Facilities, Planning, & Operations Committee

June 2017

June 8, 2017
2:00 p.m. - 3:30 pm
West Committee Room, McNamara Alumni Center
1. Public Comment Period: Police Use of Portable Audio/Video Recorders (Duluth, Morris, and Twin Cities Campuses)
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   - Draft Policy - Duluth - Page 4
   - Draft Policy - Morris - Page 9
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2. Risk Management in the Acquisition of Real Estate
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AGENDA ITEM: Public Comment Period: Police Use of Portable Audio/Video Recorders (Duluth, Morris, and Twin Cities Campuses)

☐ Review ☐ Review + Action ☐ Action ☐ Discussion

This is a report required by Board policy.

PRESENTERS: Regent David McMillan
Michael Berthelsen, Interim Vice President, University Services

PURPOSE & KEY POINTS

In accordance with Minnesota Statute 626.8473, the Board of Regents will accept public comment on the University of Minnesota Police Department's draft departmental policies on the use of portable audio/video recorders (also called "body worn cameras"). Policies for each campus police department are in the docket.

Individuals wishing to provide public comment in person to the Board on June 8, 2017, must sign up in the lobby outside the West Committee Room, 600 McNamara Alumni Center, between 1:00 p.m. and 1:45 p.m. on Thursday, June 8, 2017. Sign-up will be on a first-come, first-served basis. Speakers will be limited to two minutes, with a maximum of 20 minutes for the public comment hearing. Speakers will be called on in the order they signed-up. Only individuals who have signed up prior to the public forum will be able to address the Board.

Public comment may also be offered in writing on or before Friday, June 9, 2017, to the following postal or email addresses (please include "body worn camera" or "BWC" in subject line):

Duluth
Chief Sean Huls
UMD Police Department
1049 University Drive #287
Duluth MN 55812
umdpd@d.umn.edu

Morris
Lieutenant Jennifer Lund
UMM Police Department
Behmler Hall 6
600 East 4th Street
Morris MN 56267
ummpd@morris.umn.edu

Twin Cities
Chief Matthew Clark
UMTC Police Department
511 Washington Ave SE #100
Minneapolis MN 55455
police@umn.edu

The Crookston and Rochester campuses receive police services from their local jurisdiction and do not have University police departments.

Regents will receive an update on this topic as a component of the next update on public safety, anticipated for fall 2017.
Portable Audio/Video Recorders

424.1 PURPOSE AND SCOPE
This policy provides guidelines for the use of portable audio/video recording devices by members of this department while in the performance of their duties (Minn. Stat. § 626.8473). Portable audio/video recording devices include all recording systems whether body-worn, handheld or integrated into portable equipment.

This policy does not apply to mobile audio/video recordings, interviews or interrogations conducted at any University of Minnesota Duluth Police Department facility, undercover operations, wiretaps or eavesdropping (concealed listening devices) unless captured by a portable recording system.

424.1.1 DEFINITIONS
Definitions related to this policy include:

**Portable recording system** - A device worn by a member that is capable of both video and audio recording of the member’s activities and interactions with others or collecting digital multimedia evidence as part of an investigation and as provided in Minn. Stat. § 13.825.

424.2 POLICY
The University of Minnesota Duluth Police Department may provide members with access to portable recorders for use during the performance of their duties. The use of recorders is intended to enhance the mission of the Department by accurately capturing contacts between members of the Department and the public.

424.3 COORDINATOR
The Chief of Police or the authorized designee should designate a coordinator responsible for (Minn. Stat. § 626.8473; Minn. Stat. § 13.825):

(a) Establishing procedures for the security, storage and maintenance of data and recordings.
   1. The coordinator should work with the Custodian of Records and the member assigned to coordinate the use, access and release of protected information to ensure that procedures comply with requirements of the Minnesota Government Data Practices Act (MGDPA) and other applicable laws (Minn. Stat. § 13.01 et seq.) (See the Protected Information and the Records Maintenance and Release policies).

(b) Establishing procedures for accessing data and recordings.
   1. These procedures should include the process to obtain written authorization for access to non-public data by UMDPD members and members of other governmental entities and agencies.

(c) Establishing procedures for logging or auditing access.

(d) Establishing procedures for transferring, downloading, tagging or marking events.
(e) Establishing an inventory of portable recorders including:

1. Total number of devices owned or maintained by the University of Minnesota Duluth Police Department.
2. Daily record of the total number deployed and used by members and, if applicable, the precinct or district in which the devices were used.
3. Total amount of recorded audio and video data collected by the devices and maintained by the University of Minnesota Duluth Police Department.

(f) Preparing the biennial audit required by Minn. Stat. § 13.825, Subd. 9.

(g) Notifying the Bureau of Criminal Apprehension (BCA) in a timely manner when new equipment is obtained by the University of Minnesota Duluth Police Department that expands the type or scope of surveillance capabilities of the department’s portable recorders.

424.4 MEMBER PRIVACY EXPECTATION

All recordings made by members on any department-issued device at any time or while acting in an official capacity of this department, regardless of ownership of the device, shall remain the property of the Department. Members shall have no expectation of privacy or ownership interest in the content of these recordings.

424.5 MEMBER RESPONSIBILITIES

Prior to going into service, members assigned a portable recorder will be responsible for making sure the recorder is in good working order (Minn. Stat. § 13.825). If the recorder is not in working order or the member becomes aware of a malfunction at any time, the member shall promptly report the failure to his/her supervisor and obtain a functioning device as soon as reasonably practicable. Uniformed members should wear the recorder in a conspicuous manner or otherwise notify persons that they are being recorded, whenever reasonably practicable (Minn. Stat. § 626.8473).

Any member assigned to a non-uniformed position may carry an approved portable recorder at any time the member believes that such a device may be useful. Unless conducting a lawful recording in an authorized undercover capacity, non-uniformed members should wear the recorder in a conspicuous manner when in use or otherwise notify persons that they are being recorded, whenever reasonably practicable.

When using a portable recorder, the assigned member shall record his/her name, employee number and the current date and time at the beginning and the end of the shift or other period of use, regardless of whether any activity was recorded. This procedure is not required when the recording device and related software captures the user’s unique identification and the date and time of each recording.

Members should document the existence of a recording in any report or other official record of the contact, including any instance where the recorder malfunctioned or the member deactivated the recording (Minn. Stat. § 626.8473). Members should include the reason for deactivation. Members shall not intentionally block the portable recorders audio or visual recording functionality to defeat the purposes of this policy.
424.6 ACTIVATION OF THE AUDIO/VIDEO RECORDER
This policy is not intended to describe every possible situation in which the recorder should be used, although there are many situations where its use is appropriate. Members should activate the recorder any time the member believes it would be appropriate or valuable to record an incident.

The recorder should be activated in any of the following situations:

(a) All enforcement and investigative contacts including stops and field interview (FI) situations
(b) Traffic stops including, but not limited to, traffic violations, stranded motorist assistance and all crime interdiction stops
(c) Self-initiated activity involving contact with a citizen in which a member would normally notify the Dispatch Center
(d) Any other contact that becomes adversarial after the initial contact in a situation that would not otherwise require recording

Members should remain sensitive to the dignity of all individuals being recorded and exercise sound discretion to respect privacy by discontinuing recording whenever it reasonably appears to the member that such privacy may outweigh any legitimate law enforcement interest in recording. Requests by members of the public to stop recording should be considered using this same criterion. Recording should resume when privacy is no longer at issue unless the circumstances no longer fit the criteria for recording.

At no time is a member expected to jeopardize his/her safety in order to activate a portable recorder or change the recording media. However, the recorder should be activated in situations described above as soon as reasonably practicable.

424.6.1 CESSATION OF RECORDING
Once activated, the portable recorder should remain on continuously until the member reasonably believes that his/her direct participation in the incident is complete or the situation no longer fits the criteria for activation. Recording may be stopped during significant periods of inactivity such as report writing or other breaks from direct participation in the incident.

424.6.2 SURREPTITIOUS RECORDINGS
Minnesota law permits an individual to surreptitiously record any conversation in which one party to the conversation has given his/her permission (Minn. Stat. § 626A.02).

Members of the Department may surreptitiously record any conversation during the course of a criminal investigation in which the member reasonably believes that such a recording will be lawful and beneficial to the investigation.

Members shall not surreptitiously record another department member without a court order unless lawfully authorized by the Chief of Police or the authorized designee.

424.6.3 EXPLOSIVE DEVICE
Many portable recorders, including body-worn cameras and audio/video transmitters, emit radio waves that could trigger an explosive device. Therefore, these devices should not be used where an explosive device may be present.

**424.7 IDENTIFICATION AND PRESERVATION OF RECORDINGS**

To assist with identifying and preserving data and recordings, members should download, tag or mark the recordings in accordance with procedure and document the existence of the recording in any related case report.

A member should transfer, tag or mark recordings when the member reasonably believes:

(a) The recording contains evidence relevant to potential criminal, civil or administrative matters.
(b) A complainant, victim or witness has requested non-disclosure.
(c) A complainant, victim or witness has not requested non-disclosure but the disclosure of the recording may endanger the person.
(d) Disclosure may be an unreasonable violation of someone’s privacy.
(e) Medical or mental health information is contained.
(f) Disclosure may compromise an under-cover officer or confidential informant.
(g) The recording or portions of the recording may be protected under the Minnesota Data Practices Act.

Any time a member reasonably believes a recorded contact may be beneficial in a non-criminal matter (e.g., a hostile contact), the member should promptly notify a supervisor of the existence of the recording.

**424.8 RETENTION OF RECORDINGS**

All recordings shall be retained for a period consistent with the requirements of the organization’s records retention schedule and Minnesota Stat. § 13.825, Subd. 3, but in no event for a period less than 90 days.

If an individual captured in a recording submits a written request, the recording may be retained for additional time period. The coordinator should be responsible for notifying the individual prior to destruction of the recording (Minn. Stat. § 13.825).

**424.8.1 RELEASE OF AUDIO/VIDEO RECORDINGS**

Requests for the release of audio/video recordings shall be processed in accordance with the Records Maintenance and Release Policy.

**424.8.2 ACCESS TO RECORDINGS**

Except as provided by Minn. Stat. § 13.825, Subd. 2, audio/video recordings are considered private or nonpublic data.

Any person captured in a recording may have access to the recording. If the individual requests a copy of the recording and does not have the consent of other non-law enforcement individuals captured on the recording, the identity of those individuals must be blurred or obscured sufficiently to render the subject unidentifiable prior to release. The identity of on-duty peace officers may not be obscured unless their identity is protected under Minn. Stat. § 13.82, Subd. 17.
424.9 REVIEW OF RECORDED MEDIA FILES
When preparing written reports, members should review their recordings as a resource (See the Critical Incident Response and Investigations Policy for guidance in those cases). However, members shall not retain personal copies of recordings. Members should not use the fact that a recording was made as a reason to write a less detailed report.

Supervisors are authorized to review relevant recordings any time they are investigating alleged misconduct or reports of meritorious conduct or whenever such recordings would be beneficial in reviewing the member’s performance.

Recorded files may also be reviewed:

(a) Upon approval by a supervisor, by any member of the Department who is participating in an official investigation, such as a personnel complaint, administrative investigation or criminal investigation.
(b) Field training officers may review recordings with trainees for the purpose of providing coaching and feedback on the trainee’s’ performance.
(c) Pursuant to lawful process or by court personnel who are otherwise authorized to review evidence in a related case.
(d) In compliance with the Minnesota Data Practices Act request, if permitted or required by the Act, including pursuant to Minn. Stat. § 13.82, Subd. 15, and in accordance with the Records Maintenance and Release Policy.

All recordings should be reviewed by the Custodian of Records prior to public release (See the Records Maintenance and Release Policy). Recordings that are clearly offensive to common sensibilities should not be publicly released unless disclosure is required by law or order of the court (Minn. Stat. § 13.82, Subd. 7).

424.10 PROHIBITED USE OF AUDIO/VIDEO RECORDERS
Members are prohibited from using department-issued portable recorders and recording media for personal use and are prohibited from making personal copies of recordings created while on-duty or while acting in their official capacity.

Members are also prohibited from retaining recordings of activities or information obtained while on-duty, whether the recording was created with department-issued or personally owned recorders. Members shall not duplicate or distribute such recordings, except for authorized legitimate department business purposes. All such recordings shall be retained at the Department.

Recordings shall not be used by any member for the purpose of embarrassment, harassment or ridicule.

424.11 ACCOUNTABILITY
Any member who accesses or releases recordings without authorization may be subject to discipline (See the Standards of Conduct and the Protected Information policies) (Minn. Stat. § 626.8473).
49. BODY-WORN CAMERAS POLICY

Purpose
The primary purpose of using body-worn-cameras (BWCs) is to capture evidence arising from police-citizen encounters. This policy sets forth guidelines governing the use of BWCs and administering the data that results. Compliance with these guidelines is mandatory, but it is recognized that officers must also attend to other primary duties and the safety of all concerned, sometimes in circumstances that are tense, uncertain, and rapidly evolving.

Policy
It is the policy of this department to authorize and require the use of department-issued BWCs as set forth below, and to administer BWC data as provided by law.

Scope
This policy governs the use of BWCs in the course of official duties. It does not apply to the use of squad-based (dash-cam) recording systems. The University of Minnesota Morris Campus Police Lieutenant or designee may supersede this policy by providing specific instructions for BWC use to individual officers, or providing specific instructions pertaining to particular events or classes of events, including but not limited to political rallies and demonstrations. The University of Minnesota Morris Lieutenant or designee may also provide specific instructions or standard operating procedures for BWC use to officers assigned to specialized details, such as carrying out duties in courts or guarding prisoners or patients in hospitals and mental health facilities.

