strategy to address the requirements in §17-7-202 MCA. Current FCA summary data is provided in Appendix A.

Initial review of the 2018 Risk Management & Tort Defense (RMTD) database indicates:

- 1) A total State-Owned inventory of:
 - a) 4,787 buildings;
 - b) 23,520,636 square feet; and,
 - c) currently valued at \$3,932,908,713.
- 2) Buildings meeting the definition of LRBP-eligible (excludes the Capitol complex):
 - a) 976;
 - b) 9,444,522 square feet; and,
 - c) \$1,861,876,122 in replacement value.
- 3) Of the LRBP-eligible buildings:
 - a) 470 are greater than \$150,000 in current replacement value and are now statutorily required to have condition assessments conducted;
 - b) Consisting of 8,987,009 square feet; and,
 - c) \$1,842,294,330 in replacement value.
- 4) Though 20% of the total inventory, LRBP-eligible buildings comprise 40% of the total square footage in the inventory and represent nearly half the State's total building infrastructure value.
- 5) If the definition of LRBP-eligible in §17-7-201 is revised to include the Capitol complex, the figures change to 1,030 (w/522 >\$150,000 value), 10,806,228 square feet, valued at \$2,216,041,307 (greater than ½ the value of the total inventory).

On-going effort is in place to establish deficiency categories and identify the full parameters needed to conduct the most beneficial and cost-effective assessments. The collaboration with agencies has identified the ASTM E1557-09 UNIFORMAT II Standard Classification as the most logical and recognizable method to establish consistent data collection and reporting of deficiencies and backlog information.

Deficiency information and total cost of the deferred maintenance backlog for the entire inventory will take additional time and resources. Available software platforms capable of managing the large volume of facilities information while delivering up-to-date cost database information (i.e. the backlog cost), are being analyzed.

Near-Term Action

The Near-Term Action Plan has been developed to provide OBPP and LFC with confidence that progress is being made toward providing potential solutions within the limited resources available. A&E has formed a collaborative working group with members of all agencies and the university system to ascertain the scope of the inventory situation, gather input on an approach the inventory requirements, and develop a consensus for what should/should not be part of the facility assessments to provide the best information on the condition of state assets.

A&E and the working group are continuing their efforts in the following areas:

- Review of the inventory data for verification of LRBPeligibility, square footage, and consideration of how insured current replacement cost values and project cost replacement values may or may not differ;
- 2) Beginning development of a Request for Proposals for a Facility Asset Management platform; and,
- 3) Analysis for the Long-Term Action Plan matrix of options and possible strategies available.

The Near-Term Action Plan timeframe is from the date of this report through conclusion of the 66th legislative session. After the session, it is anticipated the matrix of options available in the Long-Term Action Plan will have received consideration and a route forward will have been selected.

Long-Term Action

The long-term effort is directly affected by the provision of additional resources to most rapidly provide the desired condition data for prioritization of deferred maintenance projects.

A matrix of options under consideration, anticipated costs, and timeline for each is provided in more detail within the Long-Term Action Plan section of the report. In brief, the options can be summarized in these general categories:

 Software and on-going vendor-provided assessments for LRBP-eligible buildings to establish unbiased and consistent data;

- 2) Software and one-time vendor-provided assessments of the LRBP-eligible buildings to establish an unbiased baseline condition:
- 3) Software and vendor-provided training of state personnel on conducting assessments;
- 4) Software only; or,
- 5) No additional resources are made available.

As documented in the body of this report, available funding in the LRBP for deferred maintenance is quite limited when compared to the quantity, square footage, and asset value of LRBP-eligible buildings. The LRBP account continues to fluctuate considerably from session to session as it is based on percentages of coal severance tax and cigarette tax revenues. External impacts to these two funding sources vary from year-to-year which translates to instabilities in the revenues generated for the LRBP.

Acknowledgements

The content of this report is the work of a dedicated collaboration across state government. It is not the product of the A&E Division alone, but the concentrated effort by many individuals and representatives of Departments and the University system who are interested in the care and condition of state assets. A&E wishes to acknowledge and thank them for their participation and contributions. Team members:

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PRESENT STATUS OF STATEWIDE INVENTORY & CONDITION ASSESSMENTS

This report provides the Legislature and Office of Budget & Program Planning with status information on the size of the overall inventory of State-Owned facilities and the progress made by the Department in establishing a program for condition assessments of those buildings that have the Long-Range Building Program fund as an option to address deferred maintenance issues. As provided in §17-7-202, assessments are not mandatory on State-Owned buildings unless they receive a portion of general fund dollars for operations and maintenance or serve as part of the academic mission of the university system.

The functional need for condition assessment data has been previously raised. Briefly, the Legislative Audit Division's (LAD) November 2000 performance audit provided two recommendations in addition to the increasing LRBP funding. One of which was that the legislature should mandate a standardized, statewide facilities condition assessment process and that the Department conduct the program (now in statute §17-7-202 MCA as a result of 2017's Senate Bill 43). This recommendation was also concurred in at the time by the Department of Administration's audit response and, with the collaboration of state agencies, assessments were conducted early in the 2000s for a brief time using an already established Montana State University model. However, the legislature has not increased or substantially changed the LRBP in order to address the ever-growing deferred maintenance liabilities.

While it is a prudent business function to assess buildings for an understanding of the deferred maintenance backlog and its associated, potential future fiscal effects, LAD's point is recognized that a mechanism be established to either reduce or control these unavoidable, increasing fiscal liabilities through some form of continuous funding mechanism. Otherwise, the fiscal obligation within each building will continue to accrue until a critical juncture or crises point is reached (e.g. roofing or boiler system failure).

When funding is provided only at crisis points, other needs must be postponed creating a cycle of ever-accumulating facility demands (i.e. a deferred maintenance backlog). In order to address the obligations and commitment needs of facility ownership, the LAD and LFD reports both addressed potential funding options and possible amounts based upon percentages of current building replacement values.

A goal of meeting the strategic informational need of the state's current backlog is an essential function of this facility condition assessment effort. As detailed in the LAD report, "According to APPA (Association of Physical Plant Administrators), periodic evaluation of the condition of facilities is an essential function of effective facilities management."

Expectations of

§17-7-201 MCA

While all State-Owned buildings, facilities, or structures valued greater than \$150,000 must be included in the inventory, §17-7-201(4), provides a definition that makes certain State-Owned facilities eligible for funding from the Long-Range Building Program (LRBP) account. An LRBP-eligible building is one:

⁴ "Facilities Management of State-Owned Buildings," Legislative Audit Division limited scope performance audit, November 2000, page §17.

- "for which the operation and maintenance are funded with state general fund money; or
- that supports academic missions of the university system and for which the operation and maintenance are funded with current unrestricted university funds."

Many projects from many funding sources are approved through the Long-Range Building Program (typically House Bill #5). This is the proper location for all State-Owned facilities projects to received legislative consideration, appropriation, and/or authorization, regardless of the funding source.

However, all other State-Owned facilities that don't meet the eligibility definition are excluded if the operation and maintenance is *entirely* funded with state special revenue, federal special revenue, or proprietary funds; or that supports nonacademic functions of the university system and for which the operation and maintenance are funded from nonstate and nontuition sources.

Expectation of

§17-7-202 MCA

For every State-Owned facility, §17-7-202(2), requires the statewide facility inventory to include:

- 1) its location and total (gross) square footage;
- 2) agency or agencies using the building (w/ square footage allocated to each);
- 3) its current replacement value (CRV) and each agencies portion; and,
- 4) whether or not the building is LRBP-eligible.

If a building is LRBP-eligible, along with the above inventory information, the following must also be included and maintained by the Department

- 1) a facility condition assessment (FCA) of the building and an itemized list of the building's deficiencies; and,
- 2) comparison of the building's current building deficiency ratio to its deficiency ratio in the previous biennium.

Assessment Cycle

FCA data older than 5-years is considered obsolete.

Industry accepted practice is to conduct individual building assessments every three-to-five years. Because building systems age and deteriorate at differing rates, data older than five years is largely considered obsolete.

§17-7-202(2)(c), permits the Department to select the assessment cycle and the Architecture & Engineering Division is attempting to target a four-year cycle (i.e. have each facility assessed once every four years).

However, given the size of the inventory, need for new software with construction cost data base integration, limited number of assessors, and full inventory eligibility yet to be determined, this once-every-four-years goal is only achievable if additional resources are provided.

INVENTORY SUMMARY & LRBPELIGIBILITY FOR ASSESSMENTS

For the purpose of insuring state assets, the Risk Management & Tort Defense (RMTD) Division of the Department of Administration has a listing of State-Owned facilities. Agencies self-report the following information that is relevant to the assessments:

- Reporting department;
- Building name and address or general location;
- Year constructed and building type;
- Building structure value; and,
- Square footage.

Inventory Summary by Agency, by LRBP-Eligibility, and by LRBP-Eligibility >\$150,000 CRV For the RMTD facility inventory summary, LRBP-Eligibility totals, and square footage and current replacement values (CRV) square, see Table 1 and graphs below.

The A&E Division anticipates these inventory figures to change over time as additional reviews and valuation updates are completed.

A fully itemized listing of facilities in the RMTD database by agency is provided in the appendices.

Facilities Not Included in Inventory

Any State-Owned facility that is uninsured is not in the RMTD database and is not included in this inventory report.

Uninsured facilities may consist of inaccuracies in the agency self-reported data or abandoned/unused/under-used buildings.

Further inventory adjustments are also anticipated as the A&E Division works with agencies to identify buildings that are not in the RMTD list but should be part of the recorded inventory. See the Long-Term Action Plan portion of this report.

TABLE 1 – Inventory Data

	Date of Latest			#LRBP-Fligible		SoFt of LRBP.	SqFt of LRBP- Fligible Bldgs	Total CRV Building	CRV of LRBP.	CRV LRBP-Fligible
Reporting Entity	↓i Assessment ▼		Total # of Buildir ▼ # of LRBP-Eligibl ▼ >\$150,000 CRV ▼ Total Square Fet ▼	\$150,000 CRV 🔻	Total Square Fe		▼ >\$150,000 CRV ▼ Structure Value ▼	Structure Value		>\$150,000 CRV
BOARD OF PUBLIC EDUCATION, SCHOOL FOR THE DEAF & BLIND	None	14	6	8	165,149	165,149	142,038	22,468,296	22,468,296	22,335,249
DEPARTMENT OF ADMINISTRATION	Not Reqd	54			1,361,706		•	354,165,185	•	•
DEPARTMENT OF AGRICULTURE	None	2	2	1	888'8	8,888	7,888	649,611	649,611	564,803
DEPARTMENT OF COMMERCE	Not Reqd	5			154,039			30,820,920		
DEPARTMENT OF CORRECTIONS	None	145	96	52	1,191,964	956,236	891,415	199,641,412	181,339,226	179,406,692
DEPARTMENT OF ENVIRONMENTAL QUALITY	Not Reqd	37			378,284			3,561,336		
DEPARTMENT OF FISH, WILDLIFE & PARKS	Not Reqd	1,549	•		936,386		•	82,643,372	•	•
DEPARTMENT OF JUSTICE	None	19	17	12	144,563	142,367	136,949	19,309,788	19,112,531	18,877,649
DEPARTMENT OF LABOR & INDUSTRY	Not Reqd	14			958'98		•	10,643,000	•	
DEPARTMENT OF MILITARY AFFAIRS	None	78	95	35	703,214	630,127	624,395	105,829,724	100,025,142	99,791,554
DEPARTMENT OF NATURAL RESOURCES	None	176	145	30	333,080	245,417	149,306	37,237,196	18,747,848	14,888,513
DEPARTMENT OF REVENUE	Not Reqd	1			108,258			7,443,615		
DEPARTMENT OF TRANSPORTATION	Not Reqd	1,032			2,200,445			186,217,304		
MONTANA HERITAGE COMMISSION	Not Reqd	252			187,228		•	32,098,315	•	
MONTANA HISTORICAL SOCIETY	Not Regd	2			12,839		•	5,955,894		•
OFFICE OF PUBLIC INSTRUCTION	None	31	30		27,312	26,614		649,966	590,771	
PUBLIC HEALTH & HUMAN SERVICES	None	66	84	45	786,201	600,238	551,660	114,036,067	85,344,412	83,449,364
STATE FUND	Not Reqd	1		•	122,203	•	•	269'086'08	-	-
UNITS OF THE MONTANA STATE UNIVERSITY										
MSU-Bozeman	Mar-17	430	122	63	5,419,987	1,564,112	1,513,524	974,376,244	364,935,981	362,698,593
MSU MAES	None	224	226	92	459,769	459,769	371,719	42,462,292	42,462,292	37,150,134
MSU-Billings	Jun-15	26	11	11	1,321,287	744,842	744,842	214,052,995	142,438,557	142,438,557
MSU-Northern	Jul-15	39	12	12	603,197	302,993	302,993	155,165,032	86,323,533	86,323,533
City College	Jun-15	s ee MSU-Billings							-	
Gallatin College	,	s ee MSU-Bozeman							-	
Great Falls College	Jun-15	8	5	3	202,614	200,995	198,680	44,099,838	44,054,994	43,884,048
UNITS OF THE UNIVERSITY OF MONTANA										
UM-Missoula	Mar-17	424	107	68	4,933,913	2,253,821	2,232,044	936,171,096	505,485,657	503,837,946
UM-Western	Mar-17	39	14	10	579,708	275,475	269,098	106,872,077	63,373,922	63,047,784
Montana Tech	None	47	31	24	897,675	673,608	664,025	177,820,367	146,986,277	146,458,874
Helena College	None	6	6	4	193,871	193,871	186,433	37,537,073	37,537,073	37,141,037
Highlands College	None	s ee Montana Tech								
Missoula College	None	see UM-Missoula								
		4,787	926	470	23,520,636	9,444,522	8,987,009	3,932,908,713	1,861,876,122	1,842,294,330

Building Location Data Inaccuracies

Given the nature of many buildings in the RMTD inventory, they do not possess a physical, postal address. These may consist of some multi-building campuses or remote facilities within the Departments of Fish, Wildlife & Parks or Transportation.

For instance, some state parks buildings may be identified similarly to those at the Blackfoot/Clearwater wildlife management area: "40 miles east-northeast of Missoula on State Hwy 200."

The A&E Division intends in the Long-Term Action Plan that GIS data or latitude/longitude information be used to identify the location of facilities.

Readily available software that is established for facilities asset management purposes is capable of this function and can accommodate it visually using platforms such as Google Earth. The RMTD database is not able to accommodate this requirement.

ASSESSMENT INFORMATION

A&E (in collaboration with all agencies) is in the process of establishing an applicable, uniform assessment methodology across the full spectrum of building types.

Challenges in Identifying LRBP-Eligibility Buildings for Assessments Again, §17-7-202 MCA, requires only those buildings that receive general fund dollars for operations and maintenance or that serve the academic mission of the university system, are required to be assessed and have their deferred maintenance included in the backlog.

A&E is in the process of working with agencies to identify all buildings in the inventory that meet the §17-7-201 definition.

At present, only a manual process requesting each agency to review its House Bill 2 appropriations at the operations and maintenance level of each building is able to produce the determination of whether or not a building meets the assessment requirement.

