ASSESSMENT OF THE REGIONAL COMMUNITY NETWORK (RCN) PROGRAM

Prepared for the Maricopa Association of Governments (MAG)

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EXECUTIVE SUMMARY

The Maricopa Association of Governments' (MAG) Regional Community Network (RCN) is a long-standing regional asset that supports critical public agency operations across the metropolitan Phoenix region. Over nearly two decades, the network has adapted to changing technologies, agency needs, and institutional arrangements. This RCN assessment was undertaken to establish a clear understanding of the network's role today and to inform decisions on how it may continue to provide regional value in the future. The report provides a shared factual foundation and frames the strategic decisions now facing the region regarding the future of the network.

The work completed to date has established a common understanding of current conditions and clarified the range of feasible future directions. The RCN supports a broad range of public sector applications, including traffic management and operations, interagency data exchange, and public safety. Agencies value the network as a trusted and reliable platform that enables coordination and information sharing. At the same time, the RCN faces challenges related to maintenance, evolving technology expectations, and uncertainty around long-term governance, funding, and risk management. These conditions underscore the importance of deliberate regional planning to guide the network's future.

Building on the understanding of current conditions and feedback from MAG staff and member agencies, this assessment identifies three alternative future paths for the RCN: expand and improve a distributed use model, advance a defined primary mission model, or preserve the break-fix model in place today. These paths represent a range of approaches to sustaining and evolving the network over time, ranging from continued operation with targeted improvements to more transformative changes in governance, investment, or delivery models. Each path carries implications for cost, agency responsibility, program eligibility requirements, and regional benefit. The assessment clarifies the considerations associated with each path and provides a framework for evaluating them in relation to regional goals and constraints. With the advancement of any alternative is the consideration of the role MAG plays in governance and management of the RCN. In each defined alternative, MAG may retain sole governance and management responsibility, partially or fully transition that responsibility to another agency, or engage third parties for RCN operational support.

A central conclusion of this report is that a formal strategic planning effort represents the appropriate next step for the RCN. The assessment has established a shared understanding of existing conditions and outlined the range of plausible directions for the network's future. Strategic planning would allow MAG and its member agencies to define collective objectives, clarify roles and responsibilities, and align expectations around governance, funding, and performance. Advancing to this next phase creates an opportunity to move from understanding to action through a deliberate and inclusive process.

OBJECTIVES AND BACKGROUND

This section of the report details the RCN Program Assessment's objectives and summarizes the evolution of the Regional Community Network (RCN) as a regional asset. Detailed documentation of the RCN's historical development and current conditions is provided in **Appendix A**, History of the RCN Program Memo, and **Appendix B**, RCN Current Conditions Memo, which together supply technical background that informs this final report.

STUDY OBJECTIVES

The purpose of this RCN Program Assessment is to support informed regional decision-making regarding the future of the RCN. The study was designed to assess current RCN conditions, uses, and governance arrangements, drawing on documentation review and agency engagement to establish a shared understanding of how the network functions today. Over an eight-month period beginning in fall 2025, the RCN Program Assessment advanced goals to document existing conditions, understand agency perspectives, and evaluate potential paths forward for the network as a regional asset. The study's sequence of activities is shown in **Figure 1**.

