

BOARD OF COMMISSIONERS MEETING AGENDA

June 8, 2020 4:30 PM

Zoom Virtual Meeting Room

Meeting ID: 399-700-0062 / Password: LCBOC

https://zoom.us/j/3997000062?pwd=SUdLYVFFcmozWnFxbm0vcHRjWkVIZz09

"The mission of Livingston County is to be an effective and efficient steward in delivering services within the constraints of sound fiscal policy. Our priority is to provide mandated services which may be enhanced and supplemented to improve the quality of life for all who work, reside and recreate in Livingston County."

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	CALL TO	THE PUBLIC	

13.

14. **ADJOURNMENT**

12.

KALKASKA COUNTY BOARD OF COMMISSIONERS RESOLUTION NUMBER 2020-16

At a regular meeting of the Board of Commissioners for the County of Kalkaska, State of Michigan, held by ZOOM with EO 2020-75 and EO 2020-77 on the 20th day of May, 2020 with the meeting called to order at 5:30 PM.

Present: Commissioners Dave Comai, Patty Cox, Kohn Fisher, Leigh Ngirarsaol (by ZOOM), James Sweet (by ZOOM) and John West.

Absent: Commissioners Craig Crambell.

The following resolution was offered by West. Supported by Comai:

COUNTY RESOLUTION 2020-16 MOVE KALKASKA COUNTY FORWARD

Whereas, Benjamin Franklin (1706-1790) stated "Any society that is willing to give up liberty for temporary security deserve neither and lose both"; and

Whereas, Under the Emergency Management Act, 1976 PA 390, the Governor may declare a state of disaster and a state of emergency for the reasons specified therein; and

Whereas, A state of disaster or state of emergency declared under the Emergency Management Act continues until the Governor finds that the threat or danger has passed, the disaster or emergency has been dealt with to the extent that disaster or emergency conditions no longer exist, or until the declared state of disaster or emergency has been in effect for 28 days; and

Whereas, After 28 days, the Governor shall issue an executive order or proclamation declaring the state of disaster or emergency terminated, unless a request by the Governor for an extension of the state of disaster or emergency for a specific number of days is approved by resolution of both houses of the Legislature; and

Whereas, An executive order or proclamation declaring the state of disaster or emergency shall indicate the area or areas threatened, the conditions causing the emergency, and the conditions permitting the termination of the state of emergency; and

Whereas, On March 10, 2020, Governor Whitmer issued Executive Order 2020-4 declaring a state of emergency across the entire state of Michigan to address the COVID-19 pandemic; and

Whereas, On April 1, 2020, Governor Whitmer issued Executive Order 2020-33 to replace Executive Order 2020-4 and expand the initial March 10, 2020, declaration to include a state of disaster related to the COVID-19 pandemic through April 30, 2020, and

Whereas, Executive Order 2020-33 states the state of emergency and the state of disaster will terminate when emergency and disaster conditions no longer exist and appropriate programs have been implemented to recover from any effects of the statewide emergency and disaster, consistent with the legal authorities upon which the

declaration is based and any limits imposed by those authorities, including Section 3 of the Emergency Management Act, 1976 PA 390, MCL 30.403; and

Whereas, On April 1, 2020, Governor Whitmer requested that the Legislature pass a concurrent resolution extending the state of emergency and state of disaster statewide across Michigan through April 30, 2020; and

Whereas, On April 7, 2020, the Legislature passed Senate Concurrent Resolution No. 24 authorizing Executive Order 2020-33 through April 30, 2020; and

Whereas, On April 27, 2020, Governor Whitmer requested that the Legislature pass a concurrent resolution extending the state of emergency and state of disaster statewide across Michigan through May 28, 2020; and

Whereas, The Legislature did not extend the state of emergency beyond April 30, 2020 as required under law; and

Whereas, the Kalkaska County Board of Commissioners perceive that certain restrictions in the Executive Order violate the civil liberties of Michigan residents that are protected by the United States Constitution and the Constitution of the State of Michigan of 1963; and

Whereas, Governor Whitmer did not provide scientific data to justify the state of emergency being declared equally across all 83 counties of the state of Michigan; and

Whereas, The Governor's executive orders placed arbitrary and inconsistent restrictions, without reasonable scientific justification, on some businesses, but not on others, and on particular activities of a person, sometimes resulting in oppressive consequences, regardless of efforts by a business or a person to implement national guidelines for safe social distancing that can combat the spread of COVID-19; and

Whereas, The Governor's executive orders placed arbitrary and inconsistent restrictions, without reasonable scientific justification, on individual's rights to associate, assemble, worship, and travel, including but not limited to the ability of a person to assemble for worship or see family members outside of a person's household, regardless of efforts taken to implement national guidelines for safe social distancing that can combat the spread of COVID-19 and without considering if a person has recovered from COVID-19; and

Whereas, The Governor's executive orders have prohibited hospitals, clinics and other medical professionals from conducting elective medical procedures that people need, including preventative care, even in cases where hospitals and medical professionals have the capacity to safely do so; and

Whereas, COVID-19 has impacted population groups differently, with some high-risk persons that are older or have underlying health conditions being more vulnerable and other low-risk persons able to safely participate in activities by implementing national guidelines for safe social distancing or if they have recovered from COVID-19; and

Whereas, the response to the COVID-19 virus must be balanced as not to make the collateral impacts more devastating and punitive than the virus itself; and

Whereas, COVID-19 has impacted areas and regions of the state differently with some counties being able to effectively contain the spread of COVID-19, including Kalkaska County, by following national guidelines for safe social distancing; now, therefore, be it

Whereas, the Kalkaska County Board of Commissioners believe all businesses are "essential" because they provide for the livelihood of their employees, and the financial hardship to those that are laid off is substantial; and

Resolved by the Kalkaska County Board of Commissioners, That we demand that the Governor compile and make available within three days from the date of this concurrent resolution, in a manner easily accessible by the public, detailed data, summarized by county, on:

- 1. The daily number of available hospital related beds occupied by all patients since January 1, 2020, segregated by in-patient beds, negative airflow beds, and intensive care unit (ICU) beds.
- 2. The daily number of available hospital related beds occupied by verified COVID-19 patients since January 1, 2020, segregated by in-patient beds, negative airflow beds, and ICU beds.
- 3. The daily number of emergency room visits in total and the daily number of emergency room visits by patients testing positive for COVID-19 since January 1, 2020.
- 4. The daily number of verified COVID-19 hospitalizations and verified COVID-19 deaths that are related to retirement or nursing homes since January 1, 2020.
- 5. The daily number of verified COVID-19 hospitalizations and verified COVID-19 deaths of individuals, who have had other pre-existing or underlying health conditions, since January 1, 2020, with a segregation of those health conditions and a breakout of verified COVID-19 hospitalizations and verified COVID-19 deaths by age, gender, and race.
- 6. The daily number of ventilators available and daily inventories of hospital Personal Protection Equipment since April 9, 2020.
- 7. The number of medical professionals that have been furloughed, had work hours reduced, or received a cut in pay since March 10, 2020.

; And be it further

Resolved, That we request local health departments, local health organizations and local hospitals provide the above data specific to Kalkaska County and make it available to the public; and be it further

Resolved, That we demand that all data related to emergency room visits, hospitalizations, and deaths related to COVID-19 patients be verified and confirmed to be COVID-19 positive patients, and the date of emergency visit, hospitalization, or death be recorded as the actual date of occurrence, not the date of any data adjustments being made subsequently; and be it further

Resolved, That we encourage the people of Kalkaska County to continue to follow national guidelines for safe social distancing and the County continues to take specific measures to protect the population most at risk, including those residing in nursing homes and retirement facilities; and be it further

Resolved, That we encourage businesses in Kalkaska County to determine the best approach to implement national guidelines for safe social distancing as they begin to open up and move Michigan forward without the Legislature extending the state of

emergency and without the declaration of a statewide declaration of disaster; and be it further

Resolved, That we encourage hospitals, clinics and medical professionals in Kalkaska County to provide elective procedures and preventative care where it is deemed appropriate based on staffing capacity, hospital capacity and availability of personal protective equipment (PPE) and as medical professionals in those facilities determine the best approach to implement national guidelines for safe social distancing; and be it further

Resolved, that a copy of this Resolution be sent to the Governor Gretchen Whitmer, US Senator Gary Peters, US Senator Debbie Stabenow, US Representative Jack Bergman, Senator Curt Vanderwall, Representative Daire Rendon, Michigan Association of Counties, Michigan County Clerks and Kalkaska County Township Clerks.

Roll Call Vote: West, yes; Comai, yes; Cox, yes; Crambell, absent; Ngirarsaol, yes; Sweet, yes; Fisher, yes. 6 yeas. 0 nays. 1 absent. Carried.

Resolution declared adopted.

Kohn Fisher

Chairman of the Kalkaska County Board of Commissioners

I, the undersigned, Clerk of Kalkaska County, do hereby certify that the foregoing is a true and complete copy of a Resolution adopted by the Kalkaska County Board of Commissioners at its Regular Meeting held on May 20, 2020.

Deborah Hill, County Clerk

Clerk of the Kalkaska County Board of Commissioners

LIVINGSTON COUNTY BOARD OF COMMISSIONERS

MEETING MINUTES

May 26, 2020, 4:30 p.m. Zoom Virtual Meeting Room

Meeting ID: 399-700-0062 / Password: LCBOC

https://zoom.us/j/3997000062?pwd=SUdLYVFFcmozWnFxbm0vcHRjWkVIZz09

Members Present: Carol Griffith, Kate Lawrence, William Green, Wes Nakagiri, Douglas Helzerman,

Robert Bezotte, Gary Childs, and Jay Gross

1. CALL MEETING TO ORDER

The meeting was called to order by Chairwoman Carol Griffith at 4:30 p.m.

2. MOMENT FOR SILENT REFLECTION

3. PLEDGE OF ALLEGIANCE TO THE FLAG

All rose for the Pledge of Allegiance to the Flag of the United States of America.

4. ROLL CALL

Roll call by the Clerk indicated the presence of a quorum.

District 5 Commissioner seat is vacant.

5. CORRESPONDENCE

- a. Hamburg Township Resolution in Support of Request to Reclassify Livingston County
- b. Menominee County Resolution 2020-16 in Response to Executive Order 2020-77
- c. Tuscola County Resolution 2020-4 Move Tuscola County Forward

Motion to receive and place on file the correspondence.

It was moved by G. Childs Seconded by W. Green

Roll Call Vote: Yes (8): C. Griffith, K. Lawrence, W. Green, W. Nakagiri, D. Helzerman, R. Bezotte, G. Childs, and J. Gross; No (0): None; Absent (0): None

MOTION Carried (8-0-0)

6. CALL TO THE PUBLIC

Bill Cowan, Unadilla Township, spoke in regards to the resolution requesting to reclassify Livingston County.

7. APPROVAL OF MINUTES

a. Minutes of Meeting Dated: May 11, 2020

b. Minutes of Meeting Dated: May 20, 2020

Motion to approve the minutes as presented.

It was moved by J. Gross Seconded by D. Helzerman Roll Call Vote: Yes (8): C. Griffith, K. Lawrence, W. Green, W. Nakagiri, D. Helzerman, R. Bezotte, G. Childs, and J. Gross; No (0): None; Absent (0): None

MOTION Carried (8-0-0)

8. TABLED ITEMS FROM PREVIOUS MEETINGS

None.

9. APPROVAL OF AGENDA

Motion to approve the Agenda as presented.

It was moved by G. Childs Seconded by K. Lawrence

Roll Call Vote: Yes (8): C. Griffith, K. Lawrence, W. Green, W. Nakagiri, D. Helzerman, R. Bezotte, G. Childs, and J. Gross; No (0): None; Absent (0): None

MOTION Carried (8-0-0)

10. REPORTS

10.a Greg Kellogg, LETS Director

10.b. Commissioner Nakagiri gave an update on the Attorney General's investigation into the MDHHS contact tracing contract.

11. APPROVAL OF CONSENT AGENDA ITEMS

Resolutions 2020-05-140 through 2020-05-142

Motion to approve the resolutions on the Consent Agenda.

It was moved by K. Lawrence Seconded by G. Childs

Roll Call Vote: Yes (8): C. Griffith, K. Lawrence, W. Green, W. Nakagiri, D. Helzerman, R. Bezotte, G. Childs, and J. Gross; No (0): None; Absent (0): None

MOTION Carried (8-0-0)

11.a 2020-05-140

Resolution Authorizing Participation in Mutual Non-Congregate Housing for Livingston County First Responders and an Agreement with North Star Reach Campground - Emergency Management

11.b 2020-05-141

Resolution Authorizing the JAG Grant Purchase of Night Vision Equipment - Sheriff

11.c 2020-05-142

Resolution Extending the Temporary Emergency Telecommuting Arrangement in Response to COVID-19 - County Administration

12. RESOLUTIONS FOR CONSIDERATION

Resolutions 2020-05-143 and 2020-05-144

12.a 2020-05-143

Resolution Authorizing Livingston County's Annual Budget Process and Calendar - Administration Motion to adopt the Resolution.

It was moved by K. Lawrence Seconded by D. Helzerman

Roll Call Vote: Yes (8): C. Griffith, K. Lawrence, W. Green, W. Nakagiri, D. Helzerman, R. Bezotte, G. Childs, and J. Gross; No (0): None; Absent (0): None

MOTION Carried (8-0-0)

12.b 2020-05-144

Resolution Authorizing the County Treasurer to Establish the 2019 Delinquent Tax Fund - Treasurer

Motion to adopt the Resolution.

It was moved by D. Helzerman Seconded by G. Childs

Roll Call Vote: Yes (7): C. Griffith, K. Lawrence, W. Nakagiri, D. Helzerman, R. Bezotte, G. Childs, and J. Gross; No (1): W. Green; Absent (0): None

MOTION Carried (7-1-0)

12.c 2020-05-145

Resolution in Support of the Request to Reclassify Livingston County - Board of Commissioners

Motion to adopt the Resolution.

Discussion.

It was moved by W. Nakagiri Seconded by K. Lawrence

Roll Call Vote: Yes (8): C. Griffith, K. Lawrence, W. Green, W. Nakagiri, D. Helzerman, R. Bezotte, G. Childs, and J. Gross; No (0): None; Absent (0): None

MOTION Carried (8-0-0)

12.d 2020-05-146

Resolution Extending Additional and/or Modified Temporary Emergency Employment Provisions in Response to COVID-19 - County Administration

Motion to adopt the Resolution.

It was moved by G. Childs Seconded by K. Lawrence

Discussion.

Commissioner Helzerman requested to move into close session to discuss counsel's opinion. Commissioners Childs and Lawrence did not withdraw their motion and support. Commissioner Helzerman then withdrew his request to move into closed session and requested a presentation by Rich McNulty, legal counsel, as to the options available.

Rich McNulty reviewed the options.

Roll Call Vote: Yes (5): C. Griffith, K. Lawrence, W. Green, R. Bezotte, and G. Childs; No (3): W. Nakagiri, D. Helzerman, and J. Gross

MOTION Carried (5-3-0)

13. CALL TO THE PUBLIC

Lori Cowan provided the correct spelling of her name.

14. ADJOURNMENT

Motion to adjourn the meeting at 5: 17 p.m.

It was moved by K. Lawrence Seconded by G. Childs

Roll Call Vote: Yes (8): C. Griffith, K. Lawrence, W. Green, W. Nakagiri, D. Helzerman, R. Bezotte, G. Childs, and J. Gross; No (0): None; Absent (0): None

MOTION Carried (8-0-0)

Elizabeth Hundley, Livingston County Clerk

LIVINGSTON COUNTY BOARD OF COMMISSIONERS

MEETING MINUTES

June 3, 2020

IMMEDIATELY FOLLOWING THE FINANCE COMMITTEE

Zoom Virtual Meeting Room

Meeting ID: 399-700-0062 / Password: LCBOC

https://zoom.us/j/3997000062?pwd=SUdLYVFFcmozWnFxbm0vcHRjWkVIZz09

Members Present Kate Lawrence, Wes Nakagiri, Douglas Helzerman, Robert Bezotte, and Jay Gross

Members Absent Carol Griffith, William Green, and Gary Childs

1. CALL MEETING TO ORDER

The meeting was called to order by Vice Chairwoman Kate Lawrence at 10:06 a.m.

2. PLEDGE OF ALLEGIANCE TO THE FLAG

All rose for the Pledge of Allegiance to the Flag of the United States of America.

3. ROLL CALL

Indicated the presence of a quorum.

District 5 Commissioner seat vacant.

4. CALL TO THE PUBLIC

None.

5. APPROVAL OF AGENDA

Motion to approve the Agenda as presented.

Moved By R. Bezotte Seconded By W. Nakagiri

Roll Call Vote: Yes (5): R. Bezotte, J. Gross, K. Lawrence, W. Nakagiri, and D. Helzerman;

No (0): None; Absent (3): C. Griffith, W. Green, and G. Childs

Motion Carried (5-0-3)

6. FINANCE COMMITTEE RECOMMENDATION FOR APPROVAL OF CLAIMS

Dated: June 3, 2020

Motion to approve the Claims.

Moved By R. Bezotte

Seconded By D. Helzerman

Roll Call Vote: Yes (5): R. Bezotte, J. Gross, K. Lawrence, W. Nakagiri, and D. Helzerman; No (0): None; Absent (3): C. Griffith, W. Green, and G. Childs

Motion Carried (5-0-3)

7. FINANCE COMMITTEE RECOMMENDATION FOR APPROVAL OF PAYABLES

May 15 through May 28, 2020

Motion to approve the Payables.

Moved By W. Nakagiri Seconded By J. Gross

Roll Call Vote: Yes (5): W. Nakagiri, D. Helzerman, R. Bezotte, J. Gross and K. Lawrence; No (0): None; Absent (3): C. Griffith, W. Green, and G. Childs

Motion Carried (5-0-3)

8. CALL TO THE PUBLIC

None.

9. ADJOURNMENT

Motion to adjourn the meeting at 10:11 a.m.

Moved By D. Helzerman Seconded By W. Nakagiri

Roll Call Vote: Yes (5): D. Helzerman, R. Bezotte, J. Gross, K. Lawrence, and W. Nakagiri;

No (0): None; Absent (3): C. Griffith, W. Green, and G. Childs

Motion Carried (5-0-3)

Elizabeth Hundley, Living	ston County Clerk

RESOLUTION NO: 2020-06-147

LIVINGSTON COUNTY

Resolution Authorizing Submission of the Fiscal Year 2021 Community Corrections Grant Application, Agreement, and other Support Documents and Acceptance of Funding Award – Central Services

WHEREAS, The Livingston County Community Corrections Advisory Board approved the Community Corrections Plan and Application for Fiscal Year 2021 on May 28, 2020; and

WHEREAS, The Community Corrections Plan and Application for FY 2021 was submitted to the Michigan Department of Corrections (MDOC), Office of Community Corrections on June 1, 2020; and

WHEREAS, The Community Corrections Plan and Application for FY 2021 requests funding the following services:

Administration including a fully grant funded .50 FTE, supplies, travel, training; and Group Programming including cognitive behavioral therapy; and

DATE:

June 8, 2020

Outpatient treatment specifically substance use disorder and trauma focused treatment services through assessments, intake, group therapy, individual therapy, and other evidence-based treatment modalities; and

Pretrial services including risk assessment, pretrial supervision, and electronic monitoring; and

WHEREAS, The total amount requested for the comprehensive plan and services is \$158.984.00.

THEREFORE, BE IT RESOLVED that the Livingston County Board of Commissioners hereby authorize the Community Corrections program to submit the Plan and Application for Fiscal Year 2021 and accept funding awarded by MDOC Office of Community Corrections.

BE IT FURTER RESOLVED that the Chairperson of the Livingston County Board of Commissioners is hereby authorized to sign all forms, assurances, contracts/agreements, and future amendments for monetary and contract language adjustments related to the above upon review of Civil Counsel.

BE IT FURTHER RESOLVED that the Livingston County Board of Commissioners hereby authorize any budget amendment necessary to effectuate this grant award.

#

MOVED: SECONDED: CARRIED:

Memorandum

To: Livingston County Board of Commissioners

From: Megan Kerekes, Community Corrections Manager

Date: 5/26/2020

Re: Community Corrections Grant Application Approval for Fiscal Year 2021

The Livingston County Advisory Board (CCAB) will approve submission of the Community Corrections Plan and Application for FY 2021 on Thursday, May 28th.

The Community Corrections Plan and Application requests \$158,984.00 in funding for the comprehensive plan and services.

Included in the Plan and Application is funding to support administration. This includes a fully grant funded .50 FTE position responsible for development, implementation, and monitoring of the Community Corrections Plan. This position acts as an advisor to CCAB and liaison to the state. It oversees agency employees and/or contracted individuals that provide funded services. The position also monitors program utilization, progress toward meeting objectives and expenditures. The total amount requested includes salary and wages, supplies, travel, and training.

Also included in the Plan and Application is funding to support group programming. Thinking Matters provides participants with evidence-based cognitive restructuring that has been proven to positively impact Prison Commitment Rates (PCR). The focus of this program is to reduce PCR and recidivism by providing skills to develop prosocial behavior and by impacting criminal behavior by teaching how to identify, monitor, and change the thinking that is fundamental to these behaviors.

Also included in the Plan and Application is funding to support outpatient treatment programming, specifically trauma services. Treatment services may include assessment, intake, group therapy individual therapy, or other evidence-based treatment modalities that have been proven successful in the facilitation of trauma recovery. This program will reduce PCR and reduce recidivism by providing offenders with techniques for development of positive coping skills and social support. This program addresses the impact of victimization which can include mental health symptoms related to post-traumatic stress disorder and substance use disorders.

Also included in the Plan and Application is funding to support outpatient programing, specifically for substance use disorder treatment services. Treatment services may include assessment, intake, group therapy, individual therapy, or other evidence-based treatment modalities that have been proven successful in treatment of substance use disorders. This program will reduce PCR and reduce recidivism by helping offenders understand, recognize, and accept addiction; identify and interrupt addictive thoughts, feelings and actions; and learn positive, healthy coping skills that negate the need for prison commitment.

Thank you for the opportunity to present this matter to you. If you have any questions, please contact me directly.

MICHIGAN DEPARTMENT OF CORRECTIONS

"Committed to Protect, Dedicated to Success"



Office of Community Corrections

Community Corrections Plan and Application Fiscal Year 2021

CCAB Name: Livingston County

Annual/Full

Application Type:

Email the application to:

1. MDOC-OCC@michigan.gov

2. Grant Coordinator

DUE DATE: May 1, 2020

SECTION I: COMMUNITY CORRECTIONS ADVISORY BOARD INFORMATION Federal I.D. Number: Name of CCAB: 36-6005819 **Livingston County** A: General Contact Information: **Contact Person** Manager's Direct **CCAB Chairperson Fiscal Agent** (Manager) **Supervisor Megan Kerekes** Roberta L. Sacharski Mike Murphy **Cindy Catanach** Name: Title: **CCAB Manager Court Admin** Sheriff **Chief Financial Officer** 204 S. Highlander Way Address: 210 S. Highlander Way 150 S. Highlander Way 304 E. Grand River Ave. City: Howell Howell Howell Howell MI MI State: MI MI Zip: 48843 48843 48843 48843 517-540-7661 517-540-7814 517-546-9111 517-540-8720 Phone: Fax: 517-545-9637 Email: MKerekes@livgov.com rsacharski@livgov.com mmurphy@livgov.com ccatanach@livgov.com

Type of Community Corrections Board: County Advisory Board					
Counties/Cities Participating in the CCAB: Livingston County					
Date application was approved by the local CCAB: May 28, 2020					
Date application was approved by county board(s) of commissioners and/or city council: Tentative					
Date application was submitted to OCC: June 1, 2020					

B: CCAB Membership						
Representing:	Name	Email				
County Sheriff:	Murphy, Michael	mmurphy@livgov.com				
Chief of Police:	Russell, Chief Davd S.	drussell@unadillapolice.org				
Circuit Court Judge:	Hatty, Hon. Michael P.	mhatty@livgov.com				
District Court Judge:	Bain, Hon. Daniel	dbain@livgov.com				
Probate Court Judge:	Cavanaugh, Hon. Miriam A.	mcavanaugh@livgov.com				
County Commissioner(s):	Lawrence, Kate	klawrence@livgov.com				
Service Area (Up to 3):	Conklin, Connie	cconklin@cmhliv.org				
County Prosecutor:	Vailliencourt, Bill	bvailliencourt@livgov.com				
Criminal Defense:	Groenhout, Karen	kgroenhout@livgov.com				
Business Community:	Griffin, Curtis	curtisdgriffin@yahoo.com				
Communications Media:	VACANT	NA				
Circuit/District Probation:	Zahon, Tom	zahont@michigan.gov				
City Councilperson:	VACANT	NA				
Workforce Development:	Awrey, Dawn	dawrey@mwse.org				

- 1. Does your CCAB have Bylaws? Yes If yes, have they been revised within the last 2 years? Yes
- 2. What steps does your CCAB take to orientate new CCAB members ensuring the understanding of their roles and responsibilities? Introduction and brief orientation by Chairperson, review of bylaws with Manager

SECTION II: ANALYSIS & STRATEGIC PLAN

Introduction and Instructions for Strategic Plan:

Michigan Public Act 511, also known as the Community Corrections Act, was established in 1988 in an effort to improve the State's prison commitment rates (PCR) through the development and utilization of evidence-based, community corrections programming that targets Group 2 straddle cell offenders, OUIL-3rd offenders, and probation violators assessed as moderate to high in risk and or needs. Counties and regions establishing a Community Corrections Advisory Board (CCAB) appoint member stakeholders as required by PA-511 to identify and target local criminogenic needs that impact prison commitments and recidivism. CCABs are obligated to abide by PA-511 and Michigan Office of Community Corrections (MOCC) requirements when receiving MOCC funding, including but not limited to data tracking and analysis, as well as minimum program eligibility and utilization requirements.

This Application serves as your CCAB's Comprehensive Plan. To be considered for funding, it must include specific and detailed explanation as to how your plan will impact State Board Priorities, local prison commitment rates, recidivism, and local priorities/initiatives through identified key objectives. Strategies to obtain key objectives as well as outcome/performance indicators must also be identified. For the purpose of this application, the following terms and definitions apply:

- 1) <u>Key Objectives</u> Overall PCR Objective, Group 2 Straddle Objective, and Recidivism Objective(s) your CCAB may identify other objectives in addition to these required objectives.
- 2) <u>Supportive Strategies</u> Proposed OCC funded programming and/or services that are intended to support the objectives identified.
- 3) <u>Strategic Issues</u> Felony disposition, recidivism, and local priority information that, when combined, form your CCAB's target areas for your Comprehensive Plan.

Felony Data Analysis:

OCC will provide CCABs with relevant felony dispositional data to complete the application. CCABs must analyze this data along with local CCIS data (reports run locally from COMPAS Case Manager) and develop key objectives and supportive strategies that will help attain local goals and support State Board Priorities.

A thorough analysis of the data should include:

- Overall PCRs, rates within sentencing guideline ranges, PCRs within Group 1 and Group 2 offense categories, status at time of offense and recidivism of probation violators, both new sentence and technical
- Reference to changes in PCRs compared to prior years
- Other changes in your CCAB/area that influence changes (new stakeholders, new or changing policies and/or procedures, emerging crimes, offender characteristics, etc.)
- Review your past OCC funding proposals for ideas

Your data analysis forms the basis of your objectives and strategies. A weak link between them may result in denial of, or conditional revisions to, your Comprehensive Plan. Therefore, it is important to demonstrate a solid connection between your data, objectives, and supportive strategies.

<u>Example:</u> Objective #1 is intended to impact the overall prison commitment rate (PCR). To address this, your CCAB should analyze local felony dispositional and CCIS data, & identified trends or changes that impacted that data. For example, trends and changes may include:

- CCAB stakeholder changes
- New judicial, probation, or CCAB staff or other personnel issues that impact referrals, screenings, or programming
- Service provider changes or issues
- Trends in local criminality (example: increase in drug related offenses, decrease in probation violations, etc.)
- Development or changes in local court services or programming (example: New Specialty Court programming, changes to court programming eligibility, etc.)

Your CCAB must then determine its proposed Overall PCR based on this analysis, with consideration given to the average of the last 3 years. Your CCAB must then identify the strategies that will impact its Overall PCR. All strategies that you are requesting funding for must be also be listed on the Summary Sheet, the Budget Cost Description, and have a completed Program Description. If you request funding for a program or service that is not identified as a strategy impacting any objective, it will not be considered for funding.

<u>SAMPLE OBEJCTIVE:</u> To reduce the County's Overall Prison Commitment Rate (PCR) to 16% or less.

<u>SAMPLE STRATEGY:</u> Target moderate-to-high risk, eligible offenders for local sanctions and supportive programming including: C01 Cognitive Programming, G18 Outpatient Treatment Services, and B15 Employment Skills. I15 Gatekeeper will be utilized to screen all offenders for eligibility.

A-1: Using OMNI Felony Disposition data supplied by OCC for the previous two fiscal years:

- 1. Are felony dispositions increasing, decreasing, or stable? Decreasing
- **2.** Describe changes within SGL categories. Report rates with detailed explanation:

TOTAL DISPOSITIONS:

Total Dispositions - Based on State OMNI data, there were a total of 678 felony dispositions in Livingston County in 2019. Overall, felony dispositions DECREASED by 25 from a total of 703 in 2018. This is a decrease of just under 4%.

PRISON COMMITMENTS:

Prison Commitments (PCs) - The total number of PCs in 2019 was 135. This is a slight increase from 121 in 2018.

PRISON COMMITMENT RATES OVERALL:

Prison Commitment Rate (PCR) - The overall PCR in 2019 was 20% (135 of 678). This is a slight increase from a PCR of 17.2% in 2018 (121 of 703 dispositions). Statewide the PCR is 19.7% (8,774 of 44,626 dispositions) putting Livingston County slightly above the statewide average.

Group 1 Offenders (homicide, robberty, CSC, Assault, etc.) - Amongst this group, the PCR in 2019 was 31.4%, up from 26.7% in 2018. There were a total of 255 Group 1 dispositions and 80 resulted in prison commitments. Statewide, the PCR for Group 1 in 2019 was 30.4% putting Livingston County slightly above the statewide average.

Group 2 Offenders (larceny, fraud, forgery, drugs, OUIL 3, other non-assaultive, etc.) - Amongst this group, the PCR in 2019 was 13%, up from 11.3% in 2018. There were a total of 423 dispositions in Group 2 and 55 resulted in prison commitments. Statewide, the PCR for Group 2 in 2019 was 12.9% putting Livingston County slightly above the statewide average.

PCR BY OFFENSE GROUP:

******Straddle Cell Offenders - In 2019 there were a total of 188 dispositions amongst straddle cell offenders. Of these, 45 resulted in prison commitments for a PCR of 23.9%. This is a decrease from 24.6% in 2018 (47 of 191). Within Group 1, 15 of 68 dispositions (22.1%) resulted in prison commitments. Ironically enough, the total number of dispositions as well as the number of prison commitments within this group remained exactly the same as 2018. Within Group 2, 30 of 120 dispositions (25%) resulted in prison commitments. This is a slight decrease from 26% (32 of 123) in 2018. The statewide PCR for straddle cell offenders is 24% putting Livingston County just slightly below the statewide average.

Intermediate Offenders - In 2019, there were a total of 262 dipositions amongst intermediate offenders. Of these, 6 resulted in prison commitments for a PCR of 2.3%. This is the same PCR (2.3%) for this offender group from 2017, but is an increase from 2018 in which zero intermediate offender dispositions resulted in prison commitments. Within Group 1, none of the 71

dispositions resulted in prison commitments. Within Group 2, 6 of 191 (3.1%) dispositions resulted in prison commitments. The statewide PCR for intermediate offenders is 1.8% putting Livingston County above the statewide average.

Presumptive Offenders - In 2019, there were a total of 71 dispositions amongst presumptive offenders. Of these, 62 resulted in prison commitments for a PCR of 87.3%. This is an increase from 67.6% in 2018. Within Group 1, 52 of 59 dispositions (88.1%) resulted in prison commitment. Within Group 2, 10 out of 12 ((83.3%) dispositions resulted in prison commitments. The statewide PCR for presumptive offenders is 80.7% putting Livingston County above the statewide average.

SGL NA – In 2019, there were a total of 157 dispositions of NA offenders. Of these, 22 resulted in prison commitments for a PCR of 14%. This is a decrease from 16.4% in 2018 and from 17.5% in 2017. Within Group 1, 13 of 57 (22.8%) total dispositions resulted in prisons commitments. Within Group 2, 9 out of 100 (9%) dispositions resulted in prisons commitments. The statewide PCR for NA offenders is 21.3% putting Livingston County below the statewide average.

OUIL 3 Dispositions - In 2019, there were a total of 79 OUIL3 dispositions. Of these, 15 dispositions resulted in a prison commitment for a PCR of 19%. This is a decrease from 21% in 2018. Statewide, the PCR for OUIL3 offenders is 16.9% putting Livingston County above the statewide average.

3. Provide information regarding policies, procedures, program operations, pertinent issues or opportunities which emerged, or other factors which have positively/negatively affected the achievement of objectives--for example, local changes regarding early jail release, implementation of required program fees, stakeholders--CCAB manager or staff, judges, magistrates, prosecutor, sheriff, contractor/service providers. Briefly describe the impact and, if negative, how it was addressed.

2019 was another year of great change for the Livingston County Courts. Despite this, the overall PCR only increased slightly, from 17% to 20%, and Livingston County remained consistent with the statewide average. The most significant change at the Courts, again this year, was a change in the makeup of the Judicial bench. The Courts have 2 new District Court Judges, Judge Murphy taking the bench in January and Judge Bain taking the bench in November. The Courts also have 2 new Circuit Court Judges, Judge Geddis taking the bench in January and Judge McGivney taking the bench in August. There was also a change in leadership with Judge Hatty assuming the role of Chief Judge for the Circuit and District Courts and Judge Cavanaugh remaining the Chief Judge of Probate Court.

Also new in 2019 was the creation of a Public Defender's office in Livingston County.

With respect to the local advisory board, there were also several changes this year. After the chairperson resigned, Sheriff Murphy assumed the role. Judge Murphy also resigned and Judge Bain was appointed. The new Public Defender joined the Board, and a new Community Corrections manager was hired.

Despite numerous changes, there has not been much impact to the overall PCR. Similarly, the target demographic, straddle cell offenders, saw little impact as well with the PCR remaining relatively stable at 24% and just slightly below the statewide average.

4. What steps will you take if you find that you are not meeting your objectives or your strategies are not being implemented as planned?

The local advisory board bylaws allows for the formation of ad hoc committees. If it were determined that Livingston County Community Corrections (LCCC) was not meeting its objectives or the strategies were not being implement as planned, a committee will be convened to review programs, objectives and reports. LCCC will work with individual service/program providers and probation staff to pinpoint problematic areas and strategies will be reevaluated to achieve positive outcomes. If necessary, new strategies will be discussed with stakeholders at the local advisory board to develop a new plan and/or approach to the existing plan.

A-2: Felony Analysis Key Objectives and Strategies

NOTE:

- Objectives should be measurable and provide sufficient detail so progress can be monitored.
- Each objective should be followed by **at least** one strategy (step, action, policy, and program) that will help you achieve your objective.
- Your objectives and strategies should be supported by the analysis above.
- Keep in mind that all programs for which you are requesting funding are considered *strategies*. Be sure to clearly identify them as strategies.
- 1. Objective #1 is intended to impact the overall prison commitment rate please state the Objective:

STAY BELOW THE STATEWIDE AVERAGE PRISON COMMITMENT RATE OF 19.7% AND REDUCE LIVINGSTON COUNTY'S OVERALL PCR FROM 20% TO 18%

Programs in support of Objective #1:

COMMUNITY CORRECTIONS PROGRAMS:

Cognitive Behavioral Therapy - The Thinking Matters program is a Cognitive Restructuring program that has individuals examine the core attitudes and beliefs that motivate thinking patterns and dictate behaviors. It will expose critical thinking errors that lead to repeated, illegal, negative or destructive behaviors and challenge individuals to develop new thinking patterns to help establish new core attitudes and beliefs therefore changing behavior.

Trauma-Specific Treatment - The Trauma Recovery and Empowerment Model (TREM) and Trauma Recovery and/or Empowerment Model for Men (M-TREM) are gender responsive evidence-based trauma services. These models use a group-based intervention designed to facilitate trauma recovery among women and men who have experienced trauma in their history. TREM draws on cognitive restructuring, psychoeducational and skills-training techniques to emphasize the development of coping skills and social support. M-TREM is sectioned into three gender-specific categories of "Male Myths, Emotions and Relationships," "Trauma Recovery," and "Recovery Skills." Trauma-specific treatment is tied to address the biopsychosocial assessment results of the probationer. In addition, the initial referral is tied to address Moderate or High Adverse Childhood Experiences (ACE) and/or COMPAS assessment results for probation and probation violators with one of the following: Family Criminality, Social Isolation/Social Adjustment, Experience of Abuse as a Child/Adult, Relationship Dysfunction, Self-Efficacy (low scores), History of Violence, Violent Felony Offense Risk Scale and Criminal Personality

Substance Use Disorder (SUD) Counseling Services: A variety of professional counseling services are offered to address substance use disorders. Services include intake assessment, group therapy treatment sessions (weekly), and short-term individual SUD counseling if deemed clinically necessary. Services incorporate evidence-based components that address substance use disorder education, relapse prevention, maintenance, accessing community resources and aftercare planning.

SPECIALTY TREATMENT COURTS:

Adult Drug Treamtent Court (ADTC) -

With respect to Substance Use Disorders, the Adult Drug Treatment Court (ADTC) is designed to help participants address their substance use that led to criminal behavior. ADTC is presided over by the Honorable Michael P. Hatty and the team consists of treatment providers, defense attorney, assistant prosecutor, probation officers, and the judge. This interdisciplinary team meets twice a month for pre-court staffing meetings and court hearings. The success of this court in addressing substance abuse is achieved through judicial interaction, individual and group counseling, frequent and random drug and alcohol testing, and connections to community resources. Adult Drug Treatment Court provides support, incentives, and accountability to each participant so they are able to successfully complete the program.