Deficiency & Assessment Data Reliability Concerns

Identifying deficiency categories is the beginning point to establish assessment context and for understanding any building's deferred maintenance backlog.

Deficiency Categories are typically grouped as addressing regulatory requirements (life safety, building code, hazardous

materials, ADA accessibility), facility integrity (damaged/worn out, lifecycle, reliability), or optimization (capacity, program/mission, improvements, energy, sustainability) and are frequently ranked in order of importance or potential risk levels subject to facility type and usage.

Through collaboration with state agencies and the university system, the determination has been made that the most long-term beneficial approach for the State in conducting assessments is to utilize the nationally recognized ASTM E1557-09 Standard Classification for Building Elements & Related Sitework – UNIFORMAT II (included in the appendices).

During transition to this Uniformat II method, each building's system and component condition will be characterized within the above Deficiency Category itemized in the following manner:

- 1) at Level 3, Individual Elements (e.g. components comprising the roofing);
- 2) combining Level 3 into Level 2, Group Elements (overall condition of the roofing system); and,
- 3) then by merging the Group Elements into Level 1, Major Groups (in this example, integrating into the major group of Building Exterior/Shell).

The data collected will be most reliable through the use of independent, qualified assessment teams who will similarly rate and rank deficiencies in a consistent and equitable manner across all facilities. This perspective is discussed in more detail throughout the report.

Deficiency Ratios (i.e. Facility Condition Index, FCI) To have confidence that a deficiency ratio reliably represents any building's overall condition, it is extremely crucial that three components in the calculation are accurate:

- Trained assessors to accurately rate/rank a deficiency of each individual element;
- Level 3 per-unit replacement cost for each deficiency of each individual element analyzed (to be provided by software through a recognized cost estimating source, such as RS Means Data); and,
- A defensible Current Replacement Value (CRV)

The overall building deficiency ratio (or FCI) can then be calculated:

FCI = total cost of all deficiencies divided by CRV

The reasons for inaccuracy in the three components noted above are:

- 1) Untrained or unqualified assessors may subjectively rate/rank a deficiency too high or too low;
- 2) This will subsequently cause the total cost of all deficiencies to be too high or too low; and,
- 3) The CRV must be a true representation of a building's value in today's dollars.

Inaccuracies in any of the above will misrepresent a building's condition as either too negative or too optimistic rather than a true representation of conditions as well as a mistaken deferred maintenance backlog.

Deferred
Maintenance
Backlog Cost ToBe-Determined

Deferred Maintenance is usually defined as "an amount needed but not yet expended for repairs, restoration, or rehabilitation of an asset." Also, as the unplanned or planned decision to allow physical assets to deteriorate by postponing prudent, major repairs until funding and a replacement schedule are determined.

While it is possible to provide an itemized listing of Level 3 deficiencies once assessments have been conducted, it is not possible to provide the total deferred maintenance backlog of the LRBP-eligible inventory or any individual building without accurate unit cost resources.

The A&E Division is unable to provide a statewide deferred maintenance backlog until such time as the appropriate software has been established, accurate unit cost data is available, assessment teams are in-place, and one full cycle of all buildings has been assessed. See the Long-Term Action Plan portion of this report for a listing of options.

List of Assessed & Unassessed Buildings by Agency

Prior assessments using the MSU methodology are available in the appendix of this report for portions of the Montana University System and the Capitol Complex.

However, these assessments are able to show only ratios or percentages deficient in the categories of the MSU format and should not be relied upon for replacement or renewal cost backlog information. This is because it consists of an invalid backlog costing data base (i.e. the cost support module is obsolete).

The lone exception is the Department of Military Affairs (DMA) who is mandated by the federal Department of Defense to use the Corps of Engineers' "Builder" platform. DMA uses federally contracted vendor services to conduct the assessments. However, DMA indicates only 2 of the 35 State-Owned, LRBP-eligible facilities have been included in the Builder assessments performed to date.

CURRENT CHALLENGES

The following areas are hurdles to establishing a statewide inventory and LRBP-eligible building facility assessment platform.

Application of the Definitions in §17-7-201(4) MCA

For many biennia, the legislature has adopted the well-conceived method of appropriating a portion of LRBP funding in a lump-sum manner under the title of "Life Safety, Code, Deferred Maintenance – Statewide." This has allowed the A&E Division to rapidly adjust projects to address critical facility issues as they arise.

The definition of an LRBP-Eligible building established in the 65th session is proving to be problematic as it affects the use of LRBP funds, not simply whether or not an agency's facilities should be assessed.

To illustrate, the Department of Administration, General Services Division's operations and maintenance budget is identified as a proprietary fund comprised of rent payments from agencies who occupy space on the Capitol complex. Though this rent is established in a rate structure approved by the legislature and regularly contains general fund dollars, the fact that it becomes a proprietary fund through rent payments eliminates the ability to use LRBP funds from the 65th session (and subsequent sessions) to respond to projects on the Capitol complex (including the Capitol itself). It is believed this is an unintended consequence of the definition established in 2017.

It is recommended consideration be given to modifying the definition in §17-7-201(4) to match the intent of Senate Bill 43, which was to obtain condition assessments of buildings wherein LRBP funds could previously be used (e.g. the

Capitol and surrounding complex). While GSD and A&E collaborate on assessing buildings on the complex, this new definition of LRBP-eligible has established a new funding restriction on the LRBP account.

Difference Between Current Replacement Value (CRV) and Project Cost

For buildings roughly <\$1,000,000, the RMTD insured CRV is generated on a cost-per-square foot per building-type basis.

For buildings approximately >\$1,000,000, the RMTD insured CRV is generated through an appraisal process approximately once every five (5) years.

The insurance-appraised CRV is not necessarily equivalent to a total project cost (total project cost will typically be higher). See difference between insured CRV and a project cost CRV in the appendices.

Attempt to Utilize Outdated & Unsupported MSU Software Montana State University developed its own Facility Assessment system which has been beneficial to the University system, the State, and used for the 2009 K-12 Facility Assessment study. As with all software applications, it has become outdated and is unusable for the Department to properly maintain statewide deficiency and deferred maintenance backlog information.

- It was built in 1992 and written for loading on a single, desktop/laptop computer.
- Not updated for operating systems newer than Windows 7.
- It is not online accessible.
- Assessment is not sortable across various buildings (i.e. it is per-building only).
- It's a "write-over" system which means prior assessment data is lost unless retained in hardcopy.
- Cost information has not been updated since 2015 and may have been applied in a manner not consistent with the cost data publisher's intent.

For these reasons, the A&E Division is actively seeking a broader facility asset management system that could be utilized by facilities managers throughout the state for more than condition assessments. See the Long-Term Action Plan portion of this report.

Multiple Vendors & Present Software Uses by Agencies

There are nine (9) separate software applications presently used by some agencies for various facility-related functions:

Maintenance Work Orders –

- Archibus (General Services Division)
- School Dude (Great Falls College, MSU)
- Accruent (MSU-Billings)
- AiM Assetworks (MSU-Bozeman)
- PubWorks (FWP)
- Space Management
 - FM Systems (MSU-Bozeman)
- Assessments
 - Builder (Military Affairs)
 - Agile Assets (Transportation, roadways only at this time)
 - MSU system (several agencies; for noting individual element deficiencies only)

Each of these applications have initial and annual recurring costs. A&E is working with the related agencies to get a summary of the costs involved in operating and maintaining these different platforms.

Investigating and Investing in Proper Software for Accurate Information

In July 2018, the A&E Division issued a Request for Information (RFI) seeking vendor qualifications for Facility Asset Management systems/software. Potential vendors must be able to fully address the following areas:

- Facility Maintenance (i.e. work orders);
- Facility Inventory & Assessments;
- Capital Planning & Project Management;
- Real Estate/Leasing;
- Space Planning & Management; and,
- Energy Management.

See the Near-Term Action Plan of this report for status information.

In-House vs. Vendor-Provided Assessments Two issues must be satisfied in order to provide condition information upon which correct priorities are established and projects may be appropriated:

- Resources (time, personnel, and funds); and,
- Trained and qualified assessors so the data are consistent across all buildings and agencies.

Assessor teams are typically comprised of three or more members:

- Architect
- Engineer
- Head of Maintenance
- Lead trades personnel, if any available (plumber, HVAC, electrician, etc.)

For any building's condition assessment to provide value, time must be devoted in varying amounts by the team members to the following process components:

- 1) Pre-Assessment
 - a) Review previous assessment
 - b) Gather work order info since previous assessment
 - c) Building record drawings
 - d) Team review
- 2) Team Conducts the Assessment
- 3) Post-Assessment
 - a) Team review
 - b) Data entry

While it may go without stating, the larger and more complex facilities require dedication of additional resources to complete an assessment.

Generally, basic Level 3 assessments can range from \$0.09 to \$0.15 per square foot. MSU has calculated its FCA costs at \$0.08/sqft as they have staff architects and engineers available, whereas many other state agencies do not and would have to rely solely on the A&E Division's limited resources to join with facilities maintenance personnel to conduct the assessments.

A better option under consideration by A&E is for the State to hire assessments to be conducted by an unbiased vendor which produces the following benefits at very little difference in cost:

- 1) Consistency in evaluation/assessment ratings resulting in more reliable data:
- 2) Impartial to the needs and priorities of agencies; and,
- 3) Frees resources to return to current agency duties.

HB 2 provided \$30,000 in FY18 and \$30,000 in FY19 to A&E for the purposes of meeting the inventory and assessment requirements of Senate Bill 43. As research and strategic planning efforts have progressed, this amount has been demonstrated to be insufficient to provide the A&E Division with personnel or sufficient funding for conducting the assessments in-house, for software, or for training.

A&E is striving diligently to make as much progress as possible while utilizing the available funding for: consultant services to assist with establishing assessment standards, criteria, and methodology; collaborating with agencies on establishing inventory and assessment direction; researching available software options; potential training of agency personnel; etc. Please refer to the Long-Term Action Plan of this report for available options.

NEAR-TERM ACTION PLAN (WHAT HAS & IS BEING DONE)

The Near-Term Action Plan has been developed to provide OBPP and the LFC the confidence that progress is being made within the resources provided. A&E has formed collaborative working groups with members of all agencies and the university system to ascertain the scope of the inventory situation, gathered input on an approach the inventory requirements, and developed a consensus for what should/should not be part of the facility assessments in order to provide the best information on the condition of state assets.

ACCOMPLISHED TO DATE:

- Establishment of all-agency collaborative work group for data review, analysis, scope, and strategic planning.
- Collection and initial review of existing agency methodology and inventory information handling.
- Determinations to:
 - Utilize RMTD inventory information;
 - Verify inventory information through future review processes;
 - Standardize all assessments on the Uniformat II method:
 - Analyze applicability of existing agency software:
 - Not try to update the MSU deficiency software; and,
 - Seek additional vendor input through a Request for Information process.

MOVING FORWARD INTO THE LONG-TERM ACTION PLAN AND MATRIX OF OPTIONS

Between the time of this report and the request for additional resources of the 66th legislative session, A&E's Near-Term steps include the following:

- Pursue additional EPP request for additional LRBP funds (state special revenue) to be included in A&E's operating budget to fund ongoing software needs and vendorperformed assessments (or include this request in the LRBP bill, typically House Bill #5);
- 2) Develop and issue a Request for Proposals for Facility Asset Management software; and,
- Continue to collaborate with all state agencies to refine inventory information, assessment cycles, and resource needs.

Future Review of Inventory Data

Though the current RMTD State-Owned property data listing is self-entered by each agency for the purposes of insuring state assets, it represents the most logical starting point for

commencement of the inventory, location, and determination of the number and types of buildings to be assessed.

A&E is utilizing RMTD's database to gain a greater understanding of which buildings are required by §17-7-202 MCA to be assessed.

It is important to note that the RMTD information is not static and the inventory information will fluctuate over time.

Impacts to Number of Buildings to be Assessed

Agencies are assisting A&E with verification of the usage of general fund dollars for operations and maintenance and buildings that are part of the university systems' academic mission to ensure no facilities are missed in potential, upcoming assessment cycles.

As the information goes through regular reviews and assessments are conducted, the number and valuation of buildings will adjust due to several factors, a primary one being inflation.

For example, LRBP-eligible buildings greater than \$150,000 CRV are required to be assessed. As inflation or valuation review increases the individual CRV's, additional buildings that reach this threshold will be added to the FCA requirement. Review of the dates of previous inventory appraisals appears to indicate a need for updated information.

Further, it is anticipated that building data (e.g. total square footage and current replacement value) information will also be verified and/or adjusted.

Use of Project Cost Data CRV Increases Number of Buildings to be Assessed As previously stated, the CRV as provided in the RMTD data is an insured replacement valuation appraisal based upon certain market assumptions (see appendices for further explanation) and will form the initial foundation for establishment of the FCA system.

In the event of a loss, this insured valuation does not impact RMTD's or the state's insurance carrier(s) from covering a project's cost.

But, it is important to note that it is also not necessarily equivalent to a Project Cost Replacement Value for an entire facility nor does it represent the cost of an individual project to address any particular set of deficiencies. Use of a Project Cost Replacement Valuation will certainly increase the number of buildings that reach the \$150,000 threshold requiring an assessment.

As A&E works toward procuring FCA software and implementation of the FCA methodology, discussions will be on-going regarding which valuation may be utilized in order to demonstrate scale and scope to the total backlog of deficiencies and the individual building needs to be addressed.

Additional Benefits to Agencies of An On-Going Data Review

- Sanitizes and/or corrects outdated or incorrect information:
- Increases accuracy of the State-Owned facility schedule;
- More reliable information for the insured properties database;
- Improved ability to predict and plan future budgetary needs:
- Allows an unbiased, multi-level prioritization method across agencies;
- Improved understanding of the total portfolio; and,
- Space management opportunities for agencies to review the purpose, use, and function of assets.

STATUS OF SOFTWARE

As previously mentioned, A&E issued an RFI to the private sector seeking input and information on currently available facility asset management systems.

Thirteen responses were received and are presently under review.

Through the National Association of State Facilities Administrators (NASFA), A&E is also in dialogue with other states about the systems they've implemented. Most recommend a broader, enterprise-wide type of approach that provides multiple facilities asset management functions as opposed to a fragmented set of multiple vendors attempting to perform various tasks.

Once the RFI review submissions are completed, A&E will coordinate with other agencies on developing a scope of services RFP to verify potential vendors can meet the multiple varied roles that comprise facility management, and not simply address the sole issues of inventory and condition assessments.

It is believed this broader approach will be benefit the state in the long-term through easier access, better data control, and integrated functions.

In addition to the cost of purchasing software, development to fit state business processes, and access licenses, additional resources will need to be dedicated for training in utilization of the new system.

DATA STRUCTURE: UNIFORMAT II, LEVEL 3 APPROACH

Unless all assessments are performed by a vendor, every agency (including MUS) will need to be trained in this new format.

ASTM E1557-09 labels the significance of this data structure approach as defining this classification method as being "the common thread linking activities and participants in a building project from initial planning through operations, maintenance, and disposal."