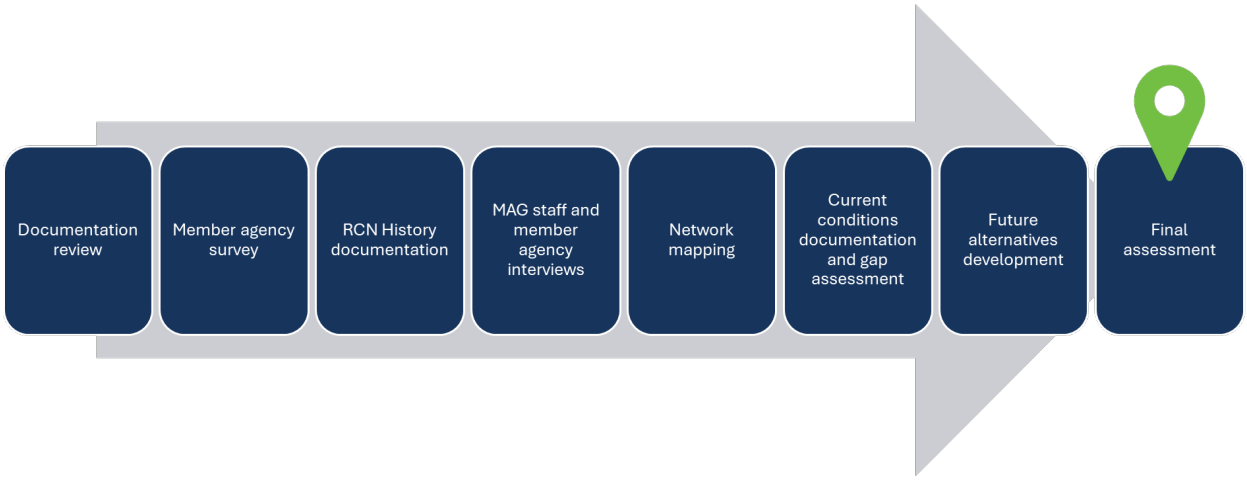


Figure 1. MAG RCN Study Components (2025-2026)

The study team began the effort in fall 2025 with a review of historical program documentation, agreements, and prior studies to establish context for the evolution of the RCN and its governance. The team complemented this work with outreach to MAG member agencies, including a broad survey and targeted interviews with agencies that rely more heavily on the network. Together, these efforts captured a range of perspectives on RCN use, expectations, benefits, and concerns. The team also conducted technical investigation, including network mapping and documentation of current conditions, to describe operational responsibilities, staffing arrangements, and system performance at a high level and to identify gaps between existing practices and emerging needs.

Building on this foundation, the study team developed a set of alternative future paths for RCN investment, management, and use. The alternatives, detailed in the **Future Path** Alternatives section of this report, reflect different approaches to sustaining and evolving the network as a regional asset and are intended to frame strategic choices and associated tradeoffs. This final report represents the culmination of the assessment effort, synthesizing findings from all study components and presenting them as a coherent basis for near-term discussion and longer-term strategic planning by MAG and its member agencies.

BACKGROUND

MAG developed the RCN as a regional asset to support intergovernmental connectivity and shared communications infrastructure among its member agencies, particularly to facilitate the exchange of transportation-related data throughout the region. Early regional studies shaped the concept for the RCN by emphasizing improved coordination, reduced duplication of infrastructure, and more effective use of shared investments to support common objectives. Over time, agencies transformed the RCN from a planned fiber backbone into an operational network supporting a diverse set of needs, with MAG assuming responsibility for operational management following initial construction and implementation phases documented in the RCN history materials in **Appendix A**.

This RCN assessment was designed to establish a **clear picture of how the RCN operates today** and to **support informed regional decision-making** about its future.

The RCN's original goals focused on intergovernmental teleconference connectivity, pollution reduction, and effective use of existing infrastructure with original uses including traffic camera sharing and video conferencing. As additional agencies joined the network and technology capabilities evolved, agencies broadened RCN use cases to include traffic management, public safety communications, and cross-jurisdictional data exchange. Agency needs, available funding, and technological advancements shaped these uses, resulting in a network that now supports a range of functions across the region.

Today, the RCN operates within a complex environment shaped by infrastructure spanning many different jurisdictions, increasing maintenance needs and performance expectations, and varied agency resources. Operations and maintenance responsibilities are shared between MAG and participating member agencies through formal agreements established many years ago, with MAG providing regional coordination and operational and technical support, while member agencies are expected to maintain the portion of the RCN infrastructure that they own and operate. Changes in staffing levels, increasing operational demands, and the absence of strategic long-term planning have influenced how the network is managed and sustained over time. These conditions, along with growing expectations for resiliency and reliability, frame the context in which future decisions about the RCN must be made.

The assessment establishes a common factual foundation to inform near- and long-term decisions about the network's future role.

THE ROLE OF STRATEGIC DIRECTION

While many agencies throughout Maricopa County have grown to depend on the RCN for day-to-day operations, that evolution has occurred largely through incremental growth. As agency reliance on the RCN increases and use cases continue to expand, clearer strategic direction is needed to ensure that future decisions around investment, governance, and operations remain aligned with regional priorities and constraints.