Definitions
The following phrases have special meanings as used in this policy:

A. **MGDPA or Data Practices Act** refers to the Minnesota Government Data Practices Act, Minn. Stat. § 13.01, et seq.

B. **Records Retention Schedule** refers to the General Records Retention Schedule for Minnesota Cities.

C. **Law enforcement-related information** means information captured or available for capture by use of a BWC that has evidentiary value because it documents events with respect to a stop, arrest, search, citation, or charging decision.

D. **Evidentiary value** means that the information may be useful as proof in a criminal prosecution, related civil or administrative proceeding, further investigation of an actual or suspected criminal act, or in considering an allegation against a law enforcement agency or officer.

E. **General citizen contact** means an informal encounter with a citizen that is not and does not become law enforcement-related or adversarial, and a recording of the event would not yield information relevant to an ongoing investigation. Examples include, but are not limited to, assisting a motorist with directions, summoning a wrecker, or receiving generalized concerns from a citizen about crime trends in his or her neighborhood.

F. **Adversarial** means a law enforcement encounter with a person that becomes confrontational, during which at least one person expresses anger, resentment, or hostility toward the other, or
at least one person directs toward the other verbal conduct consisting of arguing, threatening, challenging, swearing, yelling, or shouting. Encounters in which a citizen demands to be recorded or initiates recording on his or her own are deemed adversarial.

G. **Unintentionally recorded footage** is a video recording that results from an officer’s inadvertence or neglect in operating the officer’s BWC, provided that no portion of the resulting recording has evidentiary value. Examples of unintentionally recorded footage include, but are not limited to, recordings made in station house locker rooms, restrooms, and recordings made while officers were engaged in conversations of a non-business, personal nature with the expectation that the conversation was not being recorded.

H. **Official duties**, for purposes of this policy, means that the officer is on duty and performing authorized law enforcement services on behalf of this agency.

**Use and Documentation**

A. Officers may use only department-issued BWCs in the performance of official duties for this agency or when otherwise performing authorized law enforcement services as an employee of this department.

B. Officers who have been issued BWCs shall operate and use them consistent with this policy. Officers shall conduct a function test of their issued BWCs at the beginning of each shift to make sure the devices are operating properly. Officers noting a malfunction during testing or at any other time shall promptly report the malfunction to the officer’s supervisor and shall document the report in writing. Supervisors shall take prompt action to address malfunctions and document the steps taken in writing.

C. Officers should wear their issued BWCs at the location on their body and in the manner specified in training.

D. Officers must document BWC use and non-use as follows:

1. Whenever an officer makes a recording, the existence of the recording shall be documented in an incident report.

2. Whenever an officer fails to record an activity that is required to be recorded under this policy or captures only a part of the activity, the officer must document the circumstances and reasons for not recording in an incident report. Supervisors shall review these reports and initiate any corrective action deemed necessary.

E. The department will maintain the following records and documents relating to BWC use, which are classified as public data:

1. The total number of BWCs owned or maintained by the agency;

2. A daily record of the total number of BWCs actually deployed and used by officers and, if applicable, the precincts in which they were used;
3. The total amount of recorded BWC data collected and maintained; and

4. This policy, together with the Records Retention Schedule.

**General Guidelines for Recording**

A. Officers shall activate their BWCs when anticipating that they will be involved in, become involved in, or witness other officers of this agency involved in a pursuit, Terry stop of a motorist or pedestrian, search, seizure, arrest, use of force, adversarial contact, and during other activities likely to yield information having evidentiary value. However, officers need not activate their cameras when it would be unsafe, impossible, or impractical to do so, but such instances of not recording when otherwise required must be documented as specified in the Use and Documentation guidelines, part (D)(2) (above).

B. Officers have discretion to record or not record general citizen contacts.

C. Officers have no affirmative duty to inform people that a BWC is being operated or that the individuals are being recorded.

D. Once activated, the BWC should continue recording until the conclusion of the incident or encounter, or until it becomes apparent that additional recording is unlikely to capture information having evidentiary value. The officer having charge of a scene shall likewise direct the discontinuance of recording when further recording is unlikely to capture additional information having evidentiary value. If the recording is discontinued while an investigation, response, or incident is ongoing, officers shall state the reasons for ceasing the recording on camera before deactivating their BWC. If circumstances change, officers shall reactivate their cameras as required by this policy to capture information having evidentiary value.

E. Officers shall not intentionally block the BWC’s audio or visual recording functionality to defeat the purposes of this policy.

F. Notwithstanding any other provision in this policy, officers shall not use their BWCs to record other agency personnel during non-enforcement related activities, such as during pre- and post-shift time in locker rooms, during meal breaks, or during other private conversations, unless recording is authorized as part of an administrative or criminal investigation.

**Special Guidelines for Recording**

Officers may, in the exercise of sound discretion, determine:

A. To use their BWCs to record any police-citizen encounter if there is reason to believe the recording would potentially yield information having evidentiary value, unless such recording is otherwise expressly prohibited.

B. To use their BWCs to take recorded statements from persons believed to be victims of and witnesses to crimes, and persons suspected of committing crimes, considering the needs of the investigation and the circumstances pertaining to the victim, witness, or suspect.
In addition,

C. Officers need not record persons being provided medical care unless there is reason to believe the recording would document information having evidentiary value. When responding to an apparent mental health crisis or event, BWCs shall be activated as necessary to document any use of force and the basis for it, and any other information having evidentiary value, but need not be activated when doing so would serve only to record symptoms or behaviors believed to be attributable to the mental health issue.

D. Officers should use their BWCs and squad-based audio/video systems to record their transportation and the physical transfer of persons in their custody to hospitals, detox and mental health care facilities, juvenile detention centers, and jails, but otherwise should not record in these facilities unless the officer anticipates witnessing a criminal event or being involved in or witnessing an adversarial encounter or use-of-force incident.

**Downloading and Labeling Data**

A. Each officer using a BWC is responsible for transferring or assuring the proper transfer of the data from his or her camera to the officer’s folder on the evidence computer by the end of that officer’s shift. However, if the officer is involved in a shooting, in-custody death, or other law enforcement activity resulting in death or great bodily harm, a supervisor or investigator shall take custody of the officer’s BWC and assume responsibility for transferring the data from it.

B. Officers shall label the BWC data files at the time of transfer to storage, and should consult with a supervisor if in doubt as to the appropriate labeling. Officers should assign as many of the following labels as are applicable to each file:

1. **Evidence—criminal:** The information has evidentiary value with respect to an actual or suspected criminal incident or charging decision.

2. **Evidence—force:** Whether or not enforcement action was taken or an arrest resulted, the event involved the application of force by a law enforcement officer of this or another agency.

3. **Evidence—property:** Whether or not enforcement action was taken or an arrest resulted, an officer seized property from an individual or directed an individual to dispossess property.

4. **Evidence—administrative:** The incident involved an adversarial encounter or resulted in a complaint against the officer.

5. **Evidence—other:** The recording has potential evidentiary value for reasons identified by the officer at the time of labeling.

6. **Training:** The event was such that it may have value for training.
7. **Not evidence:** The recording does not contain any of the foregoing categories of information and has no apparent evidentiary value. Recordings of general citizen contacts and unintentionally recorded footage are not evidence.

C. In addition, officers shall flag each file as appropriate to indicate that it contains information about data subjects who may have rights under the MGDPA limiting disclosure of information about them. These individuals include:

1. Victims and alleged victims of criminal sexual conduct and sex trafficking.

2. Victims of child abuse or neglect.

3. Vulnerable adults who are victims of maltreatment.

4. Undercover officers.

5. Informants.

6. When the video is clearly offensive to common sensitivities.

7. Victims of and witnesses to crimes, if the victim or witness has requested not to be identified publicly.

8. Individuals who called 911, and services subscribers whose lines were used to place a call to the 911 system.


10. Juvenile witnesses, if the nature of the event or activity justifies protecting the identity of the witness.

11. Juveniles who are or may be delinquent or engaged in criminal acts.

12. Individuals who make complaints about violations with respect to the use of real property.

13. Officers and employees who are the subject of a complaint related to the events captured on video.

14. Other individuals whose identities the officer believes may be legally protected from public disclosure.

D. Labeling and flagging designations may be corrected or amended based on additional information.
Administering Access to BWC Data:

A. **Data subjects.** Under Minnesota law, the following are considered data subjects for purposes of administering access to BWC data:

1. Any person or entity whose image or voice is documented in the data.

2. The officer who collected the data.

3. Any other officer whose voice or image is documented in the data, regardless of whether that officer is or can be identified by the recording.

B. **BWC data is presumptively private.** BWC recordings are classified as private data about the data subjects unless there is a specific law that provides differently. As a result:

1. BWC data pertaining to people is presumed private, as is BWC data pertaining to businesses or other entities.

2. Some BWC data is classified as confidential (see C. below).

3. Some BWC data is classified as public (see D. below).

C. **Confidential data.** BWC data that is collected or created as part of an active criminal investigation is confidential. This classification takes precedence over the “private” classification listed above and the “public” classifications listed below.

D. **Public data.** The following BWC data is public:

1. Data documenting the discharge of a firearm by a peace officer in the course of duty, other than for training or the killing of an animal that is sick, injured, or dangerous.

2. Data that documents the use of force by a peace officer that results in substantial bodily harm.

3. Data that a data subject requests to be made accessible to the public, subject to redaction. Data on any data subject (other than a peace officer) who has not consented to the public release must be redacted *if practicable*. In addition, any data on undercover officers must be redacted.

4. Data that documents the final disposition of a disciplinary action against a public employee.

However, if another provision of the Data Practices Act classifies data as private or otherwise not public, the data retains that other classification. For instance, data that reveals protected identities under Minn. Stat. § 13.82, subd. 17 (e.g., certain victims, witnesses, and others) should not be released even if it would otherwise fit into one of the public categories listed above.
E. **Access to BWC data by non-employees.** Officers shall refer members of the media or public seeking access to BWC data to [the responsible authority/data practices designee], who shall process the request in accordance with the MGDPA and other governing laws. In particular:

1. An individual shall be allowed to review recorded BWC data about him- or herself and other data subjects in the recording, but access shall not be granted:
   
   a. If the data was collected or created as part of an active investigation.
   
   b. To portions of the data that the agency would otherwise be prohibited by law from disclosing to the person seeking access, such as portions that would reveal identities protected by Minn. Stat. § 13.82, subd. 17.

2. Unless the data is part of an active investigation, an individual data subject shall be provided with a copy of the recording upon request, but subject to the following guidelines on redaction:
   
   a. Data on other individuals in the recording who do not consent to the release must be redacted.
   
   b. Data that would identify undercover officers must be redacted.
   
   c. Data on other officers who are not undercover, and who are on duty and engaged in the performance of official duties, may not be redacted.

F. **Access by peace officers and law enforcement employees.** No employee may have access to the department’s BWC data except for legitimate law enforcement or data administration purposes:

1. Officers may access and view stored BWC video only when there is a business need for doing so, including the need to defend against an allegation of misconduct or substandard performance. Officers may review video footage of an incident in which they were involved prior to preparing a report, giving a statement, or providing testimony about the incident.

2. Agency personnel shall document their reasons for accessing stored BWC data in the Body Camera Video Access Log. Agency personnel are prohibited from accessing BWC data for non-business reasons and from sharing the data for non-law enforcement related purposes, including but not limited to uploading BWC data recorded or maintained by this agency to public and social media websites.

3. Employees seeking access to BWC data for non-business reasons may make a request for it in the same manner as any member of the public.

G. **Other authorized disclosures of data.** Officers may display portions of BWC footage to witnesses as necessary for purposes of investigation as allowed by Minn. Stat. § 13.82, subd. 15, as may be amended from time to time. Officers should generally limit these displays in order to protect against the incidental disclosure of individuals whose identities are not public.

Protecting against incidental disclosure could involve, for instance, showing only a portion of the
video, showing only screen shots, muting the audio, or playing the audio but not displaying video. In addition,

1. BWC data may be shared with other law enforcement agencies only for legitimate law enforcement purposes that are documented in writing at the time of the disclosure.

2. BWC data shall be made available to prosecutors, courts, and other criminal justice entities as provided by law.

Data Security Safeguards

A. Each officer shall only download the video data from their BWC onto a secure password protected server that is only available from University of Minnesota, Morris Campus Police department computers located in their secure locked office area. All requests for copies of video data shall follow University of Minnesota, Morris Campus Police data request procedures. All data reproduction requests shall be approved and disseminated by the University of Minnesota, Morris Campus Police Lieutenant or their designee.

B. Personally owned devices, including but not limited to computers and mobile devices, shall not be programmed or used to access or view agency BWC data.

C. Officers shall not intentionally edit, alter, or erase any BWC recording unless otherwise expressly authorized by the University of Minnesota Morris Lieutenant designee.

D. As required by Minn. Stat. § 13.825, subd. 9, as may be amended from time to time, this agency shall obtain an independent biennial audit of its BWC program.

Agency Use of Data

A. At least once a month, supervisors will randomly review BWC usage by each officer to ensure compliance with this policy and to identify any performance areas in which additional training or guidance is required.

B. In addition, supervisors and other assigned personnel may access BWC data for the purposes of reviewing or investigating a specific incident that has given rise to a complaint or concern about officer misconduct or performance.

C. Nothing in this policy limits or prohibits the use of BWC data as evidence of misconduct or as a basis for discipline.

