



RFP #928771 Q&A

1. Question: What Cisco platform(s) are deployed today (Catalyst Center, WLC, etc.), and what data access methods are available?

Answer: Cisco Prime, Cisco Catalyst Center. No Cisco Spaces availability though.

2. Question: What Juniper Mist data is available for the PoC, including API access, historical data, telemetry intervals, and retention period?

Answer: Juniper Mist buildings identified in the RFP will have approximately 2-4 months of historical data at the anticipated award time.

3. Question: Accessing Cisco and Juniper Mist data requires configuration on MSU's network (endpoint enablement, domain whitelisting, credentialed access). The RFP requires a HECVAT and a description of network impact but does not state who is responsible for configuration or the access timeline. Who owns the network configuration tasks, and does the 90 to 120 day clock start at award or at confirmed data access?

Answer: MSU IT will retain ownership of network configuration and security controls. The selected vendor is expected to identify requirements and coordinate closely with MSU IT.

The 90–120 day PoC period begins once working, approved data access is provisioned, not at contract award.

4. Question: The required metrics in Section 2 are limited to occupancy counts, dwell time, persistence, peak utilization, and time-based trends. Does MSU want additional data insights such as movement and pathway analytics, new versus returning visitors, or visit frequency included in the PoC, or are these explicitly out of scope?

Answer: Yes, additional metrics are valued. The metrics listed in Section 2 (occupancy counts, dwell time, persistence, peak utilization, and time-based trends) represent MSU's minimum expectations for the PoC. Proposers are encouraged to include additional data insights such as movement and pathway analytics, new versus returning visitors, and visit frequency where available and feasible. These enhanced analytics are not out of scope and may be considered favorably, provided they are clearly described and delivered within the PoC effort.

5. Question: The platform distinguishes new versus returning visitors and tracks visit frequency at building, floor, and zone levels. Section 2 lists persistence of use but does not define whether this includes returning-visitor analysis. Does MSU consider new-versus-returning and visit-frequency metrics in scope, and how does MSU define persistence?

Answer: Yes, new-versus-returning visitor analysis and visit frequency are considered in scope.

For the PoC, persistence is broadly defined as repeated or sustained use of a space over time. One objective of the PoC is to evaluate how different persistence definitions perform and which are most useful for MSU decision-making.

6. Question: The RFP states the PoC should generate building, floor, and zone/room-level occupancy counts. For MSU's intended decisions in this PoC, what is the minimum acceptable analysis level by space type (building versus floor versus room/zone), and how will MSU determine whether zone/room-level outputs are sufficiently reliable to be considered successful?

Answer: Building- and floor-level analysis are the required minimums for the PoC. Zone- or room-level outputs are desired where supported by access point density and data quality. MSU will evaluate the reliability of zone- or room-level outputs based on transparency of methodology, internal consistency of results, and alignment with expected space utilization patterns.



7. Question: The RFP calls for dwell time and persistence of use. How does MSU define dwell time (for example, continuous presence, cumulative daily presence, or threshold-based presence), and what specific planning or operational use case will MSU apply dwell and persistence metrics to?

Answer: MSU has not predefined a single dwell-time methodology. Respondents are expected to evaluate multiple approaches (e.g., continuous presence, cumulative presence, threshold-based presence) and demonstrate how each supports planning use cases, such as understanding space utilization, identifying inefficiencies, and informing future space planning decisions.

See also: Question 5.

8. Question: The RFP calls for peak utilization periods. What definition of peak should be used (maximum instantaneous interval, rolling average, percentile peak, or peak by day type), and what decision does MSU intend to support with peak metrics (for example, scheduling, space consolidation, or HVAC setpoints)?

Answer: As noted, this RFP is intended to support a Proof of Concept (POC) effort. At this stage, MSU has not predefined a single standard for “peak utilization,” as one of the objectives of the POC is to evaluate and determine which peak definitions provide the most actionable insight.

Respondents should be prepared to explore and test multiple peak methodologies (e.g., maximum instantaneous interval, rolling averages, percentile-based peaks, and variations by day type) and assess their relative usefulness.

The anticipated outcome of this effort is to inform future decision-making regarding how peak metrics can best support campus needs, which may include—but are not limited to—space utilization optimization, scheduling strategies, system sizing, and operational controls such as HVAC setpoints.

Accordingly, MSU expects the selected consultant to provide recommendations on appropriate peak definitions and associated applications based on findings from the POC.

9. Question: MSU lists supported metrics including occupancy counts, peak utilization percentage, and dwell time. Are there any additional required metrics (for example, unique device counts, utilization versus capacity, or day-type comparisons), and what use case drives each required metric?

Answer: The metrics identified in the RFP represent minimum expectations. Respondents are encouraged to include additional metrics where they enhance planning insight, provided each metric is clearly tied to a defined use case such as space utilization optimization, scheduling strategy, or capital planning.

10. Question: Section 2 expresses a strong preference for 15- or 30-minute intervals versus an hourly minimum. Is finer granularity a scored differentiator, and is the 15-minute Juniper Mist interval the target for Juniper buildings while Cisco buildings may differ?

Answer: Hourly resolution is the minimum requirement. Finer granularity (15- or 30-minute intervals) is preferred and may be considered a differentiator where it enhances analytical insight. Differences in native platform capabilities are understood and acceptable within the PoC.

11. Question: The RFP indicates utilization trends must be captured at least hourly, with a preference for 30- or 15-minute intervals. What use case specifically requires 15-minute granularity versus hourly, and will MSU evaluate vendors differently based on interval resolution even if hourly outputs meet the PoC goals?

Answer: Finer granularity may support identification of short-duration occupancy patterns and peak utilization dynamics. However, vendors will not be penalized if hourly outputs sufficiently meet PoC objectives.

12. Question: MSU asks for the ability to extract data at varying space and time granularity (building, floor, zone; hourly, 15-minute). Which combinations are actually needed for MSU's PoC evaluation and downstream analysis, and which are nice-to-have for future phases?

Answer: Building/floor level and hourly intervals is the minimum requirement.



13. Question: The RFP states no accuracy requirement related to multi-device users. Is de-duplication accuracy a stated evaluation factor, or is it only addressed under the general accuracy disclosure?

Answer: No separate scoring; included within overall accuracy evaluation.

14. Question: Section 3.2 requires respondents to describe how MAC address randomization is mitigated but states no required accuracy threshold or pass/fail criterion. What level of accuracy or confidence does MSU consider acceptable, and will randomization handling be scored?