GAPS IDENTIFIED THROUGH ASSESSMENT

Through the assessment process, the study identified several gaps that suggest the need for clearer strategic direction. Most notably, the study found an absence of a shared, documented long-term vision for the RCN that articulates its intended role as a regional asset. Agency interviews revealed differing interpretations of what the network is meant to support and how it should evolve. This lack of a unifying vision contributes to misalignment among RCN use cases, governance structures, staffing levels, and funding approaches. As a result, participating member agencies often evaluate tradeoffs on a case-by-case basis rather than within a consistent regional framework. These gaps reflect the natural result of a program that has matured operationally without a parallel evolution in long-term strategic planning. During the initial scoping of this assessment, broadband connectivity was identified as a potential area for further evaluation. However, through agency interviews and stakeholder discussions, broadband did not emerge as a significant regional need or gap associated with the RCN. Following coordination with MAG staff, broadband-related considerations were not advanced further as part of this assessment given the limited level of interest expressed by member agencies.

The assessment found **no shared, documented vision defining the RCN's intended role** as a regional asset. This lack of alignment makes it **difficult to prioritize investments** and evaluate tradeoffs consistently across agencies.

STRATEGIC PLANNING FOUNDATIONAL TO RCN'S FUTURE

In this context, strategic planning emerges as a foundational step for the future of the RCN. A structured strategic planning effort would provide a forum and process for MAG and its member agencies to articulate a long-term vision and establish guiding principles that define the purpose and value of the network. Strategic planning would also enable clearer definition and prioritization of primary RCN use cases, helping distinguish core regional functions from optional or agency-specific applications. This clarity, in turn, would support alignment of staffing models, funding strategies, and governance arrangements with desired outcomes. By establishing common goals, evaluation criteria, and well-defined roles, strategic planning would allow future choices about the RCN to be made deliberately and transparently, strengthening the network's ability to continue serving as a regional asset over time.

FUTURE PATH ALTERNATIVES

Building on the understanding of current conditions, this assessment identifies three alternative future paths for the RCN: 1) expand and improve a distributed use model, 2) advance a defined primary mission model, or 3) preserve the break-fix model in place today. The sections that follow expand upon each alternative illustrated in **Figure 2**. While they are presented as separate paths, they are not mutually exclusive in concept. Each alternative highlights different tradeoffs related to purpose, investment, coordination, and governance, helping to clarify key decision points for MAG and its member agencies. The intent of these alternatives is to provide a structured set of potential paths that may be refined or evaluated through a strategic planning effort.

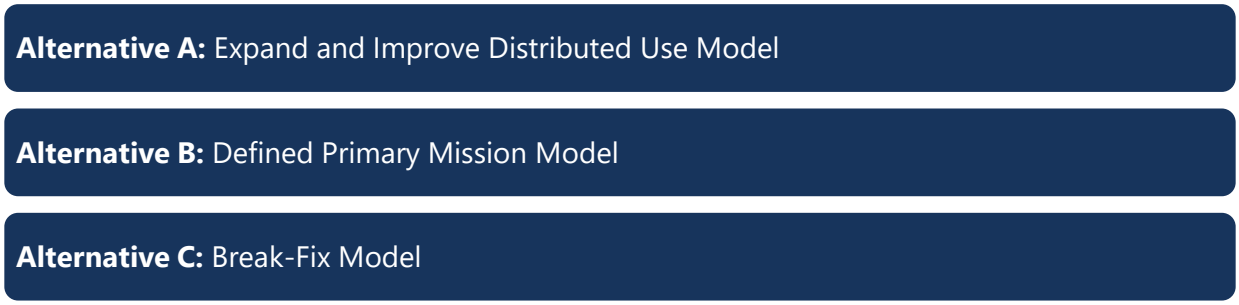


Figure 2. A Set of Alternatives for the Future

ALTERNATIVE A: EXPAND AND IMPROVE UNDER CURRENT DISTRIBUTED USE MODEL

Alternative A builds on how the RCN operates today by intentionally strengthening the existing distributed use model. Under this path, the RCN would continue to support a wide range of transportation, public safety, and public works applications, reflecting how agencies currently rely on the network. Rather than narrowing the RCN's purpose, this option focuses on making the network more reliable, better coordinated, and more resilient as a shared regional asset.