Intensive Treatment Mental Health Court (IT Court) - IT Court assists court-involved participants, with mental illness or cooccurring disorders, through its partnership with Community Mental Health (CMH) and the National Alliance on Mental Illness
(NAMI). In addition to review hearings with the judge, participants are involved in activities such as Discovery group, ACT,
Dual Recovery group, Genesis House, MRT, various sober activities, peer services and individual counseling. Once a month, the
Intensive Treatment Mental Health Court takes place at CMH where the judge and team have an opportunity to meet with
each participant's therapist to get a holistic view. An important part of IT Court is the celebrations of participants moving to
the next phase of their treatment and/or successful graduations from the program. IT Court provides participants with the
treatment, support, and resources they need to successfully avoid future criminal behavior and involvement with the criminal
justice system.

Veterans Treatment Court - Veterans Treatment Court diverts eligible veterans from the traditional court process to a specialized criminal court docket that provides a greater emphasis on addressing issues specific to veterans. The Veterans Court team consists of the judge, representatives from the Prosecutor's Office, defense bar, probation, Mentor Coordinator, Veteran Outreach Coordinator and law enforcement. All of the participants have the support of the Mentor Program. A veteran mentor acts as a coach, guide, role model, advocate, and support system for each participant. Participants and mentors meet with the judge twice a month for scheduled review hearings to discuss successes and barriers and how Veterans Treatment Court can help them to be successful.

OTHER COURT PROGRAMS:

Swift and Sure Sanctions Probation Program - With respect to non-compliance and criminal involvement, the Swift and Sure Sanctions Probation Program works to reduce recidivism, number of missed appointments, positive drug and alcohol tests, probation revocations, incarceration and improve the speed and efficiency of responding to probation violations. This is accomplished through intensive supervision provided by a dedicated program case manager who works collaboratively with a Michigan Department of Corrections Probation Agent.

Other Services geared towards reducing the overall number of Prison Commitments:

Substance Use Disorder Services:
Substance Use Counseling Services
Substance Use Assessments
Individual Substance Use Counseling
Group Substance Use Counseling
Complete Counseling Center
Fork in the Road Counseling
Key Development
Livingston County Catholic Charities
Advanced Behavioral Medicine
Karen Bergbower and Assoc.
PERS (Prevention Education Referral Services)
Connect 3 Housing — Sober Living

Domestic Violence Services:

LACASA

Complete Counseling

PERS

Livingston County Catholic Charities – Anger Management

Retail Fraud Services: Economic Crime Prevention

DEDS.

PERS

Complete Counseling

ARM (Accepting Responsibility is Mandatory)

Other Services:

Thinking Matters Cognitive Behavioral Therapy
DNA (Drugs and Alcohol Drug Testing)
JSG (Judicial Services Group) – Tether
Smart Start – Tethers
Total Court Services – Electronic Monitoring
Victim Impact Panel
Mothers Against Drunk Driving Victim Impact Panel
Total Opiate Program through Total Court Services
Livingston County Catholic Charities Sex Offender Services
Red Barrel Program
Livingston County Community Alliance

2. Objective #2 is intended to impact the Group 2 Straddle Cell rate – please state the Objective:

STAY BELOW THE STATEWIDE AVERAGE PRISON COMMITMENT RATE OF 24% FOR GROUP 2 STRADDLE CELL OFFENDERS AND REDUCE LIVINGSTON COUNTY'S PCR AMONGST THIS POPULATION FROM 23.9% to 22%.

Programs in support of Objective #2:

All programs described above in section A-2 also support the objective of reducing the PCR for straddle cell offenders.

B: Recidivism Analysis

The updated Public Act 511 mandates that CCABs "Provide improved local services for individuals involved in the criminal justice system with the goal of reducing the occurrence of repeat criminal offenses that result in a term of incarceration or detention in jail or prison." As such, CCABs are required to address recidivism within their comprehensive plan, with a specific emphasis on how the plan is intended to impact the local recidivism rates.

The State Board has defined recidivism as "Probation Violations, either technical or new sentence, resulting in prison," and has identified Probation Violators as being indicative of performance in this area:

- i. Probation Violators with a new felony conviction resulting in a prison sentence
- ii. Technical Probation Violators resulting in a prison sentence

Based on OMNI Report 3, please use the following table to report the number of Probation Violators that resulted in a prison disposition for each listed category. Regional CCABs should list the Probation Violation Data for each County separately and provide a total, regional rate at the end of each row.

B-1: Using OMNI Felony Disposition data supplied by OCC for:

Previous Fiscal Year Recidivism Rates								
County Name	Livingston	FY2018	FY2017	FY2016			Totals for Region:	
	Probation Violation - New Sentence to Prison							
Total	16/50	15/58	17/58	33/70				
	Probation Violation – Technical to Prison							
Total	10/91	17/107	21/102	29/104				

B-2: Using OMNI Felony Disposition data supplied by OCC for the previous fiscal years:

- 1. Are Probation Violations increasing, decreasing, or stable? Decreasing
- **2.** Describe changes within the Probation Violation data for the previous two fiscal years. Report rates with detailed explanation:

PCR for PVs:

The total number of probation violations (new sentence and technical) for 2019 was 141. This is a decrease from 165 in 2018 and 160 in 2017. Also, the prison commitments DECREASED from 32 in 2018 to 26 in 2019. Thus, the 2019 PCR for probation violations (PVs) is 18.4% (26 of 141). This is a DECREASE from 2018's PCR of 19.4% (32 of 165). The statewide 2019 PCR for PVs is 21.8% (2067 of 9461). Thus, Livingston County is BELOW the statewide average.

PCR By Guideline Group

SGL NA – Amongst this guideline group, there were a total of 95 PVs (new and tech), down from 108 in 2018. Of the 95 PVs in 2019, 11 resulted in prisons commitments (12% PCR), down from 18 prison commitments within this group in 2018 (17% PCR).

Intermediate – Amongst this guideline group, there were a total of 10 PVs (new and tech), down from 15 in 2018. Of the 10 PVs in 2019, 3 resulted in prison commitments (30% PCR), up from zero prison commitments within this group in 2018 (0% PCR).

***Straddle Cell – Amongst this guideline group, there were a total of 28 PVs (new and tech), down from 36 in 2018. Of the 28 PVs in 2019, 4 resulted in prison commitments (14% PCR), down from 9 prison commitments within this group in 2018 (25% PCR).

Presumptive – Amongst this guideline group, there were a total of 8 PVs (new and tech), up from 6 in 2018. Of the 8 PVs in 2019, all 8 resulted in prison commitment (100% PCR), up from 5 prison commitments within this group in 2018 (83% PCR).

PCs and PCR By PV Type:

PV New Sentence – The total number of PVs with a new sentence was 50 in 2019. This was a decrease from 58 in 2018. Of these PVs, 16 resulted in prison commitments in 2019, up slightly from 15 in 2018. Thus, the 2019 PCR for PVs new sentence is 32% (16 of 50). The statewide PCR for PVs new sentence is 28.1% (1,180 of 4,204). Thus, Livingston County is above the statewide average.

Amongst SGL NA offenders, there were 7 new PVs in 2019, up from 6 in 2018. Of the 7 new PVs, 2 resulted in a prison commitment (29% PCR), up from 1 prison commitment amongst this group in 2018 (17% PCR).

Amongst the Intermediate offenders, there were 9 new PVs in 2019, down from 11 in 2018. Of the 9 new PVs, 2 resulted in prison commitments (22% PCR), up from zero prison commitments within this group in 2018 (0% PCR).

***Amongst the straddle cell offenders, there were 26 new PVs in 2019, down from 35 in 2018. Of the 26 new PVs, 4 resulted in prison commitments (15% PCR), down from 9 prisons commitments within this group in 2018 (26% PCR).

Amongst the presumptive offenders, there were 8 new PVs in 2019, up from 6 in 2018. All 8 of the PVs in this group resulted in prison commitments (100% PCR), up from 4 in 2018 (67% PCR).

PV Technical Violator – The total number of PVTechs in 2019 was 91. This number DECREASED from 107 in 2018 and 101 in 2017. Of these, 10 resulted in prison commitments in 2019, down from 17 in 2018 and 21 in 2017. Thus, in 2019 PCR for PVTechs is 11% (10 of 91). The statewide 2019 PCR for PVTechs is 16.9% (887 of 5,257). Thus, Livingston County is BELOW the statewide average.

Amongst the SGL NA offenders, there were 88 PVTechs in 2019, a decrease from 102 in 2018. In 2019, 9 of these PVTechs resulted in prison commitments (10% PCR), a decrease from 17 in 2018 (17% PCR).

Amongst the intermediate offenders, there was 1 PVTech in 2019 which resulted in a prison commitment (100% PCR). This was a decrease in PVTechs from 2018 in which there were 4, however there were no prison commitments within this group in 2018 (0% PCR).

***Amongst the straddle cell offenders, there were 2 PVTechs in 2019, whereas in 2018 there was only 1. The PVTechs within this group in 2019 did not result in prison commitments (0% PCR), which was also the case for 2018 (0% PCR).

Amongst the presumptive offenders, there were zero PVTechs in 2019, which was also the case for 2018.

3. Provide information regarding policies, procedures, program operations, pertinent issues or opportunities which emerged, or other factors which have positively/negatively affected the achievement of objectives--for example, local changes regarding early jail release, implementation of required program fees, stakeholders--CCAB manager or staff, judges, magistrates, prosecutor, sheriff, contractor/service providers. Briefly describe the impact and, if negative, how it was addressed.

As was stated earlier, 2019 was another year of great change for the Livingston County Courts. Despite this, recidivism analysis shows that the overall PCR for probation violations, either new or technical, decreased a percentage from 19% to 18%, and Livingston County remained below with statewide average. The most significant change at the Courts, again this year, was a change in the makeup of the Judicial bench. The Courts have 2 new District Court Judges, Judge Murphy taking the bench in January and Judge Bain taking the bench in November. The Courts also have 2 new Circuit Court Judges, Judge Geddis taking the bench in January and Judge McGivney taking the bench in August. There was also a change in leadership with Judge Hatty assuming the role of Chief Judge for the Circuit and District Courts and Judge Cavanaugh remaining the Chief Judge of Probate Court.

Also new in 2019 was the creation of a Public Defender's office in Livingston County.

With respect to the local advisory board, there were also several changes this year. After the chairperson resigned, Sheriff Murphy assumed the role. Judge Murphy also resigned and Judge Bain was appointed. The new Public Defender joined the Board, and a new Community Corrections manager was hired.

Despite numerous changes, there has not been much impact to the overall PV PCR. However, the target demographic, straddle cell offenders, saw significant change with the PCR amongst this guideline group decreasing from 25% to 14%.

4. What steps will you take if you find that you are not meeting your objectives, or your strategies are not being implemented as planned?

If objectives are not being met and strategies are not being implemented, stakeholders such as MDOC Adult Probation and Parole Agents Supervisors, District Court Probation Officers, Program Managers, Sheriff's Department, Community Corrections Staff and the LCCCAB will meet to develop and implement corrective strategies in order to meet stated objectives. If needed, monthly meetings may be held to review programs, objectives and reports to determine effectiveness and strategies will be fine-tuned to gain positive outcomes.

B-3: Recidivism Key Objectives and Strategies

NOTE:

- Objectives should be measurable and provide sufficient detail so progress can be monitored.
- Each objective should be followed by **at least** one strategy (step, action, policy, and program) that will help you achieve your objective.
- Your objectives and strategies should be supported by the analysis above. Keep in mind that all programs for which you are requesting funding are considered *strategies*. Be sure to clearly identify them as strategies.
- 1. Objective #1 is intended to impact recidivism by targeting: Probation Violators with a new sentence State the Objective:

STAY BELOW THE STATEWIDE PCR AVERAGE OF 28% AND REDUCE LIVINGSTON COUNTY PCR AMONGST THIS POPULATION FROM 32% TO 28%.

Programs in support of Objective #1:

All programs described above in section A-2 also support the objective of reducing the PCR for probation violators with a new sentence.

2. Objective #2 is intended to impact recidivism by targeting: Technical Probation Violators State the Objective:

STAY BELOW THE STATEWIDE PCR AVERAGE OF 17% AND REDUCE LIVINGSTON COUNTY PCR AMONGST THIS POPULATION FROM 11% TO 10%.

Programs in support of Objective #2:

All programs described above in section A-2 also support the objective of reducing the PCR for technical probation violators.

C: COMPAS Criminogenic Needs Profile

1. Please list the top 3 needs scales as identified within the COMPAS Criminogenic Needs and Risk Profile provided by OCC or as presented by your local needs data. Additionally, present both the local and OCC strategies that will impact the identified needs scales:

According to the COMPAS Criminogenic Needs and Risks Profile Report, Substance use needs rank the highest for Livingston County followed by Non-Compliance history and Criminal involvement. Amongst the female population, self-efficacy also ranked high on the risk/needs scale.

With respect to Substance Use, the Adult Drug Treatment Court (ADTC) is designed to help participants address their substance use that led to criminal behavior. The success of this court in addressing substance use is achieved through judicial interaction, individual and group counseling, frequent and random drug and alcohol testing, and connections to community resources. Adult Drug Treatment Court provides support, incentives, and accountability to each participant so they are able to successfully complete the program. Similarly, substace use disorder treament services are offered through the Community Corrections program.

With respect to non-compliance and criminal involvement, the Swift and Sure Sanctions Probation Program works to reduce recidivism, number of missed appointments, positive drug and alcohol tests, probation revocations, incarceration and improve the speed and efficiency of responding to probation violations. This is accomplished through intensive supervision provided by a dedicated program case manager who works collaboratively with a Michigan Department of Corrections Probation Agent. Non-compliance and criminal involvement are also addressed through the Community Corrections cognitive behavioral and trauma-focused services, both evidence based practices designed to address these criminogenic needs.

2. Provide information regarding policies, procedures, program operations, pertinent issues or opportunities which emerged, or other factors which have positively/negatively affected the achievement of objectives--for example, local changes regarding early jail release, implementation of required program fees, stakeholders--CCAB manager or staff, judges, magistrates, prosecutor, sheriff, contractor/service providers. Briefly describe the impact and, if negative, how it was addressed.

As noted above, the Livingston County Courts have experienced a great amount of change over the last year. Despite this, the Livingston County Community Corrections Advisory Board is working collaboratively to diligently address the needs identified in the COMPAS Criminogenic Needs and Risk Profile.

3. What steps will you take if you find that you are not meeting your objectives, or your strategies are not being implemented as planned?

If objectives are not being met and strategies are not being implemented, stakeholders such as MDOC Adult Probation and Parole Agents Supervisors, District Court Probation Officers, Program Managers, Sheriff's Department, Community Corrections Staff and the LCCCAB will meet to develop and implement corrective strategies in order to meet stated objectives. If needed, monthly meetings may be held to review programs, objectives and reports to determine effectiveness and strategies will be fine-tuned to gain positive outcomes.

D: Local Initiative to Address Probation Violators

Please explain in detail what is being done locally to address the needs of felony probation violators, both new sentence and technical. Include your identification and screening strategies as well as risk/need identification. Include both local and OCC funded initiatives.

All programs described above in section A-2 are also aimed at addressing the needs of felony probation violators, both new sentence and technical. The new Community Corrections manager is working with MDOC probation to quickly identify and screen eligible offenders for appropriate services to address risks and needs as identified by the COMPAS.

E: Local Vocational/Educational Initiatives

Please explain in detail what is being done locally to address the local vocational/employment needs of offenders. Remember to consider trade schools, community colleges or universities who offer training to our offenders. Include both local and OCC funded initiatives.

Work Skill Corporation (WSC) – WSC provides services focused on helping individuals secure and retain employment. WSC serves people with employment barriers such as criminal backgrounds by offering progressive education and vocational development opportunities based on a person-centered approach. WSC's Employment and Training Services help people identify what type of jobs they would like to pursue and then support them with becoming work-ready. Placement services assist individuals in finding jobs. WCS's Production Services Department performs work for the automotive industry as a Tier I and Tier II supplier as well as other businesses and industries. This area supports employment and training services by providing a real work setting for assessment and training programs. Action Associates is the staffing arm of WSC. Action provides temporary, contract and permanent placement of professional, skilled trades, administrative and industrial personnel to private business and government. Other services offered by WSC include:

- Vocational Evaluations
- Career Explorations
- Work Experiences
- Job Tryouts

- Community Based Assessments
- On-the-Job Trainings
- Situational Assessments
- Pre-Employment Interview Assessments
- Specialized Assessments (Clerical, PC Skills, A+ Certification,
- Forklift Operation, Custodial Skills)
- Job Shadowing

Livingston Human Service Agency (OLHSA)- OLHSA works with offenders to create meaningful change and real opportunities for success. Through their Economic Responsibility Program, OLHSA offers financial incentives for successful completion. The "Getting Ahead" program is an internationally recognized workshop taught by facilitators in a "kitchen table" format in which participants learn to build resources for a better life by moving from thinking about making a change to creating a plan for reaching their goals. Participants build an individualized plan to reach their goal of a stable, secure life. OLHSA also has Referral Programs that assists offenders in finding the available programs and services to meet their needs. If those needs cannot be met at OLHSA, offenders are referred to other local agencies or organizations for help.

Livingston County Department of Veterans Affairs – The Department of Veterans' Services is dedicated to providing services and programs to the 12,300 veterans residing in Livingston County particularly by connecting veterans with a Veterans Career Advisor as well as assisting veterans with programs administered by the state such as the Michigan Works Veterans Job Representative for employment assistance. Veterans services is committed to connecting employers with veteran talent and reducing barriers to employment, such as skills translation and identifying the right talent for the opportunity. For veterans, this includes leveraging service providers who can assist with resume development and interview preparation and identifying opportunities with employers seeking veteran talent. For employers, this includes making it easier to navigate available resources, sharing best practices for recruitment, hiring and retention and partnering to conduct targeted outreach to the right veteran talent for the opportunity.

Community Mental Health Services of Livingston County –The Community Independence Program is a recovery-focused service that provides support to individuals so they can live successfully in the community. Case managers, therapists and peer support specialists work with individuals to develop goals toward their recovery. Case managers and therapists help individuals link with community resources for physical health, housing, employment, benefits and other needs. The staff and individuals work together to build strengths and learn skills to minimize the impact of symptoms related to mental illness and possibly substance use.

Jail Education Services – In an effort to reduce rates of recidivism by giving those within the criminal justice system an opportunity of an education, there are a number of educational services available to inmates such as:

- G.E.D. Preparation Class Instruction includes assessment through pre-testing.
- Life Skills The Life Skills classes address a number of areas including making personal challenges through positive change, taking responsibility, building healthy positive values, developing self-esteem, coping skills, and stress management.
- Parenting Skills/Family Dynamics This class addresses physical, emotional, social, and cognitive development of a child from birth through the teen years. This class also addresses positive guidance, discipline, and responsibility by learning model behavior and healthy parenting.
- Job Skills These classes address challenges facing the ex-offender. They learn the importance of goal setting. They learn to focus on strengths, attitudes, choices, enthusiasm, confidence, and self-preparation. There is also information regarding awareness and utilization of community resources and resume writing.

Livingston Educational Service Agency (LESA) - The Adult Education Program affords eligible individuals the ability to work on improving basic mathematics and/or reading skills, complete courses to obtain their high school diploma, or prepare for the high school equivalency (GED) tests. In order to be eligible, enrollees must be at least 18 years of age as of July 1 of the current

school year, and a minimum of four years must have passed since originally being enrolled in high school. Teachers are available throughout the week to work directly with enrolled individuals, both in-person, and through on-line classes. Michigan Works! - There are many Michigan employers who provide employment opportunities for ex-offenders who are willing to work hard and commit themselves to a new employment opportunity. With a statewide network of Service Centers, the Michigan Works! system serves nearly four million customers.

Convicted Felon-Friendly Employers – A number of local companies provide employment opportunities for offenders including:

- Ty Summit
- Key Plastics
- The Home Depot
- Qualified Staffing

F: Local Initiatives to Address Persons with Substance Use Disorder(s)

1. What (if any) gaps in services has your CCAB identified and documented to address offenders' substance use needs?

A clear gap in service has been identified for pre-trial offenders with substance use needs. Further, discussions with the PIHP (Community Mental Health) have idenified potential gaps in the referral process for accessing treatment services.

2. If you identified gaps in question (1.), please describe how your CCAB plans to address these needs, including details regarding the referral process, screening and assessment, referral to treatment for appropriate level of care and aftercare planning.

The Community Corrections Manager is working with MDOC probation and the PIHP to establish a comprehensive referral process so that individuals who score moderate/high in risks/needs scale of Substance Use on COMPAS are referred for an assessment for treatment at established providers in the community. If determined clinically appropriate for treatment, the provider will then link the individual to the appropriate level of care and aftercare planning.

G: Other Local Initiatives

1. Present any local priorities such as development of criminal justice coordinating councils, Specialty Courts, public education, etc., which have not been identified in the above sections, but have an impact on the performance indicators:

All local priorities which have an impact on performance indicators have been identified above.

2. Please explain how the Comprehensive Plan, in coordination with the above Local Initiatives, will impact the State Board Priorities, and ultimately offender success:

The members of the Community Corrections Advisory Board, together with the Livingston County Trial Courts are committed to maximizing funding to implement community-based corrections programs to provide alternative sanctioning options to incarceration while ensuring public safety, reducing recidivism, and addressing the unique needs of local offender and at-risk population groups.

H: Jail Data Analysis:

- Using JPIS or local snapshot data, please provide information pertaining to the number of offenders on record as well as the ADP % of housed inmates for each of the categories below.
- Please fill out each answer for this section completely, with the correct information. Applications with incomplete data may be rejected.

(NOTE: Regional CCABs should complete analysis for each county.)

Current Jail Utilization								
County	Livingston							
	General Information							
RDC (Rated Design Capacity)	411							
Utilization as % of RDC	46%							
Number of off- line beds								
			Felon Population					
Sentenced Felons	42							
Unsentenced Felons	15							
Misdemeanant Population								
Sentenced Misdemeanants	55							
Unsentenced Misdemeanants	12							
1. Does your county have a written county jail population management plan per PA 139 of 2007? Yes								
 In the previous year, did your sheriff initiate a reduction in population because the jail exceeded 95% of RDC for 5 consecutive days per Public Act 140 of 2007? No. If YES, explain how this was carried out: 								

- 3. In the previous FY, how many times did the county declare an official (in writing) jail overcrowding state of emergency (over 100% of RDC for 7 consecutive days) per Public Act 140 of 2007? NONE
- 4. Does your jail submit JPIS data? Yes If not, please provide a rationale for not submitting JPIS data:
- What vendor or jail management software is used to report jail utilization? Superion, OneSoulutionJMS
- G-1: Using JPIS data (or local data as available) provide an analysis of local jail utilization including the average daily populations/lengths of stay of jail populations including felon and misdemeanant utilization, sentenced and unsentenced populations, partially sentenced populations, boarders, and offense categories. (Regionals: use carriage return [Enter] to separate information by jail)
 - 1. This application uses JPIS Data
 - 2. Are bookings up, down, or stable? Stable
 - 3. Describe changes in ADP or AvLOS for the population groups reported above:

For the period, 10/1/18 to 9/30/19, the ADP was 189.91. Amongst sentenced felons, the ADP was 42.26 and for unsentenced felons, the ADP was 15.45. Amongst sentenced misdemeanants, the ADP was 54.99 and for unsentenced misdemeanants, the ADP was 11.75. Overall ADP is drastically reduced from the previous years 257.81, a 26% reduction. For the same period, the AvLOS was 30.95, slightly higher than the AvLOS in 2018 of 27.52. Amongst sentenced felons, the AvLOS was 103.57 and for unsentenced felons, the AvLOS was 44.53. Amongst sentenced misdemeanants, the AvLOS was 38.26, and for unsentenced misdemeanants, the AvLOS was 7.13. All analysis regarding jail utilization is based solely on JPIS data provided by the Michigan Department of Corrections, Office of Community Corrections.

Provide additional information to explain your jail utilization here including changes in stakeholders, law enforcement priorities, bed closures, etc.:

G-2: Describe policies and practices that influence jail population:

- Does the jail have a bed allocation plan? No
- 2. Does the jail accept boarders from other counties? NoIf YES, what is the daily rate charged for a boarder?

- 3. Does the jail have a county-imposed cap on local bed utilization to provide space for boarding? No If YES, report number of boarders and the % of the RDC for all boarders.
- 4. Does the jail accept MDOC or Federal boarders under contract? Yes If YES, what is the daily rate charged for MDOC and/or Federal boarders? \$87.00
- 5. What was the revenue from boarders for the previous year? \$1.7M
- 6. Provide additional analysis you feel is necessary to explain your jail utilization: NA

MICHIGAN DEPARTMENT OF CORRECTIONS OFFICE OF COMMUNITY CORRECTIONS FY 2021 FUNDING PROPOSAL

Livingston County Community Corrections

Comprehensive Plans & Services							
Program	Program Code	Funding Request	Approved Funding	Reserved Funding	Total Funding Recommendation		
Group-Based Programs							
Education	B00	-			-		
Employment	B15	-			-		
Life Skills	B16	-			-		
Cognitive	C01	20,800			-		
Domestic Violence	C05	-			-		
Sex Offender	C06	-			-		
Outpatient Services	G18	77,085			-		
Other Group Services	G00	-			-		
Sub-Total		97,885	-	-	-		
Supervision Programs							
Day Reporting	D04	-			-		
Intensive Supervision	D23	-			-		
Electronic Monitoring	D08	17,550			-		
Pretrial Supervision	F23	10,850			-		
Sub-Total		28,400	-	-	-		
Assessment Services		-,					
Actuarial Assessment	122	_			_		
Pretrial Assessment	F22	_			_		
Sub-Total		-	_	_	_		
Gatekeeper							
Jail Population Monitor	123	_			_		
Gatekeeper	125	_			_		
Sub-Total	125	_	_	_	_		
Case Management	124	_			_		
Substance Abuse Testing	G17						
Other	Z00	_			_		
Program Total	200	126,285	_	-	_		
Administration		120,203					
Salary & Wages		32,699.00			_		
Contractual Services		-			-		
Equipment		-			-		
Supplies		-			-		
Travel		-			-		
Training		-			-		
Board Expenses		-			-		
Other		-			-		
Administration Total		32,699	-	-	-		
Total Comprehensive Plans & Services		158,984	0	0	0		
Drunk Driver Jail Reduction							
Program	Program Code	Funding Request	Approved Funding	Reserved Funding	Total Funding Recommendation		
Assessment & Treatment Services	Z01	0			0		
5-Day In Jail Housing	Z02	0			0		
·							
Totals		0	0	0	0		

RESOLUTION NO: 2020-06-148

LIVINGSTON COUNTY DATE: June 8, 2020

Resolution Authorizing the Purchase of a DELL Hyperconverged System from Access-Interactive to Expand and Unify the County's Server Architecture - Information Technology

whereas, at this time, IT recommends moving forward with the purchase of a Dell hyperconverged system that will effectively bolt on and expand the County's Dell hyperconverged stretch cluster. IT recommends making this purchase as swiftly as possible to help mitigate the County's exposure to data loss disasters. This expansion will unify and solidify our server architecture, moving it on to one survivable platform, with two data center locations that will operate as one; and

WHEREAS, Livingston County's main data center is scheduled for an upgrade in summer of 2020. The current production infrastructure architecture varies between eight and twelve years old. The new Dell hyperconverged infrastructure and architecture foundation was purchased and deployed in late 2018 or early 2019. This was deployed as a balanced system with high survivability. Three servers were deployed at the Livingston County Administration building and three servers at the 911 facility; and

WHEREAS, this is a mission critical project that would reduce our server disaster recovery time from 7 to 10 days, to 24 hours or less; and

WHEREAS, Oakland County's G2G Marketplace contract 004561 will be used to purchase this data center expansion through the proven and trusted partner: Access-Interactive. Access-Interactive installed the first half of the hyperconverged server system in 2018-2019. This is a highly specialized installation and requires expert level familiarity with the Dell Hyper Converged systems and Livingston County infrastructure; and

WHEREAS, hardware, software, and services costs will not exceed \$441,388; and

WHEREAS, this project was identified in the 2020-2025 Capital Improvement Plan and funds are requested from the Capial Improvement Fund.

THEREFORE BE IT RESOLVED that the Livingston County Board of Commissioners hereby approves and authorizes a purchase order to be issued to Access Interactive for the purchase and installation services of a Dell Hyperconverged System at an amount not to exceed \$441,388.

BE IT FURTHER RESOLVED that the Livingston County Board of Commissioners hereby authorizes the Treasurer to transfer funds from F403 Capital Improvement to F636 Information Technology in an amount not to exceed \$441,388.

RESOLUTION NO: 2020-06-148

PAGE: 2

BE IT FURTHER RESOLVED that the Chairman of the Livingston County Board of Commissioners is authorized to sign all forms, assurances, contracts/agreements, renewals and future amendments for monetary and contract language adjustments related to the above upon review and/or preparation of Civil Counsel.

#

MOVED: SECONDED: CARRIED:

Livingston County Information Technology Department

Memo

To: Livingston County Board of Commissioners

From: Kristoffer Tobbe

Livingston County Chief Information Officer

cc: Cindy Catanach, Hilery DeHate

Date: May 21, 2020

Re: Livingston County Data Center Replacement Project

Primary Data Center Upgrade

At this time, IT recommends moving forward with the purchase of a Dell hyperconverged system that will effectively bolt on and expand the County's Dell hyperconverged stretch cluster. This expansion will unify and solidify our server architecture, moving it on to one survivable platform, with two data center locations that will operate as one. The survivability of the system has already been tested internally and externally for reliability. The fail-over and disaster up time decreases from days or weeks, to hours and possibly, even minutes. IT recommends making this purchase as swiftly as possible to help mitigate the County's exposure to data loss disasters.

Livingston County's main data center is scheduled for an upgrade in summer of 2020. The current production infrastructure architecture varies between eight and twelve years old. The new Dell hyperconverged infrastructure and architecture foundation was purchased and deployed in late 2018 or early 2019. This was deployed as a balanced system with high survivability. Three servers were deployed at the Livingston County Administration building and three servers at the 911 facility. This is a state of the art system with remote survivability and disaster recovery of both data and servers, with one witness server to manage the server cluster. This purchase would be a bolt on expansion to the existing system that was purchased on the Oakland County G2G contract in late 2018 and would help to smooth the need for future expansion.

The fact is that, if Livingston County were to suffer a disaster event at the County Administration building that destroyed the current production servers, we would be in a very difficult situation. There is a backup storage appliance at the Sheriff's Office where our packaged data backups are stored, but we do not have enough servers at the Sheriff's Office or at the 911 center to restore our 100+ virtual servers that we operate on. To secure enough new or used servers to restore our system would take an unknown amount of time depending on world conditions. Presently, it could take 10 or more days working 24 hours a day just to get the servers in place and staged for restoration. These facts have been validated by both internal and external sources. The current 10-year-old system suffered a major event in the summer of 2019. This is a mission critical project that would reduce our server disaster recovery time from 7 to 10 days, to 24 hours or less.

Purchasing this system will allow us to:

- Move our current Livingston County Production server environment to a stable secure and survivable system
- Smooth our need for large scale data center purchases in the future by utilizing a scalable system that can be added on as needed
- Allow for a whole scale virtual (VMware) server environment upgrade and save future costs
- Improve server and application responsiveness and speeds
- Ease management and administration of servers by unifying on a single supported
- Save tax payer dollars by taking advantage of both contract and special pricing

Finance:

It is recommended that we utilize Oakland County's G2G contract to purchase this data center expansion through the proven and trusted partner: Access-Interactive. Access-Interactive installed the first half of the hyperconverged server system in 2018-2019. This is a highly specialized installation and requires expert level familiarity with the Dell Hyper Converged systems and Livingston County infrastructure.

Additionally, we believe that there are current pricing advantages to purchasing as soon as possible using the G2G contract for the physical hardware, software, and labor. The project's cost estimate in the Capital Improvement Plan project was \$650,000. We believe that by purchasing now on the G2G contract will result in additional discounts that would lower the price to \$550,000, or possibly less.

Finance options are available through Dell Financial. There are very favorable terms that would help to smooth the purchase costs, though IT would not recommend financing technology beyond 36 months. A \$1 buyout government lease is available, as well as 0% financing.

This purchase would be made in accordance with the County's procurement policy from Resolution #2018-11-189, which was approved by the Livingston County Board on November 19, 2018.

From Section 1: Source Selection & Contract Formation, Sub-Section H: Cooperative Purchasing/Procurement Programs. "Notwithstanding any other provision of this policy, the County may make or authorize the purchase of supplies, equipment or services available through cooperative purchasing/procurement programs and other associations. The decision to purchase from these programs shall be made by the Board of Commissioner's after consultation with the department and considering among other issues: delivery, packaging, minimum order requirements, follow-up service if applicable, product/equipment quality. Bidding requirements shall be waived if it is determined to be in the best interest of the County based on written communication to support the County's findings. The County Administrator is authorized to enter into necessary agreements or contracts on behalf of the County. State of Michigan Extended Purchasing Program (such as MiDeal or other like programs) can be used instead of the normal bidding process."

Year needed 2020 Q 3-4

Expected Life Cycle: 8 -12 years

Total Estimated Cost: \$441,388.00

2020 Estimated Cost: \$441,388

2023 Estimated Cost: \$60,000 (2 server expansion, if needed)

2025 Estimated Cost: \$60,000 (2 server refresh, if needed)

Dell HCI (Virtual SAN) Solution Detail

Expanded Cluster:

Adding 8 nodes total to existing 6 node Virtual SAN cluster (4 on each side), Dual 16-core processors, 1.9TB RAM, approximately 133TB Usable without erasure coding on each side of the stretch cluster. Erasure coding usually adds 30% back which would make a usable balance of above 172TB. These calculations do not take into account dedupe and compression.

New Cluster Total:

14 nodes total (7 on each side), each Virtual SAN server will have 10x3.8TB drives, the additional drives from the 8 new servers will be moved to the original 6 servers so all 14 nodes will be uniform. 4 x 32GB DIMMs will also be moved from the 6 new servers and put into the original 6 servers.

Additional information:

Hyper Convergence Explained:

https://www.youtube.com/watch?v=qbKCukjqJVs

https://www.youtube.com/watch?v=SHLfkBiTYgY

https://www.youtube.com/watch?v=cs48Yr IUxc&t=121s

Partner Information:

Access Interactive Company Overview

Access Interactive provides technology solutions, services and support to business, educational and government organizations since 1985. Our business focus is helping our Clients make the most of technology investments. Over the last 30+ years Access has experienced significant growth to establish itself as a \$35 million organization proudly retaining over 65 full-time employees. We pride ourselves on being large enough to be extremely competitive and small enough to pay personal attention to our customers. We have an unwavering commitment to providing the best solutions, service and support to our customers.

Our highly-skilled technical services group includes over 40 full-time technicians including VMware, Microsoft, Cisco and Dell certified system engineers. Our technicians are available to you for projects ranging from on-site break/fix services to full-scale WAN/LAN integration, remote access, IP telephony and more.

Access Interactive sales consultants are technically astute and have an average over 20 years of industry experience. They are ready to apply their knowledge and technical expertise to recommending the best products and solutions and to providing efficient project management.

It is our focused mission to implement the best products, service and support in the industry to our clients.

Access Interactive has been doing business with Livingston County since the beginning of 2017.

Access Interactive has had the pleasure of working with state and local government customers, school districts, universities and colleges, and corporations for over 25 years. Recent experience includes the successful design and implementation of technology projects at:

- Oakland County, MI
- Eaton County, MI
- Ottawa County, MI
- Genesee County, MI
- Grand Traverse County, MI

- Monroe County, MI
- City of Battle Creek, MI
- City of Farmington Hills, MI
- City of Sterling Heights, MI
- City of Novi, MI

- Charter Township of Canton, MI
- Macomb County Community Mental Health, MI
- Schoolcraft College, Livonia, MI
- Michigan State University, MI

- Oakland Community College, MI
- Clinton Township, MI
- Genesee County Health Systems,
 MI
- Wayne County Airport Authority, MI

Access Interactive has become a thriving member of Michigan's education and government communities because we are focused on delivering a quality and customized customer experience. We are very grateful for the trust that our customers have place on us and in return we foster and maintain work that is worthy of a trusted advisory.

Solution Advantages:

- VMware upgrade and compliance. Homogenizing and upgrading to current version of 6.x Enterprise Plus.
- Comprehensive storage and virtualization management dashboard. Storage and servers are managed through a single pane of glass.
- Achieves true Business Continuity, fortifying the business uptime unlike other solutions.
 This solution allows for catastrophic loss of multiple nodes without affecting application and storage access. All of this accomplished without human intervention.
- All Flash solution. Up to 210,000 IOPS.
- Completely modular, no forklift upgrades required. Virtual SAN expands leveraging different size, scale, and manufacturer servers.
- Growth flexibility. Virtual SAN is capable of adding any quantity of memory, servers, or disks to accommodate new or evolving business requirements.
- Longevity. VMware is the leading provider of virtualization. In these rapidly changing times, VMware offers the most stable storage solution.
- Integrated stretch cluster functionality. Livingston County will split their Virtual SAN between 2 locations for geographic business continuity.
- Simplify and reduce administration overhead. VMware offers a single curriculum that allows the management of the complete environment from virtual switch to server to SAN.
- Vendor consolidation. Leveraging the VMware portfolio reduces the risk of 3rd party integration.
- Simplicity 100% of this curriculum is based on technologies that Livingston County's technical staff already has a master level of understanding. From VMware to Compellent, Livingston County staff works with these technologies every day (very low learning curve).
- Increase in Back-up Performance New Infrastructure architecture will dramatically reduce back-up window.