Answer: No minimum threshold has been defined. Evaluation will be based on transparency and methodology.

15. Question: Section 3.2 requires disclosure of accuracy ranges but states no minimum accuracy and no required confidence level. Does MSU have a minimum acceptable accuracy or confidence threshold for the PoC to be deemed successful?

Answer: See response to question 14.

16. Question: What decisions will MSU make based on accuracy (planning only versus operational control), and what minimum acceptance criteria, if any, should vendors target by space type (labs versus classrooms versus offices)?

Answer: This RFP is intended to support a Proof of Concept (POC) effort focused on evaluating the accuracy of space occupancy data and its suitability for different decision contexts. At this stage, MSU anticipates using POC results primarily for planning and analytical purposes (e.g., space planning, utilization assessment, and long-range facilities decision-making), not for real-time operational control.

Accordingly, MSU has not established fixed minimum accuracy thresholds by space type in advance. One of the objectives of the POC is to assess how accuracy varies across different environments (e.g., labs, classrooms, offices), sensing approaches, and usage patterns, and to determine what levels of accuracy are sufficient to support various planning decisions.

Respondents should be prepared to test, document, and report accuracy performance by space type, including sources of variance and known limitations. The anticipated outcome of the POC is to inform future guidance on acceptable accuracy ranges and decision applicability, including where data may be appropriate for high-level planning versus more operationally sensitive use cases in later phases.

17. Question: The RFP requires describing how MAC address randomization is addressed or mitigated. What is MSU's expected success condition (for example, demonstrate the method, quantify impact, or achieve a specific accuracy despite randomization), and how will MSU validate that randomization has been sufficiently handled?

Answer: MSU does not prescribe a single technical approach to addressing MAC address randomization. The expected success condition is that the respondent clearly demonstrates and quantifies how their proposed method mitigates the impact of randomization such that the resulting data remain reliable and decision-useful for the proof of concept. At a minimum, respondents should describe the method, explain its limitations, and quantify the anticipated impact of randomization on key outputs (e.g., occupancy counts, dwell time, or persistence).

18. Question: What facility datasets are available for zone creation and maintenance, such as CAD, room inventory, or other space management tools?

Answer: CAD, GIS, and room inventory data sets are available.

19. Question: Section 3.2 asks respondents to describe automated zone creation and synchronization with CAD, room inventories, and space databases, capabilities oriented toward enterprise-scale, ongoing maintenance. For a time-boxed PoC of six or fewer buildings, does MSU need automated or synchronized zone maintenance demonstrated, or is manual zone setup acceptable for the PoC, with automation evaluated only as future-state scalability?

Answer: Manual setup is acceptable for the PoC. Automation will be evaluated for scalability.



20. Question: For zone creation and management, MSU requests methods that automate or streamline zone creation using CAD, room inventories, space databases, and similar sources. Which institutional sources does MSU consider authoritative for the PoC (for example, a specific space management system), and what is the intended use that drives the emphasis on automated zone synchronization during a time-limited PoC?

Answer: For the purposes of the PoC, MSU considers its CAD floor plans, room inventory data, and GIS/space mapping datasets to be the primary authoritative sources for defining and validating space boundaries and zone structures. Additional space management and scheduling data may be available for reference where appropriate.

MSU's interest in automated zone creation and synchronization is primarily related to future scalability and long-term maintainability rather than the immediate needs of the PoC. While manual zone creation is acceptable for the proof of concept, the University seeks to understand how proposed solutions can reduce the ongoing effort required to create, update, and maintain occupancy zones as floor plans, room configurations, and space assignments change over time.

Respondents should describe how their approach can leverage authoritative space data sources to streamline zone creation, minimize manual redraw efforts, support updates when buildings are renovated or reconfigured, and maintain alignment between occupancy analytics and the University's space records. These capabilities will be evaluated primarily as indicators of long-term scalability and operational sustainability beyond the PoC.

21. Question: The RFP asks for processes to incorporate floor plan revisions, room reconfigurations, and space assignment changes while minimizing manual effort. During the 90 to 120 day PoC, does MSU anticipate active space changes that must be reflected, or is this requirement primarily to evaluate future maintainability?

Answer: No significant changes are anticipated; the requirement is future-focused.

22. Question: What is the use case intended for integrating course schedules?

Answer: Compare scheduled vs. actual utilization.

23. Question: Which BMS system is MSU using today, and what version of its software? What are the priority use cases?

Answer: Siemens Desigo is used for building automation and monitoring. All desired use cases in the RFP will be considered during evaluation.

24. Question: What is the enterprise data warehouse MSU is using today, or is it home-grown?

Answer: It is home grown.

25. Question: What APIs is the University using today?

Answer: MuleSoft is our API gateway.

26. Question: Is MSU using Snowflake? If yes, would MSU expect integrations with this platform?

Answer: MSU does not use Snowflake.

27. Question: What are the specific use cases MSU is planning for when it asks for embedding within our interface?

Answer: MSU is not requiring a specific implementation. "Embedding within our interface" refers generally to the ability for analytics, visualizations, dashboards, or AI-assisted capabilities to be integrated into an existing MSU application or report like Power BI through APIs, embedded components, or similar integration methods. Vendors should describe the available options and any technical requirements.

28. Question: Would MSU expect to pull data from an LLM chat-type interface? If yes, how would MSU expect to use this, and how would MSU expect the data to be presented?

Answer: MSU is not requiring an LLM chat interface. If offered, conversational AI capabilities would be considered optional enhancements that allow users to query study results or aggregated datasets using natural language.



29. Question: Is dashboard access expected during the PoC, or are analytical outputs, exports, and executive reporting sufficient?

Answer: Dashboard access is expected.

30. Question: Is MSU using single sign-on, or does MSU expect single sign-on for users?

Answer: MSU uses Okta. It is not required for the PoC, but should be supported long-term.

31. Question: Mandatory Minimum Requirement number 6 requires planning-relevant analytical outputs including dashboards or other visual tools. What does MSU consider planning-relevant for this PoC (for example, space investment prioritization, classroom utilization policy, or office planning), and what minimum set of outputs is required to satisfy this requirement?

Answer: Insights supporting space use, scheduling, and capital planning decisions.

32. Question: The RFP states processing may be conducted on MSU-managed virtualized computing resources if and where needed. Is MSU's intent that the vendor solution run entirely within MSU-managed infrastructure, or is MSU open to vendor-managed processing as long as privacy and security requirements are met? What is the underlying requirement driving this preference?