D. Officers should contact their supervisors to discuss retaining and using BWC footage for training purposes. Officer objections to preserving or using certain footage for training will be considered on a case-by-case basis. Field training officers may utilize BWC data with trainees for the purpose of providing coaching and feedback on the trainees’ performance.
Data Retention

A. All BWC data shall be retained for a minimum period of 90 days. There are no exceptions for erroneously recorded or non-evidentiary data.

B. Data documenting the discharge of a firearm by a peace officer in the course of duty, other than for training or the killing of an animal that is sick, injured, or dangerous, must be maintained for a minimum period of one year.

C. Certain kinds of BWC data must be retained for six years:
   1. Data that documents the use of deadly force by a peace officer, or force of a sufficient type or degree to require a use of force report or supervisory review.
   2. Data documenting circumstances that have given rise to a formal complaint against an officer.

D. Other data having evidentiary value shall be retained for the period specified in the Records Retention Schedule. When a particular recording is subject to multiple retention periods, it shall be maintained for the longest applicable period.

E. Subject to Part F (below), all other BWC footage that is classified as non-evidentiary, becomes classified as non-evidentiary, or is not maintained for training shall be destroyed after 90 days.

F. Upon written request by a BWC data subject, the agency shall retain a recording pertaining to that subject for an additional time period requested by the subject of up to 180 days. The agency will notify the requestor at the time of the request that the data will then be destroyed unless a new written request is received.

G. The department shall maintain an inventory of BWC recordings having evidentiary value.

H. The department will post this policy, together with its Records Retention Schedule, on its website.

Compliance
Supervisors shall monitor for compliance with this policy. The unauthorized access to or disclosure of BWC data may constitute misconduct and subject individuals to disciplinary action and criminal penalties pursuant to Minn. Stat. § 13.09.
Portable Audio/Video Recorders

424.1 PURPOSE AND SCOPE
This policy provides guidelines for the use of portable audio/video recording devices by members of this department while in the performance of their duties (Minn. Stat. § 626.8473). Portable audio/video recording devices include all recording systems whether body-worn, handheld or integrated into portable equipment.

This policy does not apply to mobile audio/video recordings, interviews or interrogations conducted at any University of Minnesota Police Department facility, undercover operations, wiretaps or eavesdropping (concealed listening devices) unless captured by a portable recording system.

424.1.1 DEFINITIONS
Definitions related to this policy include:

Portable recording system - A device worn by a member that is capable of both video and audio recording of the member’s activities and interactions with others or collecting digital multimedia evidence as part of an investigation and as provided in Minn. Stat. § 13.825.

424.2 POLICY
The University of Minnesota Police Department may provide members with access to portable recorders for use during the performance of their duties. The use of recorders is intended to enhance the mission of the Department by accurately capturing contacts between members of the Department and the public.

424.3 COORDINATOR
The Chief of Police or the authorized designee should designate a coordinator responsible for (Minn. Stat. § 626.8473; Minn. Stat. § 13.825):

(a) Establishing procedures for the security, storage and maintenance of data and recordings.

1. The coordinator should work with the Custodian of Records and the member assigned to coordinate the use, access and release of protected information to ensure that procedures comply with requirements of the Minnesota Government Data Practices Act (MGDPA) and other applicable laws (Minn. Stat. § 13.01 et seq.) (See the Protected Information and the Records Maintenance and Release policies).

(b) Establishing procedures for accessing data and recordings.

1. These procedures should include the process to obtain written authorization for access to non-public data by UMPD members and members of other governmental entities and agencies.

(c) Establishing procedures for logging or auditing access.

(d) Establishing procedures for transferring, downloading, tagging or marking events.

(e) Establishing an inventory of portable recorders including:
1. Total number of devices owned or maintained by the University of Minnesota Police Department.

2. Daily record of the total number deployed and used by members and, if applicable, the precinct or district in which the devices were used.

3. Total amount of recorded audio and video data collected by the devices and maintained by the University of Minnesota Police Department.

(f) Preparing the biennial audit required by Minn. Stat. § 13.825, Subd. 9.

(g) Notifying the Bureau of Criminal Apprehension (BCA) in a timely manner when new equipment is obtained by the University of Minnesota Police Department that expands the type or scope of surveillance capabilities of the department’s portable recorders.

424.4 MEMBER PRIVACY EXPECTATION
All recordings made by members on any department-issued device at any time or while acting in an official capacity of this department, regardless of ownership of the device, shall remain the property of the Department. Members shall have no expectation of privacy or ownership interest in the content of these recordings.

424.5 MEMBER RESPONSIBILITIES
Prior to going into service, members assigned a portable recorder will be responsible for making sure the recorder is in good working order (Minn. Stat. § 13.825). If the recorder is not in working order or the member becomes aware of a malfunction at any time, the member shall promptly report the failure to his/her supervisor and obtain a functioning device as soon as reasonably practicable. Uniformed members should wear the recorder in a conspicuous manner or otherwise notify persons that they are being recorded, whenever reasonably practicable (Minn. Stat. § 626.8473).

Any member assigned to a non-uniformed position may carry an approved portable recorder at any time the member believes that such a device may be useful. Unless conducting a lawful recording in an authorized undercover capacity, non-uniformed members should wear the recorder in a conspicuous manner when in use or otherwise notify persons that they are being recorded, whenever reasonably practicable.

When using a portable recorder, the assigned member shall record his/her name, employee number and the current date and time at the beginning and the end of the shift or other period of use, regardless of whether any activity was recorded. This procedure is not required when the recording device and related software captures the user’s unique identification and the date and time of each recording.

Members should document the existence of a recording in any report or other official record of the contact, including any instance where the recorder malfunctioned or the member deactivated the recording (Minn. Stat. § 626.8473). Members should include the reason for deactivation. Members shall not intentionally block the portable recorders audio or visual recording functionality to defeat the purposes of this policy.
424.6 ACTIVATION OF THE AUDIO/VIDEO RECORDER

This policy is not intended to describe every possible situation in which the recorder should be used, although there are many situations where its use is appropriate. Members should activate the recorder any time the member believes it would be appropriate or valuable to record an incident.

The recorder should be activated in any of the following situations:

(a) All enforcement and investigative contacts including stops and field interview (FI) situations
(b) Traffic stops including, but not limited to, traffic violations, stranded motorist assistance and all crime interdiction stops
(c) Self-initiated activity involving contact with a citizen in which a member would normally notify the Dispatch Center
(d) Any other contact that becomes adversarial after the initial contact in a situation that would not otherwise require recording

Members should remain sensitive to the dignity of all individuals being recorded and exercise sound discretion to respect privacy by discontinuing recording whenever it reasonably appears to the member that such privacy may outweigh any legitimate law enforcement interest in recording. Requests by members of the public to stop recording should be considered using this same criterion. Recording should resume when privacy is no longer at issue unless the circumstances no longer fit the criteria for recording.

At no time is a member expected to jeopardize his/her safety in order to activate a portable recorder or change the recording media. However, the recorder should be activated in situations described above as soon as reasonably practicable.

424.6.1 CESSATION OF RECORDING

Once activated, the portable recorder should remain on continuously until the member reasonably believes that his/her direct participation in the incident is complete or the situation no longer fits the criteria for activation. Recording may be stopped during significant periods of inactivity such as report writing or other breaks from direct participation in the incident.

424.6.2 SURREPTITIOUS RECORDINGS

Minnesota law permits an individual to surreptitiously record any conversation in which one party to the conversation has given his/her permission (Minn. Stat. § 626A.02).

Members of the Department may surreptitiously record any conversation during the course of a criminal investigation in which the member reasonably believes that such a recording will be lawful and beneficial to the investigation.

Members shall not surreptitiously record another department member without a court order unless lawfully authorized by the Chief of Police or the authorized designee.

424.6.3 EXPLOSIVE DEVICE

Many portable recorders, including body-worn cameras and audio/video transmitters, emit radio waves that could trigger an explosive device. Therefore, these devices should not be used where an explosive device may be present.
424.7 IDENTIFICATION AND PRESERVATION OF RECORDINGS
To assist with identifying and preserving data and recordings, members should download, tag or mark the recordings in accordance with procedure and document the existence of the recording in any related case report.

A member should transfer, tag or mark recordings when the member reasonably believes:

(a) The recording contains evidence relevant to potential criminal, civil or administrative matters.
(b) A complainant, victim or witness has requested non-disclosure.
(c) A complainant, victim or witness has not requested non-disclosure but the disclosure of the recording may endanger the person.
(d) Disclosure may be an unreasonable violation of someone’s privacy.
(e) Medical or mental health information is contained.
(f) Disclosure may compromise an under-cover officer or confidential informant.
(g) The recording or portions of the recording may be protected under the Minnesota Data Practices Act.

Any time a member reasonably believes a recorded contact may be beneficial in a non-criminal matter (e.g., a hostile contact), the member should promptly notify a supervisor of the existence of the recording.

424.8 RETENTION OF RECORDINGS
All recordings shall be retained for a period consistent with the requirements of the organization’s records retention schedule and Minnesota Stat. § 13.825, Subd. 3, but in no event for a period less than 90 days.

If an individual captured in a recording submits a written request, the recording may be retained for additional time period. The coordinator should be responsible for notifying the individual prior to destruction of the recording (Minn. Stat. § 13.825).

424.8.1 RELEASE OF AUDIO/VIDEO RECORDINGS
Requests for the release of audio/video recordings shall be processed in accordance with the Records Maintenance and Release Policy.

424.8.2 ACCESS TO RECORDINGS
Except as provided by Minn. Stat. § 13.825, Subd. 2, audio/video recordings are considered private or nonpublic data.

Any person captured in a recording may have access to the recording. If the individual requests a copy of the recording and does not have the consent of other non-law enforcement individuals captured on the recording, the identity of those individuals must be blurred or obscured sufficiently to render the subject unidentifiable prior to release. The identity of on-duty peace officers may not be obscured unless their identity is protected under Minn. Stat. § 13.82, Subd. 17.
424.9 REVIEW OF RECORDED MEDIA FILES

When preparing written reports, members should review their recordings as a resource (See the Critical Incident Response and Investigations Policy for guidance in those cases). However, members shall not retain personal copies of recordings. Members should not use the fact that a recording was made as a reason to write a less detailed report.

Supervisors are authorized to review relevant recordings any time they are investigating alleged misconduct or reports of meritorious conduct or whenever such recordings would be beneficial in reviewing the member’s performance.

Recorded files may also be reviewed:

(a) Upon approval by a supervisor, by any member of the Department who is participating in an official investigation, such as a personnel complaint, administrative investigation or criminal investigation.

(b) Field training officers may review recordings with trainees for the purpose of providing coaching and feedback on the trainee’s performance.

(c) Pursuant to lawful process or by court personnel who are otherwise authorized to review evidence in a related case.

(d) In compliance with the Minnesota Data Practices Act request, if permitted or required by the Act, including pursuant to Minn. Stat. § 13.82, Subd. 15, and in accordance with the Records Maintenance and Release Policy.

All recordings should be reviewed by the Custodian of Records prior to public release (See the Records Maintenance and Release Policy). Recordings that are clearly offensive to common sensibilities should not be publicly released unless disclosure is required by law or order of the court (Minn. Stat. § 13.82, Subd. 7).

424.10 PROHIBITED USE OF AUDIO/VIDEO RECORDERS

Members are prohibited from using department-issued portable recorders and recording media for personal use and are prohibited from making personal copies of recordings created while on-duty or while acting in their official capacity.

Members are also prohibited from retaining recordings of activities or information obtained while on-duty, whether the recording was created with department-issued or personally owned recorders. Members shall not duplicate or distribute such recordings, except for authorized legitimate department business purposes. All such recordings shall be retained at the Department.

Recordings shall not be used by any member for the purpose of embarrassment, harassment or ridicule.

424.11 ACCOUNTABILITY

Any member who accesses or releases recordings without authorization may be subject to discipline (See the Standards of Conduct and the Protected Information policies) (Minn. Stat. § 626.8473).
AGENDA ITEM: Risk Management in the Acquisition of Real Estate

☐ Review  ☐ Review + Action  ☐ Action  ☒ Discussion

☐ This is a report required by Board policy.

PRESENTERS: Michael Berthlesen, Interim Vice President, University Services
Michael Volna, Associate Vice President and Interim Assistant CFO

PURPOSE & KEY POINTS

The purpose of this item is to review an analysis of contract liability and the lessons learned following the acquisition and clearing of the Electric Steel and Mathisen Kurth elevator properties in late 2016 and early 2017. The item will also include a discussion of potential areas of improvement identified by the analysis.

Acquisition Process

When the University initiates or approves exploration of a property acquisition, the property owner is contacted in an attempt to put together the business terms of a purchase. Two appraisals are obtained, with the University’s goal for the purchase price not to exceed the average of the two. Following negotiation, the property owner and the University sign a purchase agreement. This agreement includes the option to terminate if assessment finds the property unacceptable (typically due to environmental or title issues) and includes a clause that the purchase is subject to Board approval if the price is over $1.25 million and/or the parcel is greater than 10 acres and subject to concurrence (advisory) by the Minnesota Legislature.

Environmental due diligence begins at this stage. The University has a number of firms under contract on annual basis, the result of a request for proposal process every five years. Each campus typically uses local firms.

A Phase I investigation is an industry standard. It looks at ground and ground water environmental conditions, not building materials. (A limited hazardous building assessment may be part of Phase I, though it is not standard.) Both University Real Estate and University Health and Safety review the consultant report, and discuss next steps and the Phase I findings with the consultant. Based on that discussion, a Phase II assessment may be ordered.