- Throughput is approximately 4.5X efficiency of traditional SAN (with two controllers.)
- Policy based storage management ability to choose granular VM storage polices for each individual VM.

What is hyper convergence?

Hyperconvergence combines compute, storage and networking in a single system. Enterprises can choose an integrated HCI appliance from a single vendor, or hardware-agnostic hyperconvergence software.

Hyperconvergence is an IT framework that combines storage, computing and networking into a single system in an effort to reduce data center complexity and increase scalability. Hyperconverged platforms include a hypervisor for virtualized computing, software-defined storage, and virtualized networking, and they typically run on standard, off-the-shelf servers. Multiple nodes can be clustered together to create pools of shared compute and storage resources, designed for convenient consumption.

The use of commodity hardware, supported by a single vendor, yields an infrastructure that's designed to be more flexible and simpler to manage than traditional enterprise storage infrastructure. For IT leaders who are embarking on data center modernization projects, hyperconvergence can provide the agility of public cloud infrastructure without relinquishing control of hardware on their own premises.

Converged infrastructure involves a preconfigured package of software and hardware in a single system for simplified management. But with a converged infrastructure, the compute, storage, and networking components are discrete and can be separated. In a hyperconverged environment, the components can't be separated; the software-defined elements are implemented virtually, with seamless integration into the hypervisor environment. This allows organizations to easily expand capacity by deploying additional modules.

What are the benefits of hyperconverged infrastructure solutions?

Hyperconverged infrastructure promises to deliver simplicity and flexibility when compared with legacy solutions. The integrated storage systems, servers and networking switches are designed to be managed as a single system, across all instances of a hyperconverged infrastructure. The inherent management capabilities enable ease of use, and software-defined storage is expected to yield greater scalability and resource efficiency. Companies can start small and grow resources as needed. HCI vendors also tout potential cost savings in areas including data center power and space; IT labor; and avoidance of licensed software such as backup or disaster recovery tools.

Which workloads are candidates for hyperconvergence?

HCI systems were initially targeted at virtual desktop infrastructure (VDI) and other generalpurpose workloads with fairly predictable resource requirements. Over time they've grown from being specialty solutions for VDI into generally scalable platforms for enterprise applications, database, and private cloud, according to research firm Forrester.

In a survey of infrastructure pros whose firms are planning, implementing or expanding their use of hyperconverged systems, Forrester found the most common workloads being run on hyperconverged systems are: database, such as Oracle or SQL server (cited by 50%); file and print services (40%); collaboration, such as Exchange or SharePoint (38%); virtual desktop (34%); commercial packaged software such as SAP, Oracle (33%); analytics (25%); and Webfacing workloads such as LAMP stack or web servers (17%).

Livingston County Dell V-San Stretch Cluster (Data Center Upgrade)	Livingston County CIP Budgeted Ammount	Original Quotation	Difference between CIP and Specified Quote	Standard Contract Pricing	Standard %	Discount price Negotiated	Savings	Reocurring Annual Costs	Finance Option A	Finance Option B
			Over Budget	Under Budget		Under Budget				
	\$650,000.00							3yr included		
Dell Power Edge Hardware				\$313,720.00		\$261,994.00	\$51,726.00	\$0.00		
Vmware Upgrades and Licensing				\$205,692.00		\$139,084.00	\$66,608.00	\$0.00		
Professional Services				\$40,310.00		\$40,310.00	\$0.00	\$0.00		
Monitoring Software				\$495.00			\$495.00	\$0.00		
Totals	\$650,000.00			\$560,217.00		\$441,388.00	\$118,829.00	\$0.00		
					Savings over Original Budgeted Ammount	\$208,612.00	32%	Lower than Budgeted ammount		
					Savings beyond Governmental Contract Pricing	\$118,829.00	21%	Lower than Contract Pricing		



Oakland County G2G Pricing CONTRACT NUMBER: 004561

for



Livingston County

Data Center Solution VSAN Stretch Cluster Phase 2

Prepared by Jerry Rioux & Daniel Heidt

May 21, 2020

Version 6.7





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Strategic Directive

Access Interactive's initial, primary focus in Livingston County's upcoming project is an in depth review of the organizational environment. Gathering momentum from the initial investigation; we're confident Access can offer credible short term recommendations / solutions in order to create a strong long lasting relationship. Our relationships with our clients grow based on strong commitment and Access Interactive's willingness to go the extra mile. Access Interactive prides itself on communication, documentation and thirst for industry knowledge. These traits, coupled with cross trained technical aptitude, contribute greatly to our overall success. We look forward to working with an organization that has a firm grasp on their field, and knowledge of how their ever changing IT infrastructure can elevate them to new levels of achievement.

Livingston County Organizational Needs

- Risk Planning and Mitigation
- Upgrade existing Infrastructure for Applications
- Prepare New Infrastructure for Growth and New Applications
- Dramatically increase Application Resilience
- Enhance Performance
- Support for Legacy product integration
- Central and Expansive I.T. Administration Management Dashboard
- Latency resistant Design
- Simplified Infrastructure
- Optimize support and integration



Solution Advantages

- VMware upgrade and compliance. Homogenizing and upgrading to current version of 6.x Enterprise Plus.
- Comprehensive storage and virtualization management dashboard. Storage and servers are managed through a single pane of glass.
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- Increase in Back-up Performance New Infrastructure architecture will dramatically reduce back-up window
- Throughput is approximately 4.5X efficiency of traditional SAN (with two controllers)
- Policy based storage management ability to choose granular VM storage polices for each individual VM
- NO RAID GROUPS!



Solution Synopsis

The proposed application performance solution provides a scalable, secure, cost effective foundation for Livingston County. There are several components that work together to provide a network that has excellent performance, is easy to manage, provides fault tolerance and secure data backups.

These components are:

- Dell VSAN Ready Nodes
- VMware VSAN and vSphere upgrade licensing
- Professional Services and Knowledge Transfer

Phase 2

Livingston Cluster

Expanded Cluster:

Adding 8 nodes total (4 on each side), Dual 16-core processors, 1.9TB RAM, approximately 133TB Usable without erasure coding on each side of the stretch cluster. Erasure coding usually adds 30% back which would make a usable balance of above 172TB. These calculations do not take into account dedupe and compression.

New Cluster Total:

14 nodes total (7 on each side), each Virtual SAN server will have 10x3.8TB drives, the additional drives from the 8 new servers will be moved to the original 6 servers so all 14 nodes will be uniform. 4 x 32GB DIMMs will also be moved from the 6 new servers and put into the original 6 servers.

Dell PowerEdge R740xd - all SSD, 384GB RAM and 38TB Raw Capacity in each Virtual SAN server

Description	Qty
PowerEdge R740XD Server	1
PowerEdge R740/R740XD Motherboard	1
No Trusted Platform Module	1
Chassis with Up to 24 x 2.5" Hard Drives for 2CPU	1
PowerEdge R740XD Shipping	1
PowerEdge R740 Shipping Material	1
Intel Xeon Gold 5218 2.3G, 16C/32T, 10.4GT/s, 22M Cache, Turbo, HT (125W) DDR4-2666	1
Intel Xeon Gold 5218 2.3G, 16C/32T, 10.4GT/s, 22M Cache, Turbo, HT (125W) DDR4-2666	1
Additional Processor Selected	1
Standard 1U Heatsink	1

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Standard 1U Heatsink 2933MT/s RDIMMs Performance Optimized	1	
	1	
Performance Optimized		
	1	
No RAID	1	
HBA330 Controller Adapter, Low Profile	1	
BOSS controller card + with 2 M.2 Sticks 240G (RAID 1),FH	1	
No Operating System	1	
No Media Required	1	
iDRAC9,Enterprise	1	
OpenManage Enterprise Advanced	1	
iDRAC Group Manager, Enabled	1	
iDRAC,Factory Generated Password	1	
Riser Config 4, 3x8, 4 x16 slots	1	
Intel X710 Dual Port 10GbE SFP+ & i350 Dual Port 1GbE, rNDC	1	
6 Performance Fans forR740/740XD	1	
Dual, Hot-plug, Redundant Power Supply (1+1), 1100W	1	
PowerEdge 2U Standard Bezel	1	
PE R740XD Luggage Tag	1	
Quick Sync 2 (At-the-box mgmt)	1	
Power Saving Dell Active Power Controller	1	
UEFI BIOS Boot Mode with GPT Partition	1	
ReadyRails Sliding Rails With Cable Management Arm	1	
No Systems Documentation, No OpenManage DVD Kit	1	
US Order	1	
Declined Remote Consulting Service	1	
PowerEdge R740 CE, CCC, BIS Marking	1	
Basic Next Business Day 36 Months	1	
ProSupport and 4Hr Mission Critical Initial, 36 Month(s)	1	
ProSupport and 4Hr Mission Critical Extension, 24 Month(s)	1	
On-Site Installation Declined	1	
32GB RDIMM, 2933MT/s, Dual Rank	12	
960GB SSD SATA Mix Use 6Gbps 512 2.5in Hot-plug AG Drive, 3 DWPD, 5256 TBW	3	
3.84TB SSD SATA Read Intensive 6Gbps 512 2.5in Hot-plug AG Drive, 1 DWPD, 7008 TBW	18	
Intel X710 Dual Port 10GbE Direct Attach SFP+ Adapter, PCIe Full Height		

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US/Thailand/Philippines/Guam Power Cord 250V	2

Dell PowerEdge R740xd with 5-Year Support (18x3.8TB drives) Qty. 6 @ \$ 33,011.00 each **\$ 198,066.00**

Dell PowerEdge R740xd with 5-Year Support (16x3.8TB drives) Qty. 2 @ \$ 29,594.00 each **\$ 59,188.00**

Miscellaneous

SFP Transceivers Qty. 60 @ \$ 54.00 each **\$ 3,240.00**

Cables and Wiring \$1,500.00



VMware Virtual SAN Licensing

VMware Virtual SAN is a radically simple, enterprise-class shared storage solution for hyper-converged infrastructure optimized for today's all-flash performance.

What Virtual SAN Delivers

Radically Simple Storage

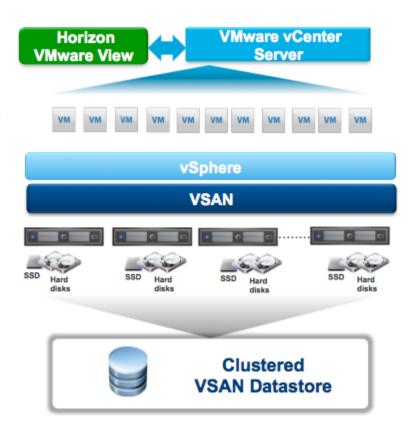
Make your job easier by simplifying storage provisioning and management for vSphere. Deploy storage with just a few mouse clicks from the vSphere Web Client and enjoy native integration with the VMware stack. Virtual machinecentric storage policies automate storage services levels on a per-VM basis.

Advanced Availability and Management

Customers of all industries and sizes trust Virtual SAN to run their business-critical workloads, from key business applications to thousands of virtual desktops. Virtual SAN ensures that data is never lost if a disk, host, network or rack fails and can even tolerate entire site failures with synchronous replication and stretched clusters.

50% Lower TCO

Deploy on inexpensive industry-standard server components to remove large, upfront investments. Eliminate siloed, purpose-built hardware and automate management of storage service levels through VM-centric policies. Further improve TCO with storage efficiency features like deduplication and enhanced automation capabilities.



Exceptional Performance

Built on an optimized I/O data path in the hypervisor and designed for flash speeds, Virtual SAN delivers much better performance than a virtual appliance or external device. Experience up to 100,000 IOPs per host with all-flash and scale up to 64 hosts per cluster—a perfect match for virtual desktops, remote IT and business critical applications.

VMware Virtual SAN Enterprise - (v. 6) - license - 1 processor Qty. 16 @ \$2,959.00 \$47,344.00

VMware Support and Subscription Production - Technical support - 3 years - for VMware Virtual SAN Enterprise Edition (v. 6) - 1 processor

Qty. 16 @ \$3,737.00 **\$59,792.00**



Additional VMware Licensing

Upgrade: VMware vSphere 6 Enterprise to vSphere 6 Enterprise Plus for 1 Processor Promo Qty. 8 @ \$ 519.00 **\$ 4,152.00**

Production Support/Subscription VMware vSphere 6 Enterprise Plus for 1 processor for 3 year Qty. 8 @ \$ 2,354.00 **\$ 18,832.00**

Upgrade: VMware vSphere 6 Standard to vSphere 6 Enterprise Plus for 1 Processor Qty. 2 @ \$ 2,128.00 **\$ 4,256.00**

Production Support/Subscription VMware vSphere 6 Enterprise Plus for 1 processor for 3 year Qty. 2 @ \$ 2,354.00 **\$ 4,708.00**

VMware Total: \$ 139,084.00



Design points for discussion

- Livingston County provides Battery Backup and PDU that can accommodate this solution.
- We assume Rack Space is available. Racks quoted upon request.
- Livingston County already owns 2 vCenter licenses so no additional vCenter license is required.
- Existing Hytrust server will be leveraged
- Witness servers customer provided on re-purposed HP servers
- Cable and wiring assumes patch panel to switch
- Cisco switching SFP's customer provided

PROFESSIONAL SERVICES:

Scope assumes someone from Livingston County assists with the project. Hours subject to change depending on exact project scope. The following is an estimate based on similar projects.

- Project plan and scheduling
- Equipment prep/software firmware updates
- Physical deployment of equipment
- Equipment integration/Virtual SAN integration
- Fabric switch integration
- Virtual SAN and volume provisioning
- Data migration
- System documentation and Visio's
- Performance tuning
- Knowledge transfer and optimization
- Project management

TOTAL: 278 hours

Senior LAN Technician @ \$145.00 per hour **\$40,310.00**

PHASE 2 PROJECT COSTS:

EQUIPMENT: \$ 401,078.00
MI SALES TAX: \$ EXEMPT
SUBTOTAL: \$ 401,078.00
SERVICES: \$ 40,310.00
SHIPPING: \$ NA

TOTAL: \$441,388.00

Quote Valid for 30-Days. Prices Subject to Change with Notice Depending on Current Market Conditions. Shipping charges not included. Terms: 50% Upon Acceptance, 25% Upon Delivery, Remainder Net 30. 25% Restocking Fee Applied to Project Costs for Returned Merchandise. UPS not included.

Authorized Signature:	_Date:
Printed Name:	Purchase Order No:

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Magic Quadrant for Hyperconverged Infrastructure

Published: 25 November 2019 ID: G00380299

Analyst(s): Jeffrey Hewitt, Philip Dawson, Julia Palmer, John McArthur

Hyperconverged infrastructure solutions are making substantial inroads into a broader set of use cases and deployment options, but limitations exist. I&O leaders should view HCl solutions as tools in the toolbox, rather than as panaceas for all IT infrastructure problems.

Strategic Planning Assumption

Driven by increased HCl scalability and management functionality, by 2023, 70% of enterprises will be running some form of HCl (i.e., appliance, software, cloud-tethered), up from less than 30% in 2019.

Market Definition/Description

Hyperconverged infrastructure (HCI) is a category of scale-out software-integrated infrastructure that applies a modular approach to compute, network and storage on standard hardware, leveraging distributed, horizontal building blocks under unified management. HCI vendors either build their own appliances using common, off-the-shelf infrastructure (hardware, virtualization, operating system), or they engage with system vendors that package the HCI vendor's software stack as an appliance. Alternatively, HCI vendors sell their software directly to end users, through resellers and integrators, for use as part of a reference architecture, or on an HCI-as-a-service basis, either on-premises or in a public cloud.

IT leaders should remain cognizant of the origins of HCI suppliers and the strategic importance of HCI within these vendors' larger portfolios. Some vendors approach HCI from a storage virtualization and data management perspective, partnering for all other components of the HCI stack (hypervisor, network virtualization, management). Others approach HCI from a server virtualization perspective and add storage virtualization and data management services later. Many server vendors approach HCI from a hardware appliance perspective as the natural evolution of their installed base of x86 servers. These server vendors either acquired an existing HCI or hyperconverged integrated system (HCIS) company or partnered with multiple HCI companies to deliver appliances or reference architectures. A few smaller providers approach HCI from a full-stack perspective, willing to compete head-to-head with leading hypervisor suppliers by initially focusing on a single niche. Some approach edge requirements strategically, while others address

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these requirements reactively. For most HCI vendors, the public cloud is an extension of the strategy, but also could be a strategic threat if IT leaders buy public cloud services in lieu of spending on their own infrastructure.

During the past year, Gartner has witnessed increased consideration of HCI in mission-critical enterprise applications. With this change, users have increased their scrutiny of support and application certification. At the same time, HCI vendors have expanded their strategy to embrace hybrid/multicloud deployments, as either backup targets or disaster recovery options, or as an alternative for on-premises infrastructure for unpredictable or cyclical resource requirements. Some HCI providers have begun to offer artificial intelligence (AI) functions to automatically improve performance and prevent failures.

The HCI vendors that historically were data-center-focused have begun to target the needs of edge environments, previously only served by niche vendors. Small remote office and edge deployments require less storage capacity, fewer compute resources and fewer features, but benefit greatly from centralized management and high-availability designs. Much of the focus for this segment is on software that can be run on minimally configured servers that will support high availability (HA) with two-node clusters or even a single-node with limited availability. Finally, HCI vendors need to meet the asymmetrical scaling requirements of IT (compute, storage and network resource requirements do not always scale at the same rate) and are offering more compute-only, storage-only and software-defined networking options. These HCI providers offer that asymmetrical scaling while maintaining the server as the primary deployment method.

It is worth noting that some vendors are operating outside the sphere of Gartner's strict definition of HCI and are designing solutions from the outset that offer unified management, but are intended to scale compute and storage resources independently (e.g., disaggregated HCI [dHCI]). These solutions look much like integrated infrastructure solutions, but with scale-out architectures for back-end storage. They do not meet the inclusion criteria for this Magic Quadrant because they typically do not combine virtual machine (VM) and software-defined storage (SDS) resources, both running on the same physical servers, as the primary deployment method (see the Inclusion Criteria section).

Magic Quadrant

Figure 1. Magic Quadrant for Hyperconverged Infrastructure



Vendor Strengths and Cautions

Cisco

Cisco is a global provider of networking, security and other IT infrastructure. The Cisco HyperFlex appliance is Cisco's HCI offering. Cisco HyperFlex was introduced in April 2016. Since the last

Magic Quadrant was published, Cisco has introduced a cloud-managed two-node cluster with Cisco SD-WAN integration for edge and remote office/branch office (ROBO) use cases. To enhance HyperFlex's capabilities to support workloads, Cisco has introduced support for the latest-generation Intel Xeon Scalable Processors, formerly Cascade Lake, and a nonvolatile memory express (NVMe) hyperconverged appliance that utilizes 3D XPoint technology in both cache and capacity storage tiers. It is powered by the Intel Optane Peripheral Component Interconnect Express (PCIe), (and other) solid-state drives (SSDs) and the Intel 3D NAND NVMe SSDs. Other product enhancements include the HyperFlex Acceleration Engine, an optional acceleration card that offloads in-line compression from the CPU, large-capacity drives to enable petabyte scalability, and enhanced Kubernetes support including Container Storage Interface (CSI) plug-in. The top three use cases for Cisco HyperFlex are mission-critical, cloud and edge.

Strengths

- For IT leaders who use Cisco as their network provider or those seeking an HCI provider with a strong business base, Cisco's installed base of networking customers, along with its global service and support capabilities, makes HyperFlex an appealing path to a single source for their server, storage and network needs.
- With a comprehensively engineered HCI solution that comprises compute, software-defined storage and integrated networking, as well as hybrid/multicloud support, Cisco's HyperFlex has product depth that can be attractive to IT leaders.
- For IT leaders seeking to deploy HCl for edge, HyperFlex Edge offers features such as integration with Cisco SD-WAN and services through Cisco Intersight.

Cautions

- Some IT leaders whose systems are standardized on competing suppliers' servers may be hesitant to shortlist Cisco HyperFlex because it is only available as an HCl appliance on Cisco UCS servers.
- Cisco chooses to provide HyperFlex as a fully integrated HCI appliance and does not offer the HyperFlex HX Data Platform as a software-only solution or through third-party server integration partnerships.
- Cisco relies on Microsoft and VMware for the hypervisor, which may cause some IT leaders to prefer the solutions from those vendors.

DataCore

DataCore, founded in 1998, with headquarters in the U.S., is a privately held developer of infrastructure SDS and storage virtualization solutions. DataCore's product is DataCore SDS, which can be deployed on existing servers or new, custom configurations. The solution, originally marketed as Hyperconverged Virtual SAN, was launched in 2014 and is based on the DataCore's SANsymphony SDS product. DataCore recently introduced DataCore HCI-Flex fixed-configuration hardware appliances; data-at-rest encryption using an industry-standard Advanced Encryption Standard (AES) algorithm with 256-bit strength encryption for improved security; and DataCore

Insight Services, a SaaS analytics platform for improved monitoring and management. DataCore SDS also offers Continuous Data Protection (CDP) for physical servers and virtual machines, as well as container hosts via Docker and Kubernetes plug-ins. DataCore SDS is used primarily for mission-critical, core IT, and edge use cases in small and midsize enterprises.

Strengths

- DataCore integrates with existing Internet Small Computer System Interface (iSCSI) and FC storage area networks (SANs) and x86 servers, as well as enables independent scaling of compute and storage resources.
- DataCore provides a robust set of data services and price-competitive, scaled-down solutions, including a two-node high-availability configuration for ROBO computer rooms, edge deployments, and the data centers of small and medium enterprises.
- The company's pace of innovation has increased with greater focus on ease of implementation with a hardware appliance, security with data-at-rest encryption and improved management with DataCore Insight Services.

Cautions

- Customers should watch for changes in strategic direction, as the company has undergone significant changes over the past year in leadership across sales, marketing, engineering and support.
- The company has deployed limited resources outside EMEA and the Americas and has few partnerships that can support customers in the Asia/Pacific (APAC) region.
- Some IT leaders cite poor support and channel partner knowledge as areas of concern.

Dell EMC

Under its parent company, Dell Technologies, Dell EMC is a global provider of products and services spanning compute, storage and networking. This Magic Quadrant evaluates Dell EMC VxRail that began shipping in 2016. Dell EMC has introduced VxRail Analytical Consulting Engine (ACE), a cloud-based, centralized data collection and analytics platform to simplify the management of VxRail clusters. VMware Cloud Foundation (VCF) is available on the VxRail solution with full stack integration or customers can use VxRail's REST APIs for customizable cloud solutions. The leading use cases for Dell EMC VxRail are core IT, mission-critical, cloud, edge and virtual desktop infrastructure (VDI). Dell EMC develops software specifically for VxRail (for example, RecoverPoint and Smart Fabric Services) that is designed to enhance VMware functionality and ease of use for a number of use cases, including core IT.

Strengths

- For IT leaders seeking mission-critical solutions, Dell EMC's VxRail has been deployed in a variety of mission-critical environments, including those running SAP HANA, Oracle RAC, Microsoft SQL, SAS Analytics and Splunk applications.
- Dell EMC has developed features and functions specifically for VxRail HCl System Software, like REST APIs and the VxRail ACE, and it provides tight integration with Dell EMC Networking platforms, which can offer advantages for IT leaders.
- For IT leaders needing HCI in multiple locations around the world, Dell EMC has a broad global sales and support reach that enables the sale and installation of VxRail in many geographies.

Cautions

- Dell EMC supports a portfolio of HCI choices beyond VxRail, including Nutanix, vSAN ReadyNodes and Microsoft Storage Spaces, all of which can be confusing when IT leaders are trying to determine what is best for their situation.
- Dell EMC VxRail is tightly coupled with VMware, so it limits IT leaders to a single hypervisor option on the VxRail offerings.
- Some client feedback indicates that there can be inconsistencies in VxRail presales and installation customer experiences.

HPE

Hewlett Packard Enterprise (HPE) is a global provider of professional services, software, servers, storage, networking and other IT infrastructure. The HPE SimpliVity hyperconverged solution was introduced in May 2017 as a result of HPE's acquisition of SimpliVity earlier that year.

The HCI solution, delivered as an appliance, integrates HPE servers, hypervisors (VMware or Hyper-V), SDS, backup and data services. HPE offers a guarantee on its data services, with notable data efficiency and reliability. Customers can acquire HPE SimpliVity through resellers, with a limited number of direct sales available. Recently, HPE added SimpliVity Validated Design for Google Cloud's Anthos for container-based private or hybrid cloud, and released AMD-based single-socket HPE SimpliVity 325 solution for ROBO and edge. In October 2019, HPE announced InfoSight integration with SimpliVity adding artificial intelligence for IT operations (AlOps) function benefits. HPE SimpliVity's most popular use cases are core IT, VDI, edge and mission-critical workloads.

Strengths

- HPE is a trusted global technology provider with a well-established channel and mature worldwide sales, service and support capabilities.
- End users are expressing a high degree of satisfaction with HPE SimpliVity data efficiency (global in-line deduplication and compression), data protection and disaster recovery features.

 HPE offers flexible consumption models and has introduced the HPE GreenLake as-a-service offering based on metered usage, built-in support and managed services.

Cautions

- For some large enterprises and service providers who are seeking a software-only solution supported on an array of server choices, SimpliVity will not be the right match, as it currently is not available as a software-only product.
- HPE SimpliVity is considered for only on-premises deployments, as it does not currently support native hybrid cloud workflows and has no integration with public cloud infrastructure as a service (laaS) for virtualized workloads.
- Because HPE offers SimpliVity, broadened its HCl portfolio to include Nutanix, introduced dHCl and also sells the Synergy composable platform, IT leaders can find it challenging to determine which HPE solution is optimal for a given situation.

Huawei

Huawei, a global infrastructure vendor based in China, leverages its FusionCube brand, which was an early integrated infrastructure system in 2013 and is now positioned as an HCI. The product includes storage, Huawei's own Kernel-based Virtual Machine (KVM) and Xen-based FusionSphere hypervisors, as well as support for VMware. The Huawei HCI solution is managed by FusionCube Center. For 2019, Huawei has targeted three initiatives: "Any workload, Any Site, One System"; "High Performance, High Reliability, Simple"; and "Hybrid Cloud-Native." FusionCube is used primarily by midsize businesses for high-density, server-virtualized workloads; VDI, database and mission-critical applications, including Oracle and SAP HANA; edge environments; and hybrid cloud installations. FusionCube's growth is a result of Huawei leveraging its networking business in Asia, Europe, Africa and South America. Huawei continues to be strong in China, and it is helped by its partnerships with SAP, Oracle and Microsoft, thus making Huawei a "provider of choice" for many customers seeking those solutions in China.

Strengths

- FusionCube, positioned as HCI, is now established and proven in Asia and EMEA across many verticals.
- Huawei's customers benefit from the vendor's strong foundation of ecosystem partners, including Oracle, SAP, VMware, Microsoft, Red Hat and SUSE.
- Huawei's deal pipeline and installed base of network infrastructure make FusionCube appealing for IT leaders implementing use cases for cloud, edge, mission-critical and VDI.

Cautions

 Huawei has limited market presence, third-party support and certification for its FusionCube and related products in North America and some other western geographies.

- IT leaders should qualify Huawei's strategic adjustments to address the inconsistency between product roadmap and delivery.
- IT leaders will want to compare FusionCube's storage functions, such as deduplication, backup and recovery tool integration, and management capabilities to more mainstream products to ensure adequate performance for their needs.

Huayun Data Group

Huayun Data Group, founded in 2010, is a China-based private company that provides cloud and big data services. Huayun Data Group's flagship HCI offering is ArcherOS, which it offers within China, with Maxta continuing to be the brand offered outside China. Huayun Data Group launched ArcherOS in August 2019. ArcherOS is based on Maxta's core HCI and SDS technology that Huayun Data Group acquired in March 2019. Huayun Data Group has integrated its own technology with what it has acquired from Maxta to provide private and hybrid cloud capabilities. Huayun Data Group has also enabled the integration of ArcherOS with other technologies from security to independent software vendor (ISV) applications via its existing ecosystem of partners. Huayun Data Group intends to follow a dual-brand strategy by utilizing the ArcherOS name in China and retaining the Maxta name outside of China for an unspecified shorter term. Huayun Data Group's primary use cases, in order of importance, are cloud, core IT, VDI, edge and mission-critical. For the cloud use case, ArcherOS/Maxta seeks to bring more public-cloud-like operational efficiency to managed service providers (MSPs) and enterprises by enabling independent compute and storage scaling.

Strengths

- Huayun Data Group supports a wide array of server hardware platforms with both ArcherOS and Maxta brands to give IT leaders many x86 server choices.
- IT leaders may find Huayun Data Group's cloud use-case experience appealing when combined with Maxta HCI functionality.
- Huayun Data Group offers single-node pricing for its software options that can make its HCI solutions appealing for IT leaders of small and medium enterprises and organizations with largescale/small-node edge requirements.

Cautions

- Huayun Data Group's dual-brand strategy of using both ArcherOS and Maxta may be confusing to IT leaders seeking an HCI deployment.
- IT leaders considering ArcherOS and Maxta may find that support capabilities vary by location due to Huayun Data Group's limited geographic footprint.
- IT leaders who prefer brands with more global levels of market recognition may decide not to consider ArcherOS and Maxta.

Microsoft

Microsoft is a global, publicly held infrastructure software, application and public cloud service company founded in 1975. The company's HCI offering is Azure Stack HCI. Azure Stack HCI was introduced in the Windows Server 2019 Datacenter edition, which follows Microsoft's initial HCI offering based on Microsoft's Windows Server 2016 Datacenter edition, introduced in 2016. Azure Stack HCI includes Microsoft's Hyper-V hypervisor and Storage Spaces Direct for storage virtualization. Over the past year, Azure Stack HCI enhancements have included improved manageability through Windows Admin Center; integration with improved security; and Day 1 support for Samsung's Z-SSD, Intel Optane, AMD's EPYC and Intel's Xeon Scalable processors. Azure Stack HCI is used primarily for cloud, edge and core IT use cases.

Strengths

- Microsoft provides organizations a comprehensive edge, core data center and cloud portfolio, with many common components and familiar management tools.
- Existing Microsoft Windows Server 2016/2019 Datacenter edition customers can implement HCl without paying additional license fees for hypervisors, management, software-defined networking, security or storage virtualization.
- Organizations have a wide range of platform and acquisition options, as Microsoft's Azure Stack
 HCl is supported on more than 2,000 devices and 134 prevalidated Azure Stack HCl SKUs.
 Microsoft has a rich, global network of reseller and system integrator partners.

Cautions

- Many organizations are unaware of Azure Stack HCI or confuse Azure Stack HCI with Azure Stack, as it is insufficiently marketed within Microsoft's broad portfolio.
- Organizations that have standardized on market-share-leading VMware ESXi cannot use Microsoft's Azure Stack HCI without migrating to Hyper-V.
- Since Microsoft does not report revenue for the Azure Stack HCl product and measures adoption based on telemetry data, it is not included in some analysis reports, which measure revenue share. IT organizations may face resistance from senior management due to the lack of inclusion.

Nutanix

Founded in 2009, Nutanix was the early market and mind share leader in the HCl space since 2011. Nutanix's HCl solution is composed of its software-defined stack: Software-defined storage; AOS; an infrastructure control plane, Prism; and optionally its hypervisor, AHV. Over the last two years, Nutanix has evolved from a vendor of HCl system appliances and data services, to a provider of a broad portfolio of software solutions and cloud services. Over the past year, Nutanix introduced a database-as-a-service offering (Nutanix Era), application self-service and app life cycle management (Nutanix Calm), S3 object storage (Nutanix Objects), file storage services (Nutanix

Files) and Xi Leap disaster recovery service. Nutanix offers subscription, term-based software licenses that are portable across hardware platforms and clouds. IT leaders deploy the Nutanix HCI solution for core IT, VDI, cloud and mission-critical use cases.

Strengths

- Nutanix has established itself as a leading HCl solution provider, which has contributed to significant traction in large enterprises and resulted in multimillion-dollar purchases by repeat and new customers across multiple industries and geographies.
- The Nutanix HCI software platform attracts IT leaders who prioritize flexibility because it supports multiple third-party servers, storage protocols and hypervisors, as well as a broad range of procurement and deployment options.
- Customers and end-user references continue to report positive support and service experiences, which contribute to strong customer loyalty.

Cautions

- Nutanix's transformation to a software company model triggered some IT leaders to question the company's long-term operational consistency in the areas of hardware integration, seamless global support and robustness of third-party server OEM solutions.
- Nutanix Xi Clusters' integration with Amazon Web Services (AWS) public cloud is still a nascent offering that is currently in tech preview.
- Cultural resistance within some infrastructure teams to adopting Nutanix's native virtualization (AHV) prevents IT leaders from taking full advantage of additional Nutanix stack offerings.

Pivot3

Pivot3 was founded in 2002, and it is a provider of automated and intelligent HCI solutions for on-premises, edge or cloud environments. Acuity is Pivot3's HCI offering. Pivot3 started shipping HCI solutions in 2008. Pivot3 has incorporated new security policy management features, including policy-based data-at-rest encryption and algorithm offloading. Pivot3 offers its Virtual Security Operations Center (SOC), which allows customers to replace expensive-to-manage graphics-enabled workstations with an HCI solution that delivers secure client desktops to security operators or first responders at any location. The primary use cases for Pivot3's HCI are mission-critical, VDI, core IT, edge and cloud. Pivot3's largest defense and intelligence deployments are advanced VDI use cases. Pivot3 leverages its own automation to facilitate functionality for both core IT and cloud use cases.

Strengths

■ IT leaders have two main Pivot3 Acuity series options — the Acuity Datacenter Series and the Acuity IoT-Surveillance Series — from which they can choose, depending on specific use-case needs.

- Pivot3 offers its analytics and VDI features for large-scale, demanding applications in the higher education, healthcare and federal markets. IT leaders will appreciate Pivot3's prescriptive solutions and templates for use cases.
- For IT and security leaders in healthcare, defense, transportation and hospitality, Pivot3's platform is designed to ensure that video solutions meet both the high-performance and reliability needs of those environments. Due to increasing demand for video analytics, Pivot3 has enhanced its solutions to meet those needs.

Cautions

- IT leaders seeking core IT and cloud HCI solutions may opt not to consider Pivot3 because of Acuity's lower market penetration outside of video surveillance and VDI use cases.
- For IT leaders seeking hypervisors beyond VMware, Pivot3's integrated hypervisor support is limited to ESXi, although other hypervisors such as Hyper-V or KVM can be supported as external hosts to a Pivot3 HCI system.
- When engaging with Pivot3 working in conjunction with an OEM partner, IT leaders should ensure that project management expectations and timelines are well documented and agreed to ahead of deployments.

Red Hat

Red Hat is a global provider of Linux-based open-source software for enterprise on-premises and hybrid cloud subscriptions and maintenance contracts — and since July 2019, Red Hat is now a wholly owned subsidiary of IBM. Red Hat Hyperconverged Infrastructure for Virtualization was released in June 2017 on top of its Red Hat Virtualization product, which uses the KVM hypervisor and Gluster Storage virtualization. Red Hat released Red Hat Hyperconverged Infrastructure for Cloud in 2018, which is built on its Red Hat Ceph Storage and Red Hat OpenStack Platform as core components in the solutions. Red Hat has expanded its HCl for Cloud offering to its virtualization offering, which includes integrated deduplication and compression capability via the acquisition of Permabit and a unified life cycle for OpenStack and Ceph Storage technologies. Red Hat restructured its business organization and built a dedicated marketing function to drive internal and outbound awareness, promotion, product readiness, and sales enablement for its HCl solution. Red Hat's HCl offering should be considered predominantly for cloud, core IT and mission-critical use cases for customers and providers adopting Red Hat Linux, Virtualization and hybrid cloud-based OpenStack deployments.

Strengths

- Customers with Red Hat Linux and OpenShift initiatives have an open-source HCl offering to consider as part of a single vendor's broader virtualization and storage catalog.
- Red Hat's HCI offering is an alternative for existing Red Hat customers and new customers seeking a single-vendor, integrated experience specifically for edge, data center, hybrid and cloud infrastructure use cases.

Red Hat has a combined OS, virtualization, storage and cloud management toolset to manage
 HCl that leverages Red Hat's depth of Linux and open-source software expertise.

Cautions

- Red Hat's strong support for Linux, virtualization and cloud offerings still needs to be extended to Red Hat's HCI.
- Red Hat's currently low market penetration with HCl may cause some IT leaders to be reluctant to consider it.
- IBM's acquisition of Red Hat may cause some IT leaders to wait to see the longer-term effects on Red Hat's HCI initiatives.

Sangfor Technologies

Sangfor Technologies, founded in 2000, with headquarters in the People's Republic of China, is a publicly held developer of IT infrastructure, security and cloud solutions. Sangfor's HCI offering is Sangfor HCI. Sangfor shipped its first HCI solution in 2015 and initially focused on Oracle RAC, but now supports a broader range of enterprise applications. Over the past 12 months, Sangfor has focused on expansion beyond its home country and Asia, with notable expansion in select countries in Europe and the Middle East. Sangfor has also launched Sangfor Community, which provides a knowledge base, online technical support, installation and configuration guides, and a community forum. Sangfor aCloud is used primarily for mission-critical, core IT and VDI use cases in midsize enterprises.

Strengths

- Organizations in the People's Republic of China, where more than 90% of Sangfor HCl sales occur, will benefit from a mature support organization that can meet needs within the local market.
- Sangfor provides a cost-competitive alternative for small and medium enterprises.
- Sangfor has developed an industry-vertical approach to the market, creating partnerships with ISVs, deploying vertically focused sales teams, and developing knowledge of regulations to meet the needs of manufacturing, government, healthcare and education organizations.

Cautions

- Local support resources may be limited outside of the People's Republic of China, Italy, Thailand, Malaysia, Indonesia, the Philippines, South Korea and Singapore.
- Sangfor has limited integration with ecosystem partners when compared with its larger international competitors.
- Sangfor is not cost-competitive in edge locations.