ASSESSMENT APPROACH CONCERNS

While the A&E Division would have primary responsibility for the facilities condition assessment program, actual inspections and assessments will need to be coordinated with agency managers and facilities maintenance personnel across the state. Some agencies do not possess a centralized facilities person or function which is left to localized administrators or campuses.

If it is not possible for assessments to be performed by an independent vendor source, multiple concerns should be recognized:

- 1) The current quantification of LRBP-eligible buildings to be assessed in the new format;
 - a) 976 (w/ 470 >\$150K CRV):
 - b) total square footage of 9.4 million (9.0 million sqft >\$150K CRV)
 - c) total CRV of \$1.86 billion (\$1.84 billion >\$150K CRV);
- A&E does not presently have the in-house resources to provide all agencies with an architect and engineer for the assessment teams;
- This lack of resources will extend assessment cycles of the entire portfolio beyond the maximum valid data period of five (5) years (i.e. means early assessments will be of no value); and.
- 4) Additional training will be needed to provide to agencies on how to participate in the Uniformat II assessment methodology. This training will need to be vendor-sourced anyway as no state agency, including the university system,

is completely familiarized with conducting assessments per this national standard method or the pending software implementation.

SCHEDULE & MILESTONES

- 1) Submission of EPP request for software and vendorperformed assessments (July 2018; completed)
- 2) Reviews of RFI Submissions (August 2018; completed);
- 3) Submit Inventory and Condition Assessment Report to OBPP and LFC (before September 1, 2018; completed);
- 4) Develop software RFP (September to December 2018); and,
- 5) Review LRBP program for potential to include request in House Bill #5 for vendor-performed assessments if EPP request is unsuccessful.

The direction the A&E Division proceeds is then dependent upon availability of additional resources per the matrix of options noted below in the Long-Term Action Plan.

LONG-TERM ACTION PLAN (PENDING ADDITIONAL RESOURCES)

A valuable return is available to the State for investment in facility condition assessments when combined with strategic funding of deferred maintenance and capital renewal needs. Because building infrastructure and systems often deteriorate more slowly (even while quality maintenance is performed), perceptions prevail that negating or continually postponing major maintenance and capital renewal means there is no accrual of a future debt load that will need to be addressed.

The opposite is the case as presented by facilities research and in the LAD audit of November 2000 wherein it frequently identifies deferred maintenance as liabilities. These liabilities continue to grow in both cost and number as funding mechanisms are not established to mitigate the growth or begin reduction of the backlog.

MATRIX OF OPTIONS

This matrix of options/solutions is under consideration to achieve the requirements of §17-7-202:

	OPTION	SCHEDULE & COST*	PROS	CONS
#1a	Software & On- Going Vendor Conducted Assessments	\$180,000** plus annual cost \$270,000 (i.e. 9 million sqft @ \$0.12/sqft divided by 4 years)*** Timeline: complete a full LRBP eligible FCA cycle in four years (before 68th Session)	 Strategic planning info available on a consistent timeline Data consistency achieved Impartiality in the condition analysis Analysis vs. Risk to type of facility is more consistent A&E and agency resources continue to be dedicated to current responsibilities 	Biennial impact to LRBP account
#1b	Software & 1- time Baseline Vendor Conducted Assessments and Vendor FCA Training of State Personnel	\$180,000** plus \$1,080,000 (i.e. 9 million sqft @ \$0.12/sqft) Timeline: complete before 67 th Session	Strategic planning info available for the entire LRBP-eligible inventory in the most rapid manner Data consistency achieved in the initial assessment Impartiality in the condition analysis Analysis vs. Risk to type of facility is more consistent State agency personnel are trained for their individual facilities by the vendor FCA team	 Impact to LRBP account Concern about completing on-going cycles of FCA in a timely manner after one-time, initial assessments are completed After initial cycle, increased workload on A&E and agencies No assurance of unbiased future data After initial cycle, negative impacts to implementation LRBP projects Potential for trained personnel to be lost over time
#2	Software & Vendor FCA Training of State Personnel	\$180,000** Timeline: 1 year to procure & implement	Deficiency and planning info will become available as this additional workload	 Slight budgetary increase to A&E Cycle for completion of FCA is indeterminate

		software; timeline to complete full LRBP eligible FCA cycle with in-house resources is indeterminate at this time.	can be incorporated within existing demands Consistent platform for the database	 Increased workload on A&E and agencies Negative impacts to implementing LRBP projects
#3	Software Only	\$130,000**	 Deficiency and planning info will become available as this additional workload can be incorporated within existing demands Consistent platform for the database 	 Slight budgetary increase to A&E Cycle for completion of FCA is indeterminate Increased workload on A&E and agencies Negative impacts to implementing LRBP projects
#4	No Additional Resources	No cost but timeline to complete full LRBP eligible FCA cycle is indeterminate at this time.	No cost.	 Unknown database format at this time Cycle for completion of FCA is indeterminate Increased workload on A&E and agencies Negative impacts to implementing LRBP projects

- * Potential Funding Source: Long-Range Building Program, State Special Revenue
- ** Software cost is an estimate at this time and includes purchase and development/adaptation. Cost information will be available in the RFP process as part of the Near-Term Action Plan. On-going, annual cost of software licenses expenses estimated at \$30,000/yr.
- *** Concept is to have vendor perform one-quarter of the LRBP-eligible inventory each FY (achieve one full cycle of assessments every 4 years). Annual software expense included in cost.

New Software Needed to Meet the Requirements of §17-7-202 MCA For the entire State-Owned inventory portion, a new software system is needed to meet 2 of the 3 requirements in §17-7-202(2)(a)(i):

- Accurately identify the location of each building (the RMTD database is not capable of providing this function; it's built on an Oracle database format); and,
- The separate square footage occupancies of multiple agencies in the same building (no statewide space planning information is yet available).

For the condition assessment portion, a new software system is needed to meet the requirements of §17-7-202(2)(a)(ii) through (e). Please refer to the above "Current Challenges" portion of this report for a more detailed description

Additional Resources
Needed for Building
Deficiency Data that is
Comprehensive,
Comparable, and Timely
Cannot be Delivered

Without additional resources for FTE or vendor-based assessments, the following impacts are present:

To the A&E Division:

- Excluding the MUS, no agency other than the A&E Division possesses both architects and mechanical engineers on staff in order to form qualified assessment teams:
- 2) A&E has been reduced by 2 FTE (down to 16.5) since the time of the LAD audit of November 2000 where it stated at that time, "in order to devote appropriate attention to the (FCA) program and avoid impacting other A&E Division responsibilities, additional FTE will be necessary;" and,
- 3) The volume of assessments required means existing A&E Division resources will be further stretched and either capital projects or facility assessments will go unaddressed in a timely manner.

Impacts to the gathering of condition assessment data:

- The Department's desired timeline for one full cycle of four (4) years for the entire LRBP-eligible inventory is unlikely to be met;
- The assessment data are considered obsolete by industry standards if any building goes longer than five (5) years between assessments; and,
- OBPP and LFC will not receive timely and concise information of the full inventory upon which to make funding prioritizations for deferred maintenance and capital renewal efforts.

Impacts to the backlog of deferred maintenance:

- Extending the assessment cycles beyond industry standards renders the deficiency and cost data unusable and of no value to any capital repair or renewal strategic planning;
- 2) As a result, some critical health, safety, or deteriorated condition that should receive attention may go unaddressed for an additional period of time; and,
- 3) The estimated versus actual cost of repairs/replacements could greatly vary.

Timeline to
Complete One Full
Cycle &
Consequences to
the Data

The Department's desired timeline is to complete one assessment of all LRBP-eligible buildings at least once every four (4) years.

This concept would provide OBPP and LFC with current assessment information on roughly half the LRBP-eligible inventory each biennium.

However, this desired concept is not achievable with the presently limited resources available and is why A&E recommends implementation of resource adjustments to establish and implement the FCA program so that its investment value is fully realized.

With the size of the LRBP-eligible inventory and the need for qualified teams to perform the assessments, using in-house resources, the A&E Division anticipates the following:

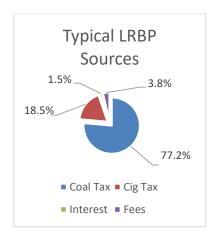
- 1) Non-MUS LRBP-eligible inventory consists of 439 buildings (183 @ >\$150K CRV) for nearly 2.8 million square feet and a value of \$428.3 million.
- 2) Adding the Capitol complex to the 183 @ >\$150K CRV increases the number of buildings that need to be assessed to ~237 (3.8 million sqft; \$773 million CRV).
- 3) In addition to its current LRBP workload, for a 4-year cycle A&E and the non-MUS agencies would have to conduct an average of five (5) building assessments per month (current GSD and MSU-Bozeman cycles are 2 buildings per month). A 5-yr cycle will require an average of 4 assessments per month.
- 4) Neither assessment cycle is sustainable with current staffing levels.
- 5) Assumptions:
 - a) uses MSU's analytics of the time-per-building for each assessment (does not include travel);
 - b) average travel time of ½ day each way per assessment effort:
 - c) attempt to consolidate assessments on a campuswide basis:
 - d) Data collection and input:
 - i) 1-day effort prior to assessments
 - ii) 1-day data entry after assessments
 - iii) collection and entry done by staff other than assessment teams
 - e) Excludes MUS as in-house facilities staff will continue to be assigned the condition assessment function.

Please refer to the Matrix of Options above for more detail on possible solutions in order to satisfy both the industry limitations on keeping the data current and accomplishing collection of the desired assessment and backlog information.

ADDITIONAL
RESOURCES WILL
PROVIDE A RETURN
ON THE
INVESTMENT

There is only one specific commitment of state funds for major repair and capital replacement/renewal projects: the Long-Range Building Program fund.

Funds into this account come primarily from 2 limited sources:

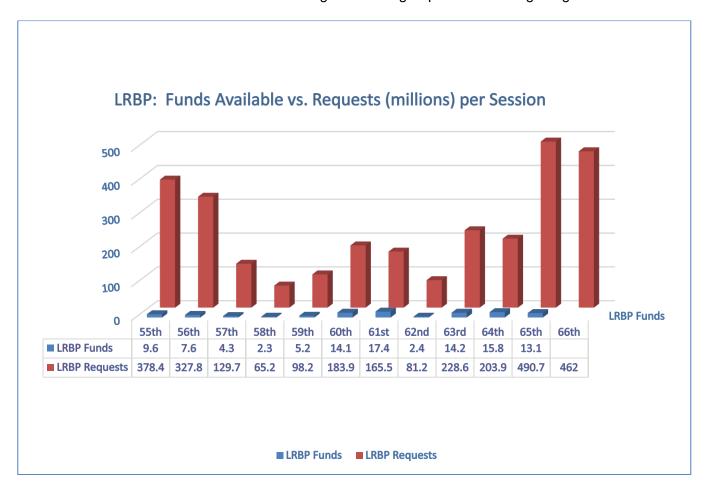


- 1) 12% of coal severance tax revenues; and,
- 2) 2.6% of cigarette tax collections.

The net LRBP cash available versus total requests for LRBPfunded projects has greatly fluctuated over the past 12 biennia:

With the RMTD total LRBP-eligible building current replacement value (CRV) at \$1,861,876,122, it is readily apparent that attention is needed to the State's outlay in strategically maintaining its aging vertical infrastructure.

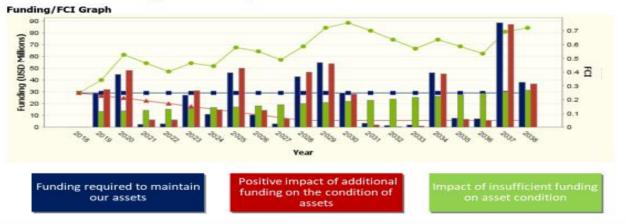
In order to target funding for the most critical deferred maintenance and capital renewal needs, an investment of \$0.12/square foot for unbiased vendor-sourced assessments can garner the State critical infrastructure condition information on its assets in a timely fashion. Then, prioritizations can be made regarding additional funding necessary to begin the process of eliminating the backlog or prevent it from getting worse.



Modeling Funding of Deferred Maintenance Options

As the following general principle maintenance funding model demonstrates (used with permission, courtesy of Accruent LLC), providing or not providing steady capital outlay for the purposes of deferred maintenance has significant impacts on the overall cost of owning physical assets.

Various Funding Level Impacts on Asset Condition



accruent

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LAD and LFD Information

Prior LAD audits and LFD reports referenced in this FCA report do not question the existence of a deferred maintenance backlog or that considerable building infrastructure deficiencies exist and are growing.

This situation is also borne out through A&E's project experience with virtually all state agencies and the LRBP program requests and MUS background in university system assessments.

Determining the primary components and magnitude of the backlog in the shortest period of time provides the most beneficial decision-making information. Targeted funding sources can then be considered to reduce the everexpanding liabilities of the State's aging infrastructure (e.g. on the Capitol complex alone, the Metcalf Building is the newest at 35-years old and the 2000 renovation of the Capitol is the most recent capital renewal).

Senate Bill 79 by Legislative Finance Committee of the 60th Session was an attempt at a response to the backlog condition.

Business Model for Supporting Facilities

The Current Replacement Value of \$3,932,908,713 in State-Owned facilities demonstrates a considerable investment to provide infrastructure for the conduct of the state's public business functions.

As referenced from the LAD and LFC reports, to keep facilities safe and functional for their intended purposes, capital outlay is required in the range of 2% to 4% of CRV for both regular maintenance and deferred maintenance. There is presently no percentage of CRV allocated specifically for meeting deferred maintenance demands or the backlog.

Several sources have attempted to help provide predictive analysis on the costs for deferring maintenance into the future due a lack of funding in the present. Many publications reference research that appears to indicate a 4:1 ratio of cost avoidance. In other words, every \$1 provided for deferred maintenance avoids \$4 in capital replacement.

As might be expected, these sources, as a general rule, indicate that cost increases are not simply additive or inflationary, but exponential the more distance there is between deferring an item and receipt of funding for corrective action. This exponential effect is directly due to cumulative impacts to more building components and systems the longer the corrective action is postponed. For example, as a roof membrane fails and goes without replacement, damage to the underlying insulation and/or roof structure becomes more extensive, thereby increasing the total scope and cost repairs.

This also implies enormous budget pressures will come to bear on future resources/revenues as deferred maintenance backlog/liabilities accumulate, making it more difficult to mitigate or contain the backlog.

In addition to a strategic, planned approach to funding of deferred maintenance liabilities, outlay for a capital renewal or renovation may be the more prudent and cost-effective step to address backlog of an aging facility and refresh it to meet current and future programmatic demands.

CONCLUSIONS AND RECOMMENDATIONS

The experience of other states that have implemented vendor-sourced Facility Condition Assessment programs (Option 1a in the Matrix of Options) have been able to establish policies and dedicated funding mechanisms to purposefully address deferred maintenance liabilities.

Utah's FCA program is vendor-sourced at the rate of \$0.12/square foot (2017, source: Division of Facilities Construction and Management) and is one of few states to have implemented a statutory requirement to fund capital improvements (defined as including alterations, replacements, repairs, and improvements to HVAC systems, electrical systems, roofing, parking lots, utilities, and other deferred maintenance uses).