Answer: MSU is open to either a vendor-managed or MSU-managed deployment model. The University's primary concern is ensuring that all data handling complies with applicable security, privacy, and contractual requirements. Vendors should describe their proposed architecture, security controls, hosting model, and any infrastructure requirements necessary to support their solution.

MSU does not prescribe a specific aggregation methodology or minimum group-size threshold. The expectation is that the data cannot reasonably be used to identify individual persons or devices and contains no personally identifiable information. Vendors should describe the anonymization and aggregation techniques they employ and how they support industry best practices and applicable privacy requirements.

33. Question: The RFP requires all Wi-Fi data to be anonymized and aggregated prior to analysis and free of PII. What aggregation standard does MSU expect (for example, minimum group-size thresholds or suppression rules), and what is the underlying governance requirement MSU wants vendors to adhere to beyond no PII?

Answer: MSU does not prescribe a specific aggregation methodology or minimum group-size threshold. The expectation is that the data cannot reasonably be used to identify individual persons or devices and contains no personally identifiable information. Vendors should describe the anonymization and aggregation techniques they employ and how they support industry best practices and applicable privacy requirements.

34. Question: How does MSU intend to validate PoC accuracy, for example through manual counts, classroom schedules, occupancy studies, or other ground-truth sources?

Answer: Schedules, capacity, historical data, and possible manual counts.

35. Question: MSU cites long-term scalability but also states the PoC is not intended to procure or deploy a long-term enterprise system. How will MSU weigh scalability potential in evaluation versus PoC-only fit, and what future scale scenario should vendors assume when describing scalability (for example, entire campus, specific building types, or continuous monitoring cadence)?

Answer: See RFP for evaluation criteria and weighting. Future scenarios are to be determined.

36. Question: If MSU could choose to pay for only the months it wanted to report on, what is the minimum number of months per year MSU would want to review, in best and worst cases?

Answer: The Proof of Concept (PoC) is intentionally aligned with the fall semester to capture conditions when campus occupancy—and corresponding demand patterns—are at their peak, providing the most meaningful dataset for evaluation. While the PoC is concentrated in the fall, a scaled implementation would anticipate ongoing, year-round reporting to enable continuous insights, seasonal comparisons, and integration into institutional planning and operations.



37. Question: Are any spaces under consideration single floors within multi-floor buildings (for example, leased space in shared buildings)?

Answer: No. All spaces identified for the PoC are entire buildings.

38. Question: The platform supports near-real-time data as well as historical trend reporting. The RFP frames the study around trends and decision support but states no real-time or live-occupancy need. Is real-time occupancy of interest, or is the PoC purely retrospective and trend-based?

Answer: The PoC is intended to support retrospective analysis and trend-based insights for planning and decision-making; real-time or live occupancy monitoring is not a defined requirement for the pilot.

However, real-time capabilities may be considered as part of overall platform functionality, particularly for future operational use and targeted data validation through comparison with physical counts. Proposers are encouraged to describe how these capabilities could add value, but PoC deliverables should remain focused on trend development, pattern identification, and decision support.

39. Question: Given the 90 to 120 day PoC window and September award, does MSU's existing Cisco and Juniper Mist environment already retain historical Wi-Fi telemetry that can be used, or will data collection begin only at project initiation?

Answer: Juniper environment does retain historical telemetry data. Cisco environment does not leverage any occupancy analytics at this time, it simply collects user association data.

40. Question: Does MSU use eduroam, such that visitors from other universities can join the network?

Answer: Yes.

41. Question: What percentage of students join the network, and how consistently do they use it?

Answer: A very high percentage. Many buildings don't have good cellular coverage.

42. Question: What percentage of faculty join the network, and how consistently do they use it?

Answer: A very high percentage. Many buildings don't have good cellular coverage.

43. Question: What behavioral patterns is MSU looking to uncover?

Answer: MSU is seeking to identify clear, actionable patterns in when, where, and how spaces are used, including peak demand times, dwell and repeat-use behaviors, high- and low-utilization areas, general movement patterns, and differences between scheduled and actual occupancy. The objective is to translate these insights into decision-ready information that supports space optimization, operational improvements, and long-term facilities planning.

44. Question: Do student and faculty Wi-Fi devices auto-connect as they move from building to building, even where buildings use different hardware (Cisco versus Juniper)?

Answer: Yes

45. Question: Are visitors granted access to the Wi-Fi network, and what percentage of them join?

Answer: MSU has a guest network that gets a lot of use by visitors as well as the students, faculty, and staff that don't want to take the time to join internal Wi-Fi or eduroam.



46. Question: The RFP states the POC will cover "up to approximately 500,000 gross square feet" across 6 buildings totaling 877,026 GSF. Will MSU select the final building subset before proposals are due, or should proposers scope and price for all 6 buildings with the understanding that coverage will be capped at 500,000 GSF? The Cisco/MIST mix of the selected buildings will also need to be understood.

Answer: MSU intends to collaboratively select the final building subset during project initiation, based on factors such as data availability, access point density, and alignment with PoC objectives.

To support this approach, respondents should:

- Provide pricing that enables flexibility, such as:
- A per-building and/or per-square-foot (GSF) pricing structure, and/or
- A baseline scenario aligned to approximately 500,000 GSF
- Clearly state any assumptions related to building selection, access point density, or data readiness

MSU does not require respondents to assume a fixed subset of the six buildings at proposal stage, and proposals should be structured to support final selection and refinement in partnership with the selected vendor.

47. Question: Can MSU provide the approximate number of wireless access points deployed across the 6 candidate buildings, broken down by Cisco and MIST? AP density and placement directly affect the granularity of zone-level analysis we can commit to in our proposal.

Answer: Yes. See response to question 56.

48. Question: Are there specific space types among the candidate buildings (large lecture halls, seminar rooms, shared departmental spaces, etc.) where utilization data would directly inform upcoming scheduling or allocation decisions? Identifying MSU's top 2-3 priority space types helps us design the right zone structure from day one.

Answer: While all space types will be evaluated, emphasis will be placed on classrooms, labs, offices, and shared academic spaces.

49. Question: The RFP references a 90-120 day POC window. Should proposers plan for a 90-day engagement with the option to extend, or will MSU specify a fixed duration? Can MSU also confirm the anticipated start date so proposers can align deliverable milestones with representative campus activity periods and identify the outcomes or decision points the final deliverables should support?