This alternative proposes that member agencies retain flexibility to pursue broad, varied, and evolving applications, while the agency with RCN oversight takes a more active role in investing in shared platforms, regional tools, and common protocols that reduce fragmentation and improve system visibility across jurisdictions. Under Alternative A, the focus of strategic planning efforts may center around how to maximize utility of the network rather than prescribe what the network may be used for. The alternative would allow demand from the member agencies, with communicated interest facilitated by strategic planning efforts, to govern the RCN's primary use or uses.

Potential Investment Areas

Expanding and improving the distributed-use model would require targeted investments that address known pain points identified through the assessment, while supporting future growth. A priority investment area is the regional video management environment. The current Luxriot system has enabled important camera sharing and collaboration, but agencies noted increasing challenges related to integration, scalability, and compatibility with newer local systems. As summarized in **Figure 3**, MAG could pursue upgrades or replacement of the regional video platform to improve interoperability, reduce workarounds, and better support both transportation and public safety video sharing. This investment would aim to meet agencies where they are today while creating a more sustainable foundation for the future.

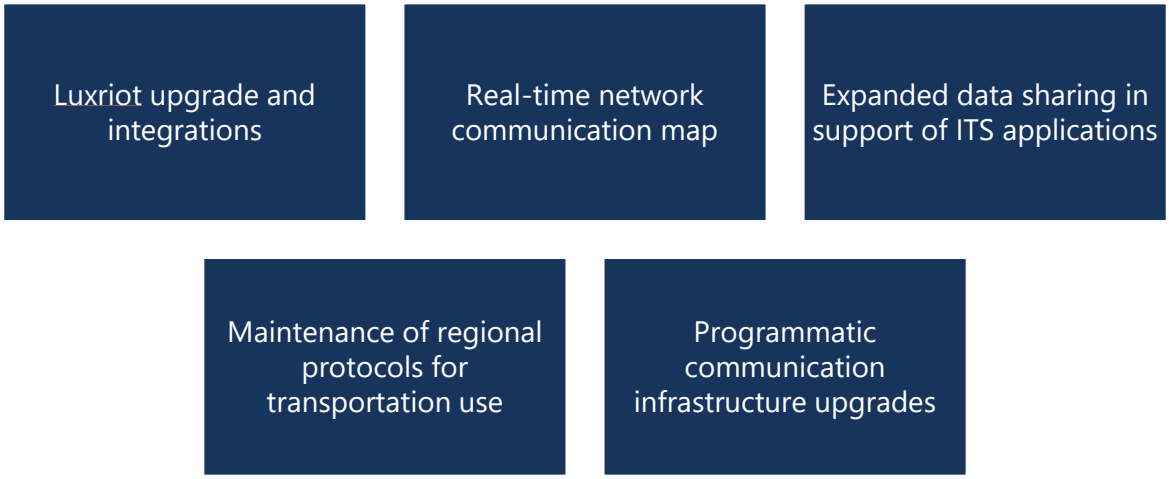


Figure 3. Potential RCN Investments over Time

Another key investment area is the development of a real-time network communications and outage map. Today, situational awareness during outages or performance issues relies heavily on ad hoc communication and institutional knowledge. A shared, real-time view of network status would allow MAG and member agencies to quickly understand what is affected, coordinate response efforts, and communicate more clearly during incidents. As agency reliance on the RCN increases, this type of shared operational awareness becomes more critical.

While use cases are not a focal point of Alternative A, expanded sharing of signal status information may align with regional transportation goals. The assessment found interest in better understanding corridor-level and regional system performance, particularly where traffic operations cross jurisdictional boundaries. Under Alternative A, MAG could support enhanced data sharing, common performance views, or gradual movement toward more integrated systems, while still allowing agencies to retain local control over operations.

Maintaining and documenting regional transportation protocols, whether for the RCN or other transportation-specific uses, represents another foundational investment. Many current practices are well understood by long-tenured staff but are not consistently documented or standardized. Formalizing

protocols related to transportation use, network access, and coordination would reduce reliance on institutional knowledge, support onboarding of new staff, and improve consistency across agencies.