Review of the LAD and LFD reports may provide perspective into the on-going discussions of the care needed for State-Owned facilities.

As these reports indicate, because of the daily usage demands supporting the State's business, obsolescence and deterioration of buildings is unavoidable even under the best of care. Therefore, it is recommended industry-wide that prioritizing strategies be developed and implemented to plan for capital improvements, replacements, and repairs.

In order to provide accurate and timely information for a prioritization of care and addressing the deferred maintenance backlog, the A&E Division recommends to OBPP and LFC the better route is to select the Long-Term Action Plan matrix option that provides the initial, baseline FCA deficiency and statewide deferred maintenance backlog cost in the shortest amount of time. This recommendation aligns with LFD's June 2016 report Process Improvement's 1) Statewide Facility Condition Assessment, 2) Enhanced Building Inventory; and 3) Measure of the Deferred Maintenance Backlog. Concurrent with such an effort, it is recommended consideration be given to Process Improvement 5) Comprehensive Facility Maintenance Program/Application for determination of essential funding levels for a) routine, day-to-day maintenance at 0.5 to 1.5% CRV, and, b) deferred maintenance and capital renewal funding into the LRBP at 1.5 to 2.5% CRV, plus periodic amounts to reduce the existing deferred maintenance backlog.

References

- RMTD Commercial Property Schedule
- ASTM E1557-09 Uniformat II
- Legislative Audit Division:
 - University Facilities Management Limited Scope Audit, November 2000
 - Facility Management of State-Owned Buildings, November 2000
- Legislative Fiscal Division:
 - Background on State Building Construction and Maintenance, December 2015
 - State Infrastructure Budgeting & Funds, June 2016
- APPA-published Facility Condition Assessments, by Harvey Kaiser

Appendices

- Appendix A: Agency Assessment Summary Information (additional detail data available)
 - o Department of Administration, General Services Division
 - Montana University System
 - University of Montana
 - Montana State University
 - Department of Military Affairs
- Appendix B: §17-7-201 and §17-7-202
- Appendix C: Property Summary Inventory from RMTD (totals will differ from the data referenced above in the report as the RMTD summary information also includes insured properties in addition to buildings; e.g. insured properties may include towers, irrigation systems, etc.)
- Appendix D: Prospective FCA UNIFORMAT II
- Appendix E: Explanation of CRV vs Project Cost CRV from RMTD

Appendix A – Agency FCA Summaries

(additional detailed data is available)



smart stewardship









FACILITIES CONDITION ASSESSMENT SUMMARY REPORT

DEFICIENCY RATIOS & BUILDING CONDITION AS OF AUGUST, 2018



GENERAL BACKGROUND

The General Services Division team has conducted 55 Facilities Condition Assessment (FCA) audits since 2014. Each building on our campus is assessed every three to five years. GSD Manages six percent of the State's building portfolio.

GSD's FCA program is modeled after the Facility Condition Inventory application and process built by Montana State University.

GSD conducts FCA's to establish spending priorities and to track the deferred maintenance backlog for our building portfolio. This tracking effort allows us to identify where deficiencies are, report on them, target the most prudent repairs, and take care of safety issues. The FCA allows General Services to understand the physical condition that our facilities and assets are in. Condition comparisons are made by using deficiency ratios.

DEFICIENCY RATIO

Each deficiency recorded on our audits has an associated remediation or repair cost. A deficiency ratio is found by taking the estimated cost of repair work and dividing it by the estimated cost to replace the entire building. These values are automatically calculated using MSU's FCI application.

DEFICIENCY BACKLOG

The total dollar value of maintenance projects and repairs that are postponed due to budget constraints.

ABOUT THIS REPORT

The following table, chart, and graphs show key building condition data collected by General Services. The team is currently in its second audit cycle.

	CYCLE ONE		
	2014-2015		
BUILDING	DEFICIENCY RATIO/PERCENTAGE: CYCLE ONE	SQUARE FOOTAGE ASSESSED	RATING
Montana Wild Discovery Center	0.2	8,940	Good
DPHHS Commodities Warehouse	0.3	38,000	Good
State of Montana Data Center	0.6	15,024	Good
Original Governor's Mansion Carriage House	0.8	2,764	Good
Montana Wild Rehabilitation Center	2.2	500	Good
Teachers' Retirement	3.9	6,431	Good
Capitol Building	4	179,672	Good
DNRC Water Resources Division	4	27,865	Good
Boiler Plant	4.2	7,946	Good
Old Livestock Building	4.3	7,936	Good
1209 8th	5.8	2,302	Fair
GSD Landscaping Shop	6.6	4,444	Fair
Diane Building	7.5	5,769	Fair
Scott Hart	7.7	81,383	Fair
FWP Headquarters	8.1	22,966	Fair
5 South Last Chance	9	53,132	Fair
Original Governor's Mansion	9.2	12,825	Fair
Records Management	10	22,800	Fair
Lee Metcalf Building	10.5	92,080	Fair
Joseph P. Mazurek Building	11.1	103,864	Poor
Walt Sullivan	11.6	51,235	Poor
1410 8th	12	3,385	Poor
OPI 1227	14.8	16,064	Poor
Capitol Annex	15	1,460	Poor
326 Washington Drive	15.6	1,725	Poor
DNRC Aviation Support Facility	16.6	42,541	Poor
Mitchell Building	16.6	130,320	Poor
Cogswell	17.1	108,868	Poor
1205 8th	17.5	2,004	Poor
DPHHS 111 Sanders	17.8	48,682	Poor
Montana Historical Society	18.2	93,653	Poor
1219 9th	19.6	1,221	Poor
1400 8th	22.1	2,004	Poor
1404 8th	23.9	2,114	Poor
1225 8th	25.5	1,707	Poor
OPI 1300	25.9	20,125	Poor
Secretary of State Annex	26.6	3,156	Poor
Old Board of Health	28	8,265	Poor
TOTAL BUILDINGS ASSESSED		TOTAL SQ FT. ASSESSED:	
38		1,235,172	

FCA PROGRAM CYCLE ONE SUMMARY DATA 4/2014-10/2016

BUILDING CONDITION RANKING INDEX



GOOD

0-5% DEFICIENCY RATIO



FAIR

5-10% DEFICIENCY RATIO

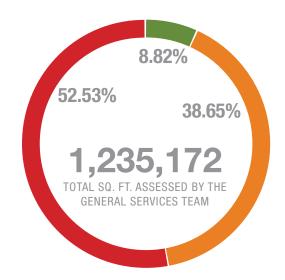


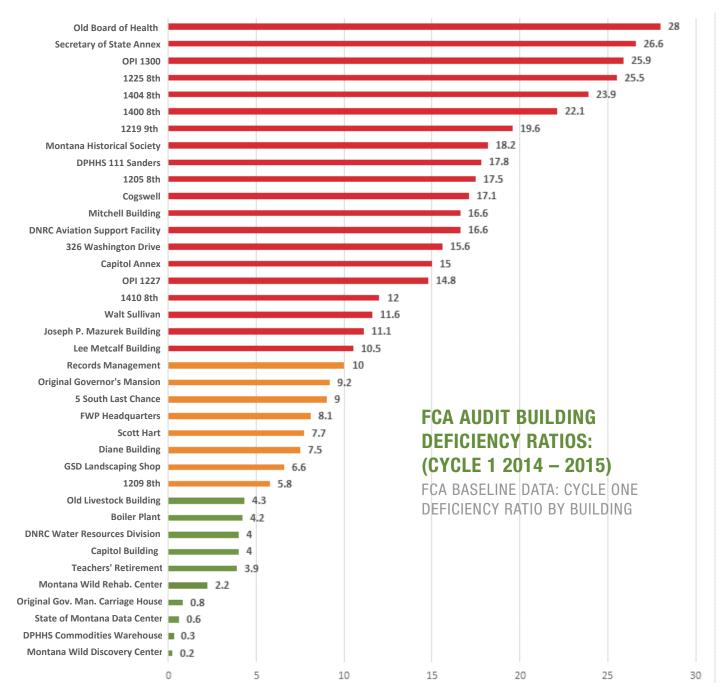
ABOVE 10% DEFICIENCY RATIO

CURRENT CONDITION PER THE FCA PROCESS

SQUARE FOOTAGE CONDITION BREAKDOWN

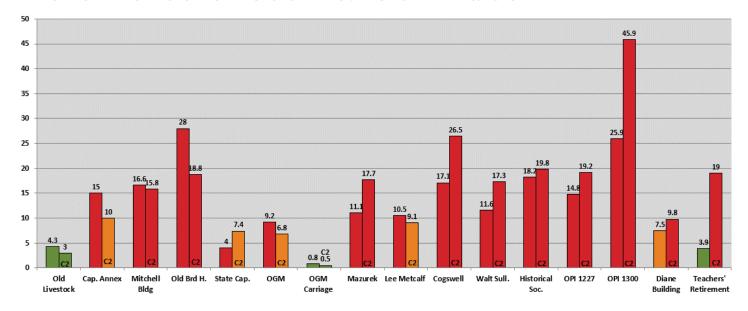
SQUARE FOOTAGE RATED AS POOR	PERCENT OF TOTAL
648,824	52.53%
SQUARE FOOTAGE RATED AS FAIR	PERCENT OF TOTAL
477,373	38.65%
SQUARE FOOTAGE RATED AS GOOD	PERCENT OF TOTAL
108,975	8.82%

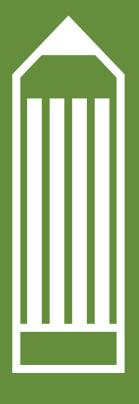




CYCLE TWO VS. BASELINE DATA (CYCLE TWO 2016 - PRESENT)

DEFICIENCY RATIO IN CYCLE ONE VS. CYCLE TWO / LAST UPDATED: 8/2018





KEY TAKEAWAYS

TOTAL DEFERRED MAINTENANCE BACKLOG

AS OF AUGUST 2018

The deferred maintenance backlog for the Montana Capitol Complex is approximately 60 million dollars, based on data from the Facility Condition Assessment (FCA) cycle one process. Cycle two is currently underway but not yet completed. The deferred maintenance consists of many life safety and critical infrastructure issues. Exterior envelope components such as roofs, skylights, windows, doors and exterior finishes have deteriorated over time due to age and are in need of replacement. Interior systems and finishes, such as Heating, Ventilation, Air Conditioning (HVAC), flooring, fire protection, central alarming, building controls and wall finishes have deteriorated to a level requiring replacement. Exterior site improvements have also been deferred for a period of time which has had catastrophic results on parking lots, drainage, and campus accessibility.

Def. Categories	Def. Ratio
	Renewal Cost
ition Inventory	Replacement Cost
ntana - Facilities Cond Building Summary cost includes buildings without def	Cost/SF
sity of Mo (Replacement	Gross Area (bldgs w/deficiencies)
Univer. lacement Cost \$571,094,958 Renewal Cost \$92,460,747 ficiency Ratio 16.2%	
Replacement Cost Renewal Cost Deficiency Ratio	Building Name
Funding Sources ☐ Auxiliary (A) ☐ Federal (F) ☐ Non-State (N) ☐ Private (P) ☑ State (S)	Bldg #

Site: UM Missoula Main Campus

	Replacement	t Total	\$571,094,958	3 (In	cludes builc	lings with	Replacement Total \$571,094,958 (Includes buildings without deficiencies)	Total	\$92,460,747	16.2%
Funding Source: State		Total	1,617,034	Avg	\$353.17	Total	\$571,094,958	Total	\$92,460,747	16.2%
85	1000 East Beckwith		2,016		\$324.94		\$655,079		\$166,532	25.4%
26	Art Annex/Grizzly Pool		40,293		\$251.64		\$10,139,733		\$2,364,777	23.3%
100	Brantly Hall		38,935		\$261.32		\$10,174,494		\$3,883,770	38.2%
36	Center for the Rocky Mountain		3,149		\$368.38		\$1,160,060		\$138,129	11.9%
98	Chemistry Stores Building		4,055		\$427.98		\$1,735,499		\$111,214	6.4%
41	Chemistry/Pharmacy		47,833		\$282.29		\$13,502,778		\$1,732,422	12.8%
702	Clarence R. Prescott House		3,180		\$313.06		\$995,563		\$101,081	10.2%
92	Clinical Psychology		5,280		\$427.98		\$2,259,787		\$347,946	15.4%
102	Corbin Hall		23,190		\$280.67		\$6,508,969		\$1,992,019	30.6%
88	Davidson Honors College		21,674		\$301.17		\$6,527,775		\$229,549	3.5%
16	Education Building		28,963		\$296.75		\$8,595,060		\$1,751,290	20.4%
11	Fine Arts		63,375		\$237.12		\$15,028,114		\$4,743,652	31.6%
7	Forestry		23,310		\$314.86		\$7,339,620		\$2,057,048	28.0%
17	Forestry Greenhouse		2,750		\$390.86		\$1,074,892		\$290,451	27.0%
27	Health Sciences		62,964		\$289.35		\$18,219,263		\$5,301,566	29.1%
6	Heating Plant		10,160		\$171.31		\$1,740,611		\$464,980	26.7%
13	International Programs		6,853		\$348.42		\$2,387,791		\$432,508	18.1%
4	Jeanette Rankin Hall		16,532		\$292.77		\$4,840,239		\$2,231,215	46.1%
28	Law		111,163		\$240.47		\$26,732,478		\$2,158,474	8.1%
20	Liberal Arts		100,713		\$227.44		\$22,907,172		\$5,167,733	22.6%
92	Mansfield Library		220,075		\$237.91		\$52,360,244		\$5,568,449	10.6%
ო	Mathematics		21,668		\$280.67		\$6,081,774		\$1,929,968	31.7%

Building Summary

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Building Name	Gross Area (bldgs w/deficiencies)	Cost/SF	Replacement Cost	Renewal Cost	Def. Ratio
McGill Hall	62,079	\$289.35	\$19,409,979	\$5,117,185	26.4%
Music	37,180	\$261.32	\$9,715,878	\$3,063,781	31.5%
Natural Sciences	23,100	\$314.86	\$7,273,497	\$2,614,944	36.0%
Natural Sciences Annex	4,890	\$390.86	\$1,911,354	\$453,744	23.7%
North Corbin Hall	14,858	\$292.77	\$4,350,125	\$1,289,116	29.6%
Performing Arts/Radio-T.V.	71,125	\$254.44	\$18,097,045	\$4,463,334	24.7%
Physical Plant	51,300	\$250.70	\$12,861,423	\$2,550,908	19.8%
Schreiber Gymnasium	43,085	\$251.64	\$10,842,340	\$3,451,519	31.8%
Science Complex (Clapp Bldg)	99,726	\$283.45	\$28,267,335	\$8,699,367	30.8%
Skaggs Building	179,775	\$274.59	\$49,366,215	\$7,039,917	14.3%
Social Science	95,246	\$232.28	\$22,124,693	\$5,519,268	24.9%
Stone Hall (Old Jounalism)	28,916	\$280.67	\$8,116,143	\$2,087,043	25.7%
University (Main) Hall	32,843	\$261.32	\$8,582,533	\$2,823,319	32.9%
Urey Lecture Hall	08,780	\$373.87	\$3,656,546	\$122,529	3.4%