Phase II is a more in-depth assessment involving digging (potholing or trenching) to pull samples for external lab review. The consultants use their environmental expertise to determine the scope of Phase II based on Phase I findings, with the University giving final approval. A Phase II
assessment is non-standard in scope. It is important to note that this phase is still purely environmental in range, and is often expedited to meet the timing of the purchase agreement.

Purchases take two tracks. If the University intends to keep and use buildings on the property, Capital Planning and Project Management undertakes an assessment of structures, systems, and mechanicals. Included in that assessment is an examination of building condition and function (sometimes done internally, sometimes outsourced) and hazardous building materials. One of the challenges is the accuracy of these assessments given the non-destructive testing being done. If the University desires cleared land, the practice is to stipulate that as a condition of the purchase agreement wherever possible. This can include verifications on permits pulled from local jurisdiction, location where debris was disposed, and evaluation of land for anything left behind.

When all due diligence is complete for properties over $1.25 million and/or 10 acres, the Board reviews and acts on purchase agreement terms and conditions prior to closing. All purchases are forwarded to the Minnesota Legislature for required notification and requested concurrence.

Areas of Improvement

Several areas of improvement to this process were identified. They include:

1. Develop a clearly defined hazardous materials assessment process for structures the University intends to demolish upon closing.
2. The institution should not accept assessments commissioned by third parties.
3. A re-evaluation of the University standard for remediation of acquired land, including whether to clean property to prepare for all possible future uses.
4. Clearer communication of unknown risks at time of Board action, including potential areas for additional cost exposure.

BACKGROUND INFORMATION

A timeline of major events leading to the acquisition and clearing of the Electric Steel and Mathisen Kurth elevator properties are listed below:

- February 2015: Athletes Village schematic design approved, committing the University to displacing the practice track facility.
- May 2015: Feedback from Regents leads to the exploration of locating the track on the East Bank if possible and the potential acquisition of necessary land.
- September 2015: Intercollegiate Athletics announces intention to construct competition level track and field facilities on East Bank with a summer 2018 opening.
- November 2015: University acquires the Electric Steel property and structures, and begins a historical study.
- April 2016: Existing Recreation Sports site selected for track and field facilities.
- September 2016: University acquires land necessary to accommodate relocation of Recreation Sports bubble and fields (Mathisen Kurth elevator property).
- November 2016: Hazards identified include asbestos in roofing, prior demolition debris (some containing asbestos); soils testing engineer recommends full removal of concrete foundations and replacement of soil.
- December 2016: Preliminary abatement and mitigation costs for elevator properties are refined, the need for additional funds becomes clear, and options to reduce costs are explored.
- February 2017: Board approves additional funding to address contamination and revised demolition requirements at elevator properties.
1. INITIATION
Senior Leadership initiates or approves exploration of property acquisition; property owner contacted in attempt to put together business terms of purchase, request access for appraisers

2. APPRAISAL AND NEGOTIATION
Two appraisals are obtained, with the University’s goal that purchase price should not exceed the average of the two appraisals

Purchase agreement is signed, typically allows 60 days to conduct due diligence

3. ENVIRONMENTAL DUE DILIGENCE
Phase I is an industry standard process, which examines ground and groundwater environmental conditions (not building materials); results of Phase I may be sufficient, or they may lead to a Phase II

Phase II is more in-depth and with a scope defined by the findings of Phase I; typical techniques include digging, potholing, and lab analysis

4. FINAL ASSESSMENT
If the U intends to keep or use building/s on site, an assessment is done to determine building condition and function; may include a limited hazardous building materials investigation

If the U desires cleared land, purchase agreement will specify property owner to demolish structures prior to closing; in instances where this is not possible, a hazardous building materials investigation is completed to inform demolition scope and cost estimates

5. BOARD OF REGENTS APPROVAL
For properties over $1.25 million and/or 10 acres, purchase agreement terms and conditions forwarded to Board of Regents for review/action prior to closing and to the Minnesota Legislature for required notification and requested concurrence
Risk Management in Real Estate Acquisition

Board of Regents Facilities, Planning, and Operations Committee
June 8, 2017
Questions Raised in February

- Is this property being cleaned to standard, or to a lower level?
- What contingencies are included in real estate projects?
- Was investigation conducted internally or contracted?
- What is obligation of contracted investigators to explore reasonable risk?
- What’s the standard we should expect?
- Review timing of these decisions and how one decision compels another
- How can risks like these be shared with the seller?
- What liability or accountability do external parties have?
Stages in the Acquisition Process

- Initiation
- Appraisal and Negotiation
- Environmental Due Diligence
- Board of Regents Approval
- Final Assessment
- Closing

Board of Regents Approval → Final Assessment
Environmental Due Diligence → Board of Regents Approval
Appraisal and Negotiation → Environmental Due Diligence
Initiation → Appraisal and Negotiation
Closing → Board of Regents Approval
## Current Risk Controls

<table>
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<tr>
<th>Transaction or Assessment Type</th>
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<td>Project-specific purchase</td>
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<tr>
<td>Market conditions</td>
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<tr>
<td>Two appraisals</td>
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<td>Phase I Environmental Study</td>
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<tr>
<td>Phase II Environmental Study</td>
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<tr>
<td>Structures Assessment</td>
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<tr>
<td>Land cleared prior to closing</td>
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Unique Factors at Elevator Sites

- Time pressure on delivery of Track project
  - total costs estimated, not fully known at time of approval
- Prior owner unable to obtain demolition permit for ESE
  - transferred risk of unknowns from seller to U
- Competing offer on Mathisen property
  - limited ability to renegotiate
- Buried debris scattered, difficult to find with sampling
  - removal required due to nature of reuse
Process Analysis and Recommendations

✓ Works well for acquisition of cleared land or with structures the University intends to retain and use

✘ Need for clearly defined process for acquisition of property with structures the University intends to demolish upon closing
✘ Do not accept assessments commissioned by third parties
✘ Evaluation of standard for remediation of acquired land
✘ More clear communication of unknown risks at time of Board action
Next Steps

- Finalize and implement processes to address identified deficiencies
BOARD OF REGENTS
DOCKET ITEM SUMMARY

Facilities, Planning & Operations

June 8, 2017

AGENDA ITEM: Update on Utilities, Energy Management, and Sustainability

☐ Review ☐ Review + Action ☐ Action ☒ Discussion

☒ This is a report required by Board policy.

PRESENTERS: Bill Paulus, Interim Associate Vice President, Facilities Management
            Shane Stennes, Director of Sustainability

PURPOSE & KEY POINTS

The purpose of this item is to provide an update on progress implementing Board of Regents Policy: Sustainability and Energy Efficiency.

The policy defines sustainability as “a continuous effort integrating environmental, social, and economic goals through design, planning, and operational organization to meet current needs without compromising the ability of future generations to meet their own needs.” The policy identifies six guiding principles to frame the institution’s sustainability efforts, and directs the University community to advance sustainability across teaching, research, outreach, and the operations that support them.

The University has advanced the policy’s aims significantly since adoption in 2004. Each campus has developed initiatives to improve the sustainability of campus operations. The report included in the docket highlights recent sustainability accomplishments related to the intersection of University operations and the topics of energy, food, water, transportation, and buildings.

This agenda item will focus on sustainability and energy. Energy is the backbone of the research, teaching, and outreach the institution delivers. The University depends on reliable energy to power the lights, computers, and equipment, and heat and cool its buildings. Without a reliable supply of energy, the institution would not be able to deliver its core mission. Even intermittent disruptions can have a significant impact, so the University works to maintain a system that is more reliable and resilient compared to the standard service provided by utilities in Minnesota.

Energy services also have to be cost effective. For most organizations, including the University, energy is among the largest non-personnel expense. By proactively managing energy consumption and supply, the University can effectively control costs for energy services, making more resources available for teaching, research, and outreach.

Energy has to be provided in a way that is environmentally responsible. Energy generation and consumption are responsible for the most significant environmental impacts attributable to the
institution. These environmental impacts can negatively affect the neighborhoods adjacent to the University, students and employees, people across Minnesota, and beyond. Providing more energy from renewable sources and conserving energy improves the sustainability of our energy supply.

The University delivers cost effective, reliable, and environmentally responsible energy services by developing long-range plans for the institution’s key utilities and then implementing various projects and initiatives in support of those plans. This agenda item will include a brief overview of the current utility master plan and some of its completed projects. The presentation will highlight the importance of utility planning to support institutional growth and future development.

BACKGROUND INFORMATION

The Board has received periodic updates on progress implementing Board of Regents Policy: Sustainability and Energy Efficiency. These are the most recent reports and presentations:

- February 2016, Annual Update on Sustainability Efforts in Facilities, Planning, and Operations, Facilities, Planning & Operations Committee
- February 2015, Annual Update on Sustainability in Operations, Facilities & Operations Committee
- December 2014, Optimizing the University's Physical Assets: System-wide Campus Infrastructure, Facilities & Operations Committee
University of Minnesota takes on Grand Challenges with new Curriculum

On campus and around the world, students and faculty from across the University of Minnesota system work to solve the big problems we face today. Find out how they are analyzing solutions, making connections, and collaborating to keep up with our changing world.

Continue reading on page 2

Morris Turns Trash into Treasures

Morris Facilities Management launched a recycling program that takes plastic bags and mixes them with wood chips to create decking boards that can be used in sustainable construction.

Continue reading on page 4

Crookston Tunnels to Local Food

Thanks to a $10,000 grant from Sodexo, University of Minnesota, Crookston's Dining Services provider, staff from the Northwest Research and Outreach Center constructed a 24 x 75 foot high tunnel in the summer of 2015. Assisted by students and a private contractor, the structure supplements the local food produced in the Allen Pedersen campus garden.

Continue reading on page 3

Twin Cities Charges Full Steam Ahead

How will the Twin Cities sustainably heat up buildings and generate hot water during the frigid Minnesota winters? The new and improved Combined Heat and Power Plant, set to open for operations in the spring of 2017!

Continue reading on page 6

Little Rochester on the Prairie

University of Minnesota, Rochester enabled a vacant lot to flourish with native plants, replacing the empty concrete building space with natural green space, making room for plant and animal species to create a microecosystem in the vacant lot.

Continue reading on page 1

UMD Charges at No Charge

The University of Minnesota, Duluth now supports electric vehicles! The UMD campus started offering free electric vehicle charging stations on campus for anyone to use.

Continue reading on page 7
With such a small campus, it might seem like the University of Minnesota, Rochester doesn't have much space to fit sustainability into its programming. But despite its limited spaces, UMR prioritizes the environment and incorporates green into its agenda wherever and whenever possible.

This year, for example, University of Minnesota, Rochester has engaged in several sustainable actions to lessen its environmental impact and promote green ways of thinking in the area it occupies.

Starting within the walls of its own buildings, UMR recently opted for LED lighting in a newly leased space. LED light bulbs are far more energy efficient than regular light bulbs, reaching 80-90% efficiency, which can result in lifespans of up to 100,000 hours. If used during a regular 8-hour work day, LED lights don't have to be replaced for about 20 years. LED lighting is also free of toxic chemicals, produces no UV emissions, and can operate on low-voltage power. As a result of all this, the switch to LED lighting at this UMR building saves money AND the environment!

Another green action initiated by UMR was to tear down a dilapidated building that it recently purchased in order to remove urban blight. The building, located in downtown Rochester, had been occupied by various tenants over the years and was eventually left vacant. Over time, the building's condition deteriorated and it became an unsightly blemish on the downtown area. UMR razed the building and let the vacant lot flourish with native plants, replacing the empty concrete building with natural green space, making room for plant and animal species to create a microecosystem in the vacant lot. The result was a total transformation from crumbling cement and blacktop to blooming foliage and ecological community.

UMR also augmented its own green space with the addition of over twenty budding new trees. A local construction company, Gerrard Companies, recently oversaw a construction project at a site that used to house University Village Inn Apartments. The construction included the removal of several arborvitae trees. With sustainability in mind, Gerrard Companies salvaged these trees and replanted them elsewhere on campus. They are enhancing a green area and providing an opportunity for the trees to develop and grow to full size over time.

As the UMR campus develops and gains access to more resources, it works to incorporate sustainability every step of the way. These green initiatives are small manifestations of the sustainable state of mind maintained by staff and faculty at UMR. They are the beginning of a strong foundation to ensure that as the campus grows, its sustainable efforts will grow right along with it.
Today, it's easy to get caught up in the big problems: climate change, food crises, global poverty, disease, and technological development. These problems touch us right here in Minnesota, but also face our nation and world. Within the University of Minnesota system, many programs are working to solve these issues. At the Twin Cities campus, the Grand Challenges program, driven by the campus Strategic Plan, provides funding for researchers and a curriculum for students to analyze solutions, develop faculty collaborations, and establish connections with many resources. Meanwhile, at UM Morris and UM Crookston, efforts are being made that work to accomplish similar goals: fostering just and equitable communities, ensuring clean water and sustainable ecosystems, and enhancing community capacity for a changing world, just to name a few.

Twin Cities
In 2015, Twin Cities Provost Karen Hanson and the Grand Challenges Research Strategies Team hosted five forums, which drew over 600 participants, to identify potential grand challenges and foster research connections. A Call for Ideas was established, which sought faculty suggestions and possible solutions for complex and multifaceted issues. Over 130 ideas were submitted, with over 350 faculty leading the efforts. Drawing broadly from this initial research period, five research areas were recommended as the focus of the Grand Challenges program. These areas are well positioned to have a powerful impact on the world, a key component of the University's strategic vision. The 29 chosen research proposals, comprised of faculty from every college, were awarded $3.6 million through Driving Tomorrow research grants. Beyond exploratory and cross discipline research, a growing suite of Grand Challenges Curriculum (GCC) courses are available each semester. Courses are taught by cross-disciplinary instructors, and while each course focuses on a particular global issue, knowledge, skills, and values learned in these classes can be applied to many different challenges. These courses don't have easy or right answers to complex problems, and students are encouraged to provide multiple perspectives, feedback, and questions. Ultimately, the goal is to build students' capacities to take viable action on these issues as leaders, innovators, and global citizens.