Answer: MSU has identified a 90–120 day window for the POC but has not yet established a fixed duration. Proposers should plan for an engagement within this range, with the final timeline confirmed during project initiation based on the selected approach and pilot buildings.

MSU anticipates initiating the POC in alignment with the fall semester to capture representative peak occupancy conditions; however, the exact start date will be confirmed at contract execution.

Proposers should align deliverables to capture meaningful patterns across the engagement period and support evaluation of the POC, validation of the proposed methodology, and a decision on future scalability and broader deployment.

50. Question: Our platform is cloud-hosted SaaS. Data is anonymized on the institution's network before transmission, secured under our HECVAT-assessed framework, with data exportable to institutional systems. Does this cloud-hosted deployment model meet MSU's data processing and hosting requirements?

Answer: Yes.

51. Question: Can MSU provide the anticipated timeline for provisioning access to both the Cisco and Juniper Mist wireless infrastructure after contract execution? Access mechanisms and provisioning timelines differ between the two platforms, and we want to ensure the full POC duration is available for data collection and analysis

Answer: The PoC 90-120 day time frame will not begin until data access has been provided.



52. Question: The integration section references 25Live, Siemens BAS/BMS, and CMMS/IWMS platforms, and the RFP notes that "the proof of concept will not require full system integrations." Should proposers plan for live data exchange with any of these systems during the POC, or would a demonstration of integration capabilities with a roadmap for full implementation be sufficient?

Answer: Demonstration is sufficient for the PoC.

53. Question: Does MSU anticipate an oral presentation, demonstration, or interview round as part of the evaluation process? If so, can MSU provide guidance on the format, expected duration, and whether the presentation should include a live platform demonstration?

Answer: The University may request oral presentations/demonstrations/interviews upon full review and evaluation of the proposals received. Details and requirements will be shared with those who are invited into that phase.

54. Question: Just to be clear, is this an RFP to be awarded to present and conduct a study whether Cisco, Juniper or a third-party location and analytics integration platform is the best fit for MSU during that 90-120 day period? Or is this an RFP to be awarded to conduct an Proof of Concept for a third-party location and analytics platform passively aggregating all the wireless location analytics from Cisco and Juniper to accomplish the stated goals in the RFP?

Answer: This RFP is to be awarded to conduct a Proof of Concept (PoC) for a third-party location and analytics platform that passively aggregates and analyzes wireless location data from MSU's existing Cisco and Juniper Mist environments. It is not intended to evaluate or recommend Cisco versus Juniper as a wireless infrastructure solution. Rather, the objective is to assess how a third-party analytics solution can leverage available data from both platforms to generate actionable occupancy and utilization insights aligned with the goals of the RFP.

55. Question: What does MSU consider a successful PoC outcome, such as directional planning insight, operationally useful dashboards, or a quantified accuracy target by space type?

Answer: A successful PoC outcome for MSU is the delivery of credible, planning-relevant insights that can inform decision-making, supported by operationally usable outputs (e.g., dashboards and datasets) and clearly defined performance benchmarks (such as accuracy by space type), with transparent documentation of limitations and assumptions.



56. Question: Of the six named buildings, what are the precise model access points, local appliances/controllers and versions, licenses and platform that are managed by each building?

Answer:

Building	Network Hardware	Controller/WLC/MIST	Access Point Total	Access Point Models	Software Version
Life Science	Cisco	Cisco WLC Series: 8510/ Model: AIR-CT8510-K9	117	702w, 1532, 2602i, 2702i, 3502i	8.5.161.7
Interdisciplinary Science & Technology Building (ISTB)	Cisco	Cisco WLC Series: 8540/ Model: AIR-CT8540-K9	149	1815w, 2702i	8.5.161.7
Bessey Hall	Juniper	Mist Edge Model ME-X6	121	AP45	0.14.29883
Kedzie Hall	Cisco	Cisco Catalyst 9800-80 Wireless Controller	169	C9120axi	17.9.5
Morrill Hall of Agriculture	Juniper	Mist Edge Model: ME-X6	148	AP45	0.14.29883
Hannah Administration Building (adm.)	Cisco	Cisco WLC Series: 8540/ Model: AIR-CT8540-K9	78 Cisco / 154 Mist	1815, 2602, 2702, 3502 / Mist AP45	8.5.161.7

Hannah Administration Building and Kedzie Hall are potentially migrating to Mist before the start of the RFP. Admin is simply waiting on a wired network upgrade (APs already installed), and Kedzie has all the new AP lines pulled and simply needs a 1:1 replacement of the AP hardware.

57. Question: Has MSU already enabled the data sources required for occupancy-style analytics in both Cisco and Juniper, or would the PoC need to include enabling features, API access, and configuration work?

Answer: MSU has begun implementing and utilizing Juniper Mist Premium Analytics and anticipates that the Juniper buildings identified in the PoC will have access to the occupancy and location analytics data available through that platform. However, the University has not fully validated all data sources or reporting capabilities required for this PoC and expects the selected vendor to assist in identifying any additional data access requirements.

For Cisco environments, occupancy analytics capabilities may be more limited and additional configuration, API access, or platform-specific enablement may be required depending on the respondent's proposed approach.

58. Question: Are the Cisco and Mist access points accurately mapped to building floorplans loaded into each platform?

Answer: Yes to accuracy of the Mist maps. Cisco maps wouldn't be terribly accurate and would require verification before signing off on.

59. Question: Is the intent for MSU to consolidate to a single wireless platform solution provider or continue to operate in a mixed wireless environment?

Answer: MSU is moving to the Mist platform. Due to the large number of Cisco APs still in use, that will be a 2-3 year effort.



60. Question: Must all processing stay entirely on MSU-managed infrastructure, and what VM/database standards are available?

Answer: No. Processing is not required to occur exclusively on MSU-managed infrastructure. If a vendor proposes an on-premises deployment, MSU can discuss available virtualization and database platforms during implementation. Vendors should identify any infrastructure dependencies or preferred deployment models in their response.

61. Question: Are campus safety and E911 requirements in-scope for this WIFI Analytics platform solution (either now, or as a future use case)?

Answer: Not in scope for PoC; potential future use case.

62. Question: Regarding non-wifi endpoints, how do you plan to have accurate occupancy trends when individuals are not carrying wireless devices or wireless is disabled

Answer: This is a recognized limitation; the PoC focuses on Wi-Fi-based estimation.

63. Question: Is dwell time and persistence of use a requirement for the selected vendor?

Answer: Yes. Both are expected metrics as stated in the RFP scope of work.