Scale Computing

Scale Computing, founded in 2007, with headquarters in the U.S., is a global provider of HCI. Scale Computing's HCI offering is HC3. Scale Computing began shipping HC3 in 2012. Scale Computing recently introduced the HE500 model for edge computing environments, with cost-competitive pricing per node. Scale Computing also established an OEM agreement with Acronis to provide long-term on-premises or cloud backup and bare-metal restore to non-HC3 systems, and ransomware protection of backups. Scale Computing introduced Intel Cascade Lake processors in the HC1000 and HC5000 product series for improved VDI performance. HC3 is used primarily in edge and ROBO deployments and the primary data centers of small and medium enterprises for business-critical and consolidation workloads.

Strengths

- For organizations seeking independent peer validation of HC3's fit for their specific use case, Scale Computing provides access to more than 900 case studies and customer reviews.
- Scale Computing offers extremely low-cost solutions that require limited hardware investment for edge locations by providing resource-efficient, full-stack software that includes Scale Computing's own KVM-based hypervisor.
- Scale Computing is making major investments to expand API-based orchestration and thirdparty tool integrations to enable customers to manage widely distributed infrastructure and applications.

Cautions

- IT leaders who wish to leverage existing skills and enterprise license agreements for Microsoft Hyper-V or VMware ESXi will find Scale Computing less appealing.
- Support for organizations with deployment sites outside the U.S. may find limited support, as more than 80% of Scale Computing's bookings are currently in the U.S., and OEM partnerships that expand Scale Computing's reach outside the U.S. are new.
- Scale Computing is not a fit for large organizations seeking a standardized core-to-edge-tocloud strategy, as the company lacks a cloud and large-data-center offering.

StarWind

Founded in 2008, StarWind develops HCI and SDS solutions. StarWind's HCI offering is the StarWind HyperConverged Appliance (HCA). StarWind first started shipping an HCI solution in 2009. The vendor also enables hardware-agnostic offerings with its StarWind Virtual SAN (VSAN) HCI software and sells a backup appliance, the StarWind Virtual Tape Library Appliance (VTLA). StarWind has honed its marketing focus to bring enterprise-level HCI features to the small and medium enterprise market at appealing costs. Over the past year, StarWind has introduced its Command Center, Virtual Appliance and ProActive Premium Support Extended as enhancements to its HCI offerings. StarWind has been expanding its channel partner relationships outside of its base

country of the U.S. to grow business in EMEA, Asia/Pacific and Japan. The StarWind HCA primary use cases are edge, mission-critical, core IT, VDI and cloud. StarWind focuses on specific features for each use case like high availability and high performance for edge, storage replication to prevent downtime and data loss for mission-critical workloads, and simplicity and flexibility for core IT.

Strengths

- For IT leaders seeking low-cost solutions with high availability, StarWind offers either a single cluster of two physical on-site nodes, or one physical on-site node and one virtual node in the cloud.
- For IT leaders seeking specific features and functions, StarWind offers a high level of customization through its engineering teams.
- StarWind's NVMe over Fabrics (NVMe-oF) support for Windows Server uses significantly less compute resources than nonfabric NVMe solutions for Windows.

Cautions

- For IT leaders desiring larger providers with greater resources, StarWind's small company size may bar it from consideration.
- For IT leaders requiring an HCl provider with broad market penetration and brand recognition, StarWind may not make their shortlists.
- As StarWind grows its small and medium enterprise business, its support approach of utilizing its relatively small engineering team may create concerns for some IT leaders who question StarWind's ability to scale support quality across all of StarWind's customers.

StorMagic

StorMagic, founded in 2006, with headquarters in England, is a privately held developer of storage virtualization and HCI solutions. StorMagic's HCI product is SvSAN. SvSAN began shipping in 2008. StorMagic recently introduced StorSecure encryption with integrated key management; three-node high availability clustering that enables continuous availability in the event of a double-node failure; and open KVM support. StorMagic's SvSAN is used primarily for mission-critical applications running in edge and ROBO locations ranging from medium to very large businesses across all major regions: the Americas, EMEA and Asia/Pacific. StorMagic is also deployed in the core data centers of small and medium enterprises.

Strengths

- StorMagic has a consistent focus on cost-effective, simple-to-manage solutions for ROBO and edge environments, and it enables two-node, HA solutions for less than \$10,000 per site (inclusive of hardware, software and maintenance).
- StorMagic SvSAN supports asynchronous scaling of compute and storage, supports dissimilar
 HCI nodes to avoid server vendor lock-in and enables HA upgrades in "brownfield"

- deployments. It also has a resource-efficient software design that minimizes compute, memory, storage and network requirements.
- StorMagic's SvSAN provides hypervisor flexibility with support for VMware ESXi, Microsoft Hyper-V and open KVM.

Cautions

- Despite being in operation for more than 13 years and having large deployments in global enterprise customers, StorMagic has limited brand awareness.
- StorMagic has no offerings for organizations seeking a single-vendor, core-to-edge-to-cloud solution, and it does not integrate directly with any cloud providers.
- StorMagic does not offer data deduplication, compression or erasure coding, limiting its fit for larger-storage-capacity requirements.

VMware

VMware is a provider of virtualization and cloud infrastructure solutions that is publicly listed and majority-owned by Dell Technologies. VMware vSAN is a software-defined storage product that serves as the foundation of VMware's HCl and is natively integrated with the vSphere hypervisor. VMware expanded HCl on-premises to offer VMware Cloud Foundation (VCF), which consists of vSphere, vSAN, NSX (network virtualization) and vRealize (advanced management), along with life cycle automation for Day 0 to Day 2 operations, to accelerate private cloud deployments. VCF is also deployed on VMware Cloud on AWS, Microsoft Azure, Alibaba Cloud, Oracle Cloud, IBM Cloud and Google Cloud Platform as well as a private-cloud-managed service, VMware Cloud on Dell EMC, enabling consistent infrastructure and operations for hybrid cloud deployments. VMware's HCl can be deployed on vSAN ReadyNodes or as an appliance from Dell Technologies, VxRail. vSAN ReadyNodes are jointly certified by both VMware and more than 15 OEM vendors, including Atos, Acer, Cisco, Dell EMC, Ericsson, Fujitsu, HPE, Hitachi Vantara, IBM Inspur, Intel, Lenovo, NEC, Quanta Cloud Technology (QCT), Supermicro and Toshiba.

New capabilities in the latest update of vSAN 6.7 are focused on more consistent performance, simplification of some aspects of operations and management, and native support for persistent storage for containers. vSAN is deployed for a broad range of use cases across both midsize businesses and global enterprises.

Strengths

- VMware can be deployed as software only, through validated designs or turnkey appliances, as well as an HCl-as-a-service offering on-premises or as public cloud laaS, to meet diverse needs of enterprise IT organizations.
- VMware has a large and loyal installed base and is considered by infrastructure and operations (I&O) leaders as one of the most trusted global IT software solution providers.

 The VMware Cloud on AWS managed service attracts IT leaders looking to deploy the VMware HCl stack across on-premises and public cloud laaS.

Cautions

- VMware's HCl offering is not suitable for IT leaders who are looking to build a hypervisorindependent infrastructure platform.
- VMware's HCI offering does not include production support for applications requiring unstructured data services, causing IT leaders to deploy third-party solutions for file and object services.
- Gartner clients note that VMware HCl deployments for complex large-scale configurations require careful planning and that these deployments may take a long time for hardware selection, integration and maintenance.

Vendors Added and Dropped

We review and adjust our inclusion criteria for Magic Quadrants as markets change. As a result of these adjustments, the mix of vendors in any Magic Quadrant may change over time. A vendor's appearance in a Magic Quadrant one year and not the next does not necessarily indicate that we have changed our opinion of that vendor. It may be a reflection of a change in the market and, therefore, changed evaluation criteria, or of a change of focus by that vendor.

Added

Huayun Data Group was added because of its acquisition of Maxta.

Sangfor Technologies was added because it met the inclusion criteria.

Dropped

Maxta was dropped because it was acquired by Huayun Data Group.

Inclusion and Exclusion Criteria

To qualify for inclusion in the HCI Magic Quadrant, vendors need to meet the following criteria.

Functional Criteria

Included HCI vendors must:

- Provide an integrated software stack, which includes unified management, software-defined compute (SDC), storage and, optionally, networking.
- Combine VM and SDS resources, both running on the same physical servers, as the primary deployment method.

- Virtualize local, internal and direct-attached storage (DAS), rather than shared, networked storage, such as a SAN and/or network-attached storage (NAS).
- Provide a mechanism to pool internal and direct-attached primary storage across servers into logical, abstracted virtual storage.
- Develop the storage and data management services integrated in the offering.

Business Criteria

Eligible HCI vendors must:

- For each product to be evaluated, provide evidence of a minimum of 100 production customers brought to revenue in at least two of the major geographies. These are the Americas; EMEA; the APAC region; and Japan in the 12 months ending 31 August 2019.
- Deliver complete Level 1 (call center/service desk) and Level 2 (escalation) support either directly or through a contracted services provider to facilitate quick and easy problem resolution. However, Level 3 (engineering) support can be delivered separately, based on vendors' engineering partnerships.
- Deliver solutions that meet user requirements in at least four of the use cases identified in the Critical Capabilities for Hyperconverged Infrastructure research.
- Deliver the product or products to be evaluated in the Critical Capabilities in general availability by 31 August 2019.

Evaluation Criteria

Ability to Execute

Gartner analysts evaluate technology providers on the quality and efficacy of the processes, systems, methods and procedures that enable IT provider performance to be competitive, efficient and effective, and to positively impact revenue, retention and reputation. Ultimately, technology providers are judged on their ability and success in capitalizing on their vision.

Product or Service: This criterion evaluates core goods and services offered by the technology provider that compete in/serve the defined market. This includes current product/service capabilities, quality, feature sets, skills and so on, whether offered natively or through OEM agreements/partnerships as defined in the Market Definition/Description section and detailed in the subcriteria.

Overall Viability: This includes an assessment of the overall organization's financial health, and the financial and practical success of the business unit. This also includes the likelihood of the individual business unit to continue to invest in the product, continue offering the product and

advancing the state of the art within the organization's portfolio of products. The growing proportion of startups in the industry require validation of business models and investment risk.

Sales Execution/Pricing: This criterion refers to the vendor's capabilities in all presales activities and the structure that supports them. This includes deal management, pricing and negotiation, presales support, and the overall effectiveness of the sales channel.

Market Responsiveness/Record: The ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also considers the vendor's history of responsiveness. The dynamics in the market require increasing flexibility.

Marketing Execution: The clarity, quality, creativity and efficacy of programs designed to deliver the vendor's message in order to influence the market, promote the brand and business, increase awareness of products, and establish positive identification with the product/brand and organization in buyers' minds are evaluated. This mind share can be driven by a combination of publicity, promotional, thought leadership, word-of-mouth and sales activities.

Customer Experience: This includes relationships, products and services/programs that enable clients to be successful with the products evaluated. Specifically, this includes the ways customers receive technical support or account support. This can also include ancillary tools, customer support programs (and the quality thereof), availability of user groups, service-level agreements and so on. Conservative buyers will consider references critical in this emerging market.

Operations: The ability of the organization to meet its goals and commitments is evaluated. Factors include the quality of the organizational structure, including skills, experiences, programs, systems and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.

Table 1. Ability to Execute Evaluation Criteria

Evaluation Criteria	Weighting	
Product or Service	High	
Overall Viability	High	
Sales Execution/Pricing	Medium	
Market Responsiveness/Record	High	
Marketing Execution	Medium	
Customer Experience	High	
Operations	Low	

Source: Gartner (November 2019)

Completeness of Vision

Gartner analysts evaluate technology providers on their ability to convincingly articulate logical statements about current and future market direction, innovation, customer needs and competitive forces, and how well they map to the Gartner position. Ultimately, technology providers are rated on their understanding of how market forces can be exploited to create opportunity for the provider.

Market Understanding: The ability of the vendor to understand buyers' needs and to translate these needs into products and services are evaluated. Vendors that show the highest degree of vision will listen and understand buyers' wants and needs, and can shape or enhance those wants with their added vision. This is a relatively new market and continues to evolve.

Marketing Strategy: This criterion refers to a clear, differentiated set of messages consistently communicated throughout the organization, externalized through the website, advertising, customer programs and positioning statements. The constant stream of new entrants puts pressure on positioning and the ability to differentiate.

Sales Strategy: This refers to the strategy for selling products that uses the appropriate network of direct and indirect sales, marketing, service, and communication affiliates that extend the scope and depth of market reach, skills, expertise, technologies, services and the customer base.

Offering (Product) Strategy: This criterion evaluates a vendor's approach to product development and delivery that emphasizes differentiation, functionality, methodology and feature set as they map to current and future requirements. Strong strategy is required for product differentiation.

Business Model: The soundness and logic of a technology provider's underlying business proposition are evaluated.

Vertical/Industry Strategy: This refers to the technology provider's strategy to direct resources, skills and offerings to meet the specific needs of individual market segments.

Innovation: Direct, related, complementary and synergistic layouts of resources, expertise or capital for investment, consolidation, defensive or preemptive purposes are evaluated. Emerging technologies must be addressed and integrated.

Geographic Strategy: This refers to the vendor's strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the "home" or native geography, either directly or through partners, channels and subsidiaries, as appropriate for that geography and market.

Table 2. Completeness of Vision Evaluation Criteria

Evaluation Criteria	Weighting	
Market Understanding	High	
Marketing Strategy	Medium	
Sales Strategy	Medium	
Offering (Product) Strategy	High	
Business Model	Medium	
Vertical/Industry Strategy	Medium	
Innovation	High	
Geographic Strategy	Medium	

Source: Gartner (November 2019)

Quadrant Descriptions

Leaders

Leaders will typically be able to execute strongly across multiple geographies, verticals, use cases and deployment models. They will have a support and channel organization that ensures a high-quality customer experience regardless of whether the solution is purchased directly or through resellers, integration partners or OEMs.

Challengers

Challengers are typically vendors whose achievements, while significant, are based on a narrower subset of the market, having gaps in geographic coverage, product portfolios and use cases. These vendors have the potential to establish themselves across the broader, global market, but have not yet done so.

Visionaries

Visionaries are typically vendors that are focusing on strong innovation and product differentiation, with the potential to significantly disrupt the market if execution improves. These may be smaller vendors with limited reach or achievement to date, or larger vendors with innovation programs that are still unproven.

Niche Players

Niche Players are typically vendors with market programs focused on a limited set of geographies, deployment models, customer segments or use cases. These vendors have met the inclusion criteria and may address their specific market category effectively.

Context

All hyperconverged integrated systems include HCI software, but HCI software is not limited to a system (hardware appliance) deployment model. Software-only/bring-your-own-server, reference architectures, cloud and as-a-service deployments are growing, placing pressure on HCIS appliance vendors to consider software-only deployment options and to reduce hardware dependencies, which offsets the simplicity and agility of HCIS appliance models. The advantages of software-only deployments, which include the avoidance of hardware vendor lock-in, are at least somewhat offset by the added complexity of the support model and inability of software-only vendors to test and certify the myriad configuration options customers may choose. Vendors with software-only options are expanding their OEM partnerships and server certifications to provide greater choice and an improved support experience.

One limitation of the traditional HCIS appliance model is that compute, storage and networking do not scale in tandem for all workloads. To compete across the broadest range of workloads, more vendors are offering compute-only and storage-only nodes. Because resource and performance requirements vary substantially by workload, Gartner continues to recommend that I&O leaders conduct a proof of concept (POC) to evaluate the compute, storage and networking requirements of their workloads running on HCI. I&O leaders also should estimate the component growth requirements to determine the need for asymmetrical scaling. The POC should include a careful analysis of performance during node failures, the increase in risk during node failures and the time to recover from node failures.

Although there are multiple 100-node-plus deployments today, most HCI implementations can be measured in tens of nodes or fewer. Even large deployments tend to be segmented into smaller clusters, but with centralized management across clusters. As HCI becomes more broadly adopted across a broader range of nonhomogeneous workloads, requirements will increase for HCI to operate more autonomously, including the capability to automatically provision, rebalance, adapt to meet quality of service (QoS) requirements, detect anomalies, and prevent failures and data loss. When HCI is deployed at large scale, these capabilities will be both increasingly necessary and key points of vendor differentiation.

One of the attractions of integrated systems and HCI is the potential to create a cloudlike provisioning model while maintaining physical control of IT assets and data on-premises in the data center, remote site or branch office. Over the next few years, cloud deployment models will become increasingly important to meet both short-term scale-up/scale-down requirements and backup and disaster-recovery requirements. An important question for users is whether HCI is a stepping stone to the cloud or a "foreseeable future" resting place for applications; and ultimately, whether it is a

good alternative to the public cloud from performance, manageability at scale and cost perspectives.

The adoption of HCI-based solutions continues to grow, but, outside of smaller organizations, HCI is unlikely to become a full-service platform for IT services across all workloads. I&O leaders should evaluate HCI solutions and select vendors and products not because HCI or that vendor is rapidly growing, but because it fits their particular use case, growth expectations and application architecture direction. HCI is likely to become yet another silo to manage, so integration with higher-level management frameworks (including cloud, container and security management) becomes key to supporting an already overtaxed operations staff.

Adopting technology innovation must be business-led, not technology-driven. There is no ideal integrated system or "endgame" infrastructure. New hardware and software innovations will continue to appear, moving the goalposts and pushing the boundaries of infrastructure design and delivery. Consolidation, rationalization and virtualization set the foundation for ultimately delivering integrated systems like hyperconverged, SDI and composable infrastructure.

Market Overview

HCI is a market that has significant overlap with the hyperconverged integrated system submarket of integrated systems. The two, however, cannot be equated, as HCI includes flexible deployment and sourcing models that extend to cloud, on-premises as a service, bring your own hardware, reference architectures, and OEM or branded appliances. At one extreme, vendors that offer multiple HCIS solutions may not develop any of their own HCI software. Conversely, HCI software vendors may partner with multiple hardware, software and cloud providers to deliver their solutions to market.

As HCI vendors expand their deployment options to include more cloud providers, such as Amazon, Google and Microsoft, acquisition activity increasingly is focused on tools and capabilities to monitor, secure, manage, optimize, and govern diverse on-premises and cloud deployments.

Many partners in the HCI market are also competitors, and I&O leaders must remain cognizant of the sometimes conflicting priorities and incentives of HCI vendors and their partners as well as rapidly expanding HCI partner networks. Full-stack infrastructure software suppliers, such as Microsoft, VMware and Red Hat, pose interesting partnership challenges, as each has significant HCI opportunities within their substantial installed base of customers. Vendors that have more hypervisor-neutral — or at least hypervisor-flexible — offerings may have advantages for customers that want to avoid hypervisor lock-in. I&O leaders pursuing multihypervisor strategies should carefully evaluate the ability of solution providers to deliver simplicity at the management layer. Cloud providers Amazon and Google, together with Microsoft, which already has a substantial position in the market, could ultimately disrupt the entire HCI market as they further extend their cloud offerings to on-premises infrastructure. Meanwhile, I&O leaders will have an alternative to public cloud and private data centers by leveraging laaS providers that use simpler-to-manage HCI for their own infrastructure.

Gartner Recommended Reading

Some documents may not be available as part of your current Gartner subscription.

"Assessing Hyperconverged Infrastructure for Mixed Workloads"

"Toolkit: Sample RFP for Hyperconverged Infrastructure"

"Evolution of Virtualization: VMs, Containers, Serverless — Which to Use When?"

"How Markets and Vendors Are Evaluated in Gartner Magic Quadrants"

Evidence

This Magic Quadrant is based on vendors' written responses to an extensive Gartner survey, vendor presentations, reference customer surveys, Gartner interviews with vendor partners and competitors, Gartner client inquiries, and independent validation of vendor claims through assessment of third-party resources.

Evaluation Criteria Definitions

Ability to Execute

Product/Service: Core goods and services offered by the vendor for the defined market. This includes current product/service capabilities, quality, feature sets, skills and so on, whether offered natively or through OEM agreements/partnerships as defined in the market definition and detailed in the subcriteria.

Overall Viability: Viability includes an assessment of the overall organization's financial health, the financial and practical success of the business unit, and the likelihood that the individual business unit will continue investing in the product, will continue offering the product and will advance the state of the art within the organization's portfolio of products.

Sales Execution/Pricing: The vendor's capabilities in all presales activities and the structure that supports them. This includes deal management, pricing and negotiation, presales support, and the overall effectiveness of the sales channel.

Market Responsiveness/Record: Ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also considers the vendor's history of responsiveness.

Marketing Execution: The clarity, quality, creativity and efficacy of programs designed to deliver the organization's message to influence the market, promote the brand and business, increase awareness of the products, and establish a positive identification with the product/brand and organization in the minds of buyers. This "mind share" can

be driven by a combination of publicity, promotional initiatives, thought leadership, word of mouth and sales activities.

Customer Experience: Relationships, products and services/programs that enable clients to be successful with the products evaluated. Specifically, this includes the ways customers receive technical support or account support. This can also include ancillary tools, customer support programs (and the quality thereof), availability of user groups, service-level agreements and so on.

Operations: The ability of the organization to meet its goals and commitments. Factors include the quality of the organizational structure, including skills, experiences, programs, systems and other vehicles that enable the organization to operate effectively and efficiently on an ongoing basis.

Completeness of Vision

Market Understanding: Ability of the vendor to understand buyers' wants and needs and to translate those into products and services. Vendors that show the highest degree of vision listen to and understand buyers' wants and needs, and can shape or enhance those with their added vision.

Marketing Strategy: A clear, differentiated set of messages consistently communicated throughout the organization and externalized through the website, advertising, customer programs and positioning statements.

Sales Strategy: The strategy for selling products that uses the appropriate network of direct and indirect sales, marketing, service, and communication affiliates that extend the scope and depth of market reach, skills, expertise, technologies, services and the customer base.

Offering (Product) Strategy: The vendor's approach to product development and delivery that emphasizes differentiation, functionality, methodology and feature sets as they map to current and future requirements.

Business Model: The soundness and logic of the vendor's underlying business proposition.

Vertical/Industry Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of individual market segments, including vertical markets.

Innovation: Direct, related, complementary and synergistic layouts of resources, expertise or capital for investment, consolidation, defensive or pre-emptive purposes.

Geographic Strategy: The vendor's strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the "home" or native geography, either directly or through partners, channels and subsidiaries as appropriate for that geography and market.

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RESOLUTION NO: 2020-06-149

LIVINGSTON COUNTY

Resolution Authorizing the Purchase of a CISCO Network Core Switch to Mitigate the County's Exposure to Data Loss - Information Technology

DATE:

June 8, 2020

- **WHEREAS,** IT recommends the purchase of a Cisco network core switch to replace the current switch that has been in place since 2010 and was end of life in 2012. Cisco no longer supports the switch's firmware upgrades. This purchase needs to be completed as swiftly as possible to help mitigate the County's exposure to data loss or other disasters; and
- WHEREAS, this switch is the nucleus of our county data network; it is similar to the body's spinal column, as all of our county's network traffic flows through this device. Traffic from our Courts, 911, Sheriff's Office, Health Department, other essential county departments, and some local municipalities is constantly running through this switch; and
- WHEREAS, core switches have a recommended 10-year life cycle. The need to keep up with security patches and system requirements in our technology infrastructure is essential. The benefits of replacing the current switch with a next generation switch include, increased scale and performance, improved server and application responsiveness and speeds, streamlined server management and administration, and fiscal diligence by utilizing both contract and special pricing; and
- where are current pricing advantages to using a contract for the physical hardware, software, and labor costs. This project was included in the Livingston County Capital Improvement Plan and was funded for the 2020 fiscal year. The project's estimate in the Capital Improvement Plan project was \$140,000; and
- WHEREAS, in compliance with the Procurement Policy, it is recommended to purchase from Logicalis, Inc. utilizing the NASPO ValuePoint Cooperative Purchasing Program, through the State of Michigan contract for an amount of \$82,703; and
- WHEREAS, Logicalis has been Livingston County's trusted Cisco partner since 2012. This is highly specialized installation, which requires expert level familiarity with Cisco core switch replacement. Prior knowledge of the County's infrastructure is also highly encouraged.
- **THEREFORE BE IT RESOLVED** that the Livingston County Board of Commissioners hereby approves and authorizes a purchase order to be issued to Logicalis, Inc. for the purchase of a network core switch amount not to exceed \$82,703.
- **BE IT FURTHER RESOLVED** that the Livingston County Board of Commissioners hereby authorizes the Treasurer to transfer an amount not to exceed \$82,703 from F403 Capital Improvement to F636 Information Technology for the network core switch project.

RESOLUTION NO: 2020-06-149

PAGE: 2

BE IT FURTHER RESOLVED that the Chairman of the Livingston County Board of Commissioners is authorized to sign all forms, assurances, contracts/agreements, renewals and future amendments for monetary and contract language adjustments related to the above upon review and/or preparation of Civil Counsel.

#

MOVED: SECONDED: CARRIED:

Livingston County Information Technology Department

Memo

To: Livingston County Commissioners, Livingston County Administrator Cindy

Catanach

From: Kristoffer Tobbe

Livingston County Chief Information Officer

Date: May 15, 2020

Re: Livingston County Data Center Switch Core Replacement Project

Core Network Switch Replacement

At this time, IT recommends the purchase of a Cisco network core switch to replace the current switch that has been in place since 2010 and was end of life in 2012. Cisco no longer supports the switch's firmware upgrades. This purchase needs to be completed as swiftly as possible to help mitigate the County's exposure to data loss or other disasters.

This switch is the nucleus of our County data network; it is similar to the body's spinal column, as all of our County's network traffic flows through this device. Traffic from our Courts, 911, Sheriff's Office, Health Department, other essential county departments, and some local municipalities is constantly running through this switch.

Core switches have a recommended 10-year life cycle. The need to keep up with security patches and system requirements in our technology infrastructure is essential. The benefits of replacing the current switch with a next generation switch include, increased scale and performance, improved server and application responsiveness and speeds, streamlined server management and administration, and fiscal diligence by utilizing both contract and special pricing.

There are current pricing advantages to using a contract for the physical hardware, software, and labor costs. This project was included in the Livingston County Capital Improvement Plan

and was funded for the 2020 fiscal year. The project's estimate in the Capital Improvement Plan project was \$140,000. The negotiated price for the switch replacement is \$82,702.95. This pricing is 56% below retail price and average.

It is recommended that we utilize the State of Michigan's NASPO contract to purchase this data center expansion through our proven and trusted partner, Logicalis. Logicalis has been Livingston County's trusted Cisco partner since 2012. This is highly specialized installation, which requires expert level familiarity with Cisco core switch replacement. Prior knowledge of the County's infrastructure is also highly encouraged.

Finance options are available through Cisco Financial. There are very favorable terms that would help to smooth the purchase costs, though IT would not recommend financing technology beyond 36 months.

This purchase would be made in accordance with the County's procurement policy from Resolution #2018-11-189, which was approved by the Livingston County Board on November 19, 2018.

From Section 1: Source Selection & Contract Formation, Sub-Section H: Cooperative Purchasing/Procurement Programs. "Notwithstanding any other provision of this policy, the County may make or authorize the purchase of supplies, equipment or services available through cooperative purchasing/procurement programs and other associations. The decision to purchase from these programs shall be made by the Board of Commissioner's after consultation with the department and considering among other issues: delivery, packaging, minimum order requirements, follow-up service if applicable, product/equipment quality. Bidding requirements shall be waived if it is determined to be in the best interest of the County based on written communication to support the County's findings. The County Administrator is authorized to enter into necessary agreements or contracts on behalf of the County. State of Michigan Extended Purchasing Program (such as MiDeal or other like programs) can be used instead of the normal bidding process."

Additional information:

Definition - What does Core Switch mean?

A core switch is a high-capacity switch generally positioned within the backbone or physical core of a network. Core switches serve as the gateway to a wide area network (WAN) or the Internet - they provide the final aggregation point for the network and allow multiple aggregation modules to work together.

A core switch is also known as a tandem switch or a backbone switch. A backbone or core is a part of computer network that interconnects various pieces of network, providing a path for the exchange of information between different LANs or subnetworks. A backbone can tie together diverse networks in the same building, in different buildings in a campus environment, or over wide areas. Normally, the backbone's capacity is greater than the networks connected to it.

A large corporation that has many locations may have a backbone network that ties all of the locations together, for example, if a server cluster needs to be accessed by different

departments of a company that are located at different geographical locations. The pieces of the network connections (for example: Ethernet, wireless) that bring these departments together is often mentioned as network backbone. Network congestion is often taken into consideration while designing backbones.

Cisco Core Switch	Livingston County CIP Budgeted Ammount	Original List Pricing	Difference between CIP and Specified Quote	Standard NASPO Contract Pricing	Standard %	Discount price Negotiated	Savings off of Standard Contract Pricing	Additional Discounts over List Price	Reocurring Annual Costs 3 yr Contract	Finance Option A	Finance Option B
	\$140,000.00	Over Budget	Over Budget	Under Budget		Under Budget					
Catalyst 9400 Series 10 slot Hardware		\$151,229.63		\$90,454.00	40%	\$55,664.00	\$34,790.00	63%	\$0.00		
Cisco Software		\$14,114.77		\$8,352.50	40%	\$5,140.00	\$3,212.50	64%	\$0.00		
Hardware Maintenance and Support		\$8,065.58		\$5,092.05	40%	\$4,723.95	\$368.10	41%	\$0.00		
Professional Installation and Configuration Services		\$28,229.53		\$17,175.00	40%	\$17,175.00	\$0.00	39%	\$0.00		
Totals	\$140,000.00	\$201,639.50	-\$61,639.50	\$121,073.55		\$82,702.95	\$38,370.60				
					Savings over Original Budgeted Ammount	\$57,297.05	41%	Lower than Budgeted ammount			
					Savings over List Pricing	\$118,936.55	59%	Lower than List Pricing			
					Savings beyond Governmen tal Contract	\$38,370.60	32%	Lower than Contract Pricing			



Switch Configuration Services Quotation # 2020-89112v3

Prepared By Logicalis for:

Livingston County

To the attention of : Ken Langley Livingston County Howell, MI 48843 Tel: 517-540-8802

Email: klangley@livgov.com

May 12, 2020



Pricing Summary

The following is a price summary of Logicalis' proposed solution.

Price Summary	Amount
Hardware	\$55,664.00
Software	\$5,140.00
Hardware Maintenance	\$4,723.95
Professional Services	\$17,175.00
Grand Total	\$82,702.95

If you're interested in leasing the equipment contained in this Quotation, Logicalis estimates the monthly lease payment to be \$1,666.

This is a budgetary number only based on a 36 month term and subject to credit approval, so please contact your Logicalis Account Executive for full details and a complete leasing quote.

- Payments do not include any applicable sales, rental or use taxes.
- Payments do not include any Logicalis professional services.
- Payments are valid for monthly payment structures only with deferrals 30 days or less.
- Please call for non-monthly payment structures and payment deferrals greater than 30 days.
- · All transactions are subject to credit and documentation requirements, review and approval.
- Additional terms may apply.



Logicalis offers a range of services, from helping you define and design a cloud strategy to assisting with server and storage selection for your current environment. We provide a variety of assessments and health checks, perfect for those who need help determining what the next steps are. Find out more at www.us.logicalis.com.

To address your most pressing challenges during COVID-19, Logicalis has instituted Rapid Deployment Services designed to support your needs to deploy remote workers, maintain security and infrastructure readiness, and provide supplemental IT staff support. All services are designed to be delivered remotely by a Logicalis Engineer. Find out more at http://bit.ly/3b6Gnzp





Ask us about Logicalis Leasing Solutions—a value-added service tailored to our customers. Leasing offers strategic, operational and financial benefits that can help meet your company's goals and get your project funded. Logicalis financing experts work with more than a dozen trusted leasing partners to assist you as our valued customer. We can deliver competitive rates and flexible terms and make the leasing process easy. Learn more today at www.us.logicalis.com/logicalis-financial-services/



Switch Configuration Services Quotation # 2020-89112v3

Customer Name & Address	Logicalis Account Executive
Ken Langley Livingston County Howell, MI 48843 517-540-8802 klangley@livgov.com	Lisa Nowak Logicalis Inc. 120 N Washington Square Suite 600 Lansing, MI 48933 +1 5173361052 lisa.nowak@us.logicalis.com
Bill To Address	Ship to Address
Livingston County 304 E Grand River Ave Howell, MI 48843-2488	Livingston County 304 E Grand River Ave Howell, MI 48843-2488

This Quotation adheres to the pricing requirements of the NASPO ValuePoint Master Agreement #AR233 (14-19), Cisco Participating Addendum MI #071B4300124 contract.

Item	Qty	Part Number	Description	List Price	Discount %	Unit Price	Extended Price
Prod	ucts						
1	1	C9410R-96U-BNDL-A	Catalyst 9400 Series 10 slot;Sup; 2xC9400- LC-48U; DNA-A LIC	\$30,400.00	60.00%	\$12,160.00	\$12,160.00
2	1	CON-SNT-C9410R9A	SNTC-8X5XNBD Catalyst 9400 Series 10 slot;Sup; 2xC940	\$6,135.00	23.00%	\$4,723.95	\$4,723.95
3	4	C9400-PWR-BLANK	Cisco Catalyst 9400 Series Power Supply Blank Cover	\$0.00	0.00%	\$0.00	\$0.00
4	2	C9400-NW-A	Cisco Catalyst 9400 Network Advantage License	\$0.00	0.00%	\$0.00	\$0.00
5	1	S9400UK9-1612	Cisco Catalyst 9400 XE 16.12 UNIVERSAL	\$0.00	0.00%	\$0.00	\$0.00
6	4	C9400-PWR-3200AC	Cisco Catalyst 9400 Series 3200W AC Power Supply	\$2,040.00	60.00%	\$816.00	\$3,264.00
7	4	CAB-US520-C19-US	NEMA 5-20 to IEC-C19 14ft US	\$0.00	0.00%	\$0.00	\$0.00
8	1	C9400-DNA-A	Cisco Catalyst 9400 DNA Advantage Term License	\$0.00	0.00%	\$0.00	\$0.00



Item	Qty	Part Number	Description	List Price	Discount %	Unit Price	Extended Price
9	1	C9400-DNA-A-3Y	Cisco Catalyst 9400 DNA Advantage 3 Year License	\$12,850.00	60.00%	\$5,140.00	\$5,140.00
10	2	PI-LFAS-T	Prime Infrastructure Lifecycle & Assurance Term - Smart Lic	\$0.00	0.00%	\$0.00	\$0.00
11	2	PI-LFAS-AP-T-3Y	PI Dev Lic for Lifecycle & Assurance Term 3Y	\$0.00	0.00%	\$0.00	\$0.00
12	1	C9400-SUP-1XL-B	Cisco Catalyst 9400 Series Sup-1XL Bundle Select Option	\$5,100.00	60.00%	\$2,040.00	\$2,040.00
13	1	C9400-SUP-1XL	Cisco Catalyst 9400 Series Supervisor 1XL Module	\$0.00	0.00%	\$0.00	\$0.00
14	1	C9400-SUP-1XL/2	Cisco Catalyst 9400 Series Redundant Supervisor 1XL Module	\$19,380.00	60.00%	\$7,752.00	\$7,752.00
15	1	C9400-LC-24XS	Cisco Catalyst 9400 Series 24-Port 10 Gigabit Ethernet(SFP+)	\$24,480.00	60.00%	\$9,792.00	\$9,792.00
16	1	C9400-LC-48U-B	Cisco Catalyst 9400 Series 2xC9400-LC-48U for Bundle Select	\$0.00	0.00%	\$0.00	\$0.00
17	1	C9400-LC-48U	Cisco Catalyst 9400 Series 48-Port UPOE 10/100/1000 (RJ-45)	\$0.00	0.00%	\$0.00	\$0.00
18	1	C9400-LC-48U	Cisco Catalyst 9400 Series 48-Port UPOE 10/100/1000 (RJ-45)	\$0.00	0.00%	\$0.00	\$0.00
19	1	NETWORK-PNP-LIC	Network Plug-n-Play Connect for zero-touch device deployment	\$0.00	0.00%	\$0.00	\$0.00
20	1	C9400-LC-48P	Cisco Catalyst 9400 Series 48-Port POE+ 10/100/1000 (RJ-45)	\$7,500.00	60.00%	\$3,000.00	\$3,000.00
21	1	C9400-LC-48P	Cisco Catalyst 9400 Series 48-Port POE+ 10/100/1000 (RJ-45)	\$7,500.00	60.00%	\$3,000.00	\$3,000.00
22	1	C9400-LC-48P	Cisco Catalyst 9400 Series 48-Port POE+ 10/100/1000 (RJ-45)	\$7,500.00	60.00%	\$3,000.00	\$3,000.00



Item	Qty	Part Number	Description	List Price	Discount %	Unit Price	Extended Price
23	1	C9400-LC-48P	Cisco Catalyst 9400 Series 48-Port POE+ 10/100/1000 (RJ-45)	\$7,500.00	60.00%	\$3,000.00	\$3,000.00
24	1	C9400-SSD-NONE	No SSD Memory Selected	\$0.00	0.00%	\$0.00	\$0.00
25	1	C9400-SSD-NONE	No SSD Memory Selected	\$0.00	0.00%	\$0.00	\$0.00
26	1	C9400-LC-48P	Cisco Catalyst 9400 Series 48-Port POE+ 10/100/1000 (RJ-45)	\$7,500.00	60.00%	\$3,000.00	\$3,000.00
27	4	SFP-10G-LR-S=	10GBASE-LR SFP Module; Enterprise-Class	\$2,079.00	60.00%	\$831.60	\$3,326.40
28	8	SFP-10G-SR-S=	10GBASE-SR SFP Module; Enterprise-Class	\$728.00	60.00%	\$291.20	\$2,329.60
					Prod	ucts Subtotal	\$65,527.95
Servi	ces - F	ixed Fee					
29	1	PS	Project Initiation	\$18,375.00	53.27%	\$8,587.50	\$8,587.50
30	1	PS	Project Completion	\$18,375.00	53.27%	\$8,587.50	\$8,587.50
				Serv	rices Fixed	Fee Subtotal	\$17,175.00

Grand Total:	
Products and Services Subtotal:	\$82,702.95
Grand Total	

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Logicalis, Inc.