Morris
The Morris campus is championing work that aligns with the Grand Challenges initiative. Morris earned Carnegie Community Engagement classification for its outstanding public engagement. Additionally, the campus is working closely with the large Spanish-speaking population in the region as part of the comprehensive Morris Intercultural Initiative to ensure their voices are heard. In January 2017, the Morris campus co-hosted Governor Dayton's Town Hall Water Summit -- an opportunity for hundreds of people to more deeply consider a shared water ethic across Minnesota. These actions contribute to the Morris campus-community initiative called "The Morris Model," which has received statewide recognition for helping the local community consider how extreme weather and climate impacts can be addressed to make their communities more resilient.

Crookston
At the University of Minnesota Crookston, sustainability is thought of as both a global and local issue that encompasses the major challenges of our time. This outlook is the driving force behind many programs that seek to mitigate these challenges. For example, the university is working to support local farms on campus while identifying local and global strategies to reduce food waste and compost organic material. Crookston is also working to integrate sustainability in the curriculum for all students, including study abroad programs with environmental themes. The university is working towards better publication of UROP grants and other research initiatives that focus on sustainable opportunities.

Duluth
Meanwhile, efforts in Duluth are also researching big issues, like protecting clean water. Situated right on Lake Superior, students and faculty understand the value of fresh water. The Large Lakes Observatory on campus expands and communicates knowledge about the past, present, and future of large lakes worldwide, the key sources of freshwater for humankind. Additionally, Duluth is home to the Natural Resources Research Institute, which delivers economic and environmental solutions with regional focus and global relevance. Specifically, research is applied towards developing sustainable, natural resource based industries, informing environmental management and policy, and supporting industries and communities seeking development. Finally, the UMD Land Lab has a key mission to strengthen food security in the Western Lake Superior region by promoting teaching, research and public engagement related to sustainable food and agriculture ecosystems. These successes can be translated, transformed, and applied to other communities worldwide.
FOOD

Morris Students Beekeepin’ It Real

In 2016, students tended the Student Organic Garden and Native American Gardens during the summer while living on-campus as part of Morris’ Live to Garden (L2G) program. This work includes maintaining several colonies of bees. In exchange for “sweat equity” in the gardens, about 10 hours per week, students are provided housing in Residential Life. Students also learn how to cook and share meals with each other. The L2G program has been running for 3 years. An L2G student summed up the experience by saying, “I loved getting to participate in Live to Garden this summer, watching the garden grow from nothing to what it is now was nothing short of fantastic!”

Crookston Tunnels to Local Food

Continued from front page

Thanks to a $10,000 grant from Sodexo, UMC’s Dining Services provider, staff from the Northwest Research and Outreach Center and UMC constructed a 24 x 75 foot high tunnel in the summer of 2015. Assisted by students and a private contractor, the structure is adjacent to UMC’s Horticulture Greenhouses and supplements the local food produced in the Allen Pedersen campus garden. Student assistance in both the garden and high tunnel is supported primarily by private endowments and Sodexo. While the garden production was hampered by a hailstorm and wet conditions (and fell short of the 11,000 lbs. produced in 2015) a bumper crop of onions, tomatoes, lettuce, and cucumbers was produced in the high tunnel. Heidi Schol, horticulture major, was the lead gardener in the high tunnel and is using that experience to evaluate 3 other high tunnel operations in the region. High tunnels have been known to extend the growing season 6 weeks in the spring and into the fall as well as expand the northward range of some plants which are not cold hardy in northern climes.

UMD local harvest reaches new heights

The UMD Sustainable Agriculture Project/Land Lab had an amazing harvest this year, nearly double what was grown the previous year. UMD Dining has now served over 40,000 pounds of food grown by students since the SAP Farm was created. Another success? Record attendance at UMD Farm Fest in September 2016.

Twin Cities Goes on a Food Waste Diet

The Natural Resources Defense Council reports that 40% of food goes to waste at the consumer level. University Dining Services is taking a seat at the table when it comes to combating food waste. This past September, Dining at the Twin Cities campus visited dining halls across campus to promote waste reduction and awareness. Representatives from M Dining set up booths at waste receptacles in dining halls, and students weighed their food waste after they were done eating. The event, which takes place once per semester in every dining hall, aims to get students to be more aware of the food waste they create, and to only take food they plan to eat. Students are encouraged to think about the impact their consumption has on the environment, and to keep this impact in mind as they eat their meals in the dining hall. Weigh the Waste is part of an overall effort by M Dining to curtail food waste and move toward their overarching goal of sustainability from sourcing to production to consumption. This fall saw improvement in almost every dining hall compared with last spring’s results, and a reduction of .24 oz of food waste per person overall at the U of M. This may not seem like much, but that reduction adds up to almost 50 pounds less waste than before!
Business is picking up on Crookston's Highway 75

In a society where everything can be thrown away, it is important for us to think about exactly where “away” is. Sometimes, “away” is simply the side of the Highway. The University of Minnesota, Crookston hopes to curb some of the littering that happens along its highway 75 by managing the trash that is thrown on the road. On the first Earth Day in 1970, the entire Crookston campus was dismissed from class to walk the one mile to downtown and pick up litter. Fast forward to today, and UM-Crookston’s Students for Sustainable Development have adopted a stretch of highway 75 which they maintain and pick up trash from. Gathering litter from the highway is often the first step in an individual’s path of environmental stewardship, a path that leads to greater sustainable involvement throughout the rest of their lives.

Morris Turns Trash into Treasures

Continued from front page

The University of Minnesota, Morris has been busy as a trailblazer for composting: in 2016, Morris developed a cold-weather windrow composting system that works specifically in Minnesota’s climate! Their innovative outdoor windrow system, which contains organic matter, minerals, water, and microorganisms demonstrates that an expensive, indoor industrial system isn’t necessary. This new development has helped make the expansive composting across campus efficient. Thanks to Morris Facilities Management, there are now composting containers in every building on campus, including residence halls and athletic facilities. And nothing is going unnoticed: in campus restrooms, paper towels are composted. These campus wide efforts have helped contribute to a waste diversion rate of 39% across the campus.

But it doesn't stop at composting: in 2016, Morris Facilities Management launched a Trex Recycling program that takes plastic bags and mixes them with wood chips to create decking boards that can be used in sustainable construction. With every 500 lbs of bags contributed, Morris receives a new bench for an on campus space. Plastic bags can take decades to decompose in landfills, but Morris has shown they can create new products out of trash for students, staff, and faculty to enjoy!

Choose reUse & WIN!

As part of its overall goal of waste reduction and diversion from landfills, the Twin Cities campus launched the Choose reUse and WIN! campaign, and UMN staff, faculty, and students can be part of it! Choose reUse and WIN! works to reward reuse by connecting your reusable cup, mug, or bottle to your smartphone. Simply purchase a barcoded sticker at any Gopher Express, at Goldy’s Gameroom, or in the Gopher Spot, and place the sticker on your reusable bottle or cup. Once the sticker is applied, “Choose reUse & WIN!” works in three simple steps:
1) Download the free Cupanion Rewards app from App Store or Google Play.
2) Use the app to scan the sticker any time you refill your container on campus.
3) Earn points for each scan and win prizes!
So far this year, the Choose reUse and WIN! Campaign has diverted over 19,400 disposable cups from local landfills and incinerators.

Fast Food goes Low-Waste in Duluth

Strong partnerships and a commitment to sustainability between UMD Dining and Custodial Service allow the campus Food Court to be ultra low-waste. After composting was firmly established as a waste stream across campus, the opportunity to go low-waste became a reality. UMD Dining provides most food items on bio-based plates or compostable paper wraps or boats, and coffee cups and utensils are all compostable too!
In 2015, the first rain gardens at Morris became fully established outside of the Green Prairie Residence Hall. The rain gardens are filled with a wide variety of pollinator friendly and beautiful plants. Morris Facilities Management worked with LHB Architects on planning. Major assistance was provided by the Stevens County Soil and Water Conservation District, which helped plan and plant the garden with funding from the Clean Water Land and Legacy Amendment. The rain gardens filter and hold water from the parking lot and the building -- keeping more water on campus and away from the Pomme de Terre River which flows about a mile away from campus.

**In Crookston, the Grass Really is Greener**

Soil moisture and temperature are known predictors of greenhouse gas (GHG) losses from highly managed turfgrass. Irrigation practices that conserve water reduce GHG losses but can adversely affect turfgrass quality. UMC turf specialist Kristie Walker, environmental scientist, Katy Chapman, and their Crookston undergraduate researchers have been evaluating irrigation and nitrogen fertilization on carbon dioxide, methane, and nitrous oxide emissions from creeping bentgrass greens. They found high nitrogen rates increased emissions of both CO2 and N2O. Emissions related to irrigation were decreased by shading, and therefore temperature. Higher turfgrass quality was associated with the use of an organic form of nitrogen known as Milorganite. This work has practical significance to growing better turf greens, conserving water, enhancing the environment, and providing valuable learning for students.

**A More Pleasant “Pleasant Street”**

Last year, Pleasant Street in the Twin Cities bus loop underwent an extensive renovation. This renovation, a product of collaboration between multiple university departments, opened up the area to facilitate better traffic flow, better manage stormwater runoff, and improve the aesthetics of the area. Pleasant Street now incorporates elements that make the area more sustainable and better for the environment. For example, the new design enables bikes, buses and cars to more easily share the road and encourages sustainable modes of transportation with a more prominent bike lane. The renovation also significantly improved stormwater management. Catch basins on the street and permeable pavement on the sidewalk funnel stormwater runoff to trenches around the trees, which then absorb and distribute the water. This manages the stormwater and expedites tree growth. The trees themselves are a variety of different species, chosen mostly for their large size. Using multiple species helps protect the trees and the ecosystem from ecological threats, such as the Emerald Ash Borer. Using large trees not only promotes carbon sequestration, but provides shade, intercepts rainfall, and absorbs water. Overall, the new Pleasant St. design enables humans to function and travel efficiently and effectively, while minimizing our impact on the environment.

**Better Fields, Less Water, and Money Savings!**

Automatic irrigation systems were installed on 5 athletic fields at UMD that save water, reduce maintenance time, and support a better playing surface. The project idea was imagined by UMD Civil Engineering Students, as part of the UMD Shines project, advised by Dr. Mary Christiansen and Dr. Alison Hoxie, during Spring 2016. Project implementation was managed by Shane Peterson, Grounds Supervisor in UMD Facilities Management. Irrigation quality plays a big role in maintaining recreational opportunities in the fall for UMD students who participate in rugby, ultimate frisbee, flag football, lacrosse, soccer, and softball. In the spring, irrigation will help the fields be playable so UMD can host football camps which bring 1,200 high school students to campus.

**Residence Halls & Rain gardens**

In 2015, the first rain gardens at Morris became fully established outside of the Green Prairie Residence Hall. The rain gardens are filled with a wide variety of pollinator friendly and beautiful plants. Morris Facilities Management worked with LHB Architects on planning. Major assistance was provided by the Stevens County Soil and Water Conservation District, which helped plan and plant the garden with funding from the Clean Water Land and Legacy Amendment. The rain gardens filter and hold water from the parking lot and the building -- keeping more water on campus and away from the Pomme de Terre River which flows about a mile away from campus.
Full Steam Ahead to the Main Energy Plant!

Continued from front page

The University of Minnesota, Twin Cities needed to save money, curb emissions, and strengthen heat infrastructure. With the construction of the Combined Heat and Power Plant, within the historic Old Main steam plant on the edge of campus, all three and more could be accomplished! While the ribbon cutting ceremony will occur during the early spring of 2017, it’s time to get excited about boilers, combustion turbines, heat recovery system generat- wait, are you asleep?! Sure, these technical improvements can seem a little snooze-worthy. But the benefits they provide to campus are the opposite. Not only would this construction efficiently provide the University with heat, but in 2011, the project was forwarded by President Kaler under his Operation Excellence Initiative. By committing to reducing costs, through smart innovations on the operational side of things, President Kaler pledged over a six-year period to redirect money towards teaching, research, and public engagement. The construction of the plant fell under other progressive initiatives as well: the U is aiming to be carbon neutral by 2050, and the construction drops the campus carbon footprint by 15%. So, what exactly will the plant be used for? It will produce 22 megawatts of electricity which equates to 45% of campus needs. In addition, the steam generation will be used for heating up buildings (because we all know the struggle of those Minnesota winters), generating hot water, and used for various “processed loads”, such as sterilization of medical equipment. On average, 85% of annual steam demand will come from the CHPP! The project will provide a reliable source of heat, electricity, and reduce our emissions, while revitalizing and reusing an existing space on campus. After debt payment and operations costs, the plan will reduce the cost of campus operations by $2-$3 million a year. Now that’s a green solution that saves the university some green too.