64. Question: The RFP states that the PoC will cover up to approximately 500,000 GSF, but the six buildings listed total over 875,000 GSF. Are all six buildings in scope?

Answer: MSU intends to collaboratively select the final building subset during project initiation, based on factors such as data availability, access point density, and alignment with PoC objectives.

To support this approach, respondents should:

- Provide pricing that enables flexibility, such as:
 - A per-building and/or per-square-foot (GSF) pricing structure, and/or
 - A baseline scenario aligned to approximately 500,000 GSF
- Clearly state any assumptions related to building selection, access point density, or data readiness

MSU does not require respondents to assume a fixed subset of the six buildings at proposal stage, and proposals should be structured to support final selection and refinement in partnership with the selected vendor.

65. Question: Within the Evaluation Section, “Cost & Value” and “Total Cost to MSU” are listed separately. Can you please clarify the difference?

Answer: The “Cost & Value” criterion will be assessed by the MSU stakeholders and will be their assessment of cost and overall value to MSU from their lens. The “Total Cost to MSU” criterion is evaluated by Procurement and is solely based on the cost proposals.

66. Question: Within the Evaluation Section it mentions “Quality of Analytical Outputs & Insights”. How will MSU be measuring this?

Answer: MSU will evaluate the quality of analytical outputs and insights based on their ability to provide clear, credible, and actionable information that supports space planning, scheduling, facilities operations, and capital planning decisions. Consideration will be given to the usability of dashboards and visualizations, the ability to identify meaningful occupancy and utilization patterns, transparency of methodology and limitations, and the relevance of recommendations derived from the data.

MSU will also evaluate the ability to export and access underlying data through standard formats, APIs, or other mechanisms that support integration with institutional reporting, analytics, and business intelligence platforms.

67. Question: How many WiFi Access Points are there for the PoC in scope?

Answer: Roughly 858 access points.



68. Question: How many WiFi Access Points are there across all of campus?

Answer: Roughly 14,500 access points.

69. Question: What access point models are in use for both Mist and Cisco?

Answer: Mist: AP45 & Cisco 702w, 1815w, 1532, 2602, 2702, 3502.

70. Question: How many users do you anticipate providing access to for a larger rollout?

Answer: If referring to number of Wi-Fi users we'd provide access to, we anticipate seeing client counts of ~100k on a single vendor platform once we're able to consolidate and folks adopt Wi-Fi usage more on campus. If referring to dashboard/analytics software users, MSU estimates approximately 25 users.

71. Question: How many granular spaces would you want to monitor, excluding buildings and floors? How many for the Pilot, and how many for an expanded engagement?

Answer: MSU has not established a fixed target for the number of granular (sub-building) spaces to be monitored at this time. For the POC, proposers should assume a limited, representative set of spaces across a small number of buildings, with final selection and level of granularity to be defined collaboratively during project initiation based on building types, pilot objectives, and technical approach.

For an expanded engagement, MSU anticipates scaling to a broader portfolio of spaces, but the total quantity and level of detail will depend on POC outcomes, demonstrated accuracy, and overall scalability. Proposers should describe how their solution can flex across varying levels of spatial granularity and building counts.

72. Question: Is GIS data and/or lat/long coordinates available for all spaces to be monitored?

Answer: Yes, we have all our spaces georeferenced.

a. Is this data exportable? If so, in what format(s)?

Answer: We use FME so we have the ability to export data to all the most common spatial data formats.

73. Question: Can read-only access to both Juniper Mist and Cisco WiFi environments be provided?

Answer: Yes.

74. Question: What version of Cisco is in use? DNAC/Catalyst, Meraki, etc.?

Answer: Cisco Prime and Cisco Catalyst Center.

a. Is the Cisco WiFi system cloud hosted?

Answer: No.

75. Question: Is MSU willing to provision a Virtual Machine on campus if needed?

Answer: Yes. MSU can provision virtual computing resources when appropriate for the selected solution, subject to standard IT governance, resource availability, and security review.

76. Question: Are floor plans available in DWG format? If not, what format are they readily available in?

Answer: Yes.

77. Question: Is there a comprehensive ESRI environment that encompasses all buildings, floors, and zones on campus with floor plans integrated?

Answer: Yes.

78. Question: Will security documents be required such as HECVAT, Soc-II, etc? If so, please specify which documents are requested.

Answer: Yes, a HECVAT is a required part of a respondent's proposal. Please refer to Section 1: Proposal Preparation, and its corresponding table on page 2 for submission requirements.



79. Question: Regarding the Master Services Agreement, will there be an additional round of Legal reviews where red lines can be provided following a successful Pilot before an expanded engagement?

Answer: Yes, but changes in scope only, not in changes to legal terms. Please refer to Section 1: Proposal Preparation, and its corresponding table on page 2 for submission requirements.

80. Question: Is it acceptable to submit proposal response materials through a secure portal (e.g., Bitwarden) rather than as email attachments?

Answer: As long as MSU doesn't have to agree to any terms or conditions (click-through, or otherwise) in order to access the documents, then, yes. Please keep in mind that MSU must disclose information subject to FOIA within its possession unless a valid, statutory exemption applies, and documents sent securely are still subject to FOIA and will be shared with MSU stakeholders as necessary.

81. Question: The RFP references both Cisco and Juniper Mist wireless infrastructure. Can the University provide the specific Cisco wireless management platform(s) and version(s) currently deployed within the buildings included in the Proof of Concept scope (e.g., Meraki, Catalyst Center version 2.3 or later, or Prime version 3.10 or later)?

Answer: Cisco Catalyst Center 2.3.7.9.70301.10 / Cisco Prime v3.9.1 / Mist Edge 0.1.3395+MEOS11

82. Question: To help us accurately address our system compatibility and data exchange capabilities with other campus datasets, could the University list any relevant platforms currently deployed on the campus beyond those already mentioned (BAS, scheduling, CMMS/IWMS, HVAC systems, etc.)?

Answer: The platforms listed in the RFP represent the primary systems anticipated for this project. Additional systems may be considered during implementation if they provide value to the project objectives. Vendors should describe their general integration capabilities and supported interfaces rather than limiting responses to specific products.

83. Question: In the RFP, there appears to be an emphasis on long-term sustainability and maintenance of zoning configurations. Can you please expand on the underlying concerns here? Routine replacement or adjustment of wireless APs should have minimal impact on existing zoning, but if necessary should still be minimal in their frequency. A migration from one Wi-Fi supplier to another may necessitate none, some, or even a significant amount of re-zoning depending on if there is a one to one match of new to old APs and their locations.