Services Statement of Work

Communication & Network Services - Route / Switch Tasks and Activities

- 1 Plan
 - 1.1 Core Switch Replacement
 - 1.1.1 Discovery and informal planning
- 2 Implement
 - 2.1 Core Switch Replacement
 - 2.1.1 Configuration of Cisco 9410 Core Chassis Switch
- 3 Validate
 - 3.1 Core Switch Replacement
 - 3.1.1 Cutover and testing of Cisco 9410 Core Switch
- 4 Support
 - 4.1 Core Switch Replacement
 - 4.1.1 Two hours of documentation and knowledge transfer
 - 4.1.2 Four hours of Day One Support

Communication & Network Services Additional Information

Livingston County has requested the support of Logicalis to assist with the replacement of an existing Cisco 6509 core switch with a new Cisco 9410 core switch. Logicalis engineers will remotely provide planning and configuration services on the new 9410 switch. Logicalis engineers will be on-site for the cut-over and testing of the new 9410 core switch.

Please note that Livingston County resources will be responsible for physically racking, stacking, and cabling the new 9410 switch and removing the existing 6509 switch.

Project Management

The assigned Logicalis Project Manager will be responsible for providing the following services:

Project Manager 2 (Low Rigor)

Planning

- Project initiation phone call
- · Resource scheduling
- High-level milestone timeline

Execution

- Product tracking, if applicable
- Weekly project status call and email
- Resource management and allocation
- Project escalations

Monitoring & Controlling

- Project Deliverable review and delivery, as applicable
- Scope management
- Document Project Change Requests (PCRs), if applicable
- Timeline monitoring

Closing

Project Closure and Acceptance processing



Terms and Conditions

Terms Applicable to All Sales

- 1. In the event Customer chooses to lease the Products and/or Services from a third party leasing company, Customer remains liable for payment to Logicalis for all Products and/or Services purchased until Logicalis receives payment from such leasing company.
- 2. All items not specifically included in this document are out of scope.
- 3. Prices are valid for 30 days from date of the document unless otherwise stated.
- 4. The information in this document is considered proprietary and confidential to Logicalis. By acceptance of this Quotation, Customer agrees to maintain this confidentiality and use such information for internal purposes only.

Terms Applicable for Product Sales

- To the extent applicable, the terms of the NASPO ValuePoint Master Agreement #AR233 (14-19), Cisco Participating Addendum MI #071B4300124 are incorporated herein by reference. For all other terms not addressed in the previously stated contract, Logicalis Terms of Sale, found on our website at www.us.logicalis.com/tcsales apply and are incorporated herein by reference.
- 2. Any variation in quantity or requested delivery may result in price changes.
- 3. Prices are subject to change without notice in the event the Product's manufacturer/distributor changes the price to Logicalis.
- 4. Shipping and taxes are added at time of invoice. Shipping charges are subject to handling fees for specifying carriers and same day shipments.
- 5. Logicalis collaborates with the OEM/distributor to schedule delivery to Customer's loading dock; inside delivery is available upon request and may increase the cost of delivery.
- 6. To the extent this Quotation includes Cisco Cloud Services, the following link shall apply: www.cisco.com/c/en/us/about/legal/cloud-and-software/cloud-terms.html.

Terms Applicable for Services Sales

- To the extent applicable, the terms of the NASPO ValuePoint Master Agreement #AR233 (14-19), Cisco Participating Addendum MI #071B4300124 are incorporated herein by reference. For all other terms not addressed in the previously stated contract, Logicalis Terms of Sale, found on our website at www.us.logicalis.com/tcsales apply and are incorporated herein by reference.
- 2. General customer responsibilities, project assumptions, change management processes, and other terms applicable to the delivery and receipt of services (as applicable to this Quotation), found at us.logicalis.com/gcr, are incorporated herein by reference.
- 3. Unless otherwise mutually agreed upon, reasonable travel expenses will be tracked separately and billed directly to Customer. Travel expenses will include cost incurred from travel (airfare, rental car, mileage, tolls and lodging). Meals, if any, will be billed at the per diem rate of \$65.



Quotation Acceptance

By signing below, the undersigned accepts this offer and confirms that he/she is authorized to purchase these items on behalf of Customer. This offer may be accepted by purchase order or other acknowledgement of acceptance, including, without limitation, by signing this document. Any reference to a Customer's Purchase Order or P.O. number does not indicate Logicalis' acceptance of terms and conditions referenced on/attached to any such P.O.

Accepted By: Livingston County	Accepted By: Logicalis, Inc.	
Signature	Signature	
Printed Name	Printed Name	
Title	Title	
Date	Date	

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Gartner Peer Insights 'Voice of the Customer': Data Center Networking

Published: 9 May 2019 **ID:** G00390119

Analyst(s): Peer Contributors

Gartner Peer Insights is a free peer review and ratings platform designed for enterprise software and services decision makers. Reviews go through a strict validation and moderation process in an effort to ensure they are authentic. This document synthesizes Gartner Peer Insights' content in data center networking market for the previous year. This peer perspective, along with the individual detailed reviews, is complementary to expert research and should play a key role in your buying process.

Overview

What Are Data Center Networking Solutions?

The data center networking vendors covered in this market provide hardware and/or software solutions to deliver connectivity primarily within enterprise data centers. This includes data center core/spine switches, access switches (top of rack [ToR], leaf), virtual switching, Ethernet fabrics, network operating systems (NOSs) and network overlays, and the requisite management, automation and orchestration of those components.

What Is the Gartner Peer Insights Customers' Choice?

Since October 2015, more than 205,000 reviews across more than 330 markets have been posted to Gartner Peer Insights. In markets where there is enough data, Gartner Peer Insights recognizes the vendors that are the most highly rated by their customers through the Customers' Choice distinction. This peer-rated distinction can be a useful complement to expert opinion, as it focuses on direct peer experiences of implementing and operating a solution.

To qualify for the Customers' Choice distinction, vendors must have a product that is aligned to the market, have their overall rating (out of 5 stars) equal or higher than the mean rating for that market, and have equal or higher than the median Product Adoption Review Coverage (PARC) in the same market, during the one-year submission period. PARC is derived by assigning point values to a vendor's review coverage across firm sizes, industry verticals and deployment regions. Reviews from end-user companies with revenue less than \$50M will be excluded from this methodology. See the full methodology here.

In the data center networking market, Gartner Peer Insights has published 612 reviews and ratings in a 12-month period ending 31 March 2019. Based on the Gartner Peer Insights Customers' Choice criteria, Figure 1 shows a list (in alphabetical order) of vendors in different segments based on their overall score (out of 5 stars) and their PARC. Only vendors with more than 10 eligible reviews during the one-year submission period are included. Customers' Choice vendors appear in the blue box on the upper right, denoted with a Customers' Choice logo.

Figure 1. Gartner Peer Insights "Voice of the Customer" Data Center Networking Customers' Choice



Source: Gartner (May 2019)

Use Customer Reviews and Expert Research to Supplement Your Analysis

Along with the historical peer-based perspective represented in this document, Gartner covers the data center networking market with expert-led research, primarily through the related Magic Quadrant and associated Critical Capabilities research documents.

Magic Quadrants are forward-looking, to help clients identify vendors likely to keep up with or even stay ahead of the overall market. Our analysts look broadly at customer feedback across markets, as well as a company's forward-looking strategy, roadmap and capabilities. Peer reviews are driven solely by reviewers' organizations' specific experiences relative to their unique needs. Hence, there may be a difference in analyst opinions about vendors, products and services versus user sentiment as expressed in peer reviews. For more information on how markets and vendors are evaluated in Magic Quadrants, please see "How Markets and Vendors Are Evaluated in Gartner Magic Quadrants."

A vendor's placement in the top-right corner (the Leaders quadrant) in a Magic Quadrant report does not mean that the vendor is the best choice for an organization. Rather, it simply means that a vendor executes well in its overall market presence and has a good strategy for continuing to do so. Often, vendors from other quadrants may be a better fit. They may offer better products (to investigate products further, refer to the associated Critical Capabilities reports that accompany the respective Magic Quadrant), better address requirements from particular verticals and/or be more affordable. Ultimately, making the right choice depends on how the vendor aligns with your business goals. For related research in this market, see "Magic Quadrant for Data Center Networking."

Not all vendors within a market are included in Gartner expert-generated research. A Magic Quadrant is not intended to be an exhaustive analysis of every vendor in a market, but rather a focused analysis. The criteria for inclusion may consist of market share, number of clients, installed base, types of products/services, target market or other defining characteristics. These criteria help narrow the scope of the research to those vendors that Gartner considers to be the most important — or best-suited — to the evolving needs of Gartner's clients as buyers in the market. While Peer Insights markets are based on Magic Quadrant market definitions, the standards for entry are broader, thus offering a more expansive view of a given market.

Figure 2 shows the vendors' position in the Magic Quadrant as of 11 July 2018, and Customers' Choice distinctions as of 16 April 2019. The list includes all vendors mentioned in the Magic Quadrant along with additional Customers' Choice vendors listed on Peer Insights, sorted alphabetically.

Figure 2. Gartner Peer Insights "Voice of the Customer" Data Center Networking Magic Quadrant and Peer Insights Customers' Choice View

Gartner Magic Quadrant and Gartner Peer In As of 31 March 2019	Sorted alphabetically	
Eligible /endors	Gartner Magic Quadrant Position	Gartner Peer Insights
Arista Networks	Leaders	
Big Switch Networks	├ Visionaries	
Cisco	⊢ Leaders	customers' choice 2019
Cumulus Networks	├ Visionaries	customers' choice 2019
Dell EMC	├ Visionaries	customers' choice 2019
Extreme Networks	• Challengers	customers' choice 2019
Hewlett Packard Enterprise (HPE)	Niche Players	customers' choice 2019
Huawei	• Challengers	customers' choice 2019
Juniper Networks	⊢ Leaders	customers' choice 2019
Lenovo	Niche Players	
Mellanox Technologies	Niche Players	
New H3C Group	Niche Players	
Pluribus Networks	Niche Players	
VMware	├ Visionaries	
		rs in Gartner Peer Insights that have the Gartner Customers July 2018. Customers' Choice announced on 16 April 2019.

Gartner Peer Insights "Voice of the Customer"

Data Center Networking Peer Reviews and Ratings

In addition to the synthesis provided by the Customers' Choice, the individual reviews and ratings within Gartner Peer Insights can be a valuable source of lessons learned for those currently in the buying cycle for data center networking market, particularly if you can find and read reviews from

This research note is restricted to the personal use of ktobbe@livgov.com.

end users like you (for example, those that share your technology adoption bias, company size, industry or geography).

These reviews give insight into not only how satisfied existing customers are with a vendor's product, but also their experience in negotiating with the vendor, getting support for the product or service and their overall implementation effort. This information can provide you with a firsthand view on what to expect from a particular vendor.

The rest of this document will highlight some of the broad findings in the data center networking market based on 12 months of reviews and will also point you to particular ways to use the site in your buying process.

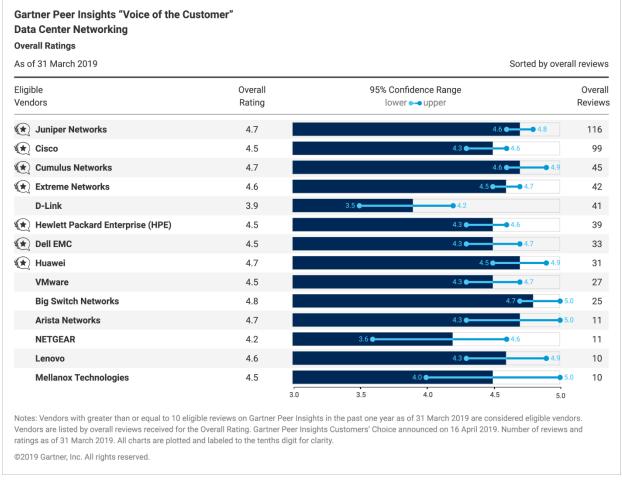
Figure 3 summarizes the overall ratings (out of 5 stars) for vendors in the data center networking that have received more than 10 eligible reviews in the one-year period ending on 31 March 2019, sorted by number of reviews.

The table is sorted by number of reviews because ultimately, the more reviews a vendor receives, the more likely it is that you can trust a summary rating. This can be visualized by the 95% confidence interval that has been added as a bar range to the overall ratings in Figure 3. This is best interpreted as: "Given the distribution of reviews received, the vendor's overall rating is 95% likely to be between the lower and upper dots."

While the confidence interval can offer a useful perspective, finding individual reviews from end users like you can be even more valuable. To begin using Gartner Peer Insights this way, please click here to navigate to the overall market page. Find a vendor you are interested in and use the filters on the left to begin narrowing reviews to read. Because access to Gartner Peer Insights is free and open to everyone, this is something that you can delegate to your team as well.

Figure 3. Gartner Peer Insights "Voice of the Customer" Data Center Networking Overall Ratings

Gartner Peer Insights "Voice of the Customer"



Vendor Comparison

In addition to reading individual reviews, you can select multiple vendors to compare within the site. Figure 4 and Figure 5 provide an aggregate view, but it's easy to create a comparison between several vendors on your shortlist and then send it to others in your organization. To begin using the site this way, please click here to go to the overall market page. Find the first vendor you are interested in comparing and press the "compare" button.

Figure 4. Gartner Peer Insights "Voice of the Customer" Data Center Networking Vendor Comparison 1 of 2

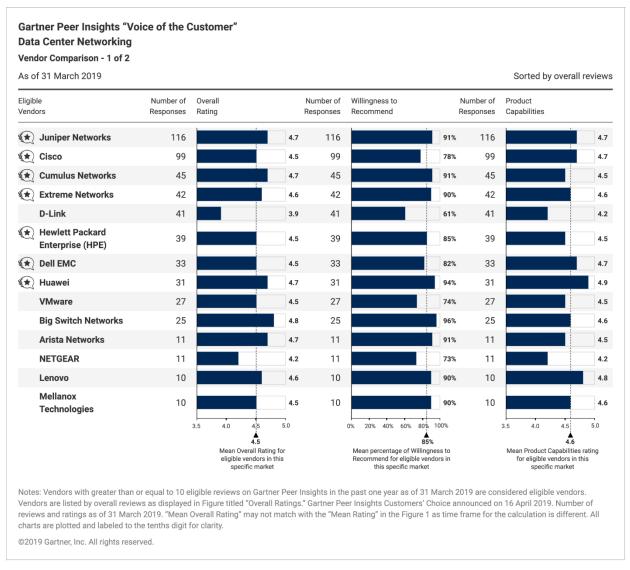
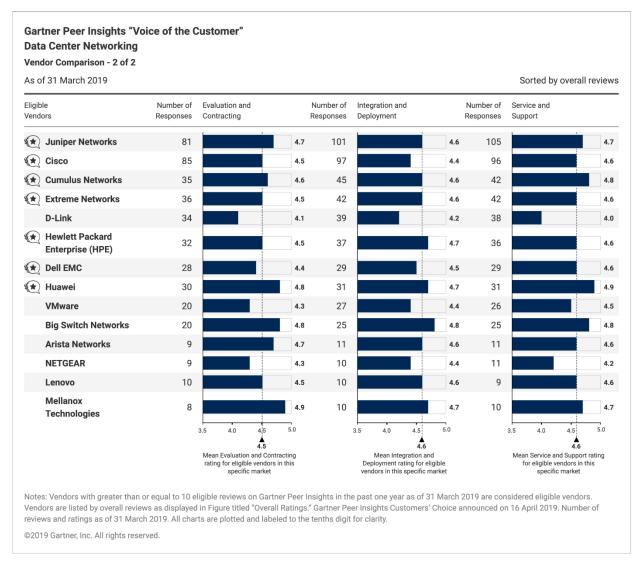


Figure 5. Gartner Peer Insights "Voice of the Customer" Data Center Networking Vendor Comparison 2 of 2



Other Vendors Considered

The Peer Insights survey asks reviewers that were involved in evaluation which other vendors were considered before deciding on the choice they made. Figure 6 summarizes their feedback, enabling you to identify which other vendors were typically on the shortlist alongside a given vendor.

Figure 6 is an aggregate view, but you can customize the view for your particular shortlist and then send to others in your organization. To begin using the site this way, please click here to go to the overall market page. Find the first vendor you are interested in comparing and press the "compare" button. "Alternative vendors considered" is an item in the comparison.

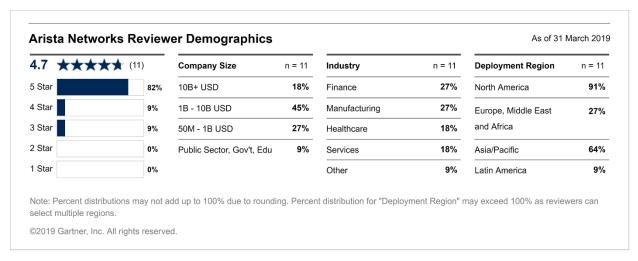
Figure 6. Gartner Peer Insights "Voice of the Customer" Data Center Networking Other Vendors Considered

As of 31 March 2019					Sorted by overall review
Eligible Vendors (Number of Responses)	Vendors That Reviewers Considered (top five alt				
Juniper Networks (82)	Cisco (85%)	Huawei (23%)	Dell EMC (20%)	Alcatel-Lucent Enterprise (18%)	Arista Networks (18%)
Cisco (85)	Juniper Networks (34%)	Hewlett Packard Enterprise (HPE) (33%)	Arista Networks (26%)	Huawei (19%)	Dell EMC (16%)
Cumulus Networks (35)	Cisco (63%)	Juniper Networks (37%)	Dell EMC (31%)	Mellanox Technologies (31%)	Arista Networks (29%)
Extreme Networks (37)	Cisco (76%)	Juniper Networks (27%)	Dell EMC (24%)	Hewlett Packard Enterprise (HPE) (24%)	Alcatel-Lucent Enterprise (11%)
D-Link (35)	Cisco (63%)	Dell EMC (34%)	NETGEAR (29%)	Extreme Networks (20%)	Huawei (20%)
Hewlett Packard Enterprise (HPE) (32)	Cisco (75%)	Juniper Networks (38%)	D-Link (31%)	Dell EMC (19%)	Huawei (19%)
Dell EMC (28)	Cisco (61%)	Hewlett Packard Enterprise (HPE) (32%)	Brocade (21%)	Juniper Networks (21%)	NETGEAR (18%)
Huawei (30)	Cisco (93%)	New H3C Group (23%)	Alcatel-Lucent Enterprise (20%)	Juniper Networks (20%)	VMware (13%)
VMware (20)	Cisco (80%)	Juniper Networks (25%)	Arista Networks (15%)	Hewlett Packard Enterprise (HPE) (15%)	Huawei (15%)
Big Switch Networks (20)	Cisco (65%)	Arista Networks (45%)	Cumulus Networks (30%)	Dell EMC (30%)	Hewlett Packard Enterprise (HPE) (25%)
Arista Networks (9)	Cisco (89%)	Juniper Networks (44%)	Brocade (33%)	Hewlett Packard Enterprise (HPE) (33%)	Dell EMC (22%)
NETGEAR (9)	D-Link (89%)	Cisco (78%)	Dell EMC (22%)	Alcatel-Lucent Enterprise (11%)	Lenovo (11%)
Lenovo (10)	Dell EMC (50%)	Cisco (40%)	Alcatel-Lucent Enterprise (20%)	Hewlett Packard Enterprise (HPE) (20%)	Big Switch Networks (10%)
Mellanox Technologies (8)	Cisco (63%)	Brocade (38%)	Dell EMC (38%)	Arista Networks (25%)	Extreme Networks (25%)

Peer Insights User Ratings

Figures 7 through 20 summarize each vendor's reviewer demographics for those reviews received in the last year, ending 31 March 2019, along with the demographics of the reviewers and a direct link to the vendor's ratings on the site. All vendors with more than 10 eligible reviews in the last year are shown, sorted alphabetically.

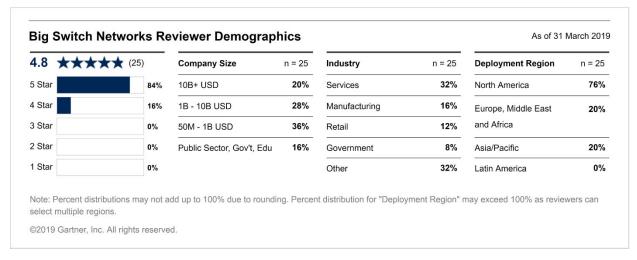
Figure 7. Gartner Peer Insights "Voice of the Customer" Data Center Networking Arista Networks Reviewer Demographics



Source: Gartner (May 2019)

Read all Peer Insights user reviews for Arista Networks.

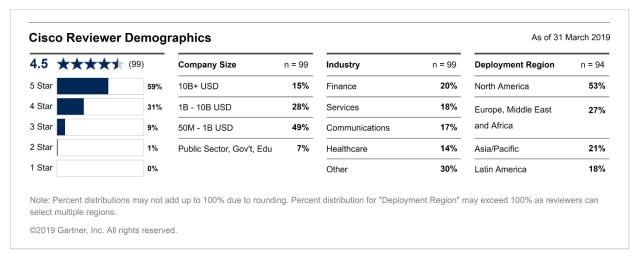
Figure 8. Gartner Peer Insights "Voice of the Customer" Data Center Networking Big Switch Reviewer Demographics



Source: Gartner (May 2019)

Read all Peer Insights user reviews for Big Switch Networks.

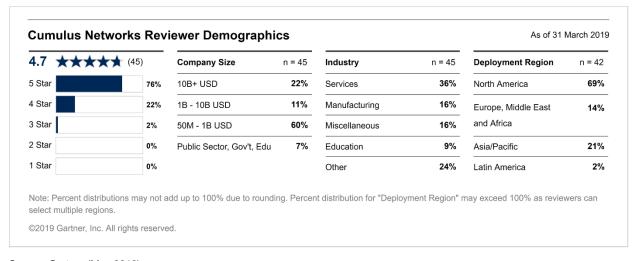
Figure 9. Gartner Peer Insights "Voice of the Customer" Data Center Networking Cisco Reviewer Demographics



Source: Gartner (May 2019)

Read all Peer Insights user reviews for Cisco.

Figure 10. Gartner Peer Insights "Voice of the Customer" Data Center Networking Cumulus Networks Reviewer Demographics



Source: Gartner (May 2019)

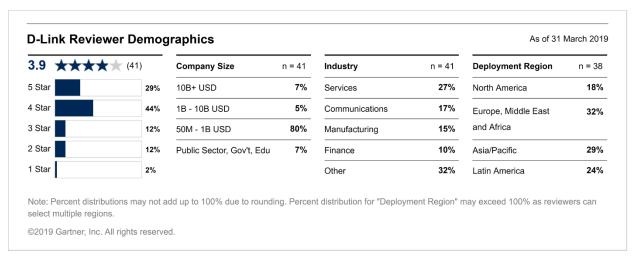
Read all Peer Insights user reviews for Cumulus Networks.

Figure 11. Gartner Peer Insights "Voice of the Customer" Data Center Networking Dell EMC Reviewer Demographics



Read all Peer Insights user reviews for Dell EMC.

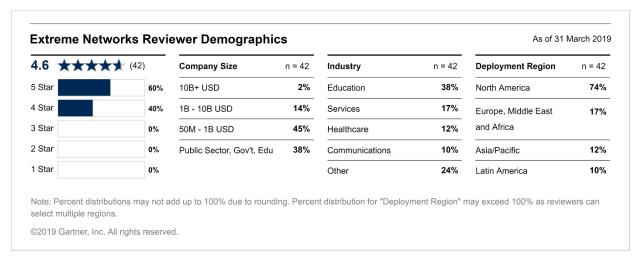
Figure 12. Gartner Peer Insights "Voice of the Customer" Data Center Networking D-Link Reviewer Demographics



Source: Gartner (May 2019)

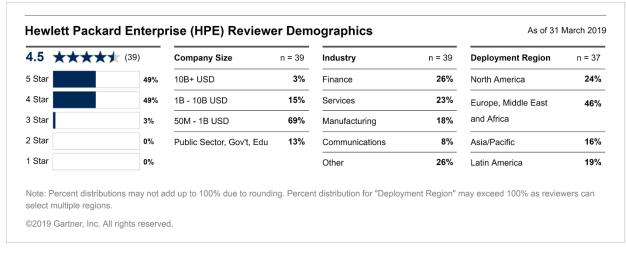
Read all Peer Insights user reviews for D-Link.

Figure 13. Gartner Peer Insights "Voice of the Customer" Data Center Networking Extreme Networks Reviewer Demographics



Read all Peer Insights user reviews for Extreme Networks.

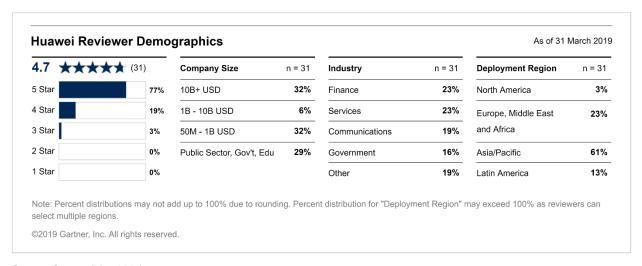
Figure 14. Gartner Peer Insights "Voice of the Customer" Data Center Networking Hewlett Packard Enterprise (HPE) Reviewer Demographics



Source: Gartner (May 2019)

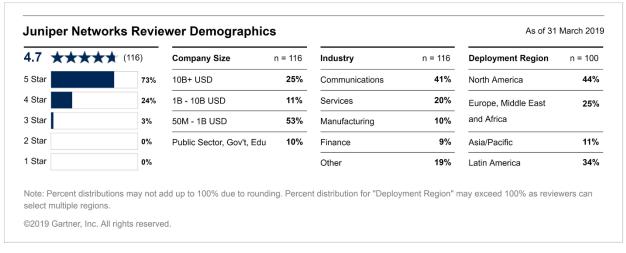
Read all Peer Insights user reviews for Hewlett Packard Enterprise (HPE).

Figure 15. Gartner Peer Insights "Voice of the Customer" Data Center Networking Huawei Reviewer Demographics



Read all Peer Insights user reviews for Huawei.

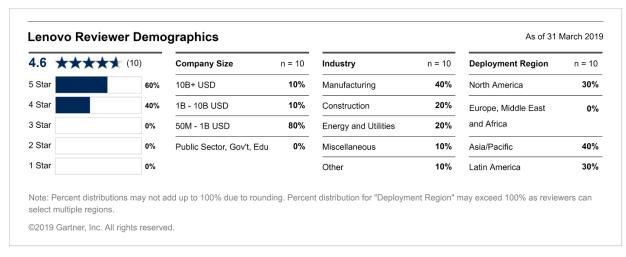
Figure 16. Gartner Peer Insights "Voice of the Customer" Data Center Networking Juniper Networks Reviewer Demographics



Source: Gartner (May 2019)

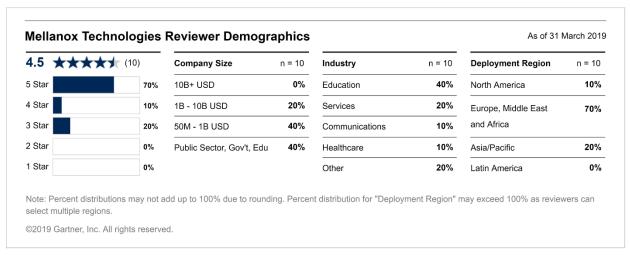
Read all Peer Insights user reviews for Juniper Networks.

Figure 17. Gartner Peer Insights "Voice of the Customer" Data Center Networking Lenovo Reviewer Demographics



Read all Peer Insights user reviews for Lenovo.

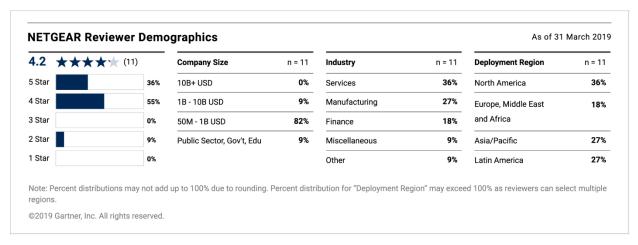
Figure 18. Gartner Peer Insights "Voice of the Customer" Data Center Networking Mellanox Technologies Reviewer Demographics



Source: Gartner (May 2019)

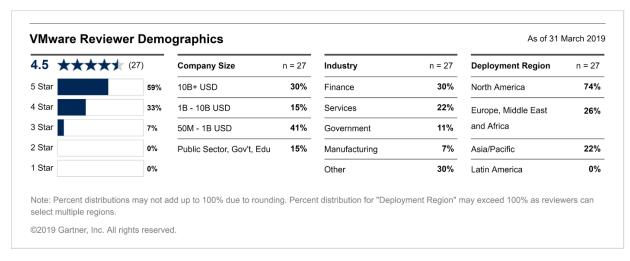
Read all Peer Insights user reviews for Mellanox Technologies.

Figure 19. Gartner Peer Insights "Voice of the Customer" Data Center Networking NETGEAR Reviewer Demographics



Read all Peer Insights user reviews for NETGEAR.

Figure 20. Gartner Peer Insights "Voice of the Customer" Data Center Networking VMware Reviewer Demographics



Source: Gartner (May 2019)

Read all Peer Insights user reviews for VMware.

Gartner Recommended Reading

Some documents may not be available as part of your current Gartner subscription.

"Magic Quadrant for Data Center Networking"

Methodology

The vendors included in the Gartner Peer Insights Customers' Choice distinctions for data center networking were announced on 16 April 2019. Reviews submitted between 1 April 2018 and 31 March 2019 were considered for determining Gartner Peer Insights Customers' Choice distinctions. Gartner is committed to transparency regarding the criteria considered in bestowing this distinction; a full description can be found on the Methodology page. The Gartner "Magic Quadrant for Data Center Networking" referenced in this report was published on 11 July 2018.

Overall customer rating is the response to the survey question: "Please rate your overall experience with this vendor." Other ratings displayed are responses to:

- "Overall rating of product capabilities"
- "Overall rating of evaluation and contract negotiation with the vendor"
- "Overall rating of integration and deployment"
- "Overall rating of service and support"

Ratings were taken on a scale of 1 to 5, where 1 is "completely dissatisfied" and 5 is "completely satisfied." The average ratings within the review may represent multiple versions of a product offering. Reviews for beta products are included in the analysis of this document. Reviews for legacy products (no longer being sold by the vendor) were not included in the analysis in this document.

The 95% confidence range in Figure 3 is calculated using a statistical technique known as bootstrapping. A bootstrap sample is taken from the vendor's ratings by resampling the same number of ratings with replacement. The process is repeated 50,000 times, and a mean is calculated from each bootstrap sample. The low and high ratings shown in the confidence range are the 2.5 to 97.5 percentile values of the histogram of these bootstrapped means. Assuming the data points collected are representative of the true underlying distribution, this represents the 95% confidence interval.

"Willingness to recommend" is calculated based on the responses to the question "Would you recommend this product to others?" The options include "yes," "yes, with reservations," "I don't know" and "no." The percentage is calculated as number of "yes" responses divided by total responses for the question. The "other vendors considered" section is based on reviewer responses for the question: "What other vendors did you consider?" The reviewer may select multiple vendors for consideration. The percentage is calculated according to the total number of reviewers who select an alternative vendor divided by the total responses to the question.

This research note is restricted to the personal use of ktobbe@livgov.com.

GARTNER HEADQUARTERS

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Regional Headquarters AUSTRALIA BRAZIL JAPAN UNITED KINGDOM

For a complete list of worldwide locations, visit http://www.gartner.com/technology/about.jsp

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RESOLUTION NO: 2020-06-150

LIVINGSTON COUNTY DATE: June 8, 2020

Resolution Authorizing the Purchase of an Enterprise Network-Server-Application Monitoring System to Monitor and Analyze the County's Environment in Real Time - Information Technology

- WHEREAS, the Livingston County Information Technology Systems are a mission critical support and infrastructure for our County departments and ultimately, our public. It is recommended that Livingston County purchase and utilize the Solarwinds Information Technology management suite; and
- WHEREAS, this technology platform will allow the County Information Technology department to monitor and analyze our technology with real time "War Room" visibility of forecasting and prediction of events both proactively and negatively. This platform allows for fast enterprise level analysis of problems and troubleshooting under a single platform or "single pane of glass; and
- **WHEREAS,** until now, Livingston County Information Technology has not had the tool set necessary to proactively monitor the County technologies on an enterprise level. This has created blind spots in the it environment, caused significant extra hours of labor, developed a poor rapport with other departments, as well as longer diagnostic times, and a reactive stance to IT; and
- **WHEREAS,** Information Technology needs to be operating on a professional enterprise level to support our network and applications 24x7. We need to move from a reactive approach to a proactive approach to IT. This can be achieved by implementing an enterprise network, server, application, log aggregation, inventory, and ticketing solution; and
- WHEREAS, in compliance with the Procurement policy, it is recommended that the County utilize the Oakland County G2G Marketplace to purchase the Solarwinds IT toolset from our proven technology and reselling partner: Access-Interactive in an amount not to exceed \$68,254. By utilizing the contract vehicle and taking advantage of special pricing, we have successfully achieved a special discount on the tool suite of 40% below the standard corporate pricing.
- WHEREAS, 911 Central Dispatch has agreed to a 24.8 % cost share in this solution as it supports the Public Safety infrastructure. Funding is available through the fiscal year 2020 budgets, however, a restricted object net-zero budget transfer is required in the Information Technology fund.
- **THEREFORE BE IT RESOLVED** that the Livingston County Board of Commissioners hereby approves and authorizes a purchase order to be issued to Access-Interactive for the purchase and of the Solarwinds Technology Suite at an amount not to exceed \$68,254.
- **BE IT FURTHER RESOLVED** that Livingston County Board of Commissioners authorizes a net-zero budget transfer from contracted services to capital hardware/software to effectuate the above.

RESOLUTION NO: 2020-06-150

PAGE: 2

BE IT FURTHER RESOLVED that the Chairman of the Livingston County Board of Commissioners is authorized to sign all forms, assurances, contracts/agreements, renewals and future amendments for monetary and contract language adjustments related to the above upon review and/or preparation of Civil Counsel.

#

MOVED: SECONDED: CARRIED:

Livingston County Information Technology Department

Memo

To: Livingston County Board of Commissioners, Livingston County Administrator Cindy

Catanach

From: Kristoffer Tobbe

Livingston County Chief Information Officer

Date: May 22, 2020

Re: Livingston County Enterprise Information Technology Monitoring Project

Enterprise IT Network-Server-Application Monitoring System

The Livingston County Information Technology Systems are a mission critical support and infrastructure for our County departments and ultimately, our public. Our systems and technology systems facilitate and enhance communications for emergency services, support public health, and improve safety for Livingston County and its citizens.

Until now, Livingston County Information Technology has not had the tool set necessary to proactively monitor the County technologies on an enterprise level. This has created blind spots in the it environment, caused significant extra hours of labor, developed a poor rapport with other departments, as well as longer diagnostic times, and a reactive stance to IT.

Information Technology needs to be operating on a professional enterprise level to support our network and applications 24x7. We need to move from a reactive approach to a proactive approach to IT. This can be achieved by implementing an enterprise network, server, application, log aggregation, inventory, and ticketing solution.

Recommendation:

It is recommended that Livingston County purchase and utilize the Solarwinds Information Technology management suite. This technology platform will allow the County Information Technology department to monitor and analyze our technology with real time "War Room" visibility of forecasting and prediction of events both proactively and negatively. This platform allows for fast enterprise level analysis of problems and troubleshooting under a single platform or "single pane of glass."

To meet the needs of Livingston County, we recommend deployment of the following modules within the Orion Platform:

- **Network Performance Monitor (NPM)** Network monitoring software with end-to-end visibility to help pinpoint performance issues.
- NetFlow Traffic Analyzer (NTA) Network traffic analyzer and bandwidth monitoring software.
- Network Configuration Manager (NCM) Automated network configuration and change management software.
- **Server and Application Monitor (SAM)** Software that resolves troubleshooting and solving performance issues in applications and the infrastructure that supports them.
- Log Analyzer (LA) Easily investigate machine data to help identify the root cause of IT issues faster.
- Virtualization Manager (VMAN) SolarWinds® Virtualization Manager (VMAN) is a powerful
 virtual machine (VM) monitoring tool built to consolidate a variety of useful observations into one
 interface. VMAN can provide you with a comprehensive understanding of your virtualization
 environment with vendor-agnostic hypervisor visibility, whether on-premises, hyperconverged,
 hybrid, or in the cloud.
- **Web Help Desk** Web Help Desk® centralizes and automates <u>ticketing management</u> tasks so you can better support your customers. Keep track of tasks, including ticket assignment, routing, and escalation. Link incident tickets to a single problem for better organization, associate problem tickets with IT assets, and track the history of asset service requests.

The Information Technology Department has downloaded a demonstration version of the Solarwinds Technology Suite that has already shown great value and identified areas of concern that needed to be addressed. This demo version alerted us of a problem another department had that they did not even know they were having. This type of IT intelligence and analytics is needed to support the county departments at an enterprise IT level 24x7.

Financial:

There is no change to the Livingston County Budget Bottom Line for this project. Funds from within the IT budget are being reallocated in addition a departmental cost share of 24.8% has been agreed upon with the Livingston County 911 Department to monitor equipment used for public safety.

It is recommended that the County utilize the G2G contract from Oakland County to purchase the Solarwinds IT toolset from our proven technology and reselling partner: Access-Interactive. By utilizing the contract vehicle and taking advantage of special pricing, we have successfully

achieved a special discount on the tool suite of 40% below the standard corporate pricing. (See table below.) Special terms have also been achieved by cooperation with Solarwinds and our reselling partner, Access-Interactive.