Bldg #

Building Summary

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Funding Sources Auxiliary (A) Federal (F)	Monta	na State	University Buildir	- Fac	iversity - Facilities C Building Summary	nditior	Montana State University - Facilities Condition Inventory Building Summary			Def. Categories \sumset I
✓ Non-State (N) ☐ Private (P) ✓ State (S)	Replacement Cost \$542,650,893 Renewal Cost \$52,296,485 Deficiency Ratio 9.6%	~	(Replacement cost includes buildings without deficiencies)	s buildin	gs without a	eficiencies				
Bldg #	Building Name	Gross Area (bldgs w/deficiencies)	ı (bldgs ncies)	C_{0}	Cost/SF	R	Replacement Cost	Ren C	Renewal Cost	Def. Ratio
Site: MSU-Boze	Site: MSU-Bozeman Main Campus Replace	ement Tot	Replacement Total \$542,650,893		cludes buila	ings witho	(Includes buildings without deficiencies)	Total	\$52,296,485	%9:6
Funding Sou	Funding Source: Non-State	Total	90,368	Avg	\$285.33	Total	\$25,784,701	Total	\$133,519	0.5%
144	Chemistry and Biochem Building		90,368)	\$285.32		\$25,784,701		\$133,519	0.5%
Funding Source: State	ırce: State	Total	1,963,458	Avg	\$263.24	Total	\$516,866,192	Total	\$52,162,966	10.1%
527	1106 So. 6th		1,853		\$157.06		\$291,051		\$48,107	16.5%
113	AJM Johnson Hall		41,621		\$266.05		\$11,073,683		\$2,422,601	21.9%
147	Animal Bioscience Building		40,633		\$309.10		\$12,559,660		\$42,989	0.3%
146	Black Box Theater		14,300		\$314.15		\$4,492,488		\$247,892	2.5%
127	Cheever Hall		60,115		\$250.70		\$15,071,432		\$1,718,659	11.4%
119	Cobleigh Hall		94,262		\$283.45		\$26,718,564		\$3,298,689	12.3%
118	Cooley Lab		38,499		\$320.99		\$12,357,794		\$9,610	0.1%
136	Culbertson Hall		48,638		\$266.05		\$12,940,626		\$1,536,331	11.9%
139	Engineering Physical Sciences		151,388		\$276.41		\$41,845,157		\$2,308,123	2.5%
117	Gaines Hall		103,337		\$279.38		\$28,870,291		\$162,157	%9:0
301	Hamilton Hall		28,013		\$280.67		\$7,862,689		\$1,352,865	17.2%
128	Haynes Hall		44,600		\$266.05		\$11,866,276		\$1,046,775	8.8%
303	Heating Plant		11,113		\$171.31		\$1,903,879		\$23,543	1.2%
109	Herrick Hall		41,285		\$251.64		\$10,389,370		\$1,839,187	17.7%
126	Howard Hall		31,215		\$276.29		\$8,624,704		\$220,203	2.6%
441	Huffman Building		8,905		\$368.38		\$3,280,513		\$197,508	%0.9
178	Jabs Hall		52,875		\$254.44		\$13,453,515		\$381	%0:0
089	Kellogg Center		4,206		\$313.06		\$1,316,772		\$297,272	22.6%
120	Leon Johnson Hall		117,521		\$277.54		\$32,617,954		\$1,371,409	4.2%
103	Lewis Hall		44,420		\$251.64		\$11,178,293		\$1,675,053	15.0%
			Ruilding Summary	Building Summary	narv					FCI Vorsion: 110
270000			Funding	Funding Sources: N and S	V and S					Dang 1 of 3
3/2/2017			Deficien	Deficiency Categories 1-6	ries 1-6					rage 1 of 2

Bldg #	Building Name	Gross Area (bldgs w/deficiencies)	Cost/SF	Replacement Cost	Renewal Cost	Def. Ratio
104	Linfield Hall	72,154	\$237.12	\$17,109,878	\$1,844,227	10.8%
116	Marsh Laboratory	31,018	\$318.88	\$9,891,330	\$3,591,906	36.3%
112	McCall Hall	10,528	\$357.26	\$3,761,339	\$582,865	15.5%
101	Montana Hall	39,594	\$261.32	\$10,346,704	\$1,834,955	17.7%
121	Museum of the Rockies	101,619	\$244.05	\$24,801,133	\$2,064,860	8.3%
400	Plant BioScience Building	54,948	\$291.27	\$16,004,704	\$209,703	1.3%
401	Plant Growth Center	67,533	\$291.27	\$19,670,337	\$2,055,750	10.5%
316	Plew Building	18,086	\$309.54	\$5,598,521	\$301,205	5.4%
115	Reid Hall	93,262	\$245.59	\$22,905,147	\$4,878,360	21.3%
111	Renne Library	158,895	\$193.51	\$30,747,771	\$1,977,145	6.4%
107	Roberts Hall	62,508	\$237.12	\$14,822,522	\$1,901,080	12.8%
105	Romney Hall	54,904	\$244.73	\$13,436,656	\$2,448,743	18.2%
122	Sherrick Hall	18,376	\$309.54	\$5,688,291	\$388,081	%8.9
108	Taylor Hall	9:636	\$348.42	\$3,462,000	\$943,922	27.3%
133	Tietz Hall	20,471	\$344.76	\$7,057,787	\$1,166,735	16.5%
102	Traphagen Hall	37,538	\$261.32	\$9,809,430	\$2,118,502	21.6%
132	Visual Communications Building	41,132	\$270.02	\$11,106,463	\$1,311,440	11.8%
129	Wilson Hall	84,708	\$245.59	\$20,804,285	\$2,468,535	11.9%
405	Wool Lab	7,449	\$151.32	\$1,127,183	\$255,598	22.7%

Building Summary Funding Sources: N and S Deficiency Categories 1-6

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1	Va
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Installation Code	Installation Name	Special Area	RPUID	Bldg Num	Bldg Name	Category Code [English UoM / Metric UoM]	Area	Floors	Const Year	BC/	System	System Cl	System CRV
30A75	Helena - Womack Rc	Unassigned	330952	10000	READINESS CENTER (WOMACK)	17180 - ARNG ARMORY - [SF / SM]	20,743	-	1971	85	A10 FOUNDATIONS	88	\$426,000
30A75	Helena - Womack Rc	Unassigned	330952	10000	READINESS CENTER (WOMACK)	17180 - ARNG ARMORY - [SF / SM]	20,743	-	1971	85 ₽	A20 BASEMENT CONSTRUCTION		
30A75	Helena - Womack Rc	Unassigned	330952	10000	READINESS CENTER (WOMACK)	17180 - ARNG ARMORY - [SF / SM]	20,743	-	1971	85 E	B10 SUPERSTRUCTURE	88	\$1,184,500
30A75	Helena - Womack Rc	Unassigned	330952	10000	READINESS CENTER (WOMACK)	17180 - ARNG ARMORY - [SF / SM]	20,743	-	1971	85 E	B20 EXTERIOR ENCLOSURE	94	\$487,800
30A75	Helena - Womack Rc	Unassigned	330952	10000	READINESS CENTER (WOMACK)	17180 - ARNG ARMORY - [SF / SM]	20,743	-	1971	85 E	B30 ROOFING	88	\$191,000
30A75	Helena - Womack Rc	Unassigned	330952	10000	READINESS CENTER (WOMACK)	17180 - ARNG ARMORY - [SF / SM]	20,743	-	1971	85	C10 INTERIOR CONSTRUCTION	91	\$663,450
30A75	Helena - Womack Rc	Unassigned	330952	10000	READINESS CENTER (WOMACK)	17180 - ARNG ARMORY - [SF / SM]	20,743	-	1971	85	C20 STAIRS	92	\$40,000
30A75	Helena - Womack Rc	Unassigned	330952	10000	READINESS CENTER (WOMACK)	17180 - ARNG ARMORY - [SF / SM]	20,743	-	1971	85	C30 INTERIOR FINISHES	93	\$273,300
30A75	Helena - Womack Rc	Unassigned	330952	10000	READINESS CENTER (WOMACK)	17180 - ARNG ARMORY - [SF / SM]	20,743	-	1971	85	D10 CONVEYING		
30A75	Helena - Womack Rc	Unassigned	330952	10000	READINESS CENTER (WOMACK)	17180 - ARNG ARMORY - [SF / SM]	20,743	-	1971	38	D20 PLUMBING	89	\$636,850
30A75	Helena - Womack Rc	Unassigned	330952	10000	READINESS CENTER (WOMACK)	17180 - ARNG ARMORY - [SF / SM]	20,743	-	1971	385	D30 HVAC	85	\$191,790
30A75	Helena - Womack Rc	Unassigned	330952	10000	READINESS CENTER (WOMACK)	17180 - ARNG ARMORY - [SF / SM]	20,743	-	1971	85	D40 FIRE PROTECTION		
30A75	Helena - Womack Rc	Unassigned	330952	10000	READINESS CENTER (WOMACK)	17180 - ARNG ARMORY - [SF / SM]	20,743	-	1971	38	D50 ELECTRICAL	69	\$467,615
30A75	Helena - Womack Rc	Unassigned	330952	10000	READINESS CENTER (WOMACK)	17180 - ARNG ARMORY - [SF / SM]	20,743	-	1971	85 E	E10 EQUIPMENT		

