

**Agendum  
Oakland University  
Board of Trustees Formal Session  
February 10, 2020**

**Approval of Dell Financial Services Lease for  
High-Performance Computing Cluster Including Storage**

**A Recommendation**

**1. Division and Department:** Academic Affairs Division, The Research Office, Operations and Finance Division, and University Technology Services Department.

**2. Introduction:** In 2019, the Chief Research Officer in collaboration with University Technology Services (UTS), engaged in an administrative budget approval process to secure funding to identify a vendor that could provide a homogeneous end-to-end solution to create a successful and timely launch for a High-Performance Computing (HPC) environment. The use of an HPC environment will accommodate the growing research and research storage needs and align with the Oakland University (University) strategic goals to support increased research, creative, and scholarly activities.

As a result of a Request for Information (RFI), review with the Research Office, a review with Gartner, which is a leading research and business insights advisory company, and discussions/consultations with peers from other research universities, UTS worked with Dell to architect the infrastructure. This solution leverages existing staff knowledge and expertise of the proposed hardware as our server infrastructure is primarily Dell equipment. This reduces training needs to only that of the specialized components and software required for an HPC system.

Dell, in collaboration with Dell Financial Services (DFS), was selected from the RFI because they offer a holistic solution that will effectively provide a scalable and reliable computing and storage solution that meets the faculty research goals. This end-to-end solution was determined to be the most viable fit for the overall needs in multiple ways. First, by providing access to the computational resources necessary to construct, analyze and interpret complex data. Dell's solution also provides access to a proof-of-concept HPC lab environment that utilizes a highly flexible, scalable platform technology that has the ability to test and validate custom software packages written by faculty on Dell hardware. Next, the University was able to negotiate that Dell will provide an onsite engineer for three months to assist UTS in implementing the HPC cluster and storage solution.

Dell will also provide expertise through Dell HPC Architects and Solutions Engineers to design and configure a research environment to meet University needs and requirements. It will adjust to scale quickly with growth and changes in the research environment allowing the University to provide options based on specific University needs for big data, data intensive computing, and highly restricted data in trusted, reliable, and scalable computing environments. Finally, UTS and Research faculty and

**Approval of Dell Financial Services Lease for  
High-Performance Computing Cluster Including Storage**  
**Oakland University**  
**Board of Trustees Formal Session**  
**February 10, 2020**  
**Page 2**

staff will be able to leverage extensive HPC knowledge and expertise from Dell, while a search for qualified candidates to hire is conducted, which will allow UTS to meet campus demand for an accessible research environment.

The proposal provides the University with a five-year lease term for the HPC Cluster and Open Storage. During the design phase for the HPC Cluster, the University leveraged an opportunity to architect the environment in a way that provides double the amount of storage for research computing needs, including backup and archive, while also satisfying the storage gap for open storage needs on campus at a reduced cost when combining both purchases into a single lease. The open storage purchase supports Ellucian Banner, Moodle Learning Management System for faculty instruction resources, student support applications and the University web environment including related files shares and document storage. The lease amortization schedule includes a prepayment of \$654,000 and annual lease payments of \$318,325.18 for five years.

3. **Previous Board Action:** There are no previous Board Actions.
4. **Budget Implications:** Funding for the lease prepayment (\$654,000) is from FY2019 year end funds. Funding for the lease agreement (\$318,325.18) and UTS positions (\$240,000) will be built into the FY2021 general fund base budget. If purchased versus leased, funding will be from reserves.
5. **Educational Implications:** The proposed solution will effectively provide a scalable and reliable computing solution that meets the faculty research goals by providing access to the computational resources necessary to construct, analyze and interpret complex data. The solution provides researchers with the ability to write into their grant proposals hardware from a predefined list. The hardware will plug into the cluster to potentially increase grant awards and expand the infrastructure.
6. **Personnel Implications:** Two new UTS personnel will be required to support the HPC environment and work with faculty to on-board their research. In addition, there will be one staff promotion to provide the necessary oversight.
7. **University Reviews/Approvals:** Proposal developed by the Research Office, and UTS and reviewed and approved by the Provost and Chief Operating Officer.
8. **Recommendation:**

RESOLVED, that the Chief Operating Officer is authorized to negotiate and execute a lease agreement and amendments with Dell Financial Services for HPC Cluster lease approved at \$318,325.18 per year, for five years and the Open Storage



**Approval of Dell Financial Services Lease for  
High-Performance Computing Cluster Including Storage**  
**Oakland University**  
**Board of Trustees Formal Session**  
**February 10, 2020**  
**Page 3**

one-time funding approval for \$654,000, totaling \$2,245,625.90, with an option to purchase versus lease; and, be it further


RESOLVED, that the Board of Trustees authorizes the President, Chief Operating Officer, and their respective designees, to perform all acts and deeds and to execute and deliver all contracts, instruments and documents that are necessary expedient and proper in connection with the lease; and, be it further

RESOLVED, that the Dell agreements and amendments and all other contracts, instruments and documents shall be reviewed and approved by the Office of the Vice President for Legal Affairs and General Counsel prior to execution, and shall be in compliance with the law and University policies and regulations and shall conform to the legal standards and policies of the Vice President for Legal Affairs and General Counsel.

9. **Attachments:** None.


Submitted to the President

on FEB 7, 2020 by

  
James P. Lentini, D.M.A.  
Senior Vice President for  
Academic Affairs and Provost

  
Scott G. Kunselman  
Chief Operating Officer

Recommended on February 7, 2020  
to the Board for approval by

  
Ora Hirsch Pescovitz, M.D.  
President