This purchase would be made in accordance with the County's procurement policy from Resolution #2018-11-189, which was approved by the Livingston County Board on November 19, 2018.

From Section 1: Source Selection & Contract Formation, Sub-Section H: Cooperative Purchasing/Procurement Programs. "Notwithstanding any other provision of this policy, the County may make or authorize the purchase of supplies, equipment or services available through cooperative purchasing/procurement programs and other associations. The decision to purchase from these programs shall be made by the Board of Commissioner's after consultation with the department and considering among other issues: delivery, packaging, minimum order requirements, follow-up service if applicable, product/equipment quality. Bidding requirements shall be waived if it is determined to be in the best interest of the County based on written communication to support the County's findings. The County Administrator is authorized to enter into necessary agreements or contracts on behalf of the County. State of Michigan Extended Purchasing Program (such as MiDeal or other like programs) can be used instead of the normal bidding process."

Additional information:

Partner Information:

Access Interactive Company Overview

Access Interactive provides technology solutions, services and support to business, educational and government organizations since 1985. Our business focus is helping our Clients make the most of technology investments. Over the last 30+ years Access has experienced significant growth to establish itself as a \$35 million organization proudly retaining over 65 full-time employees. We pride ourselves on being large enough to be extremely competitive and small enough to pay personal attention to our customers. We have an unwavering commitment to providing the best solutions, service and support to our customers.

Our highly-skilled technical services group includes over 40 full-time technicians including VMware, Microsoft, Cisco and Dell certified system engineers. Our technicians are available to you for projects ranging from on-site break/fix services to full-scale WAN/LAN integration, remote access, IP telephony and more.

Access Interactive sales consultants are technically astute and have an average over 20 years of industry experience. They are ready to apply their knowledge and technical expertise to recommending the best products and solutions and to providing efficient project management.

It is our focused mission to implement the best products, service and support in the industry to our clients.

Access Interactive has been doing business with Livingston County since the beginning of 2017.

Access Interactive has had the pleasure of working with state and local government customers, school districts, universities and colleges, and corporations for over 25 years. Recent experience includes the successful design and implementation of technology projects at:

- Oakland County, MI
- Eaton County, MI
- Ottawa County, MI
- Genesee County, MI
- Grand Traverse County, MI
- Monroe County, MI
- City of Battle Creek, MI
- City of Farmington Hills, MI
- City of Sterling Heights, MI

- City of Novi, MI
- Charter Township of Canton, MI
- Macomb County Community Mental Health, MI
- Schoolcraft College, Livonia, MI
- Michigan State University, MI
- Oakland Community College, MI
- Clinton Township, MI
- Genesee County Health Systems

Access Interactive has become a thriving member of Michigan's education and government communities because we are focused on delivering a quality and customized customer experience. We are very grateful for the trust that our customers have place on us and in return we foster and maintain work that is worthy of a trusted advisory.

About Solarwinds:

SolarWinds Technical Strategy and Innovative Approach

Since our founding in 1999, SolarWinds' mission has been to provide purpose-built products that are designed to make jobs easier for IT professionals, MSPs, and DevOps pros. The SolarWinds' solution can address the needs of Livingston County as it has proven to do countless times before by meeting and exceeding technical and testing requirements in every branch of state and local government.

The foundation of SolarWinds' software is the Orion Platform (Figure 1), which has evolved into a powerful architecture that allows customers to easily integrate multiple SolarWinds products together (by simply installing them together – "Plug & Play"). The platform offers a primary web server, polling engine and common services such as alerts, and reports. Our monitoring solutions correlate metrics over time and additional products provide increased visibility when needed.

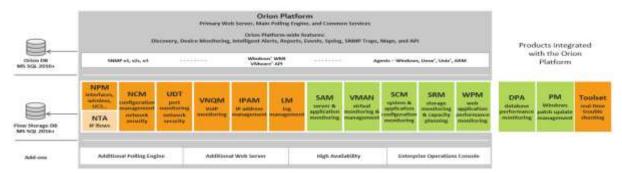


Figure 1 - SWI Orion Platform & Product Suite

SolarWinds Orion Platform includes Role Based Access Control (RBAC). Additionally, SolarWinds Orion platform provides account limitation per account or group. SolarWinds Orion integrates with Active Directory and supports 2 factor authentications using a username/password and CAC or PIV card. The Orion platform also supports multi-factor authentication using SAML 2.0 with built-in support for ADFS and Octa. You can enable, define, and control group and user account privileges for both administrators and guest users.

SolarWinds Orion Platform and product portfolio provides the ability to automatically scan networks for resources and present what is found. Resources are discovered either via ICMP requests, SNMP gets, or Windows Management Instrumentation (WMI).

Device monitoring using SNMP provides a device centric view of networking conditions. Using SNMP, counters on a device such as a router, a switch, or a security device can be measured

and forwarded to the SolarWinds Management Console. This data is useful for understanding performance conditions that are specific to the device. Performance statistics such as CPU utilization, interface/bandwidth utilization, and memory utilization represent most of performance issues encountered in the day-to-day operation of a network.

With the ability to modify built-in default alerts, or set precise custom alerts according to your needs, including email, SMS or by integrating with your ITSM solution. For large networks, you can leverage intelligent alerting to help avoid an influx of unnecessary notifications. You can also create notifications that are dependency- and topology-aware so you only receive alerts that are truly critical. Our products use metrics or thresholds to create alerts, an information display, and reports to help administrators quickly identify whether a device is a source of the problem or if the problem is in the communication transport, device, system, or with the application.

The SolarWinds solution provides unified IT monitoring and end-to-end visibility across your infrastructure. The platform visualizes and correlates cross-stack network and system data to pinpoint exact latency based on standard or pre-defined baselines and metrics that allow you to assess and analyze, accelerate troubleshooting with automatic discovery, and mapped dependencies with cross-stack IT correlation to identify and resolve problems. SolarWinds products can be used to create a baseline of your network and system performance so you know the normal working conditions of your network infrastructure. This baseline can then be used for comparisons and to monitor changes that could indicate a problem or provide early indicators that application and network demands are pushing near available capacity.

SolarWinds products are vendor agnostic, allowing users to manage a network infrastructure consisting of practically any IT product on the market (e.g., Cisco, Juniper, Palo Alto, etc.). Our solutions allow customers to effectively respond to dynamic IT changes in the market, as well as adapt to new innovations. As government networks evolve, SolarWinds can discover and map elements, keep track of all the relationships along the network and application stack and improve troubleshooting.

Our products are designed to deliver full-spectrum hybrid IT management. We manage all things IT, wherever IT is located, and from wherever IT needs to be managed. Whether your infrastructure and applications are deployed on-premises, in a public or private cloud, or some combination, we collect metrics, monitor performance, and support troubleshooting. SolarWinds Orion Platform and Core IT network and systems products can be deployed on-premise or on AWS or Azure. It's modular and it can scale across your entire hybrid IT enterprise.

You can monitor the health, capacity and performance across your hybrid IT environment including IaaS, PaaS, and SaaS cloud services. Whether your infrastructure and applications are deployed on-premises, in a public or private cloud, or some combination, our platform modules can collect metrics, monitor performance, support troubleshooting and faster resolution.

The SolarWinds Information Service (SWIS) was created to provide a standard, long lasting way to access almost any data collected by Orion Platform products. The API is used by the various platform products to access data rather than going directly to the database. SWIS provides both northbound and southbound services so it can be used for a broad range of scenarios.

SolarWinds Technical Maturity within State, Local, and Education

SolarWinds' comprehensive products and services are used by more than 275,000 customers in more than 190 countries worldwide, including SLED, DoD and civilian agencies, and Fortune 500 companies. According to the IDC Worldwide Semi-Annual Software Tracker 1H 2018 release, SolarWinds® maintained its number-one position in the global market for network management software during the first half of 2018.

Solarwinds Enterprise IT Monitoring System	Livingston County CIP Budgeted Amount	Standard Pricing	Standard Contract Pricing	Contract Savings off of Standard pricing %	Discount price Negotiated	Negotiated Savings off of Standard Contract Pricing	Reoccurring Annual Costs	Finance Option A
Server & Application Monitor	\$0.00	\$36,995.00	\$ 27,746.25	25%	\$23,020.00	38%	\$7,769.00	
Network Performance Monitor	\$0.00	\$20,389.00	\$ 15,291.75	25%	\$12,687.00	38%	\$4,021.00	
NetFlow Traffic Analyzer Module	\$0.00	\$12,149.00	\$ 9,111.75	25%	\$7,560.00	38%	\$2,562.00	
Network Configuration Manager	\$0.00	\$6,072.00	\$ 4,554.00	25%	\$3,779.00	38%	\$1,321.00	
Log Analyzer	\$0.00	\$13,125.00	\$ 9,843.75	25%	\$8,167.00	38%	\$3,281.00	
Web Help Desk	\$0.00	\$10,350.00	\$ 7,762.50	25%	\$5,160.00	50%	\$1,452.00	
Virtualization Manager	\$0.00	\$12,664.00	\$ 9,498.00	25%	\$7,881.00	38%	\$2,589.00	
Totals	\$0.00	\$111,744.00	\$83,808.00	\$27,936.00	\$68,254.00	\$43,490.00	\$22,995.00	
Totals	φυ.υυ	4111,744.00	900,000.00	Q27,700.00	400,204.00	\$40,470.00	Q22,770.00	
				Savings over Standard Pricing	\$43,490.00	39%	Funds are being found within the IT Department & Cost share with 911 Budget	
This is an unbudgeted project.				Savings beyond Government al Contract Pricing	\$15,554.00	19%	Lower than Contract Pricing	
				Livingston County Department Cost Share Partners				
				Liv Co 911 (24.8%)	\$16,926.99			
				Liv Co IT (75.2%)	\$51,327.01			
				Total Cost	\$68,254.00			



SolarWinds Project Version 5 Special Discount

Prepared by:



Jeremy Friedman Jerry Rioux Daniel Heidt

May 26, 2020





SolarWinds Software

Server & Application Monitor SAM200 (up to 200 nodes) - License with 1st-Year Maintenance

\$ 23,020.00

SolarWinds Network Performance Monitor SL2000 (up to 2000 elements) - License with 1st-year Maintenance \$12,687.00

SolarWinds NetFlow Traffic Analyzer Module for SolarWinds Network Performance Monitor SL2000 - License with 1st-year Maintenance

\$7,560.00

SolarWinds Network Configuration Manager DL200 (up to 200 nodes) - License with 1st year Maintenance \$ 3,779.00

Log Analyzer LA250 up to 250 nodes-License with 1st-Year Maintenance

\$ 8,167.00

SolarWinds Web Help Desk Per Technician License (11 to 20 named users) - License with 1st-Year Maintenance

Qty. 12 @ \$ 430.00 each \$ 5,160.00

SolarWinds Virtualization Manager VM32 (up to 32 sockets) - License with 1st-Year Maintenance

\$ 7,881.00



PROFESSIONAL SERVICES:

Scope assumes someone from Livingston assists with the project. The following is an estimate based on similar projects.

- Project plan and scheduling
- Equipment prep/software firmware updates
- Physical deployment of equipment
- Equipment integration
- Knowledge transfer and optimization
- Project management

TOTAL: XX hours

Senior LAN Technician @ \$145.00 per hour \$ 0.00

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EQUIPMENT: \$ 68,254.00
MI SALES TAX: \$ EXEMPT
SUBTOTAL: \$ 68,254.00
SERVICES: \$ TBD
SHIPPING: \$ NA

TOTAL: \$68,254.00

Quote Valid for 30-Days. Prices Subject to Change with Notice Depending on Current Market Conditions. Shipping charges not included. Terms: 50% Upon Acceptance, 25% Upon Delivery, Remainder Net 30. 25% Restocking Fee Applied to Project Costs for Returned Merchandise.

Authorized Signature:	_Date:
Printed Name:	_Purchase Order No:

Access Interactive Corporation Phone: 248-567-3000 Fax: 248-567-3050 www.access-interactive.com

Gartner Peer Insights 'Voice of the Customer': IT Service Management Tools

Published: 9 December 2019 **ID:** G00450564

Analyst(s): Peer Contributors

Gartner Peer Insights is a free peer review and ratings platform designed for enterprise software and services decision makers. Reviews go through a strict validation and moderation process in an effort to ensure they are authentic.

Overview

What Are IT Service Management Tools?

IT service management (ITSM) tools enable IT operations organizations, specifically infrastructure and operations (I&O) managers, to support the production environment better. ITSM tools facilitate the tasks and workflows associated with the management and delivery of quality IT services. These are most heavily used by IT service desks and IT service delivery functions. Some non-I&O departments (such as HR or facilities) adapt generic ticket handling and workflow capabilities for their own use. Previously, Gartner called ITSM tools by the name IT service and support management (ITSSM) tools.

What Is Gartner Peer Insights "Voice of the Customer"?

Since October 2015, more than 300,000 reviews across more than 330 markets have been posted to Gartner Peer Insights. The "Voice of the Customer" is a document that synthesizes Gartner Peer Insights' reviews for the previous year into insights for IT decision makers. This peer perspective, along with the individual detailed reviews, is complementary to expert research and can play a key role in your buying process, as it focuses on direct peer experiences of implementing and operating a solution. Only vendors with 10 or more eligible published reviews during the specified one-year submission period are included in this document.

In the ITSM tool market, Gartner Peer Insights has published 4,079 reviews and ratings in the 12-month period ending 31 October 2019. Figure 1 shows all eligible vendors based on their overall rating, review volume and diversity in industry, company size and deployment region.

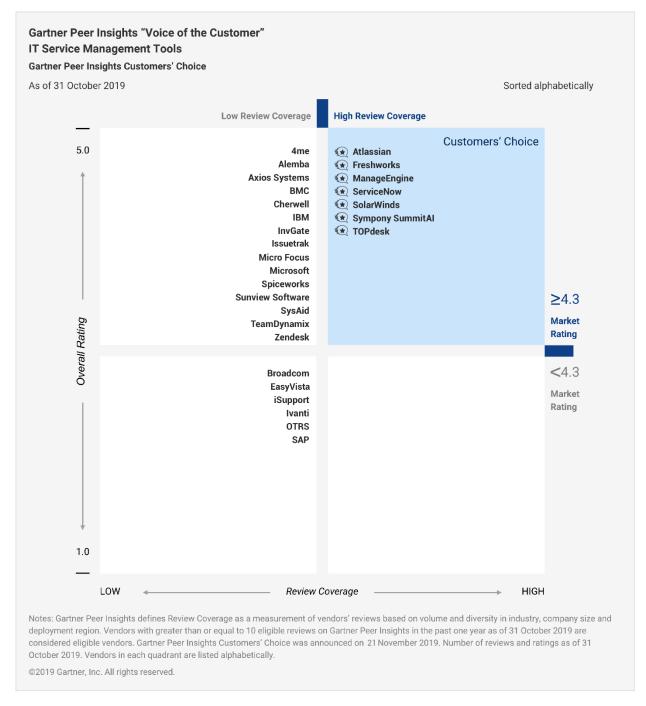
This research note is restricted to the personal use of ktobbe@livgov.com.

What Is the Gartner Peer Insights Customers' Choice?

In markets where there is enough data, Gartner Peer Insights recognizes the vendors that are the most highly rated by their customers through the Customers' Choice distinction. To qualify for the Customers' Choice distinction, vendors must have a product that is aligned to the market, have their overall rating (out of 5 stars) equal or higher than the mean rating for that market, and receive 50 or more eligible published customer reviews during the one-year submission period. In addition, customer reviews must be representative of a broad mix of enterprise clients from different industries, company sizes and deployment regions. Reviews from end-user companies with less than \$50M in revenue will be excluded from this methodology. See the full methodology here.

Based on the Gartner Peer Insights Customers' Choice criteria, Figure 1 shows a list (in alphabetical order) of vendors in different segments based on their overall score relative to the market rating and their Review Coverage (see the Methodology section for details). Customers' Choice vendors appear in the blue box on the upper right, denoted with a Customers' Choice badge. A maximum of 7 vendors can qualify.

Figure 1. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools Customers' Choice



Use Customer Reviews and Expert Research to Supplement Your Analysis

Along with the historical peer-based perspective represented in this document, Gartner covers the ITSM tool market with expert-led research, primarily through the related Magic Quadrant and associated Critical Capabilities research documents.

Magic Quadrants are forward-looking, to help clients identify vendors likely to keep up with or even stay ahead of the overall market. Our analysts look broadly at customer feedback across markets, as well as a company's forward-looking strategy, roadmap and capabilities. Peer reviews are driven solely by the specific experiences relative to the unique needs of reviewers' organizations. Hence, there may be a difference in analyst opinions about vendors, products and services versus user sentiment as expressed in peer reviews. For more information on how markets and vendors are evaluated in Magic Quadrants, please see "How Markets and Vendors Are Evaluated in Gartner Magic Quadrants."

A vendor's placement in the top-right corner (the Leaders quadrant) in a Magic Quadrant report does not mean that the vendor is the best choice for an organization. Rather, it simply means that a vendor executes well in its overall market presence and has a good strategy for continuing to do so. Often, vendors from other quadrants may be a better fit. They may offer better products (to investigate products further, refer to the associated Critical Capabilities reports that accompany the respective Magic Quadrant), better address requirements from particular verticals and/or be more affordable. Ultimately, making the right choice depends on how the vendor aligns with your business goals. For related research in this market, see "Magic Quadrant for IT Service Management Tools."

Not all vendors within a market are included in Gartner expert-generated research. A Magic Quadrant is not intended to be an exhaustive analysis of every vendor in a market, but rather a focused analysis. The criteria for inclusion may consist of market share, number of clients, installed base, types of products/services, target market or other defining characteristics. These criteria help narrow the scope of the research to those vendors that Gartner considers to be the most important — or best-suited — to the evolving needs of Gartner's clients as buyers in the market. While Peer Insights markets are based on Magic Quadrant market definitions, the standards for entry are broader, thus offering a more expansive view of a given market. Vendor inclusion and placement within the Peer Insights Voice of the Customer and Magic Quadrant is based on their specific Methodology.

Critical Capabilities documents provide insight into how well a product or service fulfills certain functional capabilities within specific use cases. Critical Capabilities reports are a point-in-time analysis to address the question of which vendor will have the best product given your weighting of which capabilities are most important to your organization. For more information on how products and services are evaluated in Critical Capabilities, please see "How Products and Services Are Evaluated in Gartner Critical Capabilities." For related research in this market, see Gartner's "Critical Capabilities for IT Service Management Tools."

Figure 2 shows the vendors' position in the Magic Quadrant as of 29 August 2019, and Customers' Choice distinctions as of 21 November 2019. The list includes all vendors mentioned in the Magic

Quadrant along with additional Customers' Choice vendors listed on Peer Insights, sorted alphabetically.

Figure 2. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools Magic Quadrant and Peer Insights Customers' Choice View

Gartner Magic Quadrant and Gartne As of 31 October 2019	Sorted alphabetically	
Eligible Vendors	Gartner Magic Quadrant Position	Gartner Peer Insights
Atlassian		customers' choice 2019
Axios Systems	→ Niche Players	
вмс	⊢ Leaders	
Broadcom	Niche Players	
Cherwell	• Challengers	
EasyVista	Niche Players	
Freshworks	Niche Players	customers' choice 2019
ІВМ	Niche Players	
Ivanti	• Challengers	
ManageEngine		customers' choice 2019
Micro Focus	Niche Players	
ServiceNow	⊢ Leaders	customers' choice 2019
SolarWinds		customers' choice 2019
Symphony SummitAI		customers' choice 2019
TOPdesk		customers' choice 2019
	adrant for IT Service Management Tools was published	rs in Gartner Peer Insights that have the Gartner Customers on 29 August 2019. Customers' Choice announced on 21

Source: Gartner (December 2019)

Gartner Peer Insights "Voice of the Customer"

ITSM Tools Peer Reviews and Ratings

In addition to the synthesis provided by the Customers' Choice, the individual reviews and ratings within Gartner Peer Insights can be a valuable source of lessons learned for those currently in the buying cycle for the ITSM tool market, particularly if you can find and read reviews from end users like you (for example, those that share your technology adoption bias, company size, industry or geography).

These reviews give insight into not only how satisfied existing customers are with a vendor's product, but also their experience in negotiating with the vendor, getting support for the product or service, and their overall implementation effort. This information can provide you with a firsthand view on what to expect from a particular vendor.

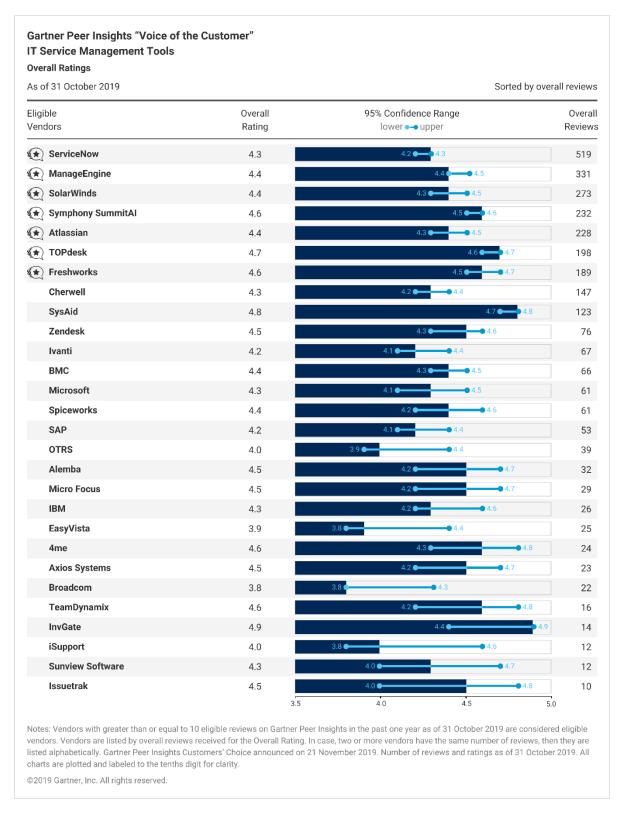
The rest of this document will highlight some of the broad findings in the ITSM tool market based on 12 months of reviews, and will also point you to particular ways to use the site in your buying process.

Figure 3 summarizes the overall ratings (out of 5 stars) for vendors in the ITSM tool market that have received more than 10 eligible reviews in the one-year period ending on 31 October 2019, sorted by number of reviews.

The table is sorted by the number of reviews because ultimately, the more reviews a vendor receives, the more likely it is that you can trust a summary rating. This can be visualized by the 95% confidence interval that has been added as a bar range to the overall ratings in Figure 3. This is best interpreted as: "Given the distribution of reviews received, the vendor's overall rating is 95% likely to be between the lower and upper dots."

While the confidence interval can offer a useful perspective, finding individual reviews from end users like you can be even more valuable. To begin using Gartner Peer Insights this way, please click here to navigate to the overall market page. Find a vendor you are interested in and use the filters on the left to begin narrowing reviews to read. Because access to Gartner Peer Insights is free and open to everyone, this is something that you can delegate to your team as well.

Figure 3. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools Overall Ratings



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Vendor Comparison

In addition to reading individual reviews, you can select multiple vendors to compare within the site. Figure 4 and Figure 5 provide an aggregate view, but it is easy to create a comparison between several vendors on your shortlist and then send it to others in your organization. To begin using the site this way, please click here to go to the overall market page. Find the first vendor you are interested in comparing and press the "compare" button.

Figure 4. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools Vendor Comparison 1 of 2

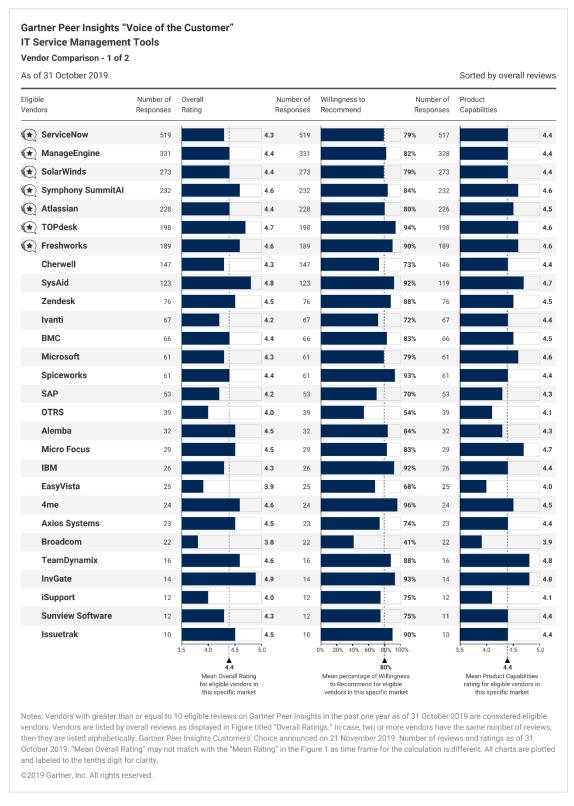
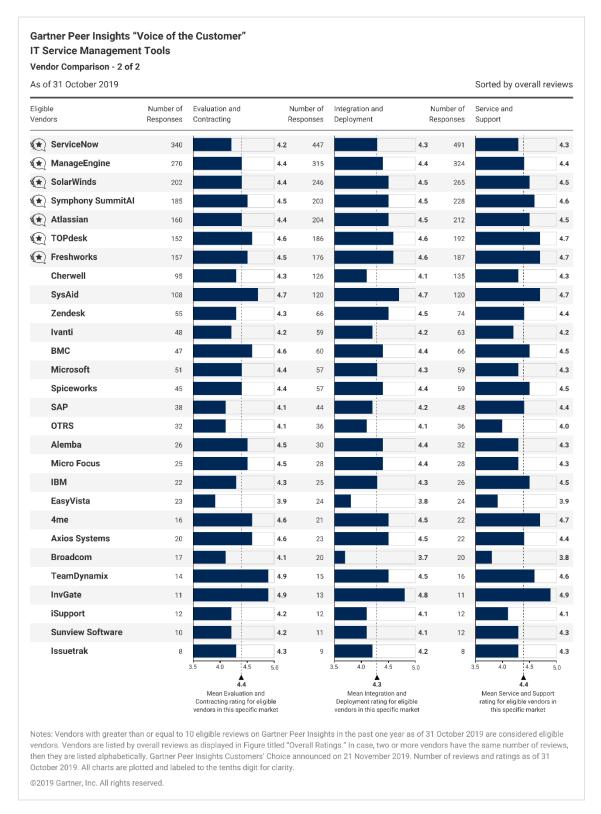


Figure 5. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools Vendor Comparison 2 of 2



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Other Vendors Considered

The Peer Insights survey asks reviewers who were involved in evaluation which other vendors were considered before deciding on the choice they made. Figure 6 summarizes their feedback, enabling you to identify which other vendors were typically on the shortlist alongside a given vendor.

Figure 6 is an aggregate view, but you can customize the view for your particular shortlist and then send to others in your organization. To begin using the site this way, please click here to go to the overall market page. Find the first vendor you are interested in comparing and press the "compare" button. "Alternative vendors considered" is an item in the comparison.

Figure 6. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools Other Vendors Considered

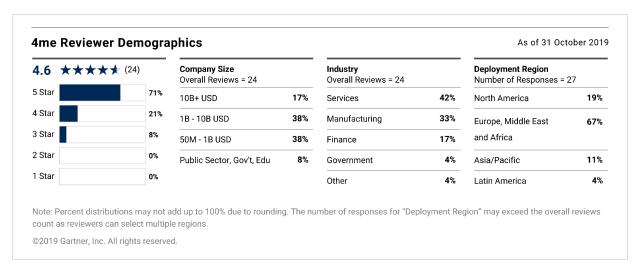
As of 31 October 2019					Sorted by overall review
Eligible Vendors (Number of Responses)	Vendors That Reviewe Considered (top five a				
ServiceNow	IBM	Microsoft	Zendesk	Atlassian	BMC
(341)	(27%)	(24%)	(18%)	(18%)	(16%)
ManageEngine	Zendesk	ServiceNow	Spiceworks	Microsoft	SolarWinds
(273)	(34%)	(34%)	(33%)	(24%)	(22%)
SolarWinds	Zendesk	ServiceNow	Spiceworks	Freshworks	Microsoft
(202)	(40%)	(29%)	(22%)	(17%)	(16%)
Symphony SummitAl (186)	ServiceNow (34%)	IBM (26%)	ManageEngine (13%)	BMC (12%)	SAP (12%)
Atlassian	Zendesk	Microsoft	ServiceNow	IBM	SAP
(160)	(31%)	(28%)	(26%)	(24%)	(16%)
TOPdesk	Zendesk	ServiceNow	Microsoft	IBM	Freshworks
(152)	(24%)	(20%)	(18%)	(9%)	(7%)
Freshworks	Zendesk	ServiceNow	Spiceworks	Atlassian	ManageEngine
(156)	(62%)	(38%)	(31%)	(24%)	(24%)
Cherwell	ServiceNow	BMC	Microsoft	IBM	ManageEngine
(97)	(59%)	(32%)	(21%)	(15%)	(15%)
SysAid	Spiceworks	Zendesk	ServiceNow	ManageEngine	SolarWinds
(108)	(35%)	(33%)	(31%)	(30%)	(24%)
Zendesk	Atlassian	IBM	Microsoft	SAP	NetHelpDesk
(55)	(18%)	(16%)	(16%)	(15%)	(13%)
Ivanti	ServiceNow	Microsoft	Zendesk	SAP	IBM
(49)	(39%)	(24%)	(24%)	(20%)	(18%)
BMC	ServiceNow	Zendesk	IBM	Atlassian	Microsoft
(47)	(51%)	(32%)	(26%)	(17%)	(17%)
Microsoft	IBM	SAP	SolarWinds	Zendesk	Atlassian
(51)	(45%)	(25%)	(16%)	(16%)	(12%)
Spiceworks	Zendesk	ManageEngine	NetHelpDesk	SolarWinds	Atlassian
(45)	(33%)	(27%)	(22%)	(20%)	(18%)
SAP	Microsoft	IBM	Zendesk	Ivanti	Atlassian
(38)	(39%)	(32%)	(18%)	(13%)	(11%)
OTRS (32)	Symphony SummitAl (31%)	IBM (28%)	ServiceNow (22%)	Zendesk (22%)	NetHelpDesk (16%)
Alemba	ServiceNow	Zendesk	Ivanti	TOPdesk	BMC
(26)	(38%)	(31%)	(23%)	(19%)	(15%)
Micro Focus	ServiceNow	BMC	IBM	Atlassian	Microsoft
(25)	(52%)	(52%)	(24%)	(16%)	(16%)
IBM	Microsoft	Zendesk	Agiloft	BMC	Micro Focus
(22)	(36%)	(18%)	(14%)	(14%)	(14%)
EasyVista	Axios Systems	BMC	IBM	Issuetrak	SAP
(23)	(35%)	(26%)	(26%)	(17%)	(17%)
4me	BMC	ServiceNow	Atlassian	Ivanti	TOPdesk
(16)	(50%)	(44%)	(19%)	(19%)	(19%)
Axios Systems	Microsoft	Hornbill	Zendesk	IBM	Ivanti
(20)	(30%)	(25%)	(25%)	(20%)	(20%)
Broadcom	IBM	ServiceNow	BMC	ManageEngine	Microsoft
(18)	(44%)	(39%)	(28%)	(28%)	(22%)
TeamDynamix	ServiceNow	Microsoft	Atlassian	Freshworks	TOPdesk
(14)	(57%)	(36%)	(29%)	(29%)	(21%)
InvGate	Zendesk	ManageEngine	BMC	Microsoft	Spiceworks
(11)	(64%)	(55%)	(27%)	(27%)	(27%)
iSupport	Microsoft	IBM	SAP	Entry Software	HelpSTAR
(12)	(58%)	(33%)	(33%)	(25%)	(25%)
Sunview Software	Zendesk	ServiceNow	SolarWinds	SysAid	Atlassian
(10)	(60%)	(50%)	(40%)	(30%)	(20%)
Issuetrak	ServiceNow	Microsoft	iSupport	ITinvolve	Ivanti
(8)	(38%)	(25%)	(13%)	(13%)	(13%)

Source: Gartner (December 2019)

Peer Insights User Ratings

Figures 7 through 34 summarize each vendor's reviewer demographics for those reviews received in the last year, ending on October 2019, along with the demographics of the reviewers and a direct link to the vendor's ratings on the site. All vendors with more than 10 eligible reviews in the last year are shown, sorted alphabetically.

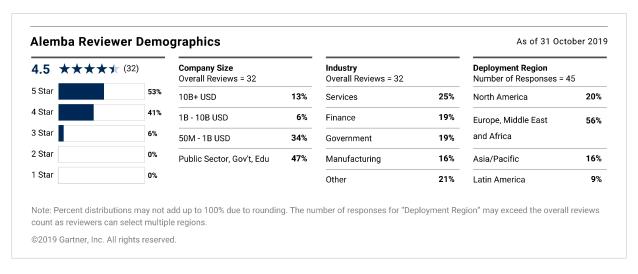
Figure 7. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools 4me Reviewer Demographics



Source: Gartner (December 2019)

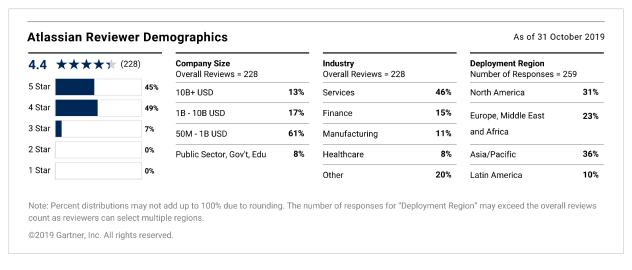
Read all Peer Insights user reviews for 4me.

Figure 8. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools Alemba Reviewer Demographics



Read all Peer Insights user reviews for Alemba.

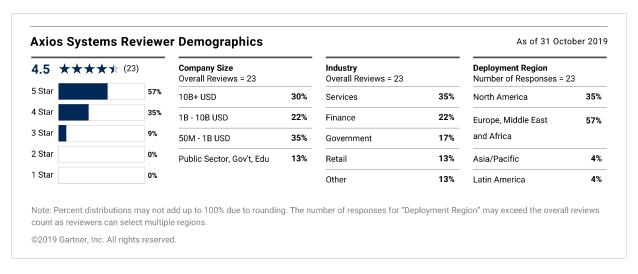
Figure 9. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools Atlassian Reviewer Demographics



Source: Gartner (December 2019)

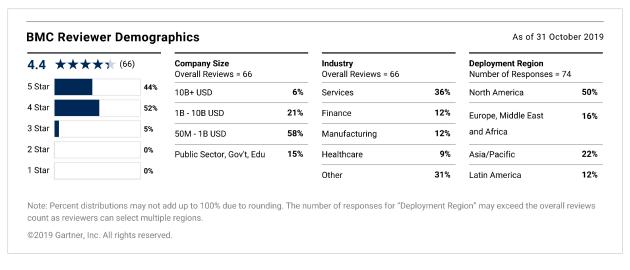
Read all Peer Insights user reviews for Atlassian.

Figure 10. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools Axios Systems Reviewer Demographics



Read all Peer Insights user reviews for Axios Systems.

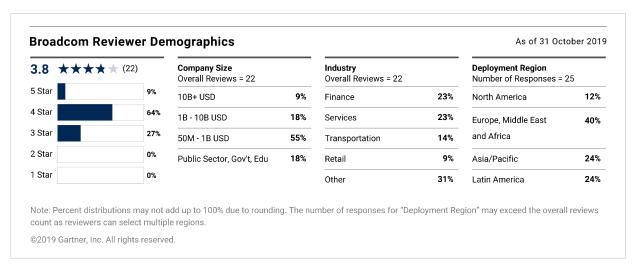
Figure 11. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools BMC Reviewer Demographics



Source: Gartner (December 2019)

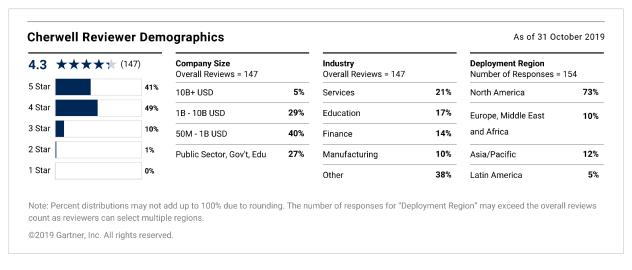
Read all Peer Insights user reviews for BMC.

Figure 12. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools Broadcom Reviewer Demographics



Read all Peer Insights user reviews for Broadcom.

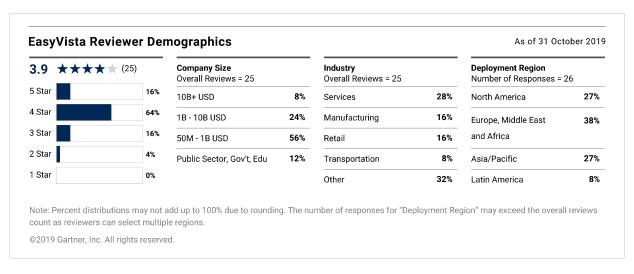
Figure 13. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools Cherwell Reviewer Demographics



Source: Gartner (December 2019)

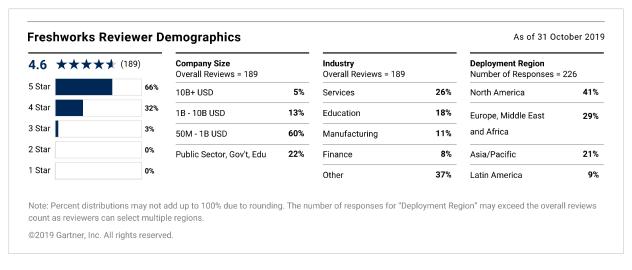
Read all Peer Insights user reviews for Cherwell.

Figure 14. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools EasyVista Reviewer Demographics



Read all Peer Insights user reviews for EasyVista.