Evaluating the Promise of a Problem: UMC and the Invasive Hybrid Cattail

Northwest Research and Outreach Center biologist-Dan Svedarsky has been evaluating the biofuel potentials of the invasive cattail, a hybrid between the native broadleaf cattail and the narrowleaf cattail. This species originally arrived on the East Coast and spread west, and can choke out other aquatic vegetation, and dramatically reduce open water, which reduces habitat for wetland wildlife. Svedarsky and Josh Bruggman, a UMC alum and now graduate student at the University of North Dakota, have been studying the effects of cattail control strategies to create an environment of 50% open water and 50% cattails. This particular approach is called a “hemi-marsh” and is an ideal configuration for wetland habitat. Although harvesting cattails presents challenges in wet conditions, once they are in pellets or some form of compressed fuel, their energy content is similar to wood. These plants are also productive, often growing over 10 tons per acre, don’t have to be planted, don’t compete with land used to grow food crops, and are carbon neutral in comparison to fossil fuels. They are also widespread, with over 100,000 acres across Northwest Minnesota.

Made in Minnesota

In 2014, the University of Minnesota, Morris was accepted into the Made in Minnesota solar incentive program, and shortly after, a 20-kilowatt photovoltaic (PV) system was installed on the UMM campus. The Made in Minnesota program specializes in solar panel installations and lighting and aids companies and individuals in the utilization of renewable energy. It provides incentives for participants, who are selected by lottery, and installs the solar systems. Finally, it reimburses participants based on the amount of solar energy produced. The new solar system uses PV cell panels to convert solar energy into usable electricity. The system directly powers the Green Prairie Community Residence Hall on the UMM campus, offsetting both energy consumption and cost. With the addition of two 1.5 kilowatt solar panels near the Science Building, UMM now has a total of 23 kilowatts of installed solar PV system on campus. These systems deliver over 30,000 kilowatt-hours of power per year. 2015 was the first full year of production from the new solar PV installation.

Students Spark Solar

Last school year, a team of UMD students partnered with UMTC to work on solar as part of undergraduate research, class projects, and the UMD SUN Delegation to make progress on advancing solar energy use. From initial planning meetings, to brainstorming and prioritizing sites for solar installations, the students gathered resources from across campus, the Duluth community, and even national experts via a Solar Technical Assistance grant-- to help plan for the future of solar at UMD and UMTC. Results from student work was featured in an April 2016 Solar Summit for UMD campus and community members, and recently presented at the national AASHE conference in Baltimore, MD.
University of Minnesota, Duluth Charges at No Charge

Electric vehicles (EVs) are powering up sustainability in Duluth! Parking & Transportation Services, in a partnership with Facilities Management now offers free electric vehicle charging on campus. Fuel costs for electric vehicles are generally lower than conventional vehicles, but free charging stations provide a great incentive to consumers. At the station, two cars can charge simultaneously, so drivers can charge up their vehicles while studying or working on campus. The charger is open for anyone to use. If students, staff, faculty or visitors want to check the availability of the charging station, they can visit chargepoint.com. The station from ChargePoint was received at no cost through ChargePoint's JumpStart program, submitted by UMD Facilities Management and the Office of Sustainability. Separate from the JumpStart grant, in 2013, UMD and the City of Duluth partnered with the Twin Cities Clean Cities Coalition to bring training workshops on EV-safety and technical assistance to Duluth. Since its installation, the UMD EV charging station has been used for 431 individual EV-charging sessions!

Car Sharing is Caring

Since the 2011 launch of the University of Minnesota, Morris ZimRide partnership, students at UMM have saved over $350,000 through carsharing. ZimRide is a car sharing service which allows students to communicate and connect to find other students with common destinations and carpool. The program is especially useful at times like Thanksgiving, winter, and spring break, when high densities of students are flowing out of the UMM campus. Many of these students are headed in the same direction, and riding in individual cars to the same place is wasteful and unnecessary. Thanks to ZimRide, students can save money and gas by connecting with those headed in their direction. It also proves useful to students who don't have cars, as they too can find rides through the service.

Bike (or Walk!) Through Crookston

In this Northwestern Minnesota farming community, many in Crookston are striving to make it easier and safer to get around town on foot and by bike. In early 2016, Bike Crookston, a collaborative working group, was formed to encourage active living and community connections through bicycle access, education, and infrastructure both on and off campus. UMC staff from Student Affairs, Community Engagement, International Student Programing, and the Wellness Center are joined by UMC students and active members from Polk County Public Health, the Polk County Wellness Coalition, and other community members. The group is moving ahead with great momentum with the goal of making Crookston and the UMC campus more bike and pedestrian friendly.

“LEEP”ing Forward to Efficient Lighting

Parking and Transportation also received two 2016 Lighting Energy Efficiency in Parking campaign awards. The first, awarded for highest energy savings, was for sustainable lighting use in the East River Road Garage. The second award, at the 19th Avenue Ramp, was for highest percentage energy savings. These awards come as the result of recent energy efficiency initiatives at UMN, specifically through installing low wattage LED fixtures and implementing high efficiency lighting controls.
The Sustainability Times

REAL ESTATE

Sustainable designs from the architect’s studio...

Green Prairie Living & Learning Community
Morris
A perfect blend of sustainable design, The Green Prairie Living and Learning Community proves that architecture can both create and respect living environments. Inside, you’ll find newly installed low-flush toilets, optimal insulation for energy efficiency, and natural daylight. Take a step outside, and onsite orchards and edible gardens are ready for enjoyment.

Cina Hall: College of Liberal Arts
Duluth
Visit Duluth’s Cina Hall and find out what truly makes sustainable design cool: the perfectly syncing air conditioning system combines recycled air with new, outside air, promoting energy savings and a fresh workspace. This system is especially optimal for the number of students and staff occupying Cina Hall, who will also find comfort in the ample natural light, which is supplemented by dimmable LED lighting.

17th Avenue Residence Hall
Twin Cities
Design can improve buildings on often times overlooked different levels: at 17th Ave Residence Hall, you’ll find an innovative gray water system that works to capture five days of rainwater in underground facilities. Water at 17th Ave embarks on a new journey: it is used for toilets and outdoor watering, contributing to the health and sanitation needs of residents and beautiful lawns.

Evergreen Hall
Crookston
Walking into Evergreen Hall gives the impression of living design: building materials include banana peel fibers and interior woodwork that were salvaged from evergreen and ash trees removed from the construction site. This model demonstrates that while constructing buildings sustainably, items don’t have to go to waste, but instead, can be transformed. Sustainable architecture truly breathed new life into the old, discarded, and forgotten.
Crookston Community Taking Green Steps Forward with a Little Help from UMC

UMC’s Center for Sustainability announces the hiring of Matt Peterson as a Community Sustainability Outreach Assistant for the GreenSteps Program. This MPCA Program recognizes communities that achieve benchmarks in sustainability practices and Matt will help move that along. With the help of DeAndra O’Connell, a past UMC intern, the City of Crookston passed a Step One resolution to engage in the program and is now working on Step Two. Sustainability Assistants are supported by UMC’s Green Fee.

A Look Into Living Laboratories...

What if the University was more than just a backdrop of student life? If campus grounds themselves were used as outdoor spaces for innovation, testing, and learning? With the Living Laboratory program, the possibilities are endless! The Twin Cities campus invites student, staff, and faculty proposals two times a year to utilize campus grounds as a living lab. More than 20 projects have been approved and established since program inception in 2011, ranging from compost systems to pollinator friendly gardens. The next round of applications opens Fall 2017. What will YOU create on campus? Find out more at z.umn.edu/livinglab

Duluth Dining Alert!

UMD has a beautiful new dining space for on-campus residents that offers superior amenities and space for students, but utilizes the same square footage as before! By renovating the existing building structure, UMD Dining kept the square footage of campus from increasing, yet improved the flow of traffic and provided more efficient and comfortable seating options. Superior Dining took steps to make the space energy-efficient, with upgraded heating, ventilation and air conditioning equipment, LED lighting, and many local and sustainably-sourced materials.

Rochester Promotes Shared Public Space as a Sustainable Resource

UMR is looking towards future development with the Rochester Downtown Master Plan and the Destination Medical Center. UMR is committed to the creation of public space that can easily and permanently be shared with community partners, thereby limiting the need to overdevelop and duplicate space in the downtown area.

Representing the University in Marrakech, Morocco

This November, 7 graduate students and 3 faculty engaged in research focused on climate change policy, financing and action represented the University of Minnesota in Marrakech, Morocco, where they attended the 22nd Conference of the Parties (COP22), organized by the United Nations Framework Convention on Climate Change (UNFCCC). This year, the COP22 session focused on implementation of the Paris Agreement, a collective framework for countries to respond to climate change, which was negotiated last year during the COP21 conference. While in Marrakech, the University delegates offered daily impressions on the proceedings, which focused on ways to put the Paris Agreement into action. Learn more about their experience in Marrakech, the course they took to prepare and the many ways that they see University of Minnesota research contributing to global efforts to fight climate change. While many researchers at the University focus on climate change, across disciplines, special thanks go this year to the Humphrey School of Public Affairs and the Institute on the Environment for making this opportunity possible. Visit z.umn.edu/COP22

Morris is ranked by Sierra Club as the highest performing “Cool School” in Minnesota in 2016. Morris ranked in the top 30 of all colleges and universities in the United States at #28 by Sierra Club.

A May 2016 workshop connected the UMD campus and community members around energy issues. Over 50 faculty, staff, local experts, and organizational staff gathered at the UMD Energy Research Workshop with a goal to spark research in sustainable energy systems. City of Duluth Mayor Emily Larson attended to share her inspiration and outline recent City energy efficiency investments. The group also toured local energy projects with St. Louis County, Minnesota Power, Western Lake Superior Sanitary District, and the UMD Small Wind Turbine project.

UMN Fleet Goes Green with NAFA Sustainable Fleet Accreditation Program

This summer, the University of Minnesota’s Fleet (including all rental, leased, and department-owned vehicles) attained the second highest rating for a sustainable fleet from the National Association of Fleet Administrators (NAFA). The NAFA Sustainable Fleet accreditation program sets objectives, meaningful standards and guidelines for achievement of a sustainable vehicle fleet and is now considered the worldwide standard for achieving lasting improvements in air quality through the reduction of emissions, increasing fuel efficiency, and reducing fossil fuel use. The University is proud to have achieved this high sustainability rating through NAFA and will continue to work toward its goals of achieving the highest rating possible in future years.
The Institute on the Environment celebrates 10 years of supporting breakthrough research across disciplines, developing the next generation of global leaders and building transformative partnerships across the state, region and globe.

Students from all five University of Minnesota campuses are invited to present their research via lightning talk, poster or creative work at the Sustainability & Energy Expo on April 7th, 2017. Read more at z.umn.edu/SustSym2017

LOOKING FOR GARDENERs
Join the Live to Garden Program. You put in the sweat equity and we provide a place for you to live in the summer on campus. This is your chance to make friends, eat food and learn how to grow food. Contact Morris Healthy Eating and Student Organic Gardening Club for more information.

FEELING BLUE?
NEED SOMEONE TO TALK TO ABOUT GETTING GREEN?
SUSTAINABILITY HELP B+
THE AMBASSADOR IS IN

UMTC IT ALL ADDS UP BRAND AMBASSADORS ARE JUST WHAT YOU NEED TO CREATE A FUN, SUSTAINABLE EVENT. EMAIL USUSTAIN@UMN.EDU TO REQUEST A GREEN TEAM FOR YOUR NEXT EVENT OR PROMOTION!

Traditions, Trees, and Partnerships
Learn how university wide coordination between Facilities Management, Capital Planning and Project Management, and the American Indian Student Center to salvage Ash trees and turn into American Indian Lacrosse Sticks.

z.umn.edu/lacrosse

THE WORN WEAR TOUR
April 5, 2017 at Coffman Memorial Union
z.umn.edu/WornWearTour

NEED A RIDE?
Looking for a ride in Crookston? Save gas and the planet while you make a friend. Connect on Facebook by typing, “UMC Ride Share.”

UMC FREE AND FOR SALE
Got stuff you don’t need that another might want? Reduce waste. Connect on Facebook by typing, “UMC Free and For Sale.”
Dear University of Minnesota...

Q: Are there any ways to get rewarded for acting sustainably on campus?  
A: Yes, and great question! You can get rewarded for refilling your reusable water bottle or mug on the Twin Cities campus! Check out choosereuse.umn.edu for instructions to join the reuse revolution!

- Miserly in Minneapolis

Q: How can I get one of those cool Sustainability Water Bottles?  
A: Stop by the Center for Sustainability Office in Hill Hall. They’re free to all new students supported by the Crookston Students for Sustainable Development and the Green Fee.

- Goldy Gopher

Q: Growing up we composted food scraps in my house. Where can I do that at Morris?  
A: Everywhere - is the short answer. Everywhere you go on campus you should be able to find a composting receptacle. It is likely you only need to walk a couple of feet down the hall to find one. Thanks for composting -- and tell a friend!

- Regal the Eagle

Q: How can I get involved with sustainability on campus?  
A: Connect with us, at the UMD Office of Sustainability, because there are so many opportunities to get involved! Live, Learn and Lead sustainably, and make an impact in Duluth!

- Champ the Bulldog

Q: As a busy staff member at UMR, I often don’t have time to get to the gym, even though my physician recommends I get daily exercise. How do I add more hours to the day?  
A: The easiest way to add hours to the day is to bring your walking shoes to work and lace them up during your lunch hour. The campus is connected by bike, pedestrian, and public transportation options. You can get in your exercise and eat a light lunch in no time at all.

- Rockie the Raptor

PURCHASING
- IMAGINE if we purchased products that are made from post-consumer materials collected directly from our waste stream. IMAGINE if our natural resources were given new life again and again. IMAGINE if we reintroduced the same materials over and over so we’re not extracting natural resources from our Earth. IMAGINE a system that returns recycled products back to campus for use. Zero waste is the way of the future... are you in?