Answer: MSU's primary concern is the long-term effort required to create, maintain, and update occupancy zones so they remain aligned with authoritative space records, floor plans, and room inventories. While routine access point replacement may have limited impact on zoning, changes to floor plans, room configurations, space assignments, renovations, wireless infrastructure, or building layouts can require significant manual effort to review and update occupancy zones.

As part of this PoC, MSU is interested in understanding how proposed solutions support the creation, validation, synchronization, and ongoing maintenance of zones using available institutional data sources such as CAD drawings, GIS data, and room inventory systems. Particular interest will be given to approaches that reduce manual effort, support bulk updates, and help ensure occupancy analytics remain aligned with the physical and functional use of campus spaces over time. While manual zone creation is acceptable for the PoC, MSU views maintainability and scalability as important considerations for any future expansion beyond the proof of concept.

a. Are these the primary concerns, or are there other activities beyond these scenarios that the University has concerns about related to this topic?

Answer: Yes. In addition to wireless infrastructure changes, MSU is concerned with the impact of renovations, room reconfigurations, departmental moves, space reassignments, floor plan updates, and other changes that may affect zone definitions or occupancy reporting. The University is interested in understanding how proposed solutions minimize the ongoing effort required to keep occupancy zones synchronized with institutional space records and physical building layouts.



84. Question: Please confirm whether integration with BAS/BMS are not mandatory for PoC acceptance and may be offered via an API or as developing or future-phase capabilities.

Answer: Integration with BAS/BMS systems is not required for PoC acceptance. Respondents may demonstrate this capability through APIs, sample integrations, or descriptive approaches; however, full integration is not expected within the PoC scope. MSU will evaluate BAS/BMS integration capabilities as part of future scalability and long-term potential beyond the PoC.

85. Question: For the Cisco buildings, please confirm the Cisco Spaces license tier in place and whether Firehose API access is available, or whether an upgrade would be required and acceptable within the PoC.

Answer: MSU does not have a Cisco Spaces license.

86. Question: For the Juniper Mist buildings, what API and data access (e.g. Mist API, occupancy or location endpoints, and the 15-minute interval data referenced) would be provided to the respondent for the PoC?

Answer: MSU currently has access to Juniper Mist APIs and is evaluating Juniper Mist Premium Analytics capabilities as part of its broader assessment of occupancy and space utilization analytics. Relevant API access and available occupancy, location, and analytics data for the selected PoC buildings will be made available to the selected vendor, subject to security review, licensing availability, and approval by MSU IT.

MSU recognizes that Juniper Mist provides native occupancy, location, analytics, dashboards, and reporting functionality. One objective of this PoC is to evaluate the extent to which third-party solutions can enhance, extend, or complement those capabilities through additional analytics, data integration, visualization, reporting, benchmarking, predictive insights, and decision-support tools.

MSU is also interested in understanding how occupancy and utilization data can be accessed, exported, and integrated with institutional reporting and analytics platforms. Respondents should describe available APIs, export mechanisms, data models, and integration capabilities that would enable MSU to incorporate occupancy data into its own reporting, business intelligence, and planning environments.

Respondents should clearly identify which capabilities rely on standard Mist data, which capabilities require or benefit from Mist Premium Analytics, and which capabilities are unique to their solution. Respondents should also describe any additional data requirements, APIs, licenses, or configuration changes needed to support their proposed approach.

87. Question: Does MSU expect processing and hosting to occur within MSU-managed infrastructure, or is a vendor-hosted SaaS model using anonymized, aggregated data acceptable?

Answer: See response to question 60.

88. Question: The six candidate buildings total approximately 877,000 GSF against a 500,000 GSF cap. For pricing, should respondents price a defined 500,000 GSF subset, all six candidate buildings, or provide per-building or per-square-foot pricing so the final set can be selected collaboratively?

Answer: MSU intends to collaboratively select the final building subset during project initiation, based on factors such as data availability, access point density, and alignment with PoC objectives.

To support this approach, respondents should:

- Provide pricing that enables flexibility, such as:
 - A per-building and/or per-square-foot (GSF) pricing structure, and/or
 - A baseline scenario aligned to approximately 500,000 GSF
- Clearly state any assumptions related to building selection, access point density, or data readiness

MSU does not require respondents to assume a fixed subset of the six buildings at proposal stage, and proposals should be structured to support final selection and refinement in partnership with the selected vendor.



89. Question: Can MSU provide the approximate number of wireless access points per candidate building, to support accurate PoC and future-scalability pricing?

Answer: See responses to questions 56, 68, and 69.

90. Question: Juniper Mist AP already deployed?

a. Are APs strategically installed across all locations identified in the RFP?

Answer: Not all the buildings. Better fitted Mist locations can be suggested though as the migration from Cisco to Mist is actively occurring.

b. Confirm whether MSU has access points (APs) available for deployment, either partially (if only a subset is currently deployed) or in full (if none have been deployed to date)? Advise whether [Supplier] assistance is required to determine location requirements if AP placement is necessary, either through "APoS" or "predictive design."

Answer: MSU owns active subscriptions and is arranging access to PMA through the length of the RFP.

- The buildings selected for RFP do not have "optimal" Wi-Fi coverage, in fact it's safe to say that the Cisco buildings definitely do not.
- We have APs that can be deployed, and supplier assistance isn't necessary.

91. Question: Cisco Spaces Cloud platform is recommended to achieve usable and highly granular occupancy analytics over a WiFi infrastructure.

Answer: MSU does not have Cisco Spaces.

92. Question: Is there an existing Cisco 9800 WLC running 17.6.1 or later software?

Answer: Yes.

93. Question: Are Cisco APs deployed as a high-density or RTLS based design across the approximate 500K square foot campus in and around the buildings of interest?

Answer: No. The Cisco design was deployed 10-15 years ago and was done in a "best effort" manner. The Mist Wi-Fi being deployed currently is being done in a way that location analytics are actually attainable though.

94. Question: Is there an existing Cisco Catalyst Center running 2.2.3 or later software?

Answer: Yes.

95. Question: For each PoC building, please confirm the exact wireless platform and software version (e.g., Cisco Wireless LAN Controller / Catalyst 9800 with IOS-XE version, or a Juniper Mist cloud organization), and indicate whether MSU is mid-migration between wireless vendors. This determines whether one or two ingestion paths are required.