)	Annual Control			Dieta Minn	,	The state of the s	Area	Floors C	Const Year	BCI	System	System CI	System CR1
Installation Code	Installation Name	Special Area	RPUID	Bidg Num		Caregory Code English Dow / Metric Dow							
30A90	Helena Fms 03	Unassigned	319796	000M1		44224 - ORG STR BLDG - [SF / SM]	3,687	2	1957	76	A10 FOUNDATIONS	84	\$97,000
30490	Helena Fms 03	Unassigned	319796	DOOM	ORGANIZATIONAL STORAGE 44	44224 - ORG STR BLDG - [SF / SM]	3,687	7 6	1957	8 R	AZO BASEMENI CONSTRUCTION R40 SUPERSTRUCTURE	RE	890 500
30A90	Helena Fms 03	Unassigned	319796	000M1		44224 - ORG STR BLDG - [SF / SM]	3,687	2 2	1957	9/	B20 EXTERIOR ENCLOSURE	82	\$172,650
30490	Helena Fms 03	Unassigned	319796	1W000		44224 - ORG STR BLDG - [SF / SM]	3,687	2 2	1957		B30 ROOFING	25	\$44,000
30A90	Helena Fms 03	Unassigned	319796	1M000	ORGANIZATIONAL STORAGE 44	44224 - ORG STR BLDG - [SF / SM]	3,687	2	1957		C10 INTERIOR CONSTRUCTION	72	\$48,000
30A90	Helena Fms 03	Unassigned	319796	1M000		44224 - ORG STR BLDG - [SF / SM]	3,687	2	1957	76	C20 STAIRS	88	\$21,000
30A90	Helena Fms 03	Unassigned	319796	1M000		44224 - ORG STR BLDG - [SF / SM]	3,687	2	1957		C30 INTERIOR FINISHES	84	\$23,100
30A90	Helena Fms 03	Unassigned	319796	000M1	ORGANIZATIONAL STORAGE 444	44224 - ORG STR BLDG - [SF / SM]	3,687	2 0	1957		D10 CONVEYING	7.6	OOL FOR
30A90	Helena Firms 0.3	Unassigned	319790	DOOM!		44224 - ORG STR BLDG - [SF / SM]	2,007	7 0	1067		DZO PLUMBING	74	\$61,700
30490	Helena Fms 03	Unassigned	319796	000M1		44224 - ORG STR BLDG - [SF / SM]	3,687	2 2	1957		D40 FIRE PROTECTION	3	915,00
30A90	Helena Fms 03	Unassigned	319796	000M1		44224 - ORG STR BLDG - [SF / SM]	3,687	2	1957		D50 ELECTRICAL	75	\$86,040
30A90	Helena Fms 03	Unassigned	319796	000M1		44224 - ORG STR BLDG - [SF / SM]	3.687	2	1957		E10 EQUIPMENT		
30A90	Helena Fms 03	Unassigned	319798	000M2		44220 - STORAGE GP INST - [SF / SM]	410	-	1957		A10 FOUNDATIONS	81	\$18,700
30A90	Helena Fms 03	Unassigned	319798	000M2		44220 - STORAGE GP INST - [SF / SM]	410	-	1957		A20 BASEMENT CONSTRUCTION		
30A90	Helena Fms 03	Unassigned	319798	000M2		44220 - STORAGE GP INST - [SF / SM]	410	-	1957		B10 SUPERSTRUCTURE	78	\$24,700
30490	Helena Fms 03	Unassigned	319798	000M2		44220 - STORAGE GP INST - [SF / SM]	410	-	1957		B20 EXTERIOR ENCLOSURE	55	\$29,755
30A90	Helena Fms 03	Unassigned	319798	000M2		44220 - STORAGE GP INST - [SF / SM]	410	-	1957		B30 ROOFING	88	83,000
30490	Helena Fms 03	Unassigned	319798	000M2		44220 - STORAGE GP INST - [SF / SM]	410	-	1957		C10 INTERIOR CONSTRUCTION		
30490	Helena Fms 03	Unassigned	319798	000M2	STORAGE GEN PURPOSE	44220 - STORAGE GP INST - [SF / SM]	410	-	1957	02	C20 STAIRS		
30490	Helena Fms 03	Unassigned	319798	000M2	STORAGE GEN PURPOSE 44	44220 - STORAGE GP INST - [SF / SM]	410	-	1957		C30 INTERIOR FINISHES		
30A90	Helena Fms 03	Unassigned	319798	000M2		44220 - STORAGE GP INST - [SF / SM]	410	-	1957		D10 CONVEYING		
30A90	Helena Fms 03	Unassigned	319798	000M2		44220 - STORAGE GP INST - [SF / SM]	410	-	1957		D20 PLUMBING		
30A90	Helena Fms 03	Unassigned	319798	000M2		44220 - STORAGE GP INST - [SF / SM]	410	-	1957		D30 HVAC		
30A90	Helena Fms 03	Unassigned	319798	000M2		44220 - STORAGE GP INST - [SF / SM]	410	-	1957		D40 FIRE PROTECTION		
30A90	Helena Fms 03	Unassigned	319798	000M2		44220 - STORAGE GP INST - [SF / SM]	410	-	1957		D50 ELECTRICAL		
30A90	Helena Fms 03	Unassigned	319798	000M2		44220 - STORAGE GP INST - [SF / SM]	410	-	1957		E10 EQUIPMENT		
30A90	Helena Fms 03	Unassigned	319799	000M3		21407 - ARNG VEH MAINT - [SF / SM]	19,642	2	1958	92	A10 FOUNDATIONS	6/	\$543,000
30A90	Helena Fms 03	Unassigned	319799	OCONES	VECHICLE MAIN SHOP #3	Z1407 - ARNG VEH MAIN - [SF7 SM]	19,042	7 0	1938		AZU BASEMENI CONSTRUCTION	8	2024 5024
30490	Helena Fine 03	Unassigned	319799	OUOMAS		21407 - ARNG VEH MAINT - [SF / SM]	19,042	2 6	1930		BIO SOPERS INCCIONE	000	\$371,300
30A90	Helena Fms 03	Unasslaned	319799	000M3		21407 - ARNG VEH MAINT - [SF / SM]	19.642	2	1958		B30 ROOFING	2. 2.	\$242.300
30A90	Helena Fms 03	Unassigned	319799	000M3		21407 - ARNG VEH MAINT - [SF / SM]	19,642	2	1958		C10 INTERIOR CONSTRUCTION	81	\$366,800
30490	Helena Fms 03	Unassigned	319799	000M3		21407 - ARNG VEH MAINT - [SF / SM]	19,642	2	1958		C20 STAIRS	80	\$12,000
30A90	Helena Fms 03	Unassigned	319799	000M3	VECHICLE MAINT SHOP #3 21	21407 - ARNG VEH MAINT - [SF / SM]	19,642	2	1958		C30 INTERIOR FINISHES	- 67	\$129,485
30A90	Helena Fms 03	Unassigned	319799	000M3		21407 - ARNG VEH MAINT - [SF / SM]	19,642	2	1958		D10 CONVEYING	30	\$122,000
30A90	Helena Fms 03	Unassigned	319799	000M3		21407 - ARNG VEH MAINT - [SF / SM]	19,642	2	1958		D20 PLUMBING	81	\$333,750
30A90	Helena Fms 03	Unassigned	319799	000M3		21407 - ARNG VEH MAINT - [SF / SM]	19,642	2	1958		D30 HVAC	79	\$537,200
30A90	Helena Fms 03	Unassigned	319799	000M3		21407 - ARNG VEH MAINT - [SF / SM]	19,642	2	1958		D40 FIRE PROTECTION		
30A90	Helena Fms 03	Unassigned	319799	000003	VECHICLE MAINT SHOP #3	21407 - ARNG VEH MAINT - [SF / SM]	19,642	2 0	1958	9 8	DS0 ELECTRICAL	83	\$399,450
30490	Helena Fms 03	Unassigned	319791	OUOMA		21407 - ARNG VEH IMMINI - [SF / SM] 44228 - HAZ MAT STR INS - [SF / SM]	300	7	1994		A10 FOLINDATIONS	- 8	007'08
30A90	Helena Fms 03	Unassigned	319791	000M4		44228 - HAZ MAT STR INS - [SF / SM]	300	-	1994	. L	A20 BASEMENT CONSTRUCTION	3	i
30A90	Helena Fms 03	Unassigned	319791	000M4		44228 - HAZ MAT STR INS - [SF / SM]	300	-	1994	77 E	B10 SUPERSTRUCTURE	86	\$11,500
30490	Helena Fms 03	Unassigned	319791	000M4		44228 - HAZ MAT STR INS - [SF / SM]	300	-	1994	77 E	B20 EXTERIOR ENCLOSURE	72	\$41,990
30490	Helena Fms 03	Unassigned	319791	000M4	HAZ MAT STORAGE	44228 - HAZ MAT STR INS - [SF / SM]	300	-	1994	77 E	B30 ROOFING	21	\$3,500
30490	Helena Fms 03	Unassigned	319791	000M4	HAZ MAT STORAGE	44228 - HAZ MAT STR INS - [SF / SM]	300	-	1994	2 4	C10 INTERIOR CONSTRUCTION		
30A90	Helena Fms 03	Unassigned	319791	000M4	HAZ MAT STORAGE 44	44228 - HAZ MAT STR INS - [SF / SM]	300	-	1994		C20 STAIRS	88	\$17,500
30490	Helena Fms 03	Unassigned	319791	000M4		44228 - HAZ MAT STR INS - [SF / SM]	300	-	1994		C30 INTERIOR FINISHES	88	\$2,850
30A90	Helena Fms 03	Unassigned	319791	000M4		44228 - HAZ MAT STR INS - [SF / SM]	300	-	1994		D10 CONVEYING		
30A90	Helena Fms 03	Unassigned	319791	000M4		44228 - HAZ MAT STR INS - [SF / SM]	300	-	1994		D20 PLUMBING		
30A90	Helena Fms 03	Unassigned	319791	000M4		44228 - HAZ MAT STR INS - [SF / SM]	300	-	1994	<i>1</i>	D30 HVAC	88	\$1,200
30A90	Helena Fms 03	Unassigned	319791	DOOM	HAZ MATI STORAGE	44228 - HAZ MAT SIK INS - [SF / SM]	300		1994		D40 FIRE PROJECTION	60	944 700
30A90	Helena Fms 03	Unassigned	319791	000044		44228 - HAZ MAT STR INS - [SF / SM]	300	-	1994	<u> </u>	DS0 ELECTRICAL	7.9	N'LLS
30490	Helena Fms 03	Unassigned	1037873	CANOP		14220 - FRZ MAI SIK INS - [SF / SM]	200		1957		A10 FOLINDATIONS		
30A90	Helena Fms 03	Unassigned	1037873	CANOP		14179 - OVERHEAD PROTEC - [SF / SM]	209	-	1957	. 4	A20 BASEMENT CONSTRUCTION		
30A90	Helena Fms 03	Unassigned	1037873	CANOP		14179 - OVERHEAD PROTEC - [SF / SM]	409	-	1957	8	B10 SUPERSTRUCTURE		
30490	Helena Fms 03	Unassigned	1037873	CANOP		14179 - OVERHEAD PROTEC - [SF / SM]	607	-	1957	E L	B20 EXTERIOR ENCLOSURE		
30A90	Helena Fms 03	Unassigned	1037873	CANOP		14179 - OVERHEAD PROTEC - [SF / SM]	607	-	1957		B30 ROOFING		
30A90	Helena Fms 03	Unassigned	1037873	CANOP		14179 - OVERHEAD PROTEC - [SF / SM]	209	-	1957		C10 INTERIOR CONSTRUCTION		
30490	Helena Fms 03	Unassigned	1037873	CANOP		14179 - OVERHEAD PROTEC - [SF / SM]	209	-	1957		C20 STAIRS		
30A90	Helena Fine 03	Unassigned	1037873	CANOP	Overhead Protection 14	14179 - OVERHEAD PROTECT SEVEM]	/00	- -	1957		C30 INTERIOR FINISHES		
30490	Helena Fms 03	Unassigned	1037873	CANOP		14779 - OVERHEAD PROTEC - [SF / SM]	607		1957		D20 PIUMBING		
30490	Helena Fms 03	Unassigned	1037873	CANOP		14179 - OVERHEAD PROTEC - [SF / SM]	607	- -	1957		D30 HVAC		
30A90	Helena Fms 03	Unassigned	1037873	CANOP		14179 - OVERHEAD PROTEC - [SF / SM]	209	-	1957	ĺ	DAN FIRE PROTECTION		
00000	L	- Incompany									240 FINE 1 2010 C 1 C 1		



Appendix B – §17-7-201 §17-7-202

Montana Code Annotated 2017

TITLE 17. STATE FINANCE
CHAPTER 7. BUDGETING AND APPROPRIATIONS
Part 2. Long-Range Building Program and Budget

Definitions

17-7-201. Definitions. In this part, the following definitions apply:

- (1) (a) "Building" includes a:
- (i) building, facility, or structure constructed or purchased wholly or in part with state money;
- (ii) building, facility, or structure at a state institution;
- (iii) building, facility, or structure owned or to be owned by a state agency, including the department of transportation.
- (b) The term does not include a:
- (i) building, facility, or structure owned or to be owned by a county, city, town, school district, or special improvement district;
- (ii) facility or structure used as a component part of a highway or water conservation project.
- (2) "Construction" includes construction, repair, alteration, and equipping and furnishing during construction, repair, or alteration.
- (3) "High-performance building" means a building that integrates and optimizes all major high-performance building attributes, including but not limited to:
 - (a) energy efficiency;
 - (b) durability;
 - (c) life-cycle performance; and
 - (d) occupant productivity.
 - (4) (a) "Long-range building program-eligible building" means a building, facility, or structure:
 - (i) owned by a state agency and for which the operation and maintenance are funded with state general fund money; or
- (ii) that supports academic missions of the university system and for which the operation and maintenance are funded with current unrestricted university funds.
 - (b) The term does not include a building, facility, or structure:
- (i) owned by a state agency and for which the operation and maintenance are entirely funded with state special revenue, federal special revenue, or proprietary funds; or
- (ii) that supports nonacademic functions of the university system and for which the operation and maintenance are funded from nonstate and nontuition sources.

History: En. Sec. 14, Ch. 271, L. 1963; amd Sec. 1, Ch. 24, L. 1973; amd. Sec. 81, Ch. 326, L. 1974; R.C.M. 1947, 82-3314; amd. Sec. 3, Ch. 512, L. 1991; amd. Sec. 2, Ch. 135, L. 2009; amd. Sec. 1, Ch. 281, L. 2017.

Montana Code Annotated 2017

TITLE 17. STATE FINANCE
CHAPTER 7. BUDGETING AND APPROPRIATIONS
Part 2. Long-Range Building Program and Budget

Preparation Of Building Programs And Submission To Department Of Administration -- Statewide Facility Inventory And Condition Assessment

17-7-202. Preparation of building programs and submission to department of administration -- statewide facility inventory and condition assessment. (1) Before July 1 of each even-numbered year, each state agency and institution shall submit to the department of administration, on forms furnished by the department, a proposed long-range building program, if any, for the agency or institution. Each agency and institution shall furnish any additional information requested by the department relating to the utilization of or need for buildings.

- (2) (a) Except as provided in subsection (3), the department shall compile and maintain a statewide facility inventory and condition assessment that:
 - (i) for each state-owned building:
 - (A) identifies its location and total square footage;
 - (B) identifies the agency or agencies using or occupying the building and how much square footage each agency uses or occupies;
 - (C) lists the current replacement value of the building in its entirety and each agency's portion of the building;
 - (D) identifies whether the building is a long-range building program-eligible building;
 - (ii) for each long-range building program-eligible building:
 - (A) includes a facility condition assessment of the building and an itemized list of the building's deficiencies; and
 - (B) compares the building's current building deficiency ratio to its deficiency ratio in the previous biennium.
- (b) The department may contract with a private vendor to collect, analyze, and compile the building information required in this subsection (2).
 - (c) The facility inventory and condition assessment must be updated as determined by the department.
- (d) The department may incorporate in the statewide facility inventory and condition assessment any facility condition assessment or similar document compiled by an agency.
- (e) The department shall provide the statewide facility inventory and condition assessment, including a calculation of the deferred maintenance backlog and overall building deficiency ratio of the long-range building program-eligible buildings, to the office of budget and program planning and the legislative finance committee by September 1 of each even-numbered year in an electronic format.
- (3) The department is not required to include a state-owned building that has a current replacement value of \$150,000 or less in the facility inventory and condition assessment.
- (4) The department shall examine the information furnished by each agency and institution and shall gather whatever additional information is necessary and conduct whatever surveys are necessary in order to provide a factual basis for determining the need for and the feasibility of the construction of buildings. The information compiled by the department shall be submitted to the governor before December 1 of each even-numbered year.

History: En. Sec. 15, Ch. 271, L. 1963; amd. Sec. 82, Ch. 326, L. 1974; R.C.M. 1947, 82-3315(1), (2); amd. Sec. 2, Ch. 281, L. 2017.

Appendix C – 2018 RMTD State-Owned Inventory Summary

			***************************************	Commercial Fig	commercial Property schedule				
				REPORT PA	REPORT PARAMETERS				
Reporting Year:	2018	Ownership:	ALL	Year Built Range:	ALL to ALL C	Occupancy Code:	ALL	Construction Class:	ALL
Appraisal Date Range:	ALL to ALL	Report By:	ALL	Value Range:	ALL to ALL R	Square Feet Range:	ALL to ALL		
Fiscal Year¹	Agency	-	Number of Properties	Total Square Feet	Total Building Structure Value		Total Building Content Value	Total Special Content Value	Total Value
2018	AUDITOR'S OFFICE		~	29,764	₩	0\$	\$657,693	\$266,048	\$923,741
2018	BOARD OF PUBLIC EDUCATION	JUBLIC	16	169,384	\$22,468,295		\$3,377,737	\$1,314,880	\$27,160,912
2018	DEPARTMENT OF ADMINISTRATION	NT OF ATION	85	1,516,833	\$354,683,277		\$50,717,468	\$95,062,311	\$500,463,057
2018	DEPARTMENT OF AGRICULTURE	NT OF RE	23	33,076	\$649,611		\$3,364,575	\$384,717	\$4,398,903
2018	DEPARTMENT OF COMMERCE	YT OF	260	402,183	\$62,919,234		\$3,140,701	\$1,426,000	\$67,485,935
2018	DEPARTMENT OF CORRECTIONS	NS OF	171	1,266,933	\$199,641,412		\$33,016,305	\$7,396,292	\$240,054,010
2018	DEPARTMENT OF ENVIRONMENTAL QUALITY	NT OF	42	411,049	\$3,561,335		\$2,849,555	\$5,276,237	\$11,687,128
2018	DEPARTMENT OF FISH, WILDLIFE & PARKS	VT OF IFE &	1,642	1,092,724	\$82,643,372		\$12,998,778	\$42,892,618	\$138,534,768

'Fiscal Year represents the year risk exposure data was submitted to the Risk Management & Tort Defense Division.

Commercial Property Schedule

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				REPORT PA	REPORT PARAMETERS				
Reporting Year:	2018	Ownership:	ALL	Year Built Range:	ALL to ALL C	Occupancy Code:	ALL	Construction Class:	ALL
Appraisal Date Range:	ALL to ALL	Report By:	ALL	Value Range:	ALL to ALL S	Square Feet Range:	ALL to ALL		
Fiscal Year¹	Agency		Number of Properties	Total Square Feet	Total Building Structure Value	:	Total Building Content Value	Total Special Content Value	Total Value
2018	DEPARTMENT OF JUSTICE	ENT OF	84	330,222	\$19,621,918		\$12,469,230	\$15,778,432	\$47,869,581
2018	DEPARTMENT OF LABOR & INDUSTRY	ENT OF	52	224,513	\$10,643,000		\$7,631,469	\$1,567,515	\$19,841,984
2018	DEPARTMENT OF LIVESTOCK	ENT OF	4	10,089	€	\$0 \$	\$528,569	\$262,233	\$790,802
2018	DEPARTMENT OF MILITARY AFFAIRS	ENT OF VFFAIRS	8	704,378	\$105,829,724		\$16,479,153	\$386,000	\$122,694,877
2018	DEPARTMENT OF NATURAL RESOURCES	ENT OF	509	422,774	\$37,665,220		\$22,407,877	\$9,573,001	\$69,646,099
2018	DEPARTMENT OF REVENUE	ENT OF	61	239,697	\$7,443,615		\$7,641,151	\$19,293,861	\$34,378,628
2018	DEPARTMENT OF TRANSPORTATION	ENT OF TATION	1,032	2,200,445	\$186,217,303		\$29,227,235	\$12,233,364	\$227,677,903
2018	GOVERNOR'S OFFICE	۲. ۲.	7	2,451	₩	\$0	\$74,379	\$3,391,861	\$3,466,240

¹Fiscal Year represents the year risk exposure data was submitted to the Risk Management & Tort Defense Division.