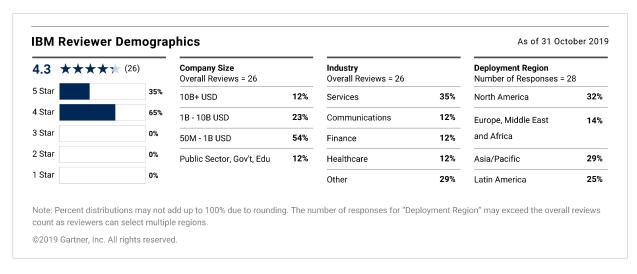
Figure 15. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools Freshworks Reviewer Demographics



Source: Gartner (December 2019)

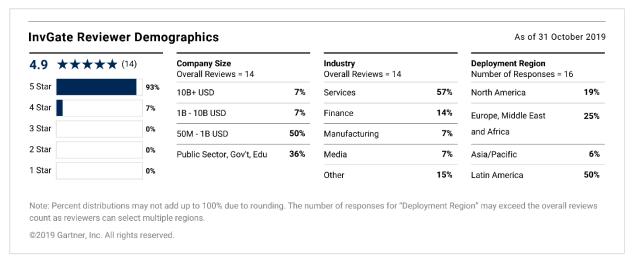
Read all Peer Insights user reviews for Freshworks.

Figure 16. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools IBM Reviewer Demographics



Read all Peer Insights user reviews for IBM.

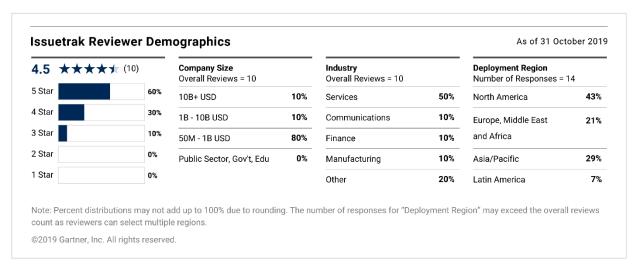
Figure 17. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools InvGate Reviewer Demographics



Source: Gartner (December 2019)

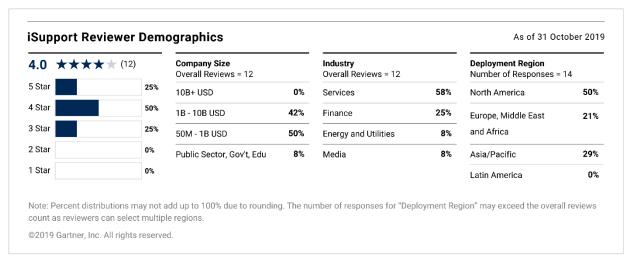
Read all Peer Insights user reviews for InvGate.

Figure 18. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools Issuetrak Reviewer Demographics



Read all Peer Insights user reviews for Issuetrak.

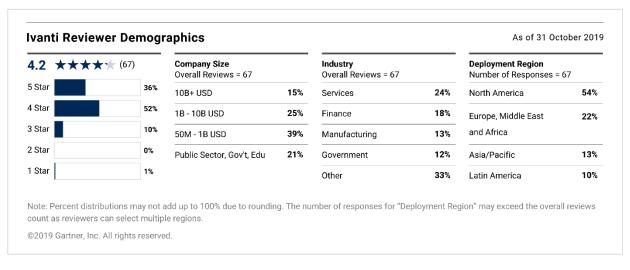
Figure 19. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools iSupport Reviewer Demographics



Source: Gartner (December 2019)

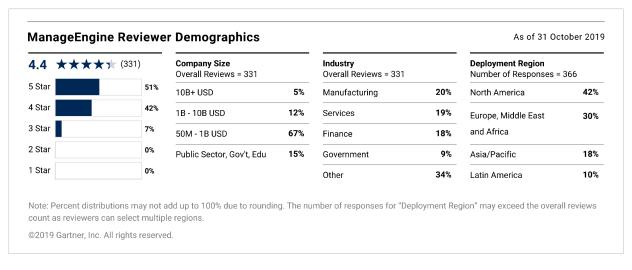
Read all Peer Insights user reviews for iSupport.

Figure 20. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools Ivanti Reviewer Demographics



Read all Peer Insights user reviews for Ivanti.

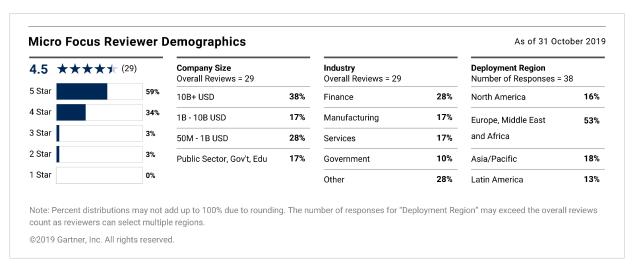
Figure 21. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools ManageEngine Reviewer Demographics



Source: Gartner (December 2019)

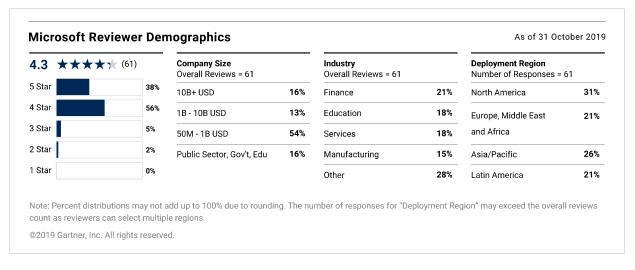
Read all Peer Insights user reviews for ManageEngine.

Figure 22. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools Micro Focus Reviewer Demographics



Read all Peer Insights user reviews for Micro Focus.

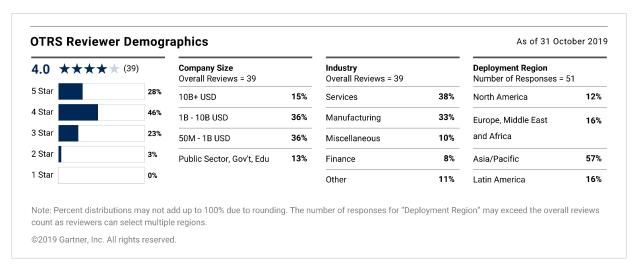
Figure 23. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools Microsoft Reviewer Demographics



Source: Gartner (December 2019)

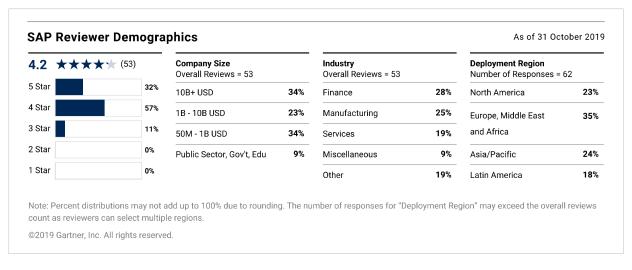
Read all Peer Insights user reviews for Microsoft.

Figure 24. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools OTRS Reviewer Demographics



Read all Peer Insights user reviews for OTRS.

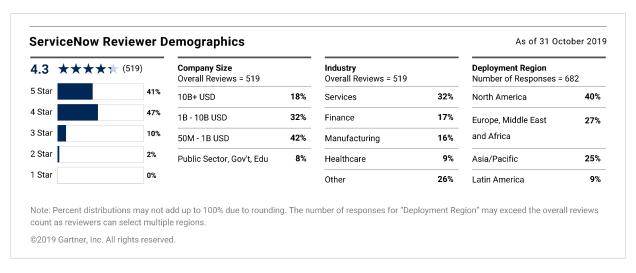
Figure 25. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools SAP Reviewer Demographics



Source: Gartner (December 2019)

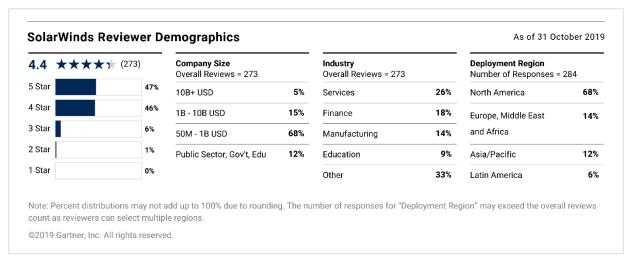
Read all Peer Insights user reviews for SAP.

Figure 26. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools ServiceNow Reviewer Demographics



Read all Peer Insights user reviews for ServiceNow.

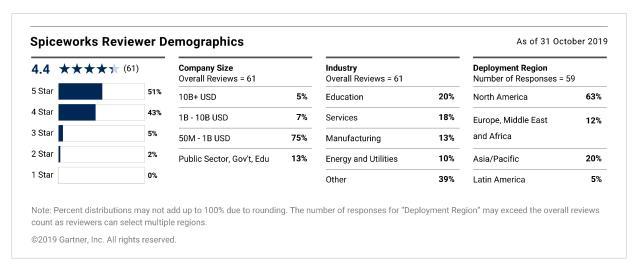
Figure 27. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools SolarWinds Reviewer Demographics



Source: Gartner (December 2019)

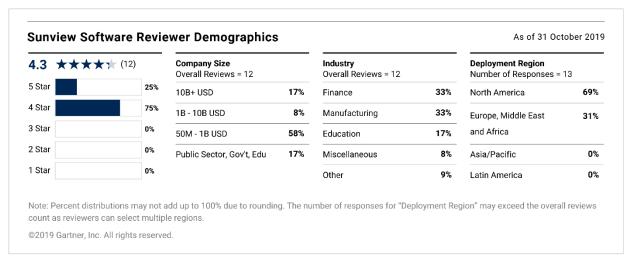
Read all Peer Insights user reviews for SolarWinds.

Figure 28. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools Spiceworks Reviewer Demographics



Read all Peer Insights user reviews for Spiceworks.

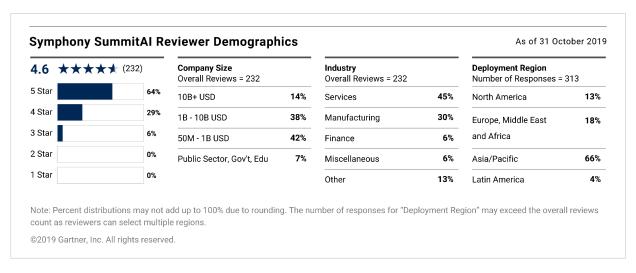
Figure 29. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools Sunview Software Reviewer Demographics



Source: Gartner (December 2019)

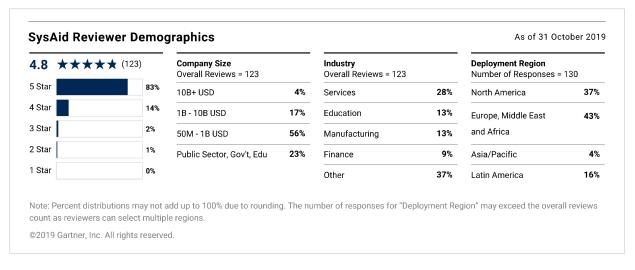
Read all Peer Insights user reviews for Sunview Software.

Figure 30. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools Symphony SummitAl Reviewer Demographics



Read all Peer Insights user reviews for Symphony SummitAl.

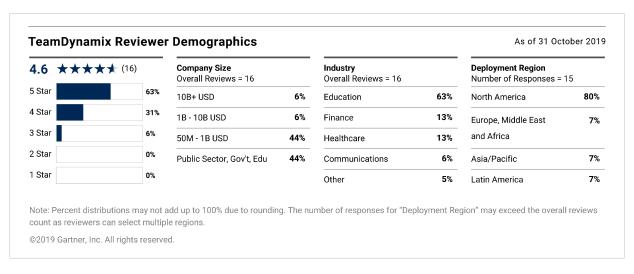
Figure 31. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools SysAid Reviewer Demographics



Source: Gartner (December 2019)

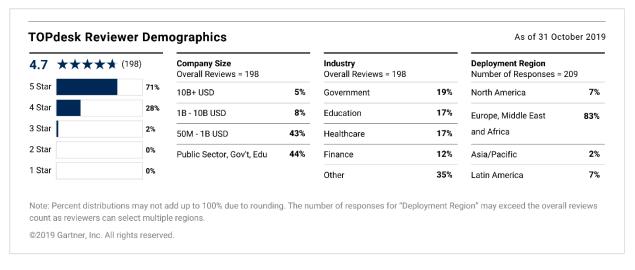
Read all Peer Insights user reviews for SysAid.

Figure 32. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools TeamDynamix Reviewer Demographics



Read all Peer Insights user reviews for TeamDynamix.

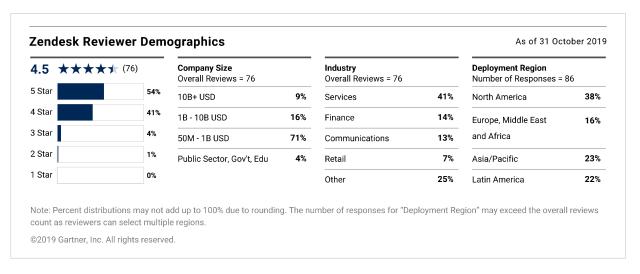
Figure 33. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools TOPdesk Reviewer Demographics



Source: Gartner (December 2019)

Read all Peer Insights user reviews for TOPdesk.

Figure 34. Gartner Peer Insights "Voice of the Customer" IT Service Management Tools Zendesk Reviewer Demographics



Read all Peer Insights user reviews for Zendesk.

Gartner Recommended Reading

Some documents may not be available as part of your current Gartner subscription.

"Magic Quadrant for IT Service Management Tools"

"Critical Capabilities for IT Service Management Tools"

Methodology

The vendors included in the Gartner Peer Insights Customers' Choice distinctions for ITSM tools were announced on 21 November 2019. Reviews submitted between 1 November 2018 and 31 October 2019 were considered for determining Gartner Peer Insights Customers' Choice distinctions. Gartner is committed to transparency regarding the criteria considered in bestowing this distinction; a full description can be found on the Methodology page. The Gartner "Magic Quadrant for IT Service Management Tools" referenced in this report was published on 29 August 2019.

Overall customer rating is the response to the survey question: "Please rate your overall experience with this vendor." Other ratings displayed are responses to:

- "Overall rating of product capabilities"
- "Overall rating of evaluation and contract negotiation with the vendor"

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- "Overall rating of integration and deployment"
- "Overall rating of service and support"

Ratings were taken on a scale of 1 to 5, where 1 is "completely dissatisfied" and 5 is "completely satisfied." The average ratings within the review may represent multiple versions of a product offering. Reviews for beta products are included in the analysis of this document. Reviews for legacy products (no longer being sold by the vendor) were not included in the analysis in this document.

Vendors' Review Coverage is measured by their review volume and diversity in industry, company size and deployment region. Vendors who have 50 or more eligible published reviews and at least 20% of eligible reviews that are outside of the primary industry, company size and deployment region will be categorized as "High Review Coverage" and positioned on the right hand quadrants in Figure 1. In markets where there are more than 7 vendors that have qualified for Customers' Choice Distinction, the 7th highest "Product Adoption Review Coverage (PARC)" score of all qualified vendors will become the new Review Coverage threshold. For detailed definition of Review Coverage and PARC, please refer to the Methodology.

The 95% confidence range in Figure 3 is calculated using a statistical technique known as bootstrapping. For a given vendor, a bootstrap sample is taken from either the set of overall ratings of the market or the set of overall ratings for the vendor. The size of the sample taken is the same as the number of reviews of the vendor. There is a higher chance to take the sample from the vendor's overall ratings when the vendor has more reviews. A mean is calculated for each bootstrap sample and the process is repeated 50,000 times. The low and high ratings shown in the confidence range are the 2.5 to 97.5 percentile values of the histogram of these bootstrapped means (or the vendor's actual rating, whichever is lower/higher). This represents the 95% confidence interval.

"Willingness to recommend" is calculated based on the responses to the question "How likely is it that you would recommend this product or service to a friend or colleague?" The reviewer can select the response on a rating scale of 0 to 10, where 0 is "not at all likely" and 10 is "extremely likely." The response is considered "yes" if the rating is greater than or equal to 8 and "no" if the rating is less than 8. For reviews first submitted in mid-2018 or came from Magic Quadrant Reference Survey, the question "Would you recommend this product to others" was asked instead, with responses including "yes," "yes, with reservations," "I don't know," and "no." The "Willingness to recommend" percentage is calculated using the total number of "yes" responses for both questions as defined above divided by the total number of responses to the question.

The "other vendors considered" section is based on reviewer responses for the question "What other vendors did you consider?" The reviewer may select multiple vendors for consideration. The percentage is calculated according to the total number of reviewers who select an alternative vendor divided by the total responses to the question.

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RESOLUTION NO: 2020-06-151

LIVINGSTON COUNTY DATE: June 8, 2020

Resolution Authorizing the Enterance into a Participating Addendum Through the NASPO Valuepoint Cooperative Purchasing Program and the Authorization of a Stock Hardware Order - Information Technology

- WHEREAS, Livingston County has the need to purchase technology equipment to support the functions of the County's operations in a fiscally responsible manner using the NASPO ValuePoint Cooperative Purchasing Program; and
- **WHEREAS,** utilization of the NASPO contract will result in significant cost savings for mission critical projects for the Information Technology Department; and
- WHEREAS, participation in a Participating Addendum (PA) will result in effectively "piggy-backing" on the Master Agreement entered into between the State of Minnesota and Hewlett-Packard, Co (now HP, Inc.) and its addendums. This "piggy-backing" was authorized under the Master Agreement subject to the approval of the State Chief Procurement Official ("CPO") and the State of Michigan (SOM) has not issued a PA for the NASPO Master Agreement; and
- WHEREAS, Civil Counsel reviewed the Master Agreements and deteremined the County is allowed to enter into their own respective PAs to utilize NASPO Value Point Master Agreements even when the SOM does not have an existing PA in place; and
- WHEREAS, based upon recommendation of Civil Counsel, issuance of a PA is requested; and
- WHEREAS, Information Technology has a need to place a stock order of hardware to support the County's users. Desktop computers, laptops, docking stations, and monitors are needed to replace outdated equipment in our environment and to support requests for additional necessary hardware; and
- WHEREAS, through the issuance of a County PA for use of the NASPO ValuePoint Cooperative Purchasing Program, the vendor Civitas-IT is able to provide hardware at a significant cost savings of as much as \$12,350 compared to our standard contract pricing with our current supplier; and
- WHEREAS, funding is available through the fiscal year 2020 Information Technology budget.
- **THEREFORE BE IT RESOLVED** that the Livingston County Board of Commissioners hereby approves and authorizes entrance into the Master Agreement via a Participating Addendum with the NASPO ValuePoint Cooperative Purchasing Program.
- **BE IT FURTHER RESOLVED** that the Livingston County Board of Commissioners hereby approves and authorizes a purchase order to be issued to Civitas-IT for the purchase of stock technology hardware including desktops, laptops, docking stations, and monitors at an amount not to exceed \$72,450.

RESOLUTION NO: 2020-06-151

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BE IT FURTHER RESOLVED that the Chairman of the Livingston County Board of Commissioners is authorized to sign all forms, assurances, contracts/agreements, renewals and future amendments for monetary and contract language adjustments related to the above upon review and/or preparation of Civil Counsel.

#

MOVED: SECONDED: CARRIED: Livingston County Date : 5/6/2020

Qty	Part #	Description		Jnit List \$		Livingston Unit \$		Livingston Ext'd \$
lapto	op. Latitude 5400 alte	ernative, HP EliteBook 840		\$1,770.00		\$1,239.00		
25		HP EliteBook 840 G5 Base NB PC i5-8365U, 8G, 256SSD for Livingston Co	\$	2,182.00		899.00		22,475.0
25	4WG30AV	HP IDS UMA i5-8365U 840 G6 Base NB PC	\$	1,151.00	\$	469.00	\$	11,725.
25	4SS11AV#ABA	OS Localization US	\$	2.00	\$	1.00	\$	25.
25	X7B43AV	eStar Enable IOPT	\$	2.00	\$	1.00	\$	25.
25	4WG65AV	Windows 10 Home 64	\$	142.00	\$	68.00	\$	1,700.
25	4WH02AV	Integrated HD 720p IR TripleMic Webcam	\$	27.00	\$	11.00	\$	275.
25	4WG47AV	14 inch FHD (1920x1080) Anti-Glare LED UWVA 400 for HD Webcam + IR slim ALSensor	\$	170.00	\$	69.00	\$	1,725
25	4WG87AV	8GB (1x8GB) DDR4 2400	\$	180.00	\$	73.00		1,825
25	4WG95AV	256GB PCIe NVMe Value Solid State Drive	\$	225.00	\$	92.00		2,300
25	4WG55AV	No Near Field Communication (No NFC)	\$	2.00	\$	1.00	\$	25
25	5MA76AV	Intel Wi-Fi 6 AX200 ax 2x2 MU-MIMO 160MHz +Bluetooth 5 WW with 2 Antennas	\$	25.00	\$	10.00	\$	250
25	4WG62AV	No WWAN	\$	2.00	\$	1.00	\$	25
25	4WG54AV	No Fingerprint Sensor	\$	2.00	\$	1.00	\$	25
25	4WG89AV	Active SmartCard	\$	2.00	\$	1.00	\$	25
25	4WG15AV	3 Cell 50 WHr Long Life	\$	45.00	\$	18.00	\$	450
25	4WG14AV	65 Watt Smart nPFC Right Angle for Fast Charge AC Adapter	\$		\$	4.00	\$	100
25	4WJ40AV#ABA	C5 1.8m Sticker Conventional Power Cord US	\$	2.00	\$	1.00	\$	25
25	4WJ68AV#ABA	Dual Point Backlit spill-resistant Collaboration US	\$	64.00	\$	25.00	\$	625
25	4WH12AV#ABA	3/3/0 Warranty US	\$	125.00	\$	51.00	\$	1,275
25	4WG53AV	AMT Enabled	\$	2.00	\$		\$	25
25	4WJ44AV#ABA	Country Localization US	\$ \$	2.00	\$	1.00 1.00	\$	25
25	1QE38AV	Core i5 vPro G8 Label	>	2.00	\$	1.00	>	25
25	U4414E	HP 3 year Next business day onsite Hardware Support for Notebooks	\$	79.00	\$	39.00	\$	975
23	044146							
25	2SU51AV#ABA	Drop-In-Box HP ThunderBolt Dock 120W G2 US	\$		\$ Sect	113.00 tion Subtotal:	_	
25	2SU51AV#ABA				Sect		\$	2,825 26,300
25	2SU51AV#ABA m Factor (SFF) Deskt	Drop-In-Box HP ThunderBolt Dock 120W G2 US		299.00	Sect	tion Subtotal:	\$	
25 Il For	2SU51AV#ABA m Factor (SFF) Deskt	Drop-In-Box HP ThunderBolt Dock 120W G2 US op PC, Optiplex alternative, HP EliteDesk 800 G5	\$	299.00 \$1,127.00	Sect	tion Subtotal: \$789.00	\$	26,300
25 II For 65	2SU51AV#ABA m Factor (SFF) Deskt config #32568335	Drop-In-Box HP ThunderBolt Dock 120W G2 US op PC, Optiplex alternative, HP EliteDesk 800 G5 HP EliteDesk 800 G5 SFF PC i5-9600, 8GB, 256SSD for Livingston Co.	\$	\$1,127.00 1,537.00 198.00	Sect	\$789.00 \$49.00	\$ \$	26,300 35,685 4,550
25 II Form 65 65	2SU51AV#ABA m Factor (SFF) Deskt config #32568335 6BD64AV	Drop-In-Box HP ThunderBolt Dock 120W G2 US op PC, Optiplex alternative, HP EliteDesk 800 G5 HP EliteDesk 800 G5 SFF PC i5-9600, 8GB, 256SSD for Livingston Co. HP EliteDesk 800 G5 Small Form Factor PC	\$ \$ \$	\$1,127.00 1,537.00 198.00	Sect	\$789.00 \$49.00 70.00	\$ \$	35,685 4,550
25 Il Form 65 65 65	m Factor (SFF) Deskt config #32568335 6BD64AV 4YH35AV#ABA	op PC, Optiplex alternative, HP EliteDesk 800 G5 HP EliteDesk 800 G5 SFF PC i5-9600, 8GB, 256SSD for Livingston Co. HP EliteDesk 800 G5 Small Form Factor PC OS Localization US	\$ \$ \$ \$	\$1,127.00 1,537.00 198.00 1.00	\$ \$ \$ \$	\$789.00 \$49.00 70.00 1.00	\$ \$ \$ \$ \$	26,300 35,685 4,550 65
25 III Form 65 65 65 65 65	m Factor (SFF) Deskt config #32568335 6BD64AV 4YH35AV#ABA 6ME13AV	Drop-In-Box HP ThunderBolt Dock 120W G2 US op PC, Optiplex alternative, HP EliteDesk 800 G5 HP EliteDesk 800 G5 SFF PC i5-9600, 8GB, 256SSD for Livingston Co. HP EliteDesk 800 G5 Small Form Factor PC OS Localization US ENERGY STAR Certified	\$ \$ \$ \$	\$1,127.00 1,537.00 198.00 1.00	\$ \$ \$ \$ \$	\$789.00 \$49.00 70.00 1.00 1.00 79.00	\$ \$ \$ \$ \$ \$	26,300 35,685 4,550 65 5,135
25 II Fore 65 65 65 65 65 65	m Factor (SFF) Deskt config #32568335 6BD64AV 4YH35AV#ABA 6ME13AV 6CU48AV	Drop-In-Box HP ThunderBolt Dock 120W G2 US op PC, Optiplex alternative, HP EliteDesk 800 G5 HP EliteDesk 800 G5 SFF PC i5-9600, 8GB, 256SSD for Livingston Co. HP EliteDesk 800 G5 Small Form Factor PC OS Localization US ENERGY STAR Certified EliteDesk 800PLA SFF G4/G5 250W Chassis	\$ \$ \$ \$ \$	\$1,127.00 1,537.00 198.00 1.00 1.00 216.00	\$ \$ \$ \$ \$ \$ \$	\$789.00 \$49.00 70.00 1.00 1.00 79.00	\$ \$ \$ \$ \$ \$ \$	26,300 35,685 4,556 65 5,135 2,925
25 II Form 65 65 65 65	m Factor (SFF) Deskt config #32568335 6BD64AV 4YH35AV#ABA 6ME13AV 6CU48AV 6CV74AV	Drop-In-Box HP ThunderBolt Dock 120W G2 US OP PC, Optiplex alternative, HP EliteDesk 800 G5 HP EliteDesk 800 G5 SFF PC i5-9600, 8GB, 256SSD for Livingston Co. HP EliteDesk 800 G5 Small Form Factor PC OS Localization US ENERGY STAR Certified EliteDesk 800PLA SFF G4/G5 250W Chassis Windows 10 Home 64	\$ \$ \$ \$ \$ \$	\$1,127.00 1,537.00 198.00 1.00 216.00 129.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$789.00 \$49.00 70.00 1.00 79.00 45.00	\$ \$ \$ \$ \$ \$ \$ \$	26,300 35,685 4,556 65 5,135 2,925 9,035
25 II Form 65 65 65 65 65 65 65	m Factor (SFF) Deskt config #32568335 6BD64AV 4YH35AV#ABA 6ME13AV 6CU48AV 6CV74AV 6CW51AV 6CW14AV	Drop-In-Box HP ThunderBolt Dock 120W G2 US op PC, Optiplex alternative, HP EliteDesk 800 G5 HP EliteDesk 800 G5 SFF PC i5-9600, 8GB, 256SSD for Livingston Co. HP EliteDesk 800 G5 Small Form Factor PC OS Localization US ENERGY STAR Certified EliteDesk 800PLA SFF G4/G5 250W Chassis Windows 10 Home 64 Intel Core i5 9500 3.0 2666MHz 9M 6C 65W CPU 8GB (1x8GB) DDR4 2666 DIMM Memory	\$ \$ \$ \$ \$ \$ \$ \$	\$1,127.00 1,537.00 198.00 1.00 216.00 129.00 413.00	\$ \$ \$ \$ \$ \$ \$ \$	\$789.00 \$49.00 70.00 1.00 1.00 79.00 45.00 139.00 66.00	\$ \$ \$ \$ \$ \$ \$ \$	26,300 35,685 4,550 65 5,135 2,925 9,035 4,290
25 65 65 65 65 65 65 65 65	m Factor (SFF) Deskt config #32568335 6BD64AV 4YH35AV#ABA 6ME13AV 6CU48AV 6CV74AV 6CW51AV 6CW14AV 6CW22AV	Drop-In-Box HP ThunderBolt Dock 120W G2 US op PC, Optiplex alternative, HP EliteDesk 800 G5 HP EliteDesk 800 G5 SFF PC i5-9600, 8GB, 256SSD for Livingston Co. HP EliteDesk 800 G5 Small Form Factor PC OS Localization US ENERGY STAR Certified EliteDesk 800PLA SFF G4/G5 250W Chassis Windows 10 Home 64 Intel Core i5 9500 3.0 2666MHz 9M 6C 65W CPU 8GB (1x8GB) DDR4 2666 DIMM Memory 256GB M.2 2280 PCIe NVMe TLC Solid State Drive	\$ \$ \$ \$ \$ \$ \$	\$1,127.00 1,537.00 198.00 1.00 1.00 216.00 129.00 413.00 180.00 225.00	\$ \$ \$ \$ \$ \$ \$ \$ \$	\$789.00 \$49.00 70.00 1.00 79.00 45.00 139.00 66.00 83.00	\$ \$ \$ \$ \$ \$ \$ \$ \$	26,300 35,685 4,550 65 5,135 2,925 9,035 4,290 5,395
25 Il Ford 65 65 65 65 65 65 65 65 65 65	m Factor (SFF) Deskt config #32568335 6BD64AV 4YH35AV#ABA 6ME13AV 6CU48AV 6CV74AV 6CW51AV 6CW14AV 6CV22AV 6CV04AV	Drop-In-Box HP ThunderBolt Dock 120W G2 US OP PC, Optiplex alternative, HP EliteDesk 800 G5 HP EliteDesk 800 G5 SFF PC i5-9600, 8GB, 256SSD for Livingston Co. HP EliteDesk 800 G5 Small Form Factor PC OS Localization US ENERGY STAR Certified EliteDesk 800PLA SFF G4/G5 250W Chassis Windows 10 Home 64 Intel Core i5 9500 3.0 2666MHz 9M 6C 65W CPU 8GB (1x8GB) DDR4 2666 DIMM Memory 256GB M.2 2280 PCIe NVMe TLC Solid State Drive HP VGA Port	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$1,127.00 1,537.00 198.00 1.00 216.00 129.00 413.00 180.00 225.00 5.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$789.00 \$49.00 70.00 1.00 1.00 45.00 139.00 66.00 83.00 2.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	26,300 35,685 4,550 65 5,138 2,925 9,035 4,290 5,395 130
25 III Ford 65 65 65 65 65 65 65 65 65 65	m Factor (SFF) Deskt config #32568335 6BD64AV 4YH35AV#ABA 6ME13AV 6CU48AV 6CV74AV 6CW51AV 6CW51AV 6CW14AV 6CV22AV 6CV04AV 6EJ07AV#ABA	Drop-In-Box HP ThunderBolt Dock 120W G2 US OP PC, Optiplex alternative, HP EliteDesk 800 G5 HP EliteDesk 800 G5 SFF PC i5-9600, 8GB, 256SSD for Livingston Co. HP EliteDesk 800 G5 Small Form Factor PC OS Localization US ENERGY STAR Certified EliteDesk 800PLA SFF G4/G5 250W Chassis Windows 10 Home 64 Intel Core i5 9500 3.0 2666MHz 9M 6C 65W CPU 8GB (1x8GB) DDR4 2666 DIMM Memory 256GB M.2 2280 PCIe NVMe TLC Solid State Drive HP VGA Port USB Business Slim Wired Keyboard US	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$1,127.00 1,537.00 198.00 1.00 216.00 129.00 413.00 180.00 225.00 5.00 13.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$789.00 \$49.00 70.00 1.00 1.00 45.00 139.00 66.00 83.00 2.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	26,300 35,685 4,550 65 5,135 2,925 9,035 4,290 5,395 130 325
25 65 65 65 65 65 65 65 65 65 65 65 65 65	m Factor (SFF) Deskt config #32568335 6BD64AV 4YH35AV#ABA 6ME13AV 6CU48AV 6CV74AV 6CW51AV 6CW51AV 6CW22AV 6CV04AV 6EJ07AV#ABA 6CV70AV	Drop-In-Box HP ThunderBolt Dock 120W G2 US OP PC, Optiplex alternative, HP EliteDesk 800 G5 HP EliteDesk 800 G5 SFF PC i5-9600, 8GB, 256SSD for Livingston Co. HP EliteDesk 800 G5 Small Form Factor PC OS Localization US ENERGY STAR Certified EliteDesk 800PLA SFF G4/G5 250W Chassis Windows 10 Home 64 Intel Core i5 9500 3.0 2666MHz 9M 6C 65W CPU 8GB (1x8GB) DDR4 2666 DIMM Memory 256GB M.2 2280 PCIe NVMe TLC Solid State Drive HP VGA Port USB Business Slim Wired Keyboard US HP Optical Wired Mouse USB	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$1,127.00 1,537.00 198.00 1.00 216.00 129.00 413.00 180.00 225.00 5.00 13.00 5.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$789.00 \$49.00 70.00 1.00 1.00 45.00 139.00 66.00 83.00 2.00 5.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	26,300 35,689 4,550 65 5,138 2,928 9,038 4,290 5,399 130 325 130
25 II For 65 65 65 65 65 65 65 65 65 65 65 65 65	m Factor (SFF) Deskt config #32568335 6BD64AV 4YH35AV#ABA 6ME13AV 6CU48AV 6CV74AV 6CW51AV 6CW51AV 6CW22AV 6CV04AV 6EJ07AV#ABA 6CV70AV 6CW89AV	Drop-In-Box HP ThunderBolt Dock 120W G2 US OP PC, Optiplex alternative, HP EliteDesk 800 G5 HP EliteDesk 800 G5 SFF PC i5-9600, 8GB, 256SSD for Livingston Co. HP EliteDesk 800 G5 Small Form Factor PC OS Localization US ENERGY STAR Certified EliteDesk 800PLA SFF G4/G5 250W Chassis Windows 10 Home 64 Intel Core i5 9500 3.0 2666MHz 9M 6C 65W CPU 8GB (1x8GB) DDR4 2666 DIMM Memory 256GB M.2 2280 PCIe NVMe TLC Solid State Drive HP VGA Port USB Business Slim Wired Keyboard US HP Optical Wired Mouse USB 9.5mm DVD-Writer 8/6G3SFF 4G4MT/SFF	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$1,127.00 1,537.00 198.00 1.00 216.00 129.00 413.00 225.00 5.00 13.00 5.00 19.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$789.00 \$49.00 70.00 1.00 1.00 45.00 139.00 66.00 83.00 2.00 5.00 6.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	26,300 35,685 4,550 65 5,135 2,925 9,035 4,290 5,395 130 325 130 390
25 III Ford 65 65 65 65 65 65 65 65 65 65 65 65 65	m Factor (SFF) Deskt config #32568335 6BD64AV 4YH35AV#ABA 6ME13AV 6CU48AV 6CV74AV 6CW51AV 6CW51AV 6CV22AV 6CV04AV 6EJ07AV#ABA 6CV70AV 6CW89AV 6CW97AV#ABA	Drop-In-Box HP ThunderBolt Dock 120W G2 US OP PC, Optiplex alternative, HP EliteDesk 800 G5 HP EliteDesk 800 G5 SFF PC i5-9600, 8GB, 256SSD for Livingston Co. HP EliteDesk 800 G5 Small Form Factor PC OS Localization US ENERGY STAR Certified EliteDesk 800PLA SFF G4/G5 250W Chassis Windows 10 Home 64 Intel Core i5 9500 3.0 2666MHz 9M 6C 65W CPU 8GB (1x8GB) DDR4 2666 DIMM Memory 256GB M.2 2280 PCIe NVMe TLC Solid State Drive HP VGA Port USB Business Slim Wired Keyboard US HP Optical Wired Mouse USB 9.5mm DVD-Writer 8/6G3SFF 4G4MT/SFF 3/3/3 (material/labor/onsite) SFF Warranty US	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$1,127.00 1,537.00 198.00 1.00 216.00 129.00 413.00 225.00 5.00 13.00 19.00 125.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$789.00 \$49.00 70.00 1.00 1.00 45.00 139.00 66.00 83.00 2.00 5.00 6.00 46.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	26,300 35,685 4,550 65 5,135 2,925 9,035 4,290 5,395 130 325 130 329 2,990
25 II For 65 65 65 65 65 65 65 65 65 65 65 65 65	m Factor (SFF) Deskt config #32568335 6BD64AV 4YH35AV#ABA 6ME13AV 6CV74AV 6CV74AV 6CW51AV 6CW51AV 6CV22AV 6CV04AV 6EJ07AV#ABA 6CV70AV 6CW89AV 6CW97AV#ABA	Drop-In-Box HP ThunderBolt Dock 120W G2 US OP PC, Optiplex alternative, HP EliteDesk 800 G5 HP EliteDesk 800 G5 SFF PC i5-9600, 8GB, 256SSD for Livingston Co. HP EliteDesk 800 G5 Small Form Factor PC OS Localization US ENERGY STAR Certified EliteDesk 800PLA SFF G4/G5 250W Chassis Windows 10 Home 64 Intel Core i5 9500 3.0 2666MHz 9M 6C 65W CPU 8GB (1x8GB) DDR4 2666 DIMM Memory 256GB M.2 2280 PCIe NVMe TLC Solid State Drive HP VGA Port USB Business Slim Wired Keyboard US HP Optical Wired Mouse USB 9.5mm DVD-Writer 8/6G3SFF 4G4MT/SFF 3/3/3 (material/labor/onsite) SFF Warranty US HP 800 G5 SFF Bulk Pack Country Kit US	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$1,127.00 1,537.00 198.00 1.00 216.00 129.00 413.00 225.00 5.00 13.00 19.00 125.00 1.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$789.00 \$49.00 70.00 1.00 1.00 45.00 139.00 66.00 83.00 2.00 5.00 46.00 46.00 1.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	26,300 35,685 4,550 65 5,135 2,925 9,035 4,290 5,395 130 325 130 329 2,990 65
25 III Ford 65 65 65 65 65 65 65 65 65 65 65 65 65	m Factor (SFF) Deskt config #32568335 6BD64AV 4YH35AV#ABA 6ME13AV 6CU48AV 6CV74AV 6CW51AV 6CW51AV 6CV22AV 6CV04AV 6EJ07AV#ABA 6CV70AV 6CW97AV#ABA 6CW27AV#ABA 6CW27AV#ABA	Drop-In-Box HP ThunderBolt Dock 120W G2 US Drop PC, Optiplex alternative, HP EliteDesk 800 G5 HP EliteDesk 800 G5 SFF PC i5-9600, 8GB, 256SSD for Livingston Co. HP EliteDesk 800 G5 Small Form Factor PC OS Localization US ENERGY STAR Certified EliteDesk 800PLA SFF G4/G5 250W Chassis Windows 10 Home 64 Intel Core i5 9500 3.0 2666MHz 9M 6C 65W CPU 8GB (1x8GB) DDR4 2666 DIMM Memory 256GB M.2 2280 PCIe NVMe TLC Solid State Drive HP VGA Port USB Business Slim Wired Keyboard US HP Optical Wired Mouse USB 9.5mm DVD-Writer 8/6G3SFF 4G4MT/SFF 3/3/3 (material/labor/onsite) SFF Warranty US HP 800 G5 SFF Bulk Pack Country Kit US Multi-Unit (Small Form Factor) G4/G5 Eco-Packaging	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$1,127.00 1,537.00 198.00 1.00 216.00 129.00 413.00 225.00 5.00 13.00 19.00 125.00 1.00 5.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$789.00 \$49.00 70.00 1.00 1.00 45.00 139.00 66.00 83.00 2.00 6.00 46.00 1.00 2.00 2.00 40.00 2.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	26,300 35,685 4,550 65 5,135 2,925 9,035 4,290 5,395 130 325 130 2,990 65 130
25 Ill Fort 65 65 65 65 65 65 65 65 65 65 65 65 65	m Factor (SFF) Deskt config #32568335 6BD64AV 4YH35AV#ABA 6ME13AV 6CV74AV 6CV74AV 6CW51AV 6CW51AV 6CV22AV 6CV04AV 6EJ07AV#ABA 6CV70AV 6CW89AV 6CW97AV#ABA	Drop-In-Box HP ThunderBolt Dock 120W G2 US OP PC, Optiplex alternative, HP EliteDesk 800 G5 HP EliteDesk 800 G5 SFF PC i5-9600, 8GB, 256SSD for Livingston Co. HP EliteDesk 800 G5 Small Form Factor PC OS Localization US ENERGY STAR Certified EliteDesk 800PLA SFF G4/G5 250W Chassis Windows 10 Home 64 Intel Core i5 9500 3.0 2666MHz 9M 6C 65W CPU 8GB (1x8GB) DDR4 2666 DIMM Memory 256GB M.2 2280 PCIe NVMe TLC Solid State Drive HP VGA Port USB Business Slim Wired Keyboard US HP Optical Wired Mouse USB 9.5mm DVD-Writer 8/6G3SFF 4G4MT/SFF 3/3/3 (material/labor/onsite) SFF Warranty US HP 800 G5 SFF Bulk Pack Country Kit US	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$1,127.00 1,537.00 198.00 1.00 216.00 129.00 413.00 225.00 5.00 13.00 19.00 125.00 1.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$789.00 \$49.00 70.00 1.00 1.00 45.00 139.00 66.00 83.00 2.00 5.00 46.00 46.00 1.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	26,300 35,688 4,550 65 5,135 2,925 9,038 4,290 5,395 130 325 130 2,990 65 130
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RESOLUTION NO: 2020-06-152

LIVINGSTON COUNTY DATE: June 8, 2020

Resolution to Levy 2020 Allocation Millage - Equalization

WHEREAS, in compliance with the requirements of Act 5, Public Acts of Michigan 1982, as amended; and

WHEREAS, the proposed levy would apportion taxes for the county operation purposes based on the

Taxable /valuation of

WHEREAS, prior to the presentation of this resolution, the following tax levies were recommended:

General Operations 3.2765 Ambulance .2897 Veterans Relief .1127

THEREFOR BE IT RESOLVED that the apportionment of taxes for the county operating purposes be approved and authorized to be levied on the summer tax billing against the Taxable Valuation of the County at the rate of 3.2767.