Answer: See response to question 56.

96. Question: For the Cisco buildings (Life Science, ISTB, Kedzie), which Cisco Spaces license tier is held (SEE, Extend, or ACT), and is a Cisco Spaces Connector deployed? Occupancy analytics typically require the Extend tier, and room-level analysis may require ACT; alternatively, is access limited to Catalyst Center or the base controller?

Answer: No Cisco Spaces license.

97. Question: For the Cisco buildings, will MSU issue read-only API access (a Cisco Spaces Firehose/Location API key, or Catalyst Center Assurance access), and is the Cisco Spaces tenant US- or EU-hosted?

Answer: Catalyst Center access can be arranged but only applies to a single building in the RFP. Goal would be to upgrade that building to Mist sooner than later.



98. Question: For the Juniper buildings (Hannah, Bessey, Morrill), please confirm the Mist cloud region/API host, the organization ID, the in-scope site IDs, whether the Premium Analytics subscription is held, and that MSU will issue a read-only organization API token. (Standard Mist retention is approximately 30 days; Premium Analytics retains roughly 13 months of historical zone/occupancy data.)

Answer: A key objective of this PoC is to understand how the respondent's solution relates to and complements Juniper Mist Premium Analytics. Respondents should clearly identify any dependencies on Mist Premium Analytics and describe whether their solution leverages, supplements, extends, or operates independently of the capabilities provided by that platform.

MSU is interested in understanding the unique value provided by the respondent's solution, any additional functionality beyond native Mist capabilities, and whether ongoing use of Mist Premium Analytics would be required to support the proposed approach. Following vendor selection, MSU and MSU IT will work with the selected respondent to determine and provision the appropriate read-only access, API credentials, site information, and other technical details necessary to support the PoC.

99. Question: The PoC must complete within 90-120 days "of data access." Does this period begin when MSU delivers working read-only credentials, which MSU team provisions them, and what is MSU's anticipated provisioning timeline?

Answer: If referring to Mist / Cisco data access, our network planning group will provide working credentials as soon as we receive word to move forward. Provisioning timeline will only be a day or two maximum and that would only be if folks were out of the office. Most likely something we can provide within the same working day. Once given access, you'll be provided access to all existing data in wireless support systems. Prime and Catalyst Center client data goes back a ~month and Mist client data goes back ~12 months with PMA license active.

100. Question: Which campus SSID(s) are in scope for the PoC buildings, and are they 802.1X/WPA2-Enterprise networks (for example eduroam or MSUnet) versus open guest networks? Secured, authenticated SSIDs are central to reliable, privacy-preserving device counting.

Answer: eduroam is our only 802.1x SSID. MSUnet 3.0 (open, mac registration), MSUnet Guest(open), and MSUnet PSK may be available depending on the building they're in.

101. Question: What is the approximate access-point density per room or zone in the PoC buildings, and will MSU permit a short ground-truth window (brief manual headcounts in a small number of representative spaces) to calibrate accuracy? Room-level occupancy is most defensible near one AP per room; otherwise results are reported at zone or floor level.

Answer: Depending on the building, 1 AP or less. Cisco buildings from years ago were often designed in a best effort manner utilizing hallways, meaning that there are plenty of rooms without APs at all.

102. Question: Can MSU export room geometry and attributes from its ArcGIS Indoors model (Sites -> Facilities -> Levels -> Units, with Unit IDs and names) as a file geodatabase or feature service, in preference to raw CAD? This is the cleanest path to automated, maintainable zones.

Answer: Yes.



103. Question: MSU's ArcGIS Indoors model already includes a Wireless Access Point layer. Can MSU supply the AP-to-room/level placement (AP name or identifier mapped to Unit ID) so re-surveying is unnecessary, and who owns that layer (IPF GIS versus MSU IT Networking)?

Answer: MSU currently maintains referenced room and space data; however, a comprehensive mapping of wireless access points to individual rooms or space inventory records is not currently available. The University recognizes the potential value of establishing and maintaining these relationships and would be interested in understanding how proposed solutions can leverage, create, or help maintain AP-to-space associations.

Respondents should describe any requirements, methodologies, or supporting data needed to establish and sustain these mappings, as well as any benefits such relationships provide for occupancy analytics, zone management, accuracy, and long-term maintainability.

Ownership and stewardship of any future AP-to-space mapping processes or datasets would be determined collaboratively among the appropriate MSU stakeholders.

104. Question: Can MSU provide the Spartan Space room inventory (room number, room-type and function codes, assignment unit, and design capacity) joined to the ArcGIS Indoors Unit ID for per-room normalization, and confirm the canonical space-ID and join key? If only CAD is available, will it follow the IPF Document Submittal Standards (DWG with closed room polygons, the "MSU Print" layer state, metadata sheet, georeferenced with units/CRS), and what is the current secure transfer method?

Answer: MSU can provide room inventory, floor plan, and spatial data needed to support the PoC. Where appropriate, spatial data may be available in formats consistent with the ArcGIS Indoors Information Model (AIIM), as well as other commonly used GIS and CAD formats.

MSU does not require respondents to utilize ArcGIS Indoors as the primary platform for occupancy visualization or reporting. Rather, the University's interest is in providing authoritative space and room reference data that can support occupancy analysis, zone creation, data integration, and reporting.

Respondents should describe any data requirements, preferred formats, and methods for linking occupancy information to room inventory, space attributes, and other institutional datasets. The specific data sources, identifiers, and integration approach will be finalized during project initiation with the selected respondent.

105. Question: What is the preferred dashboard delivery target—Tableau, Power BI, an embedded ArcGIS Indoors/Dashboards view, or landing processed occupancy in the MSU Enterprise Data Warehouse or a data hub? Who are the named report consumers (e.g., ISPM, Office of Planning & Budgets, IPF), and is row-level access by unit required?

Answer: For the initial PoC, MSU is interested in dashboard and visualization capabilities delivered through the respondent's platform, including compatibility with commonly used business intelligence tools such as Tableau and Power BI.

However, MSU also places significant value on access to the underlying occupancy and utilization data. Respondents should describe available data export, API, and integration capabilities that would enable occupancy data to be incorporated into MSU's enterprise data warehouse and combined with other institutional datasets, reporting systems, and analytics tools.

MSU is interested in understanding both the reporting capabilities provided by the proposed solution and the flexibility to leverage occupancy data within broader institutional analytics and decision-support processes.