RECYCLING
- IMAGINE all the plastic bag liners - in all of the recycling bins - across all of the campuses - being recycled into new bag liners over and over again. IMAGINE reducing our water and oil consumption by simply recycling in a closed-loop system. These are the steps that help preserve our Earth’s air, water, and limited natural resources.

COLLECTION
- IMAGINE the University of Minnesota collects campus recyclables in a different way; with the intent of bringing them back to our campus for use again. What if we were able to recycle our expendable goods and products to use them again and again? Each year, the Twin Cities campus alone generates 5 tons of plastic bags through cans and bottle collection alone. Recycling just one ton of plastic saves the equivalent of 2,000 gallons of gasoline and almost 2,000 pounds of oil. The U is working to make the campus more sustainable every day, and that includes reducing our waste and carbon footprint. IMAGINE closed-loop recycling and IMAGINE our sustainable future.

HELP US SHAPE THE FUTURE
- http://www.umd.edu/umrecycling
SUSTAINABILITY IS A CONTINUOUS EFFORT INTEGRATING ENVIRONMENTAL, SOCIAL, AND ECONOMIC GOALS...TO MEET CURRENT NEEDS WITHOUT COMPROMISING THE ABILITY OF FUTURE GENERATIONS TO MEET THEIR OWN NEEDS.
Sustainability is Across the Mission

Teaching

Research

Outreach

Operations
Energy Makes It Possible

- 15,810 Degrees Awarded
- $880 Million in R&D
- 212 Patent Filings
- Thousands of people supported through clinics and extension services
What Energy Type and How is it Used?

- **Electricity**
  - Purchased from the Utility
  - Self-Generated

- **Steam/Hot Water**
  - Self-Generated
## Energy Use by Campus

<table>
<thead>
<tr>
<th>Campus</th>
<th>District Steam Consumption (Pounds)</th>
<th>Campus Electric Consumption (kWh)</th>
<th>Carbon Footprint (MT CO₂e)</th>
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</thead>
<tbody>
<tr>
<td>Crookston</td>
<td>39,084,000</td>
<td>7,244,718</td>
<td>10,764</td>
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<td>Duluth</td>
<td>228,491,000</td>
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<td>Morris</td>
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<td>Rochester</td>
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<td>Twin Cities</td>
<td>1,511,825,000</td>
<td>366,397,599</td>
<td>372,877</td>
</tr>
</tbody>
</table>
Guiding Principles

- Sustainable
- Cost Effective
- Reliable
Reliability

- Unplanned utility outages
- Emergency generators
- Accuracy and reliability of utility services metering
- Chilled water production
- Steam production and delivery
- Campus steam and electric consumption/use intensity
Cost Effectiveness

Budget Includes:
- Purchased Fuel/Electricity
- Debt Service
- Capital Investment
- Operations/Repair
- Engineering and Tech Support

Projected FY2018: $98,681,000
Twin Cities Buildings and Utilities Greenhouse Gas Emissions

28% REDUCTION of CO$_2$e 2008 - 2016
APPLYING OUR PRINCIPLES
New Main Energy Plant: CHP Performance

CONVENTIONAL GENERATION

- 98 units fuel
- 31% efficiency
- POWER PLANT
- 154 units total fuel
- 56 units fuel
- 80% efficiency
- BOILER

- 30 units electricity

COMBINED HEAT & POWER

- 45 units steam
- NATURAL GAS COMBUSTION TURBINE
- COMBINED HEAT AND POWER (CHP)
- 90 units fuel

49% Overall Efficiency

83% Overall Efficiency
Renewable Electricity

• Community Solar Gardens (Twin Cities)

• Renewable*Connect (Twin Cities)

• On-Site Solar
Twin Cities Electric Sources

2013

- SE Steam Plant

- Xcel

2018 (projected)

- Community Solar
- Renewable*Connect
- On-Site Solar
- CHP / SE Steam

Xcel
Managing Energy Consumption

• **Build it Right**
  – Smart Design
  – Strict Standards
  – Commissioning

• **Maintain**
  – Preventative Maintenance
  – Timely Repairs

• **Optimize / Improve**
  – Recommissioning
  – Continuous Commissioning
  – Energy Conservation Opportunities
• Commissioning (New Buildings)

• Recommissioning (Older buildings)

![Typical Pre and Post-Recommissioning Building Energy Consumption](chart.png)
Energy Conservation Opportunities

- Ventilation improvements
- Building control upgrades
- Smart Lab protocols
- LED lighting retrofits

![Image of a library room with a graph showing pre and post Amperage Draw of a Typical LED Lighting Retrofit. The graph indicates Energy Savings ~50%.]
Savings Continue in Energy Profile

UMN conservation efforts pay off

UMN saves an average of $13M each year through energy management
PLAN THE WORK, WORK THE PLAN
Plans in Context

- Campus Master Plan
- Utility Master Plan
- 6 Year Capital Plan
- Annual Capital Plan
- Annual Work Plans
2009 University Utility Master Plan

• Completed Items
  – Combined heat and power
  – Chilled water clusters
  – Steam tunnel shaft replacement
  – Improved steam distribution
  – Interconnecting electrical switch stations
Looking Ahead

- Recently Completed:
  - Southeast Gateway
  - East Gateway
  - Crookston electric distribution

- Upcoming:
  - Twin Cities campus Utility Master Plan (FY2019)
Guiding Principles

- Sustainable
- Cost Effective
- Reliable
AGENDA ITEM: Open Space Plan (Twin Cities Campus)

☐ Review  ☐ Review + Action  ☐ Action  ☑ Discussion

☐ This is a report required by Board policy.

PRESENTERS: Monique MacKenzie, Director of Planning, Capital Planning and Project Management

PURPOSE & KEY POINTS

The purpose of this item is to provide information about planning for the diversity of open spaces found on the Twin Cities campus, and to discuss the landscape management approach to maintain these spaces in optimum condition. This item will discuss the vision for, and daily operational commitment to, campus open spaces on an ongoing basis.

Three sub-areas of the Twin Cities campus’ open space system will be discussed: the Knoll, Essex Corridor, and the West Bank. Each has a role to play in advancing the sought-after qualities that make the experience of campus visitors, students, faculty, and staff positive.

Historic Campus Design

Campus-like development creates unique environments, evolving on the basis of incremental decisions. The academic campus is distinct from corporate or other private campuses, usually due to its long history. The academic campus also accommodates a wide range of activities engaged in by large numbers of people who travel by all modes of transport to a set of common destinations, such as a commencement, lecture, or sporting event.

Campuses are themselves iconic environments, particularly in urban areas. They are unique places that evolve over time and their historic origins evoke a pastoral setting, where landscapes were of equal importance to buildings. Historically, campuses were developed as an enclave, set apart from the rest of the urbanized area. They were located and designed distant from the bustle of urban life to first support teaching and learning, and later research.

Twin Cities Campus Long-Range Vision

Present-day thinking about the evolution of the Twin Cities campus has changed. Campus planners recognize legacies established by designers of the past, which used quads and malls as key design features. As the campus has grown and the city has changed, today’s vision advances the concept of a riverfront campus in the city. This focuses effort on how future and current open spaces can engage
the river, through lookouts or improved access. It also recognizes how the relationship between buildings and unbuilt spaces in a high-density urban environment can enhance the experience of campus.

**Open Space Planning and Maintenance**

Planning for a system of open spaces occurs at the campus level, the district level, and, when a new building is proposed, at the site level. Memorable, well-designed, proportionally comfortable spaces appeal to broad audiences and contribute to the iconic status of the Twin Cities campus.

Open spaces on campus are both public-focused, as a land-grant institution in the middle of an urban area, and campus community-focused. This affects planning and design guidance about location, function, scale, and purpose of existing open spaces and those that will be developed.

Qualities that make an open space successful follow principles of good design, with the goal of creating an experience that offers protection, comfort, and delight. The physical design and location of open spaces, and the attractiveness of these places as students, faculty, staff, and visitors experience them, offers a competitive advantage. The place-based experience that occurs on a campus is an important component that builds on this competitive advantage.

The care and maintenance of its landscape is a commitment the University makes on a weekly, and sometimes daily, basis to advance its brand and identity. Recent survey data of prospective students visiting higher education institutions shows that perceptions of building and grounds upkeep relate directly to perceptions of the quality and desirability of an educational experience at that specific institution.

**BACKGROUND INFORMATION**

Prior campus planning presentations to the Board have referenced plans for new development and new open spaces as an outgrowth of the 2009 Campus Master Plan.
Incremental Evolution of Campus

Minneapolis
Incremental Evolution of Campus

St. Paul
What Defines Twin Cities’ Open Space Needs?

- Planned and intentional guidance from single landowner
- Incremental change over time, started prior to city’s development
- Expectation of long term presence
- Public component of land grant institution
- Size and diversity of campus community (students, faculty, staff, visitors)
Campus Planning

- Support the mission of the land grant institution
- Engage with the surrounding community as development occurs
- Improve the built and natural environment on and near campus
Campus Development Framework

2016 Campus Development Framework

1. ADVANCE OUTREACH MISSION
   - Integrate human-scale medium-density development.
   - Improve the pedestrian experience.
   - Connect the AVC and the IDS.
   - Locate clinical and potential new hospital.
   - Acquire land strategically.

2. REINVEST IN THE CAMPUS CORE
   - Integrate mixed-use development.
   - Locate collaboration spaces in ground floors.
   - Maintain density.
   - Improve path and open space connectivity.
   - Design to encourage car use in campus core.
   - Ensure safe paths, open spaces, and access.

3. REINFORCE THE TRANSIT CORRIDOR
   - Integrate mixed-use development.
   - Activate the street edge.
   - Stitch together East and West Banks.
   - Design a pedestrian-friendly environment.
   - Create a distinct identity.

4. ENGAGE THE RIVER
   - Create new physical and visual connections.
   - Design riverfront open space sites.
   - Design buildings with both river and campus faces.
   - Develop housing to support student experience.

5. INTEGRATE CAMPUS AND COMMUNITY EDGES
   - Participate in efforts in joint planning areas.
   - Define land use patterns and density in context.
   - Determine new build sites and design candidates.
   - Improve safe routes in and through campus.
Place Based Experience

- Iconic environments
- Competitive advantage
- Appeal to broad audiences (recruitment, retention, alumni, and donor interest)
Creating a Memorable Campus Experience

• Public and community focus
  – Gathering places
  – Brand, image, identity

• Student focus
  – Familiar, protected, place of discovery
What defines campus open space?

A: Spaces that protect, provide comfort and delight

**COMMON VISION**
Architects collaborate with urban planners. Landscape architects design green spaces. Designers shall, in consultation with the authorities and the local community, find out what it is that the citizens need.

**ESTHETICS**
A visually appealing space that highlights the character of the city contributes to the awakening of civic pride and attracts tourists. Spaces also need to be functional.

**SOCIABILITY**
A well-designed public space should attract the most diverse groups of citizens - people of different ages, backgrounds and interests.

**COMFORT**
A comfortable space encourages people to stay in it longer by offering seating and protection from sun, wind and rain. It also must be clean and well maintained, with lots of garbage and recycling bins and toilets.

**FLEXIBILITY**
The same public space can be used for open-air market activities in the morning hours, be a popular place for dining at noon, a place for learning in the afternoon and a place for evening concerts.

**PLACES**
Landmarks help to define the appearance of a city. On a more practical level, they provide places for meetings.

**ACCESSIBILITY**
A real public space should be accessible to all persons with disabilities, visually impaired persons, persons who have difficulties to walk, bikers, parents with baby strollers.

**SAFETY**
A space should be well illuminated and well marked to help people navigate through it with safety.

**CREATIVITY**
A space should contain interactive elements that encourage creativity, both for the youngest, and for the oldest person. And we should not forget animals!
Importance of Campus Open Space

- Distinguishes our campus among all others
- Provides functional benefits for the campus community
- Establishes open spaces that are scaled to human proportions
Open Space Vision: Quads and Mall
Campus and City
Expanding Campus Open Space
A. Knoll Area: Buildings in the Landscape

Provides value (recreation, aesthetic, or technical)
B. Essex Corridor: Variety of Spaces

Variety of human scale spaces
District within the campus

A. Essex pedestrian corridor
B. AHC and campus core connectivity
C. River residential neighborhood phasing strategy
D. Patient access at campus-community edge
C. West Bank: Interconnected Plazas

Distinctive built environment
Purpose of Landscape Management Plan

• Ensure appropriate, efficient, and cost effective application of resources to present a beautiful, safe, welcoming, and sustainable campus

Objectives
• Produce detailed maintenance plan
• Create tool to manage customer expectations
• Establish process for proactive communication
District Character, Service Type

- Landscape Maintenance Approach
  - Based on Master Plan guiding principles and district profiles
  - Reflects district character - Chapter 5, Master Plan
  - Adheres to overarching principles related to function, safety, security, aesthetics, and sustainability
Service Type

- Formal
- Informal
- Naturalistic
# Service Intensity

<table>
<thead>
<tr>
<th>INTENSITY</th>
<th>SERVICE TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FORMAL</td>
</tr>
<tr>
<td>ENHANCED</td>
<td></td>
</tr>
<tr>
<td>STANDARD</td>
<td></td>
</tr>
<tr>
<td>RESPONSIVE</td>
<td></td>
</tr>
</tbody>
</table>

The image shows a table with three columns: Formal, Informal, and Naturalistic, corresponding to different service intensity levels: Enhanced, Standard, and Responsive.
Service Type and Intensity: Minneapolis
Service Type and Intensity: Saint Paul
AGENDA ITEM: Information Items

☐ Review  ☐ Review + Action  ☐ Action  ☒ Discussion

This is a report required by Board policy.