BE IT FURTHER RESOLVED that the Ambulance Millage and Veterans Relief Millage be levied on the winter tax billing against the Taxable Valuation of the County at the rates of .2897 and .1127 respectively;

BE IT FURTHER RESOLVED that the 2020 levy for the county operations and debt be approved and levied as recommended

BE IT FURTHER RESOLVED that the Chairman of the Board of Commissioners be authorized to sign the 2020 Millage Rate Request (L-4029) upon approval of the Board of Commissioners

#

MOVED: SECONDED: CARRIED: Memorandum

To: Livingston County Board of Commissioners

From: Sue I. Bostwick

Date: May 27, 2020

Re: Resolution – 2020 County Millage rates

I have attached the resolution for the 2020 L-4029, Millage Request, for the county's levies. Included in the form are both summer and winter levies calculated with the proper Headlee rollback. I have also been in discussions with the Veterans Administration and the millage has been set by them to reflect funds needed for the future year's budget which was discussed in their May 20th meeting. The Allocation Board has levied the final allocated millage rate on, May 27, 2020 in which we have no changes.

If you have any question regarding this matter, please contact me.

ORIGINAL TO: County Clerk(s) COPY TO: Equalization Department(s) COPY TO: Each township or city clerk

2020

2020 TAX RATE REQUEST (This form must be completed and submitted on or before October 1,

MILLAGE REQUEST REPORT TO COUNTY BOARD OF COMMISSIONERS 2020 Taxable Value of ALL Properties in the Unit as of 5-23-11 9,806,507,325 County Livingston

PLEASE READ THE INSTRUCTIONS ON THE DEVEDOE CIDE

Local Government U	Unit		For	LOCAL School Distri	icts: 2020 Ta	xable Value of Non-Ho	mestead and Non- Qualified			THE REVER	
	Livingston Co			Agricultural Properties if a millage is Levied Agai \$					CAREFULLY		
	mplete this form tax rates have				erty tax is levie tax roll.	d. Penalty for no	n-filing is provided under	MCL Sec 211.	.119		
(1)	(2)	(3)	(4)	(5)**	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Source	Purpose of Millage	Date of Election	Millage Authorized by Election, Charter, etc.	2019 Millage Rate Permanently Reduced by MCL 211.34d	2020 Current Year Millage Reduction Fraction	2020 Millage Rate Permanently Reduced by MCL 211.34d	Sec. 211.34 Millage Rollback Fraction	Maximum Allowable Millage Levy*	Millage Requested to be Levied July 1	Millage Requested to be Levied Dec 1	Expiration Date of Millage Authorized
Allocated	Operating	N/A	5.0000	3.3073	0.9907	3.2765	1.0000	3.2765	3.2765		Allocated
Extra Voted	EMS	08/12/10	0.3000	0.2925	0.9907	0.2897	1.0000	0.2897		0.2897	12/31/203
Extra Voted	Veterans	08/02/16	0.1390	0.1354	0.9907	0.1341	1.0000	0.1341		0.1127	12/1/202
otal			5.4390	3.7352		3.7003		3.7003	3.2765	0.4024	
repared by	Sue Bostwick			ŗ	Title	Director		D	Pate 5/1/2020		

As the Representatives for the local government unit named above, we certify that these requested tax levy rates have been reduced, if necessary to comply with the state constitution (Article 9, Section 31), and that the requested levy rates have also been reduced, if necessary, to comply with MCL Sections 211.24e and 211.34 and, for LOCAL school districts which levy a Supplemental (Hold Harmless) Millage, 380.1211 (3).

Clerk	Х	Signature	Type Name	Date
Secretary			Elizabeth Hundley	
Chairperso	Х	Signature	Type Name	Date
President			Carol Griffith	

*Under Truth in Taxation, MCL Section 211.24e, the governing body may decide to levy a rate which will not exceed the maximum authorized rate allowed in column 9. The requirements of MCL 211.24e must be met prior to levying an operating levy which is larger than the base tax rate but not larger than the rate in column 9.

^{**} IMPORTANT See instructions on the reverse side for the correct method of calculating the millage rate in column (5).

RESOLUTION NO: 2020-06-153

LIVINGSTON COUNTY DATE: June 8, 2020

Resolution Authorizing the Acceptance of the County Clerk's 2019 Annual Report - County Clerk

WHEREAS, the office of the Livingston County Clerk is furnishing a report of their activities for the period of January 1, 2019 through December 31, 2019, in printed form comprised of the 2019 Annual Report; and

WHEREAS, the Livingston County Clerk has provided a copy of the 2019 Annual Report to the Board of Commissioners.

THEREFORE BE IT RESOLVED that the Livingston County Board of Commissioners hereby accepts the Livingston County Clerk's 2019 Annual Report.

#

MOVED: SECONDED: CARRIED:





Livingston County Clerk 2019 ANNUAL REPORT





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^{*}Cover Photo Courtesy of George J. Moses

A Message From Your Livingston County Clerk

May 6, 2020

I am pleased to present the 2019 Annual Report for the Livingston County Clerk's Office. This Annual Report provides a statistical and informational summary of our office and attempts to explain the wide range of activities we participated in during 2019. My goal with this annual report is to give you a glimpse of the many mandated services we provide the public and other governmental agencies.

I find myself with the challenge and privilege of leadership at this truly historical time. We are facing a crisis not imagined at the beginning of the year, but one that will forever change our country, state, and county. The impact will not be fully known for months, if not longer, and will be felt for years to come. However, one thing remains certain, the Clerk's Office stands ready to provide our residents the services they need with the highest level of quality in the most cost effective manner possible.

I am proud of the professionalism, dedication, and hard work of the staff within the Clerk's Office. The Livingston County Clerk's Office has become one of the most respected within Michigan because of their efforts. I sincerely thank the Livingston County Board of Commissioners and County Administration for your continued support.

Sincerely,

Elizabeth Hundley
Livingston County Clerk

Livingston County, Michigan



Elizabeth Hundley Livingston County Clerk

FUNCTIONS AND DUTIES OF THE CLERK

The County Clerk is an elected position mandated by Article VII, Section 4 of the State Constitution. The Clerk's Office is one of the most diverse in county government and is governed by over 600 statutes. The Clerk is responsible for managing five separate budgets and numerous Trust and Agency Accounts.

The four primary divisions within the Clerk's Office include:

- Clerk of the Board of Commissioners
- · Vital Records Division
- The Elections Division
- · Clerk of the Circuit Court

CLERK OF THE BOARD OF COMMISSIONERS

Division Overview

Michigan law establishes the County Clerk as the clerk to the County Board of Commissioners. We are tasked with attending board meetings, taking minutes for those meetings, and preserving those minutes which become the official record of the meetings. Approved minutes for open meetings along with agenda packets become permanent records held within our office.

The Board of Commissioners normally meets on the second and fourth Mondays of the month at 7:30 p.m. In addition, the Board meets immediately following the Finance Committee meeting on the first and third Wednesdays of the month at 7:30 a.m. The meetings are open to the public and are normally held in the Board Chambers located on the

second floor of the Administration Building at 304 E. Grand River Avenue in downtown Howell. We attended 46 board meetings during 2019.

County Directory

The Clerk's Office is responsible for updating the County Directory. The directory is a resource guide published to assist the residents of Livingston County in communicating with government offices and agencies, as well as elected and appointed officials at the local, state, and federal levels.

Please feel free to contact the Clerk's Office if you are aware of an update that needs to be made. The directory is available online at the County Clerk's website.

THE VITAL RECORDS DIVISION

Division Overview

By law, the County Clerk serves as the local registrar for the county. The Vital Records Division is responsible for the preparation, filing, and preservation of information on the births, deaths, and marriages within Livingston County. The public is provided certified copies of these records pursuant to legal guidelines. Certified copies can be obtained by visiting our office located in the Historic Courthouse, by mail, or by use of our online request system.

Vital records are kept for historical, as well as genealogical purposes. Some of these records retained by the Clerk's office include:

- Birth Certificates
- Death Certificates
- Marriage Licenses
- Military Discharges
- Notary Bonds
- Concealed Pistol Licenses (CPL's)
- Assumed Names (DBA's)
- · Home Birth Registry
- · Oaths of Office

Home Births

Livingston County is the largest county in Michigan without a hospital birthing center. For a variety of reasons, parents are opting for home birth or mid-wife deliveries. After the baby's arrival, either a parent or the midwife will visit our office to file the required paperwork to obtain the child's birth certificate. Technology advancements during 2019 resulted in significant improvements to our procedures for recording home births. The Vital Records Division processed 22 home birth registrations in 2019.



"Easiest bureaucratic experience ever!" Customer Comment - December 17, 2019 "The staff here are amazing! Super courteous and helpful." Customer Comment – July 2, 2019

Business Registration

Business registrations filed at the county level are administered and overseen by the Vital Records Division. The law requires a business that operates in Livingston County to register with our office unless it is a corporation, a limited liability company, or limited liability partnership. This year, we took the opportunity to revamp our business registration forms as well as this portion of our website. The website now hosts PDF forms that can be filled out and filed with our office. We assisted the public with the formation or dissolution of 509 businesses during 2019.

Notary Public

The role of the Notary Public is to serve as an unbiased or impartial witness. Notaries are commissioned officers by the State of Michigan.

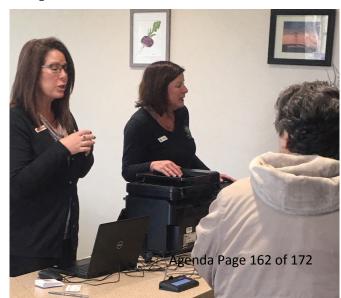
This year, Michigan amended its notary public laws to permit electronic notarizations and remote notarizations. Electronic notarizations are similar to traditional notarizations inasmuch as the signer appears before the notary, but the document being signed, as well as the notary's signature are electronic. Remote notarization permits the notary to witness the signature via webcam or Internet audio technology. This can also be referred to as "webcam notarization."

The Vital Records Division is responsible for administering an oath to each notary applicant, along with filing and managing the required surety bond. The surety bond protects the public from a notary's misconduct or negligence. Attorneys in good standing with the State Bar of Michigan are only required to file an oath with the county; no bond is required. We processed 468 notary applications during 2019.

Military Discharge Record (DD-214)

Michigan law mandates a County Clerk record military discharge documents (DD-214) free of charge for veterans residing within their county. Certified copies are available at no charge if needed in the future. Military discharge documents are confidential. If a copy is needed, it can be given

Michelle Olrich and Amy Kostesich assisting Veterans during Harvest for Heros



to the veteran with proper identification; or a member of their family, with a death certificate and proof of relationship. Our office processed 160 DD-214's in 2019.

In addition, Livingston County
Veterans are eligible to receive a
Veterans ID card that identifies them
as eligible for discounts offered by
various businesses within the county.
Our office processed and issued 156
ID cards during 2019. Starting in
April of 2019, the Livingston County
Veterans' Services Department pays
the cost of Veterans ID cards that
are issued.

On November 25, 2019, the Clerk's Office worked in conjunction with Region 9 VCAT to provide mobile services to Livingston County Veterans at their Harvest for Heroes event. Veterans were advised to bring necessary documentation with

them to this event and we were able to issue Veterans ID cards and record military discharge documents to eligible veterans. Honoring our veterans and providing them services in a convenient manner is a high priority for the Clerk's Office.



Clerk Hundley swearing in Judge McGivney

Oaths of Office

An Oath of Office is required for certain individuals prior to serving in their elected or appointed capacity. Our Vital Records Division prepares and files the required Oaths of Office for Livingston County. The oaths become permanent records and remain on file within the Clerk's Office.

County Clerk, Elizabeth Hundley, had the honor of administering oaths of office to 53rd District Court Judge Shauna Murphy, appointed on December 26, 2018; 44th Circuit Court Judge Matthew McGivney, appointed on June 21, 2019; and 53rd District Court Judge Daniel Bain, appointed on September 18, 2019.

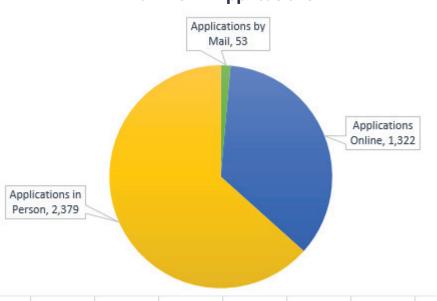
Concealed Pistol Licenses (CPL)

The Vital Records Division accepts and processes new and renewal CPL applications for residents of Livingston County. In Michigan, a resident must obtain a concealed pistol license, commonly known as a CPL, in order to carry a pistol concealed. Individuals applying for a new CPL are required by law to submit the application, additional documents, and pay the required fee with the County Clerk in the county of residence. New CPL applicants must also be fingerprinted to complete the application process.

Our office is among the few County Clerk offices that provide fingerprinting services in our office to new applicants. We fingerprinted 909 residents who applied with our office during 2019.

The County Clerk is required to notify CPL holders that their license is approaching expiration three to six months prior to the expiration of their current license. A CPL may be renewed at the County Clerk's office. In addition, residents have the option of renewing by mail or online with the Michigan State Police. However, the County Clerk is still responsible for storing and maintaining all records; issuing the license; and issuing statutory disqualifications, notices of suspension, and revocations.

2019 CPL Applications



FOIA Coordinator

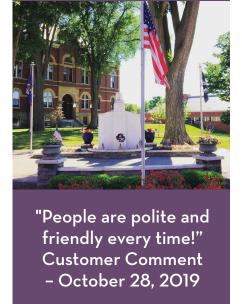
The County Clerk serves as the county's FOIA (Freedom of Information Act) coordinator. When a FOIA request is filed with the County, we are responsible for tracking the progress of that request and resulting response.

The volume of the FOIA requests has increased 55% from 601 in 2016 to 932 in 2019. With the increase in both volume and complexity, our office adopted new technology to track these requests. The public can now submit their requests through our protected online GovQA portal. The new FOIA request system was made available for public use on January 2, 2019.

Tax Allocation Board

The Tax Allocation Board is the process by which the allowed millage rate is allocated between the county, townships that are not charter townships, and the intermediate school district when a county does not have a fixed millage approved by the voters. Livingston County is one of the few counties in Michigan that continues to utilize the Tax Allocation Board.

By law, the County Clerk serves as the clerk of the Tax Allocation Board. We prepare the board packets, prepare and distribute agendas, take minutes, and preserve the official minutes as a permanent record within our office. The Tax



Allocation Board convened five times during 2019.

Certificate of Non-Commencement of Legal Proceedings

Michigan law sets forth a process for contractors to record a statement or claim of lien on property. A person with an interest in property with such a lien may submit to the County Clerk certain documentation that requires the Clerk to search our records to determine if proceedings to enforce the lien have been commenced within the required timeframe. If proceedings have not been commenced, the County Clerk will execute and deliver to the owner a certificate of that fact, bearing the seal of the Circuit Court. Our office received and issued three certificates of non-commencement during 2019.

THE ELECTIONS DIVISION

Division Overview

The County Clerk is the chief election official within Livingston County. The Elections Division provides guidance and instruction to the local jurisdictions who conduct many of the day-to-day election operations, and performs oversight to ensure the proper administration of elections. The Elections Division is also responsible for the accumulation of election results and maintenance of the permanent elections records.

We administered three elections during the 2019 election cycle: the Special Election in May, the Special Election in August, and the City-Special Election in November. In addition, we accepted candidate filings and produced ballots for the Livingston Educational Service Agency (LESA) June Election as required by law.

"Thank you for going above and beyond to make sure we got our marriage license corrected. We appreciate your help so, so much." Customer Comment – July 5, 2019

Vital Records Comparison

(2016 - 2019)

	2016	2017	2018	2019
Deaths Recorded & Filed	1,401	1,142	1,141	1,135
Births Recorded & Filed	30	14	22	22
Marriage Licenses Issued & Filed	1,011	1,104	1,103	969
Assumed Names Filings	872	782	531	509
Concealed Pistol License Applications	4,244	3,562	3,420	3,754
Notary Commissions Issued, Bonds Filed	310	295	501	468
FOIA Requests	601	739	865	932
Military Discharge Recordings	89	72	76	160

Appointment to Election Modernization Advisory Committee

Livingston County Clerk, Elizabeth Hundley, was among 27 local election officials and national election experts appointed by Secretary of State Jocelyn Benson to serve on the Election Modernization Advisory Committee. The committee was convened to assist and advise the Department of State and the Bureau of Elections as they work to implement the constitutional changes approved by voters in Proposal 3 of 2018. The committee met three times during 2019 and continues to work towards recommendations to improve the administration of elections within the State of Michigan.

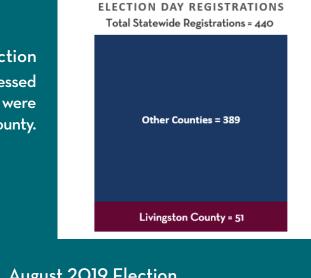


Election Day Registrations

May 2019 was the first election with same day voter registration.

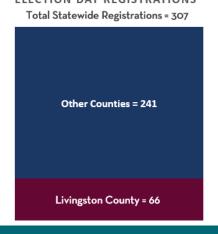
May 2019 Election

440 total registrations were processed statewide on Election Day. 51 of those were registered in Livingston County.



MAY 7, 2019 SPECIAL ELECTION

AUGUST 6, 2019 SPECIAL ELECTION ELECTION DAY REGISTRATIONS



August 2019 Election

307 total registrations were processed statewide on Election Day. 66 of those were registered in Livingston County.

November 2019 Election

975 total registrations were processed statewide on Election Day. 66 of those were registered in Livingston County.

NOVEMBER 5, 2019 ELECTION ELECTION DAY REGISTRATIONS Total Statewide Registrations = 975 Other Counties = 909 Livingston County = 66

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Livingston County Voters

As of December 31, 2019. Livingston County had 147,723 registered voters, 2,893 of which were new voter registrations processed by the Elections Division.

Automatic Voter Registration ("AVR") was rolled out in the Secretary of State branch offices in September. This change means that customers who transact business within the branch offices. of the Secretary of State and who are eligible are automatically registered to vote unless the person opts out.

Residents with a Michigan Driver's License or Personal Identification Card may also register to vote using Online Voter Registration available at www.Michigan.gov/Vote. Current voters can easily change their address using this website, as well.

Livingston County has seen, and will continue to see. increases in the number of voters utilizing absentee voting as a result of no reason absentee voting. Election administrators in Livingston County are prepared for record numbers of absentee ballots being cast in August and November of 2020 for a variety of reasons including COVID-19.

Campaign Finance

All candidates, political action committees, and ballot question committees at the county and local level are required to report the revenues and expenditures of their campaign by filing campaign finance reports with the County Clerk's Office. These documents are kept on file with the Elections Division and help to maintain the accuracy, integrity, and transparency of the elections process. The Elections Division processed seven campaign finance filings during 2019.

Risk Limiting Audits

During 2019, the Bureau of Elections piloted a new type of post-election audit, referred to as Risk-Limiting Audits ("RLA"). An RLA is a comprehensive check that uses statistical methods to confirm whether reported election results

are correct and detect possible anomalies that may need further scrutiny because of human error or possible manipulation. Ballots are randomly selected based on a mathematical formula to confirm that the ballot tabulators tallied them correctly. The Bureau of Elections conducted three pilot RLA's during 2019. We participated in the first pilot RLA involving multiple jurisdictions that was conducted in September for the August Special Election.

Election Commission

The Livingston County Election
Commission is composed of the
County Clerk, the Judge of the
Probate Court, and the County
Treasurer. The Commission is
responsible for approving ballots for
use at federal, state, and countywide
elections held within Livingston

Clerk Hundley, Pat Hughes, and Mary Kuzner during the Risk Limiting Audit





The Board of Canvassers hard at work

County. In addition, Commission members are responsible for holding hearings to determine the factualness/clarity of the wording used on recall petitions filed against certain county and local level officials. The Livingston County Election Commission met four times during the 2019 election cycle.

Board of Canvassers

The County Board of Canvassers is composed of two Democratic members and two Republican members. They are appointed by the Livingston County Board of Commissioners to a 4-year term. One term from each party expired on October 31, 2019.

Nancy Sauvage, Democratic member, was appointed for her first term through October 31, 2023. Carla Chapman, Republican member,

was re-appointed to serve through October 31, 2023. Ms. Chapman was first appointed in 1999.

The County Clerk serves as clerk of the Board and is responsible for taking notes and preparing minutes of each Board meeting. The Canvassers' principal responsibility is to canvass all elections and certify certain elections held in the county. In 2019, the May, August, and November elections were canvassed and certified by the Board of Canvassers.

Precinct Inspector Training

Michigan election law requires the County Clerk to conduct training schools for precinct election inspectors within the county. The County Clerk must train inspectors for all cities and townships within Livingston County with a

Page 166 of 172

population of less than 10,000. Election inspectors must be certified every two years.

Precinct inspector trainings were conducted in April, June, July, and October for the 2019 elections. A total of 34 inspectors were trained.

High School Voter Registration

The Elections Division conducted voter registration events at Brighton High School and Pinckney High School this year with the assistance of several city and township clerks. Students who are 17.5 years of age are eligible to register to vote and may vote once reaching 18 years of age. Our goal is to register many of these students to prevent the need for registering at their local clerk's office on election day. Our efforts were greatly appreciated by students and our local clerks.

Forms Committee

Our Election Coordinator, Joe Bridgman, is a member of the Bureau of Elections Forms Committee. This committee is responsible for the design and testing of many commonly used election forms. This year, the Forms Committee revised the absent voter ballot envelopes and the Hamburg Township Clerk piloted the new design with great success. The new design will be utilized on a statewide basis during the 2020 election cycle. In addition, revisions to canvass booklets for precinct delegates were completed. Revisions were necessary as changes to Michigan's election law transferred the responsibility of certifying precinct delegates to County Clerks rather than local election inspectors.

The Circuit Court staff teamed up with LESA to sell greeting cards and dog treats created by the students of LESA. Around 100 greeting cards and many bags of dog treats were sold. The funds raised help fund LESA's valuable programs. Pictured here are Kristi Cox and Michele Coan-Bradley from the Clerk's Office and Sarah Harvey from LESA.



City of Brighton Clerk, Tara Brown and Clerk Hundley

Marion Township Clerk, Tammy Beal, and Joseph Bridgman



Accessible Voting For All Event

The Clerk's Office once again participated in the "Accessible Voting For All" class held at the Livingston Educational Service Agency (LESA) on September 3O, 2O19. Our office worked to promote voter participation for individuals with disabilities or those in need of assistance while voting. The class covered issues such as using the voting equipment, the voting process, citizens' rights within the polls on election day, what to expect when you vote, and why it is important to vote.

9 · 2019 Annual Report

CLERK OF THE CIRCUIT COURT

Division Overview

The Constitution for the State of Michigan tasks the County Clerk with the preservation of all court records for future generations. To that end, the Circuit Court division of the Clerk's Office is responsible for maintaining and preserving court records. Those records include, but are not limited to those associated with the following types of cases: felony criminal cases, domestic relations matters, personal protection orders, general civil matters involving claims of \$25,000 or more, appeals from lower courts, and juvenile matters. These records are preserved in strict accordance with the record retention guidelines set forth by the State of Michigan.

A file is opened by the filing of an initial pleading. That document fixes the type and complexity of the case, which in turn determines the depth of involvement by the Clerk's Office. That document is processed with precision (electronically, when applicable) and placed in the file. Each document and file is maintained in a manner that allows for appropriate access pursuant to statute and court rule.

In addition to the Case Load Comparison chart, please refer to the last page of this report for both a caseload and collections summary.

Criminal

The Clerk's Office duties with criminal files includes not only preparing the various judgments involved, but also collecting the monies assessed. as well as reporting convictions to the State of Michigan for entry onto criminal histories. All of these duties are critically important and must be performed with particularity within very short timelines.

Domestic and PPO's

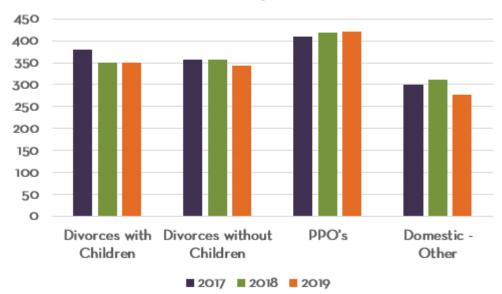
Domestic files can remain active upward of 18 years. It naturally follows that they require a great deal more handling and attention to detail over the life of the file. Many different file types fall under this category.

Case Load Comparision

(2019 - 2018)

Circuit Court County Clerk's Office	2019 Cases	2018 Cases	Actual Change	Increase / Decrease
Civil Cases Filed	446	463	-17	-3.67%
Domestic Cases Filed	971	1,017	-46	-4.52%
Criminal Cases Filed	643	659	-16	-2.43 %
Reopened Cases	108	117	-9	-7.69 %
Appeals	46	37	+9	+24.32%
PPO's Filed	421	418	+3	+0.72%
Total Cases Opened	2,635	2,711	-76	-2.81%

Domestic Filings 2017 - 2019





Civil and Appeals

Civil cases can encompass a whole host of different issues from contract disputes to real estate disputes. The complexity of these cases can be daunting and often, monies are escrowed with the courts and additional accounting is required.

We are proud to announce that in March of 2019, the Business Court branch of our Civil Division began accepting cases. There were a total of 40 cases filed in our Business Court this year. These cases can be moved through the system expeditiously for the benefit of the business owner(s). We saw 30% of the Business Court cases disposed of within 90 days and 48% within six months.

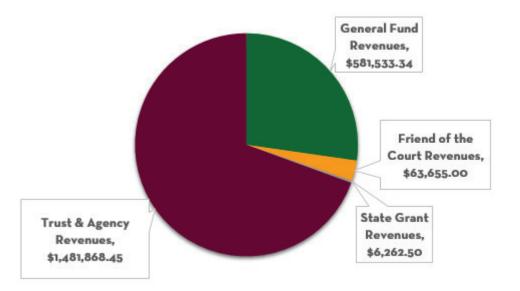
The vast majority of appeals from the lower court is within the Civil Division. These filings can range from landlord/tenant matters to dog cases. There are very strict timelines that must be adhered to when dealing with appeals.

Financial Accounting

The Clerk's Office is responsible for receipting all payments made to the 44th Circuit Court. The Clerk's Office receipted \$2,133,319.29 during 2019, which includes \$581,533.34 of General Fund revenues. The total amount receipted includes filing fees, court ordered fines, costs, restitution and bonds among other receipts.

We have placed a high priority on collections this year. I look forward to continued improvements and success.

Total 2019 44th Circuit Court Revenues (\$2,133,319.29)





Health Official, Dianne McCormick; Penny Murphy; Clerk Hundley; and Commissioner Lawrence took 1st in the women's division at the 2019 Corrigan Oil Co. Annual Golf Outing. Proceeds benefited 3 local charities. Agenda Page 169 of 172



Mary Kuzner was selected as the County's 1st Quarter Employee Recognition Winner

Employee Recognition Award & Nominations

The Clerk's Office was honored to receive so many recognitions of quality customer service during the first year of the County's Employee Recognition Program.

County Clerk's 2019 Livingston County Employee Recognition Nominations:

1st Quarter - 10 employees received 15 nominations.

Mary Kuzner was selected as the 1st Quarter award winner.

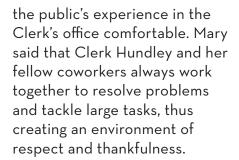
Mary received 11 nominations for her service and was mentioned as being "very helpful and nice," "friendly, quick, and efficient," and making

Courthouse Halloween Celebration

The Clerk's Office celebrated Halloween in style with a party at the Courthouse with the Treasurer's Office and Register of Deeds Office. Employees displayed their creativity and dressed in unique and fun costumes.



Britta Karlsson-Wisniewski, Joe Bridgman, Amy Kostesich, and Michelle Olrich



2nd Quarter - 9 employees with 14 nominations.

3rd Quarter - 4 employees with 6 nominations.

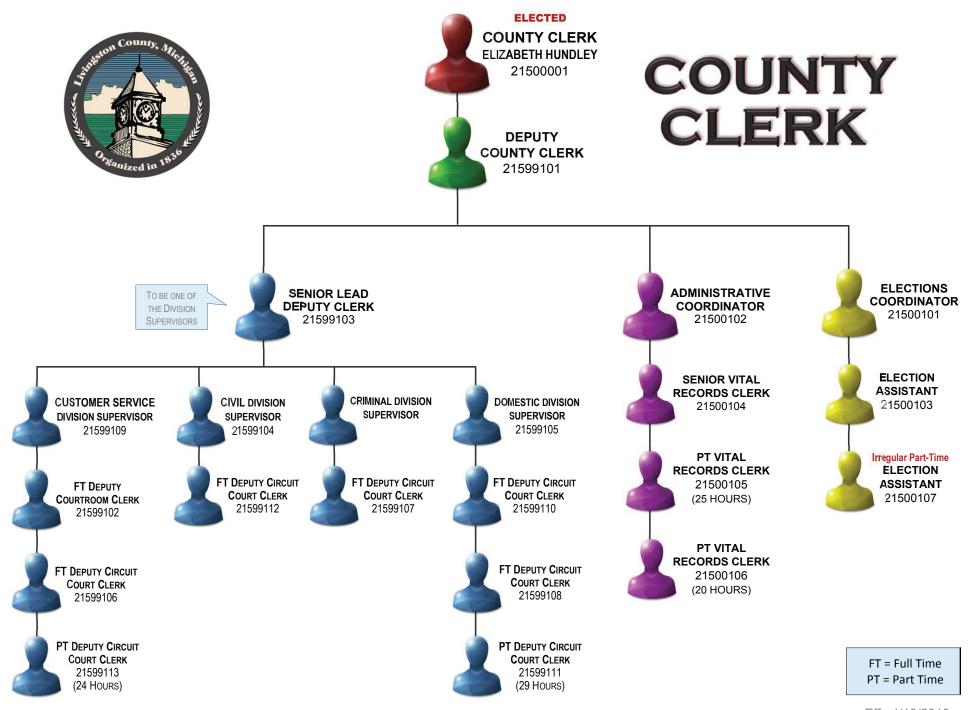
4th Quarter - 7 employees with 9 nominations.



The Treasurer's Office



The Register of Deeds Office



Eff: 4/10/2019

2019 ANNUAL ACTIVITIES & STATISTICAL REPORT

OFFICE OF THE LIVINGSTON COUNTY CLERK

CIRCUIT COURT CLERK'S OFFICE
Civil Cases Filed446
Domestic Cases Filed 971
Criminal Cases Filed 643
Reopened Cases 108
Appeals46
PPO's Filed
Total Cases Opened
Cases Pending January 1, 2019 849
Cases Closed in 2019
Cases Pending December 31, 2019 798
CIRCUIT COURT COLLECTIONS
County General Fund Revenues
Friend of the Court Revenues
State Grant Revenues (Drug Court)\$6,262.50
Trust & Agency Revenues
Other Governmental Entities
Restitution
Restitution \$470,070.01
Total Circuit Court Revenues\$2,133,319.29
COUNTY CLERK SUMMARY
Writs Issued
Attorneys at Law Registered9
Notary Commissions Issued/Bonds Filed
Concealed Weapon Permits Issued
Assumed Names/Co-Partnerships & Dissolutions Filed 509
Marriage Licenses Issued and Filed
Births Decorded and Filed
Births Recorded and Filed
Deaths Recorded and Filed
Deaths Recorded and Filed
Deaths Recorded and Filed

2019 ELECTIONS DIVISION ANNUAL ACTIVITIES & STATISTICAL REPORT

ELECTIONS CANVASSED: 3

May 7 Special Election for City of Brighton, Howell Public Schools,

and Brighton Area Fire Authority

August 6 Special Election for Byron Area Schools, Fenton Area Public

Schools, Whitmore Lake School District, and Washtenaw

Intermediate School District

November 5 City General Elections (Brighton and Howell) and Special

Elections (Brighton Area Schools, Fenton Area Public Schools, Pinckney Community Schools, Oakland Community College)

ELECTION REIMBURSEMENTS: 3

<u>MAY 7</u>	<u>AUGUST 6</u>
2 Cities, 10 Townships	6 Townships
43 Polling Precincts	8 Polling Precincts
6 AV Counting Boards	1 AC Counting Board
7 Combined Precincts	3 Split Precincts
36 Ballot Styles	5 Ballot Styles

Proposals: 1 City, 1 School District, and 1 Fire Authority

Election Reimbursement:

Proposals: 3 School Districts and 1 Intermediate School District Election Reimbursement:

d t coo of

\$21,555.82 \$4,292.03

NOVEMBER 5

2 Cities, 8 Townships 42 Polling Precincts 7 AV Counting Boards 9 Split Precincts

36 Ballot Styles

Proposals: 4 School Districts and 1 Community College

Election Reimbursement:

\$20,038.05

Election Inspector Schools Of Instruction: 4 Number Of Precinct Inspectors Trained: 34

Campaign Finance Statements Filed: 7 (158709 - 158715)

Voter Registrations Sent To City, Township, Out-County Clerks: 2,893

Candidate Filing Fees for 2019

State Representative Candidates: \$300 Intermediate School District Candidates: \$200 Late Campaign Finance Filing Fees: \$525

Refundable Filing Fees: \$300 / Non-Refundable Filing Fees: \$200

Total 2019 Filing Fees Collected: \$1,025