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				REPORT PA	REPORT PARAMETERS				a nove
Reporting Year:	2018	Ownership:	ALL	Year Built Range:	ALL to ALL	Occupancy Code:	ALL	Construction Class:	ALL
Appraisal Date Range:	ALL to ALL	Report By:	ALL	Value Range:	ALL to ALL	Square Feet Range:	ALL to ALL		
Fiscal Year¹	Agency		Number of Properties	Total Square Feet	Total Building Structure Value		Total Building Content Value	Total Special Content Value	Total Value
2018	HISTORICAL SOCIETY	7	4	55,283	\$5,955,894	5,894	\$237,024	\$5,684,516	\$11,877,435
2018	OFFICE OF PUBLIC INSTRUCTION	PUBLIC ON	34	38,112	\$646	\$649,965	\$547,628	\$23,250	\$1,220,844
2018	PUBLIC HEALTH & HUMAN SERVICES	ALTH & RVICES	195	1,323,476	\$114,036,067		\$44,976,676	\$25,798,087	\$184,810,830
2018	PUBLIC SERVICE REGULATION	RVICE	~	15,600		0\$	\$505,973	\$49,500	\$555,473
2018	STATE FUND	Q	ဖ	125,862	\$30,980,697		\$3,838,325	\$5,250,027	\$40,069,049
2018	SUPREME COURT - JUDICIARY	COURT	_	24,025	\$252	\$252,349	\$693,067	\$10,912,015	\$11,857,432
2018	UNIVERSITY SYSTEM	>-	1,397	15,087,414	\$2,690,279,614		\$540,082,756	\$427,871,247	\$3,658,233,618
Total for Fiscal Year 2018	ree		5,419	25,726,287	\$3,936,141,911		\$797,463,337	\$692,094,012	\$5,425,699,261

¹Fiscal Year represents the year risk exposure data was submitted to the Risk Management & Tort Defense Division. page 3

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				REPORT PA	REPORT PARAMETERS				
Reporting Year:	2018	Ownership:	ALL	Year Built Range:	ALL to ALL	Occupancy Code:	ALL	Construction Class:	ALL
Appraisal Date Range:	ALL to ALL	Report By:	ALL	Value Range:	ALL to ALL	Square Feet Range:	ALL to ALL		
Fiscal Year¹	Reporting Entity	ntity	Number of Properties	Total Square Feet	Total Building Structure Value		Total Building Content Value	Total Special Content Value	Total Value
AUDITOR'S OFFICE	CE								
2018	AUDITOR'S OFFICE			29,764		\$0	\$657,693	\$266,048	\$923,741
TOTAL:			-	29,764		0\$	\$657,693	\$266,048	\$923,741
BOARD OF PUBLIC EDUCATION	IC EDUCATION								
2018	BOARD OF PUBLIC EDUCATION	PUBLIC	- Period	950		\$0	\$27,399	\$	\$27,399
2018	BOARD OF PUBLIC EDUCATION, SCHOOL FOR THE DEAF & BLIND	PUBLIC L, OR THE ND	4	165,149	\$22,468,295		\$3,234,524	\$490,000	\$26,192,820
2018	MONTANA ARTS COUNCIL	4RTS		3,285		0\$	\$115,813	0\$	\$115,813
2018	MONTANA STATE LIBRARY	STATE	0	0		80	\$0	\$824,880	\$824,880
TOTAL:			16	169,384	\$22,468,295		\$3,377,737	\$1,314,880	\$27,160,912
DEPARTMENT OF ADMINISTRATION	= ADMINISTRAT	NOI							
2018	DEPARTMENT OF ADMINISTRATION	NT OF ATION	89	1,419,626	\$354,683,277		\$46,083,973	\$94,850,000	\$495,617,251
2018	PUBLIC DEFENDERS OFFICE	S	16	82,521		\$ 0\$	\$3,882,703	\$212,311	\$4,095,014
2018	PUBLIC EMPLOYEES RETIREMENT DIVISION	S L	~~	14,686		0\$	\$750,792	O \$	\$750,792
TOTAL:			85	1,516,833	\$354,683,277		\$50,717,468	\$95,062,311	\$500,463,057

'Fiscal Year represents the year risk exposure data was submitted to the Risk Management & Tort Defense Division.

			***************************************	REPORT PARAMETERS	RAMETERS				
Reporting Year:	2018	Ownership:	ALL	Year Built Range:	ALL to ALL	Occupancy Code:	ALL	Construction Class:	ALL
Appraisal Date Range:	ALL to ALL	Report By:	ALL	Value Range:	ALL to ALL	Square Feet Range:	ALL to ALL		
Fiscal Year¹	Reporting Entity	intity	Number of Properties	Total Square Feet	Total Building Structure Value		Total Building Content Value	Total Special Content Value	Total Value
PEDADTMENIT OF ACRICIII TIIDE		ע			÷ .				
2018	DEPARTMENT OF AGRICULTURE	E INT OF JRE	23	33,076	\$64(\$649,611	\$3,364,575	\$384,717	\$4,398,903
TOTAL:			23	33,076	\$64	\$649,611	\$3,364,575	\$384,717	\$4,398,903
DEPARTMENT OF COMMERCE	F COMMERCE								
2018	DEPARTMENT OF COMMERCE	ENT OF	7	208,325	\$30,820,919		\$2,060,664	\$458,700	\$33,340,284
2018	MONTANA HERITAGE COMMISSION	Z	253	193,858	\$32,098,314		\$1,080,036	\$967,300	\$34,145,651
TOTAL:			260	402,183	\$62,919,234	9,234	\$3,140,701	\$1,426,000	\$67,485,935
DEPARTMENT OF CORRECTIONS	F CORRECTION	တ							
2018	DEPARTMENT OF CORRECTIONS	INT OF SNC	36	177,838	\$21,675,894		\$5,084,917	\$15,000	\$26,775,812
2018	DEPARTMENT OF CORRECTIONS, BOARD OF PARDONS	INT OF ONS,	~	2,500		0\$	\$91,412	0\$	\$91,412
2018	DEPARTMENT OF CORRECTIONS, MONTANA STATE CORRECTIONAL TREATMENT CENTER	int of Ons, STATE Onal	ω	23,036	\$4,357,777	777,7	\$530,796	0	\$4,888,574

¹Fiscal Year represents the year risk exposure data was submitted to the Risk Management & Tort Defense Division. page 5

Commercial Property Schedule

				commercial reports conceand	مامانت فيامطه	2			
				REPORT PA	REPORT PARAMETERS				
Reporting Year:	2018	Ownership:	ALL	Year Built Range:	ALL to ALL	Occupancy Code:	ALL	Construction Class:	ALL
Appraisal Date Range:	ALL to ALL	Report By:	ALL	Value Range:	ALL to ALL	Square Feet Range:	ALL to ALL		
Fiscal Year¹	Reporting Entity	ntity	Number of Properties	Total Square Feet	Total Building Structure Value		Total Building Content Value	Total Special Content Value	Total Value
2018	DEPARTMENT OF CORRECTIONS, MONTANA WOMEN'S PRISON	NT OF DNS, RISON	က	85,543	\$26,072,544		\$2,038,320	0\$	\$28,110,865
2018	DEPARTMENT OF CORRECTIONS, PINE HILLS YOUTH CORRECTIONAL FACILITY	NT OF ONS, YOUTH ONAL	15	157,918	\$24,823,347		\$3,064,599	\$173,000	\$28,060,946
2018	DEPARTMENT OF CORRECTIONS, PRISON INDUSTRIES	NT OF ONS, S	49	280,048	\$24,601,462		\$11,846,473	\$6,030,292	\$42,478,228
2018	DEPARTMENT OF CORRECTIONS, RIVERSIDE YOUTH CORRECTIONAL FACILITY	NT OF ONS, YOUTH ONAL	7	45,008	\$6,428,330		\$1,037,787	\$80,000	\$7,546,118
2018	DEPARTMENT OF CORRECTIONS, STATE PRISON	NT OF ONS, ON	55	495,042	\$91,682,054		\$9,321,996	\$1,098,000	\$102,102,051
TOTAL:			171	1,266,933	\$199,641,412		\$33,016,305	\$7,396,292	\$240,054,010
DEPARTMENT OF ENVIRONMENTAL QUALITY	= ENVIRONMEN	TAL QUALITY							
2018	DEPARTMENT OF ENVIRONMENTAL QUALITY	NT OF ENTAL	42	411,049	\$3,561,335		\$2,849,555	\$5,276,237	\$11,687,128
TOTAL:			42	411,049	\$3,561,335		\$2,849,555	\$5,276,237	\$11,687,128

DEPARTMENT OF FISH, WILDLIFE & PARKS

¹Fiscal Year represents the year risk exposure data was submitted to the Risk Management & Tort Defense Division. page 6

				Commercial	Commercial Frogery Confedure			
Witness Brian				REPORT PA	REPORT PARAMETERS			
Reporting Year:	2018	Ownership:	ALL	Year Built Range:	ALL to ALL Occup	Occupancy ALL Code:	Construction Class:	ALL
Appraisal Date Range:	ALL to ALL	Report By:	ALL	Value Range:	ALL to ALL Squ Ran	Square Feet ALL to ALL Range:		
Fiscal Year	Reporting Entity	Entity	Number of Properties	Total Square Feet	Total Building Structure Value	Total Building Content Value	Total Special Content Value	Total Value
2018	DEPARTMENT OF FISH, WILDLIFE & PARKS	ENT OF JLIFE &	1,642	1,092,724	\$82,643,372	\$12,998,778	\$42,892,618	\$138,534,768
TOTAL:			1,642	1,092,724	\$82,643,372	\$12,998,778	\$42,892,618	\$138,534,768
DEPARTMENT OF JUSTICE	OF JUSTICE							
2018	DEPARTMENT OF JUSTICE	ENT OF	84	330,222	\$19,621,918	\$12,469,230	\$15,778,432	\$47,869,581
TOTAL:			84	330,222	\$19,621,918	\$12,469,230	\$15,778,432	\$47,869,581
DEPARTMENT OF LABOR & INDUSTRY	JF LABOR & INE	OUSTRY						
2018	DEPARTMENT OF LABOR & INDUSTRY	ENT OF	52	224,513	\$10,643,000	\$7,631,469	\$1,567,515	\$19,841,984
TOTAL:			52	224,513	\$10,643,000	\$7,631,469	\$1,567,515	\$19,841,984
DEPARTMENT OF LIVESTOCK	JF LIVESTOCK							
2018	DEPARTMENT OF LIVESTOCK	ENT OF K	4	10,089	0\$	\$528,569	\$262,233	\$790,802
TOTAL:			41	10,089	0\$	\$528,569	\$262,233	\$790,802
DEPARTMENT OF MILITARY AFFAIRS	JE MILITARY AF	FAIRS						
2018	DEPARTMENT OF MILITARY AFFAIRS	ENT OF AFFAIRS	8	704,378	\$105,829,724	\$16,479,153	\$386,000	\$122,694,877
TOTAL:			81	704,378	\$105,829,724	\$16,479,153	\$386,000	\$122,694,877

'Fiscal Year represents the year risk exposure data was submitted to the Risk Management & Tort Defense Division.

Commercial Property Schedule

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Reporting Year:	2018	Ownership:	ALL	Year Built Range:	ALL to ALL	Occupancy Code:	ALL	Construction Class:	ALL
Appraisal Date / Range:	ALL to ALL	Report By:	ALL	Value Range:	ALL to ALL	Square Feet Range:	ALL to ALL		
Fiscal Year¹	Reporting Entity	ntity	Number of Properties	Total Square Feet	Total Building Structure Value		Total Building Content Value	Total Special Content Value	Total Value
DEPARTMENT OF NATURAL RESOURCES	NATURAL RES	SOURCES							
2018	DEPARTMENT OF NATURAL RESOURCES	INT OF	201	389,275	\$33,919,864		\$21,778,575	\$9,553,001	\$65,251,441
2018	DEPARTMENT OF NATURAL RESOURCES, SWAN RIVER FOREST CAMP	INT OF IS, IR IMP	ω	33,499	\$3,745,356	,356	\$629,301	\$20,000	\$4,394,657
TOTAL:			209	422,774	\$37,665,220		\$22,407,877	\$9,573,001	\$69,646,099
DEPARTMENT OF REVENUE	REVENUE								
2018	DEPARTMENT OF REVENUE	NT OF	61	239,697	\$7,443,615		\$7,641,151	\$19,293,861	\$34,378,628
TOTAL:			61	239,697	\$7,443,615		\$7,641,151	\$19,293,861	\$34,378,628
DEPARTMENT OF TRANSPORTATION	TRANSPORTA	NOIL							
2018	DEPARTMENT OF TRANSPORTATION	NT OF TATION	1,032	2,200,445	\$186,217,303		\$29,227,235	\$12,233,364	\$227,677,903
TOTAL:			1,032	2,200,445	\$186,217,303		\$29,227,235	\$12,233,364	\$227,677,903
GOVERNOR'S OFFICE	FICE								
2018	LEGISLATIVE BRANCH	Ā		0		\$0	\$0	\$3,037,311	\$3,037,311
2018	LEGISLATIVE BRANCH, CONSUMER COUNSEL	₽ ~	~	2,451		0\$	\$74,379	\$10,000	\$84,379

'Fiscal Year represents the year risk exposure data was submitted to the Risk Management & Tort Defense Division. page 8

				commercial Property Schedule	heiry Sciledule				
				REPORT PARAMETERS	RAMETERS				******
Reporting Year:	2018	Ownership:	ALL	Year Built Range:	ALL to ALL Coc	Occupancy Code:	ALL	Construction Class:	ALL
Appraisal Date Range:	ALL to ALL	Report By:	ALL	Value Range:	ALL to ALL Squ	Square Feet Range:	ALL to ALL		
Fiscal Year¹	Reporting Entity	ntity	Number of Properties	Total Square Feet	Total Building Structure Value		Total Building Content Value	Total Special Content Value	Total Value
2018	SECRETARY OF STATE	Y OF	0	0	0\$		0\$	\$344,550	\$344,550
TOTAL:			2	2,451	0\$		\$74,379	\$3,391,861	\$3,466,240
HISTORICAL SOCIETY	SIETY								
2018	MONTANA HISTORICAL SOCIETY	-i	4	55,283	\$5,955,894		\$237,024	\$5,684,516	\$11,877,435
TOTAL:			4	55,283	\$5,955,894		\$237,024	\$5,684,516	\$11,877,435
OFFICE OF PUBLIC INSTRUCTION	IC INSTRUCTIO	Z							
2018	OFFICE OF PUBLIC INSTRUCTION	PUBLIC ON	34	38,112	\$649,965		\$547,628	\$23,250	\$1,220,844
TOTAL:			34	38,112	\$649,965		\$547,628	\$23,250	\$1,220,844
PUBLIC HEALTH & HUMAN SERVICES	& HUMAN SERN	/ICES							
2018	PUBLIC HEALTH & HUMAN SERVICES	ALTH & RVICES	97	581,576	\$3,177,553	\$24	\$24,411,724	\$22,832,350	\$50,421,627
2018	PUBLIC HEALTH & HUMAN SERVICES, MENTAL HEALTH NURSING CARE CENTER	ALTH & SALTH ARE	∞	81,586	\$17,706,618	₩	\$2,425,565	\$272,000	\$20,404,184

'Fiscal Year represents the year risk exposure data was submitted to the Risk Management & Tort Defense Division.