PRESENTERS: Michael Berthlesen, Interim Vice President, University Services

PURPOSE & KEY POINTS

The purpose of this item is to provide an update on the following:

A. Preliminary 2018 State Capital Request
B. Capital Planning and Project Management Semi-Annual Project Report

BACKGROUND INFORMATION

A. Preliminary 2018 State Capital Request

Board of Regents policy requires the Board to approve the University's state capital request before it is submitted for consideration by the governor and the Minnesota Legislature. The final 2018 state capital request is due to Minnesota Management and Budget by October 15, and will be presented to the Board for review in September and approval in October. A preliminary 2018 state capital request is presented as an information item to the Board at this time in order to meet the initial submission requirements from Minnesota Management and Budget. The University's capital request will be updated to reflect the outcome of any special session legislation.

B. Capital Planning and Project Management Semi-Annual Project Report

This report includes projects in process that have been approved in the Capital Improvement Budget and for which the Board is required to approve the schematic design. The report highlights progress performed and challenges encountered in delivering the project scope of work within the approved budget and schedule. The Capital Planning and Project Management Semi-Annual Project Report is presented in the summer and in the winter to provide performance information prior to the consideration of the Annual Capital Improvement Budget and the Six-Year Capital Plan.
C. Final Project Review: Chemistry and Advanced Materials Science (Duluth Campus)

In accordance with the Board of Regents Policy: *Reservation and Delegation of Authority*, Final Review prior to the award of a construction project for the above-named project. This project will construct a new 58,000 square foot (sf) science and engineering laboratory building on the Duluth Campus. The new building will include laboratory space for chemistry research (13,000 sf), chemistry instruction (5,300 sf), and applied materials science research (2,300 sf). Additional space for faculty offices and student study is also included.
Preliminary 2018 State Capital Request
University of Minnesota
June 1, 2017

Summary:
The 2017 state bonding bill provided the necessary funding for several high priority capital projects, but very little HEAPR for existing buildings. The $20.6 million HEAPR the University did receive follows two years without any asset renewal appropriation. Therefore, this preliminary state capital request reflects only the remaining projects from the University’s 2017 request (all investments in existing facilities) and a $200 million HEAPR request. The final 2018 state capital request will be presented to the Board of Regents for review and action in September and October.

Request Summary (Unprioritized):

<table>
<thead>
<tr>
<th>Campus</th>
<th>Project</th>
<th>Total</th>
<th>State</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>System</td>
<td>HEAPR</td>
<td>$200,000,000</td>
<td>$200,000,000</td>
<td>$0</td>
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<tr>
<td>System</td>
<td>Greater MN Academic Capital Renewal</td>
<td>$15,800,000</td>
<td>$10,533,000</td>
<td>$5,267,000</td>
</tr>
<tr>
<td>UMTC</td>
<td>Pillsbury Hall Capital Renewal</td>
<td>$36,000,000</td>
<td>$24,000,000</td>
<td>$12,000,000</td>
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<tr>
<td></td>
<td></td>
<td>$251,800,000</td>
<td>$234,533,000</td>
<td>17,267,000</td>
</tr>
</tbody>
</table>

Project Summaries:

1. *Higher Education Asset Preservation and Replacement (HEAPR)* – This request is for funds used system-wide to maximize and extend the life of the University’s existing physical plant. HEAPR funds are essential in supporting the teaching, research, and service missions of the University. Individual projects will fall into one of four broad categories: Health and Safety, Building Systems, Energy Efficiency, and Utility Infrastructure. The system-wide HEAPR advisory committee makes recommendations on individual projects to the Vice President for University Services using data from the Facility Condition Assessment and Building Code Deficiency Report. HEAPR funds do not require a one-third University funding match.

2. *Greater Minnesota Academic Capital Renewal Projects* – This request is for funds to make capital renewal investments in existing teaching, research, and student support spaces on the University’s Crookston, Duluth, Morris campuses. These projects will convert obsolete spaces into modern facilities to meet the needs of today’s programs and provide new learning opportunities across Minnesota. Up-to-date classrooms, instructional laboratories, and collaboration spaces are essential to attract the best and brightest students and remain competitive with other regional universities. Funds will be used to modernize space in Owen Hall and Dowell Hall (Crookston), A.B. Anderson Hall (Duluth), and Humanities Building and Blakely Hall (Morris). The overall student experience at the University of Minnesota will be improved by enhancing the physical environment and adding modern classroom learning technologies.
3. *Pillsbury Hall* Capital Renewal – This project will completely renovate and restore historic Pillsbury Hall (1887) scheduled to be vacated by the Department of Earth Sciences when the Tate Hall project is completed in summer 2017. This obsolete science facility will be repurposed to create modern, flexible teaching, learning, and non-laboratory research spaces focused on serving undergraduates as well as the College of Liberal Arts’ humanities programs. The renovated space is anticipated to be divided between classroom / assembly-type spaces capable of supporting multiples modes of learning and alternative workplace office space for faculty and staff. At nearly 60,000 gross square feet, the renovation is expected to maintain an equivalent amount of space when complete. The rehabilitation of Pillsbury Hall is expected to be consistent with the Secretary of the Interior’s Standards for Preservation.
# Capital Planning & Project Management

## Semi-Annual Project Report

### May 25, 2017

<table>
<thead>
<tr>
<th>Projects</th>
<th>Scope</th>
<th>Schedule</th>
<th>Budget</th>
<th>Project Budget</th>
<th>Est. Design Completion</th>
<th>Est Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Projects in Design</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry and Advanced Material Science Building, UMD</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>$43,000,000</td>
<td>November 2016</td>
<td>Funding TBD</td>
</tr>
<tr>
<td>Health Sciences Education Center, UMTC</td>
<td>✔️</td>
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<td>✔️</td>
<td>$108,630,000</td>
<td>November 2017</td>
<td>Funding TBD</td>
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<tr>
<td>Pioneer Hall Renovation, UMTC</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>$104,500,000</td>
<td>February 2018</td>
<td>August 2019</td>
</tr>
<tr>
<td>Shepherd Laboratories Robotics Lab Remodel, UMTC</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>$12,203,000</td>
<td>November 2017</td>
<td>August 2018</td>
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<tr>
<td>Track and Recreation Sports Bubble, UMTC</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>$19,000,000</td>
<td>July 2017</td>
<td>September 2018</td>
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<tr>
<td><strong>Projects in Construction</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AHC Renovation and Relocation Program, UMTC</td>
<td>✔️</td>
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<td>✔️</td>
<td>$13,533,000</td>
<td>December 2017</td>
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<td>Athletes Village, UMTC</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>$166,000,000</td>
<td>January 2018</td>
<td></td>
</tr>
<tr>
<td>Bell Museum, UMTC</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>$64,225,000</td>
<td>August 2017*</td>
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<tr>
<td>Combined Heat and Power Plant, UMTC</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>$112,981,000</td>
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<td>John T. Tate Hall, UMTC</td>
<td>✔️</td>
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<td>✔️</td>
<td>$92,500,000</td>
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<tr>
<td>Veterinary Isolation Laboratories, UMTC</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>$29,500,000</td>
<td>October 2017</td>
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</tr>
</tbody>
</table>

### Total Portfolio Budget: $766,072,000

- Projects from $1,000,000 - $5,000,000: 0
- Projects from $5,000,000 - $20,000,000: 3
- Projects over $20,000,000: 8

Total Project Count: 11

*Bell Museum building substantial completion August 2017; exhibit completion June 2018
<table>
<thead>
<tr>
<th>PROJECTS IN DESIGN</th>
<th>Chemistry and Advanced Material Science Building, UMD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>A new 58,000 SF Facility supporting chemical and applied science research and academics.</td>
</tr>
<tr>
<td><strong>Status</strong></td>
<td>Construction not funded in 2016 Bonding Bill and resubmitted for 2017 request. Schedule revised to reflect new construction start date pending 2017 Bonding Bill.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Scope</th>
<th>Schedule</th>
<th>Budget</th>
</tr>
</thead>
</table>

| Health Sciences Education Center, UMTC | |
| **Description**   | Demolition, renovation, and construction for approximately 194,000 SF of new interdisciplinary health sciences education facility on the East Bank Campus. |
| **Status**        | Design Development is in progress. Construction pending 2017 Bonding Bill. |

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<th>Scope</th>
<th>Schedule</th>
<th>Budget</th>
</tr>
</thead>
</table>

| Pioneer Hall Renovation and Consolidated Superblock Dining Facility, UMTC | |
| **Description**   | Renovation and expansion of Pioneer Hall to accommodate 756 beds and provide a consolidated 850 seat dining facility for the superblock residence halls. |
| **Status**        | Clean-out is in process and preparations are underway for abatement. Design Development is scheduled to be complete in August with construction anticipated to begin October 2017. |

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<th>Scope</th>
<th>Schedule</th>
<th>Budget</th>
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</table>

| Shepherd Laboratories Robotics Lab Remodel, UMTC | |
| **Description**   | Remodel the first and second floors for laboratory and office space. Open the second floor structure for drone test flight area. Replace all mechanical and electrical systems. |
| **Status**        | Project is in Schematic Design. |

<table>
<thead>
<tr>
<th></th>
<th>Scope</th>
<th>Schedule</th>
<th>Budget</th>
</tr>
</thead>
</table>
### PROJECTS IN DESIGN

#### Track and Recreation Sports Bubble, UMTC

**Description**  
A new Track & Field facility at the Athletes Village site and relocation of the existing Recreation Sports Bubble and Softball Field.

**Status**  
Design Development is in progress. Scheduled to begin construction in early Summer 2017.

#### AHC Renovation and Relocation Programs, UMTC

**Description**  
Renovation of 54,000 SF in Phillips-Wangensteen and Moos Tower to accommodate decanting VFW and Masonic Memorial Buildings for the Academic Health Center programs.

**Status**  
Design is complete and renovations are underway.

#### Athletes Village, UMTC

**Description**  
A new 321,000 SF Athletes Village supporting excellence in academics and advance training practices as well as a hub for the entire Athletics department.

**Status**  
Center of Excellence and Football Performance fully enclosed, and interior finishes started. Indoor Football structure is complete with roof installation in progress.

#### Bell Museum, UMTC

**Description**  
A new museum and planetarium that will provide a center for research, education, and public engagement around Minnesota's natural environments.

**Status**  
Building enclosure is near completion with curtain wall, weathering steel and TMT wood siding. Interior finishes and site work are underway. Open to the public in the Summer 2018.
# PROJECTS IN CONSTRUCTION

## Combined Heat and Power Plant, UMTC

**Description**
Installation of new combined heat and power equipment in the existing Old Main Utility Building that will reduce the University’s carbon footprint and provide the best long-term solution.

**Status**
Steam and electrical performance relative to criteria are being analyzed. Currently providing steam to campus and power to Xcel Energy. Commissioning and emissions testing in progress.

<table>
<thead>
<tr>
<th>Scope</th>
<th>Schedule</th>
<th>Budget</th>
</tr>
</thead>
</table>

## John T. Tate Hall, UMTC

**Description**
Renovation of the existing facility and new construction, totaling 229,500 SF. Includes the rehabilitation of the exterior and new infrastructure to support the program.

**Status**
Exterior enclosure is substantially complete and interior finishes are underway. Substantial completion is scheduled for July 2017 with occupancy August 2017.

<table>
<thead>
<tr>
<th>Scope</th>
<th>Schedule</th>
<th>Budget</th>
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</thead>
</table>

## Veterinary Isolation Laboratories, UMTC

**Description**
Demolish and replace three existing facilities with new 31,140 SF bio-containment facility to support the University's growing infectious diseases research initiatives.

**Status**
Building enclosed and weather-tight. Interior walls complete. Electrical, Mechanical, and ceiling installations in progress.

<table>
<thead>
<tr>
<th>Scope</th>
<th>Schedule</th>
<th>Budget</th>
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</thead>
</table>
University of Minnesota
Final Review of Capital Projects over $5 Million
Chemistry and Advanced Materials Science, 03-500-14-1036

Policy Summary:
According to Board of Regents Policy Reservation and Delegation of Authority, Article I, Section VIII, Subdivision 9, “The Board reserves to itself the authority for a subsequent review of approved capital budget projects with a value greater than $5,000,000 prior to the award of construction contracts.”

Project Summary:
This project will construct a new 58,000 square foot (sf) science and engineering laboratory building on the Duluth Campus. The new building will include laboratory space for chemistry research (13,000 sf), chemistry instruction (5,300 sf), and applied materials science research (2,300 sf). Additional space for faculty offices and student study is also included. The research laboratory space will consist of flexible wet and dry labs with adequate utilities, environmental controls, and modern safety accommodations to serve the needs of evolving research and teaching pedagogy. The building is three stories, with a mechanical and electrical penthouse, and is connected to the rest of the campus via skyway. The project includes connections to the existing campus chilled water, steam, and electrical infrastructure.

Board of Regents Approval Summary:
Capital Budget: June 2014, June 2017
Schematic Plans: October 2015

Project Team:
Architect: BWBR
Construction Manager: McGough Construction

Project Budget:
2014 State Appropriation: $1,500,000
2017 State Appropriation: 28,267,000
Duluth Facilities Management 750,000
Private Giving 150,000
University Debt 13,984,000
Total Capital Funding $44,651,000

Project Schedule:
Begin Construction: July 2017
Substantial Completion: November 2018

Consistency of project with approved scope, schedule, and budget:
X Yes ___No