Alternative A preserves broad agency flexibility but requires higher staffing capacity, governance discipline, and cost-allocation clarity.

Programmatic communications infrastructure upgrades aligned with strategic planning outcomes would support expansion of the RCN to meet evolving regional needs. These may include increasing network capacity for future needs where relevant, improving fiber redundancy, and extending coverage to other member agencies.

Alternative A Considerations

Expanding and improving the distributed use model under Alternative A would require a higher level of coordination, planning, and governance than the current break-fix posture. As member agencies add new applications, upgrade local systems, and increase dependence on shared tools, clear regional expectations become more important. Alternative A assumes investments in proactive planning, documentation, integration support, and multiagency facilitation to reduce fragmentation and manage complexity. This approach also carries higher staffing expectations, as meaningful improvement work extends beyond troubleshooting and requires sustained attention on coordination and system evolution.

Funding and operational boundaries represent the most significant long-term challenge under Alternative A. Because the RCN supports mixed uses while existing funding sources are constrained to transportation uses (see **Funding Considerations**), clearer cost allocation frameworks, including increased member agency contributions, as well as interagency agreements would be needed to ensure transparency and compliance. This alternative also heightens the need to manage operations and maintenance scope creep, as expanded tools and capabilities can blur lines of responsibility between MAG and member agencies. Maintaining trust, clearly defining system handoff points, and documenting roles and responsibilities and managing expectations are essential to ensuring that continued expansion strengthens the RCN.

ALTERNATIVE B: EVOLVE RCN FOCUS TOWARD A DEFINED PRIMARY MISSION

Alternative B intentionally shifts the RCN away from a broadly flexible model towards a clearly defined primary use. Through the assessment process, two mission areas emerged as the strongest candidates for a primary focus: transportation and public safety. These focus areas reflect current use patterns, and they align most closely with how agencies describe the RCN's mission critical value.

Alternative B aligns the RCN around a clear primary mission, most strongly centered on transportation or public safety use cases today. Greater focus improves alignment and accountability but reduces flexibility for secondary or evolving uses.

Under this alternative, MAG and its member agencies would intentionally define a primary mission for the RCN and align governance, staffing, funding sources, and investment decisions around that purpose. Establishing a primary mission provides a clearer framework for prioritization, performance measurement, and long-term planning, addressing gaps identified through the assessment related to alignment, accountability, and strategic clarity.

Potential Path: Transportation–Focused Primary Mission

Under a transportation-focused primary mission, the RCN would be optimized to support regional traffic management, signal system monitoring, and intelligent transportation systems coordination. The network's purpose would be clarified as a critical component of the region's transportation operations ecosystem, with the scope to support real-time data exchange and corridor-level performance monitoring across jurisdictions.

A transportation-focused RCN would clarify the network's purpose as a core component of regional traffic management and ITS operations, aligning governance, staffing, and investments with MAG's transportation mission.

In this model, governance structures and staffing skill sets would align closely with transportation operations and IT-ITS integration. Investments would prioritize reliability, performance, and interoperability for transportation applications, including signal systems, traffic cameras, incident management, and regional operations coordination. MAG's role would remain closely tied to its transportation planning and operations mission, and funding strategies would more clearly align with MAG's existing funding streams for transportation-eligible programs and policies. Many of the potential investment areas under explored under Alternative A may also be considerations under Alternative B with a transportation focus. A key differentiator is the bounds within those investment areas are determined. With a transportation-focused primary mission, each potential investment would be measured against its contributions to transportation uses.

Public safety and other non-transportation uses could continue under this model, but only where they directly support or enhance transportation operations, such as incident response coordination or shared situational awareness during major events. Over time, this focus would enable clearer performance measures for the RCN, tied to transportation outcomes such as system reliability, visibility across jurisdictions, and operational efficiency.

Potential Path: Public Safety–Focused Primary Mission

Under a public safety–focused primary mission, the RCN would prioritize reliability, uptime, and secure video and data sharing to support emergency response, real-time crime centers, and cross-jurisdictional public safety coordination. The network would be positioned as critical public safety infrastructure, with operating expectations centered on high availability, rapid incident response, and secure communications.