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				REPORT PARAMETERS	RAMETERS				
Reporting Year:	2018	Ownership:	ALL	Year Built Range:	ALL to ALL	Occupancy Code:	ALL	Construction Class:	ALL
Appraisal Date Range:	ALL to ALL	Report By:	ALL	Value Range:	ALL to ALL	Square Feet Range:	ALL to ALL		TO PROPERTY OF THE PROPERTY OF
Fiscal Year¹	Reporting Entity	≣ntity	Number of Properties	Total Square Feet	Total Building Structure Value		Total Building Content Value	Total Special Content Value	Total Value
2018	PUBLIC HEALTH & HUMAN SERVICES, MONTANA CHEMICAL DEPENDENCY CTR	EALTH &	4	27,600		0\$	\$445,681	\$265,000	\$710,681
2018	PUBLIC HEALTH & HUMAN SERVICES, MONTANA DEVELOPMENTAL CENTER	EALTH &	25	177,171	\$15,613,322		\$3,454,575	\$599,391	\$19,667,288
2018	PUBLIC HEALTH & HUMAN SERVICES, STATE HOSPITAL	EALTH & , STATE	49	297,180	\$48,846,918		\$10,477,402	\$1,191,346	\$60,515,667
2018	PUBLIC HEALTH & HUMAN SERVICES, VETERANS' HOME - COLUMBIA FALLS	SALTH & S' HOME A FALLS	10	106,493	\$18,782,912		\$2,455,906	\$610,000	\$21,848,818
2018	PUBLIC HEALTH & HUMAN SERVICES, VETERANS' HOME	SALTH & S'HOME E	7	51,870	\$9,908,743		\$1,305,818	\$28,000	\$11,242,562
TOTAL: PUBLIC SERVICE REGULATION	EREGULATION		195	1,323,476	\$114,036,067		\$44,976,676	\$25,798,087	\$184,810,830
2018	PUBLIC SERVICE REGULATION (COMMISSION)	RVICE ON ION)	-	15,600		\$0	\$505,973	\$49,500	\$555,473
TOTAL:			F	15,600		\$0	\$505,973	\$49,500	\$555,473

¹Fiscal Year represents the year risk exposure data was submitted to the Risk Management & Tort Defense Division. page 10

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				REPORT PA	REPORT PARAMETERS				
Reporting Year:	2018	Ownership:	ALL	Year Built Range:	ALL to ALL	Occupancy Code:	ALL	Construction Class:	ALL
Appraisal Date /	ALL to ALL	Report By:	ALL	Value Range:	ALL to ALL	Square Feet Range:	ALL to ALL		
Fiscal Year¹	Reporting Entity	ntity	Number of Properties	Total Square Feet	Total Building Structure Value		Total Building Content Value	Total Special Content Value	Total Value
STATE FUND									
2018	STATE FUND	۵	9	125,862	\$30,980,697		\$3,838,325	\$5,250,027	\$40,069,049
TOTAL:			မ	125,862	\$30,980,697		\$3,838,325	\$5,250,027	\$40,069,049
SUPREME COURT - JUDICIARY	- JUDICIARY								
2018	SUPREME COURT - JUDICIARY	ourt	7	24,025	\$252,349	349	\$693,067	\$10,912,015	\$11,857,432
TOTAL:				24,025	\$252,349	349	\$693,067	\$10,912,015	\$11,857,432
UNIVERSITY SYSTEM	IEM								
2018	UNIVERSITY SYSTEM, COMMISSIONER OF HIGHER EDUCATION	NER	74	39,207		·s Os	\$1,051,089	0\$	\$1,051,089
2018	UNIVERSITY SYSTEM, GREAT FALLS COLLEGE MONTANA STATE UNIVERSITY	/ REAT EGE STATE	ω	202,614	\$44,099,838		\$11,654,563	\$6,028,000	\$61,782,401
2018	UNIVERSITY SYSTEM, HELENA COLLEGE UNIVERSITY OF MONTANA	elena ' Of	12	193,871	\$37,537,073		\$12,501,248	\$473,090	\$50,511,411

¹Fiscal Year represents the year risk exposure data was submitted to the Risk Management & Tort Defense Division. page 11

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				KEPOKI PA	KEPOKI PAKAMEIEKS				***************************************
Reporting Year:	2018	Ownership:	ALL	Year Built Range:	ALL to ALL	Occupancy Code:	ALL	Construction Class:	ALL
Appraisal Date Range:	ALL to ALL	Report By:	ALL	Value Range:	ALL to ALL	Square Feet Range:	ALL to ALL		
Fiscal Year¹	Reporting Entity	Entity	Number of Properties	Total Square Feet	Total Building Structure Value		Total Building Content Value	Total Special Content Value	Total Value
2018	UNIVERSITY SYSTEM, MONTANA STATE UNIVERSITY - BILLINGS	۲ STATE ۲ -	64	1,370,439	\$214,169,666		\$52,260,837	\$22,346,702	\$288,777,205
2018	UNIVERSITY SYSTEM, MONTANA STATE UNIVERSITY - BOZEMAN	Υ STATE Υ -	490	5,666,496	\$974,376,244		\$260,015,828	\$136,646,880	\$1,371,038,952
2018	UNIVERSITY SYSTEM, MONTANA STATE UNIVERSITY - NORTHERN	Y STATE Y - √	40	608,197	\$155,140,151		\$23,505,843	\$3,298,116	\$181,944,111
2018	UNIVERSITY SYSTEM, MONTANA TECH OF THE UM	↑ TECH	47	913,834	\$177,820,366		\$36,251,255	\$38,910,079	\$252,981,701
2018	UNIVERSITY SYSTEM, MSU, AGRICULTURA! EXPERIMENT STATION	Y nsu, JRAL NT	227	464,161	\$42,462,292		\$5,926,271	\$4,800,756	\$53,189,319
2018	UNIVERSITY SYSTEM, MSU EXTENSION SERVICE		13	30,424		0\$	\$748,837	0\$	\$748,837
2018	UNIVERSITY SYSTEM, MSU, FIRE SERVICES TRAINING	۲ ISBU, ICES	0	3,324		0\$	\$116,601	\$180,000	\$296,601

¹Fiscal Year represents the year risk exposure data was submitted to the Risk Management & Tort Defense Division. page 12

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Reporting Year:	2018	Ownership:	ALL	Year Built Range:	ALL to ALL C	Occupancy Code:	ALL	Construction Class:	ALL
Appraisal Date ALL to ALL Range:	ALL to ALL	Report By:	ALL	Value Range:	ALL to ALL S	Square Feet Range:	ALL to ALL		
Fiscal Year¹	Reporting Entity	ntity	Number of Properties	Total Square Feet	Total Building Structure Value		Total Building Content Value	Total Special Content Value	Total Value
2018	UNIVERSITY SYSTEM, UNIVERSITY OF MONTANA - MISSOULA	r of	453	5,015,139	\$937,801,904		\$118,880,349	\$210,197,638	\$1,266,879,892
2018	UNIVERSITY SYSTEM, UNIVERSITY OF MONTANA - WESTERN	r OF	38	579,708	\$106,872,077		\$17,170,028	\$4,989,986	\$129,032,091
TOTAL:			1,397	15,087,414	\$2,690,279,614		\$540,082,756	\$427,871,247	\$3,658,233,618

Appendix D – FCA UNIFORMAT II

1 Row	2 Curre	nt F	CI System	5	6	Po	8 ssible Futu	9 re Sys	tem using UniFormat	11
Index	System		Component	1	Level 1		Level 2	2 3 7 6	Level 3	Level 4
1	System 1 — Foundation		Footings/Foundation Walls Exterior Steps/Retaining Walls	A		A10	Foundations	A1020	Standard Foundations Special Foundations	(See other
2						A20	Basement		Slab on Grade Basement Excavation	handout for sample detail
3	System 2 — Envelope	2A	Exterior Walls	0	SHELL	B10	Construction Superstructure	A2020 B1010	Basement Walls Floor Construction	-
3	System 2 — Envelope	2B	Exterior Windows	1	SHELL			B1020	Roof Construction	
4		2C 2D	Exteriod Doors/Hatches Interior Columns/Beams			B20	Exterior Enclosure		Exterior Walls Exterior Windows	1
		20	interior Courtinardearns					B2030	Exterior Doors	
5	System 4 — Roof System	4A 4B 4C	Structure Covering Insulation			B30	Roofing		Roof Coverings Roof Openings	
6		10	III SUIGNUT	С	INTERIORS	C10	Interior Construction	C1010 C1020	Partitions Interior Doors	1
7	System 3 — Floor System	3A	Structure	1		C20	Stairs	C1030 C2010	Fittings Stair Construction	1
		3B	Stair Treads/Risers Interior Wall Systems	-		020	Interior Finishes	C2020	Stair Finishes Wall Finishes	-
8	System 5 — Finishes	5A 5B 5C 5D 5E	Interior Wall Systems Ceilings Interior Doors/Hardware/Windows Floor Finishes Wall Finished			U30	interior Finishes	C3020	Floor Finishes Ceiling Finishes	
9	System 10 — Conveying		Elevator/Lift	D	SERVICES	D10	Conveying	D1010 D1020 D1090	Elevators & Lifts Escalators & Moving Walks Other Conveying Systems	
10	System 8 — Plumbing System	8A	Fixtures	1		D20	Plumbing	D2010	Plumbing Fixtures	1
		8B 8C	Supply Piping Waste Piping					D2020 D2030	Domestic Water Distribution Sanitary Waste Rain Water Drainage	
								D2090	Other Plumbing Systems	
11	System 7 — H & V System	7A 7B	Heating Ventilating	1		D30	HVAC	D3010 D3020	Energy Supply Heat Generating Systems	
		7C	Cooling					D3030	Cooling Generating Systems	
				1					Distribution Systems Terminal & Package Units	
								D3060	Controls and Instrumentation	
								D3070	Systems Testing & Balancing Other HVAC Systems & Equipment	
12	System 11 — Safety Systems		Egress	1		D40	Fire Protection	D4010	Sprinklers	1
			Extinguishing System Exit Signs/Emergency Lighting/Alarms					D4020 D4030	Standpipes Fire Protection Specialties	
		11D	Asbestos/Hazardous Materials Handicap Accessibility						Other Fire Protection Systems	
13	System 9 — Electrical System	9A 9B	Building Service Lighting	1		D50	Electrical	D5010	Electrical Service & Distribution Lighting and Branch Wiring	
		9C	Distribution					D5030	Communications & Security Other Electrical Systems	
14		9D	Voice/Data	E	EQUIPNENT	E10	Equipment	D5090 E1010	Commercial Equipment	1
				I	& FURNISHINGS			E1020 E1030	Institutional Equipment Vehicular Equipment	
15		\vdash		1		E20	Furnishings	E1090 E2010	Other Equipment Fixed Furnishings	1
16	System 6 — Specialties	6A	Toilet Partitions	F	SPECIAL	F10	Special	E2020 F1010	Movable Furnishings Special Structures	-
10	System 6 — Speciaties	6B 6C	Signage/Directories Fixed Seating/Risers	-	CONSTRUCTION & DEMOLITION	10	Construction	F1020 F1030 F1040	Integrated Construction Special Construction Systems	
		6D 6E	Chalk/Tackboards/Cabinets Fume Hoods					F1040	Special Facilities special Controls and Instrumentation	
		6F 6G	Lockers Cells and Visitor Cubicles	1						
		6H	Ansul Hoods	1						
17	-	61	Swimming Pool			F20	Selective Building	F2010 F2020	Building Elements Demolition Hazardous Components Abatement	
40	1			-	BUILDING	040	Demolition Site Properties	C1010	Site Clearing	4
18				G	SITEWORK	G10	Site Preparation	G1010	Site Clearing Site Demolition and Relocations Site	
								G1030	Earthwork Hazardous Waste Remediation	
19	-					G20	Site	G2010	Roadways	1
							Improvements	G2020	Parking Lots	
									Pedestrian Paving Site Development	
						000	Dite Me 1	G20S0	Landscaping	-
20				1		G30	Site Mechanical Utilities	G3020	water Supply Sanitary Sewer	
							F.118651	G3030	Storm Sewer	
								G3050	Heating Distribution Cooling Distribution	
		1						G3060	Fuel Distribudon	
21				1		G10	Site Electrical	G4010	Other Site Mechanical Utilities Electrical Distribution	-
-54H				1			Utilities	G4020	Site Lighting	
				1					Site Communications & Security Other Site Electrical Utilities	
22	1	1		1		G90	Other Site		Service and Pedestrian Tunnels	7

Appendix E – Differential Between Insured CRV and Project Cost CRV

Project Costs vs. Insurable Values

The variance in new construction costs/project costs and an appraised/scheduled insurable value can be considerable and always exists, but to varying degrees. Project costs include many items that should not be included in an insurable value, which can vary significantly from project to project. Typically, and as a mean for the range of difference between those two costs, 25% is about average. Project costs are often placed on a property schedule as the insurable value and in almost all cases, the Member is then over insured. One way of protecting your Members from this is to review the contractor's breakdown or line item list of construction costs from the project, or contact your appraisal partner to assist in this effort so that the non-recurring aspects of construction can be extracted from the value. Consider this as new construction occurs and reach out to AssetWorks as needed for guidance on this topic.

Common examples of aspects of construction <u>not</u> applicable to an insurable value include:

- **↓**Demolition of the previous structure
- Purchase of ancillary/support structures
- **Landscaping**
- Exterior free-standing signage/marquees
- Fencing/Lighting
- Parking lot/walkways construction

- Claim settlements
- Utility service to the site
- Furnishings purchases
- Other land improvements
- Advertising costs
- Contingency reserves
- Unique miscellaneous costs

Appraisal valuations would include the removal of the specific costs listed above to arrive at an insurable value but for appraisals in general, and as a basic guide, the values include/do not include the following:

Included Values

Material and Labor Costs
Normal Site Preparation
Utilities from Structure to Lot Line
Normal Architects and Engineers Costs
Contractors Overhead and Insurance
Unique Building Features
Permitting/Inspection Fees

Excluded Values

Land Acquisition
Land/Site Improvements
Offsite Contents
Building Contents
Marketing Costs
Discounts and Bonuses
Complex Financing Schemes

Related to costs not applicable to an insurable value for existing buildings are insurance "Exclusions", a term referring to the non-insurable aspects of a building. The concept is that in the event of a loss, these parts of the structure would remain intact. Typically Exclusions would be in the 4% - 6% range of a buildings replacement cost and applies to the portions of the buildings that are at or below grade. Common building components in this category include the concrete slab, underground piping and wiring. Exclusions are subtracted from a New Replacement Cost (NRC) to form a New Replacement Cost Less Exclusions (NRCLE) which depending on the property coverage policy may equate to an insurable value. In seismically prone areas, earthquake coverage can be involved and public entities may opt to not apply exclusions for scheduled buildings since the entirety of the structure is at risk in a seismic event.