106. Question: Is there an existing ISPM space-metrics report template or function-code/room-type taxonomy that occupancy outputs must conform to, what reporting cadence is expected (e.g., real-time, daily, term rollups), and what comparison baselines are desired (Wi-Fi occupancy versus 25Live scheduled use versus design capacity)?

Answer: MSU does not currently require conformance to a specific ISPM space utilization report template as part of the PoC. However, respondents should be prepared to align occupancy and utilization outputs with commonly used institutional space classifications, room types, and planning metrics where appropriate.

The University is interested in evaluating multiple reporting cadences and levels of aggregation, including hourly, daily, weekly, and academic-term summaries, to determine which are most useful for planning and decision-making purposes.

Desired comparison baselines may include, but are not limited to, scheduled use (e.g., 25Live), room capacity, room type, space assignments, and other institutional space management data. One objective of the PoC is to assess how occupancy and utilization data can be integrated with existing datasets to support space planning, utilization analysis, scheduling reviews, and related reporting activities.

Respondents are encouraged to describe recommended metrics, reporting approaches, and comparison methodologies based on their experience and the capabilities of their solution.

107. Question: Should occupancy be reconciled against CollegeNET 25Live (scheduled events) and/or the Siemens and Delta building-automation schedules, and would MSU grant read access to those feeds for the PoC? Additionally, are there required formats or templates for the Final Report and Executive Briefing, and any periodic status cadence beyond the three phase deliverables?

Answer: MSU expects occupancy data to be reconciled against available system data—including scheduled events (e.g., CollegeNET 25Live) and, where relevant, building automation schedules (e.g., Siemens, Delta)—to support meaningful validation, context, and insight development. MSU can provide read access or data exports from these systems for the PoC, subject to standard IT governance and coordination during project initiation. Proposers should describe how they will incorporate these data sources to compare scheduled vs. actual utilization, validate observations, and enhance the quality of findings.

MSU has not established required formats or templates for the Final Report or Executive Briefing at this time. Deliverables should be clear, well-structured, and tailored to both technical and executive audiences, with the final format and level of detail confirmed during project initiation. In addition to the defined phase deliverables, MSU anticipates a regular status cadence (e.g., biweekly check-ins) to review progress, address issues, and align on interim findings. Proposers may recommend a cadence and reporting approach that supports effective coordination and timely decision-making.

108. Question: Which security assessments are required and on what timeline—the HECVAT (please specify the form/version currently accepted), the IT Readiness Form, and the Service Provider Security Assessment (SPSA)? Is a current SOC 2 Type II report acceptable alongside these?

Answer: The HECVAT is preferred. Please find the most current version of the HECVAT security survey here: [Higher Education Community Vendor Assessment Tool \(HECVAT\)](#). Review the information on the page, download and complete the questionnaire, and return the completed form to MSU with your proposal. Including the SOC2 as a supplemental document is also acceptable.



109. Question: How will MSU's GRC team classify the PoC's Wi-Fi/occupancy data under MSU's four-tier scheme given the solution uses anonymized, aggregated counts, would those outputs fall to Private or Public rather than Confidential? Is FERPA in scope, and will a Data Use Agreement or Data Security Agreement (DUA/DSA) be required?

Answer: MSU's intent for this PoC is to analyze space occupancy and utilization patterns, not to identify, monitor, or track individual students, faculty, staff, or visitors. The University expects occupancy data to be anonymized and aggregated such that outputs support building, floor, room, or zone-level analysis without exposing personally identifiable information (PII).

Respondents should describe how their solution protects privacy, minimizes the use of identifiable data, and supports the delivery of aggregated occupancy and utilization metrics suitable for planning, operational, and analytical purposes.

MSU anticipates that outputs used for reporting and decision-making will be aggregated occupancy and utilization measures rather than individual device or user-level records. Any data classification, governance requirements, and agreements will be determined through the University's established review processes during vendor evaluation and implementation.

110. Question: Does "MSU-managed virtualized compute" mean on-premises VMware infrastructure or an MSU-owned AWS/Azure landing zone? Please confirm OS images and identity (NetID/SAML SSO), whether outbound calls to the Cisco and Juniper Mist clouds are permitted, whether processing must remain entirely within MSU's boundary, and the required audit-logging, retention (NIST 800-171), and end-of-engagement data-destruction evidence.

Answer: See responses to questions 60 and 87.

111. Question: During project initiation, may the final building list be adjusted if a selected building lacks sufficient access-point density to support the desired analysis level (e.g., zone versus floor)?

Answer: Yes. MSU intends to collaboratively select the final building subset during project initiation, based on factors such as data availability, access point density, and alignment with PoC objectives.

To support this approach, respondents should:

- Provide pricing that enables flexibility, such as:
 - A per-building and/or per-square-foot (GSF) pricing structure, and/or
 - A baseline scenario aligned to approximately 500,000 GSF
- Clearly state any assumptions related to building selection, access point density, or data readiness

MSU does not require respondents to assume a fixed subset of the six buildings at proposal stage, and proposals should be structured to support final selection and refinement in partnership with the selected vendor.

112. Question: Regarding the requirement to address MAC address randomization: Does MSU have an established statistical tolerance or margin of error for occupancy estimation, or will the evaluation rely entirely on the vendor's demonstrated mitigation methodology?

Answer: Currently no real method to work around MAC address randomization on any network besides eduroam on campus. We do our best to steer everyone towards using eduroam, but besides that, Staff/Students/Faculty are instructed to simply turn off the feature on their devices during device onboarding to other SSIDs and wired networks.

113. Question: For the "Future Scalability & Pricing" indicative estimates, should the assumption for "campus-wide deployment" be based on the existing AP density, or should vendors include optional pricing models that factor in AP augmentation to improve spatial resolution?

Answer: Depending on the buildings we're focusing on, the estimates should be based on future augmentations. The current Mist deployments are almost entirely ready, but it's highly unlikely that Cisco deployments could be used 1:1.



114. Question: Section 6.1 states data must be returned in a "mutually agreed, usable electronic format." Does MSU's Enterprise Data/IT team have a preferred format for this hand-off (e.g., Parquet, CSV, native PostgreSQL dump) so we can ensure the architecture supports it natively?

Answer: CSV is an acceptable and preferred baseline format, given its broad compatibility and ease of use across platforms. Proposers may also describe support for additional formats (e.g., Parquet, database exports, or API-based delivery), particularly where they enhance scalability, performance, or integration. The final format and delivery method will be confirmed during project initiation in coordination with MSU's Enterprise Data and IT teams.