A public safety-focused RCN would prioritize reliability, uptime, and secure video and data sharing to support emergency response and real-time crime center operations.

In this model, governance and staffing would shift to reflect public safety operational needs, including increased emphasis on redundancy, security, and continuity of operations. Investments would focus on improving network resilience, reducing single points of failure, and supporting seamless video and data sharing among law enforcement, emergency management, and related agencies.

Transportation uses would continue only where they directly relate to public safety outcomes, such as traffic signal control for emergency vehicle preemption, camera access during incidents, or coordinated response to major events or emergencies. While this approach could increase public safety value and clarity of purpose, it would require careful consideration of funding eligibility, governance structures, and MAG's role relative to transportation-focused responsibilities. This model would necessitate significant funding from member agencies, as existing resources that support the RCN are transportation-based.

Alternative B Considerations

Alternative B offers greater clarity and discipline than the distributed-use model. Governance structures, staffing skill sets, and technical architecture can align more tightly with the selected mission, reducing ambiguity and administrative complexity. Funding strategies may become easier to match with mission-specific programs and eligibility requirements.

At the same time, this approach involves difficult tradeoffs. Flexibility for other use cases diminishes unless intentionally preserved, and some agencies may perceive a loss of value if their primary use case is no longer central. Enforcement would require conversations around tradeoffs as part of a strategic planning process. Selecting and implementing a primary mission would require deliberate stakeholder engagement, clear communication, and thoughtful transition planning.

ALTERNATIVE C: NO CHANGE (PRESERVE BREAK-FIX OPERATIONS)

Alternative C preserves the RCN's current operating posture, continuing to manage the network under a largely reactive, break-fix model with minimal additional investment beyond maintaining basic functionality. Under this path, the RCN would remain focused on responding to outages, resolving connectivity issues,

and addressing agency specific requests as they arise. Coordinated regional applications, shared tools, and systemwide upgrades would remain limited, and proactive planning or system evolution would be extremely limited.

Alternative C maintains the current reactive operating model with minimal additional investment. While stable in the near term, it carries increasing long-term risk as reliance on the RCN grows.

This alternative acknowledges that, despite constrained staffing and limited resources, the RCN continues to provide meaningful value to member agencies today, in large part due to the investments made up to this point in both equipment and other infrastructure and in the relationships between MAG and its member agencies. Many agencies rely on the network for essential functions, and the existing model may be sufficient to keep the system operational with some targeted change. (see **Staffing and Funding**) Alternative C emphasizes continuity and stability in the near term, avoiding major organizational or structural changes while preserving existing connectivity and flexibility for agency use.

In practice, preserving the break-fix model would mean continuing to prioritize immediate issue resolution over longer-term enhancements. Documentation improvements, resiliency upgrades, and regional tool development would generally be deferred unless required to address critical failures. Investment decisions would remain incremental and opportunistic rather than guided by a broader roadmap or performance objectives, while some investments necessary to maintain existing services would remain.

Alternative C Considerations

Alternative C represents the lowest short-term cost and organizational commitment among the three paths. It maintains existing flexibility in how agencies use the RCN and avoids difficult decisions about narrowing scope or redefining purpose. This approach may also provide an opportunity to reset or clarify member agency expectations around service levels, response times, and the limits of MAG's operational role.

At the same time, this path carries significant long-term risk. While break-fix operations are currently in place, the MAG's operating posture for RCN upkeep has evolved over time with varying increasing demands, expanding use cases, and staff turnover. As agency reliance on the RCN increases, a purely reactive model may struggle to keep pace with expectations for reliability, resiliency, and coordinated regional operations. Deferred upgrades and limited documentation increase vulnerability to single points of failure and place added strain on institutional knowledge. Over time, this can erode confidence in the network and reduce its relevance as a regional asset.

Alternative C concentrates risk by deferring alignment, documentation, and resiliency improvements while placing pressure on limited staff capacity.

If staffing challenges persist, Alternative C may prompt consideration of third-party support for maintenance and operations as a short-term capacity solution. However, stakeholder discussions highlight that this option carries its own challenges. Member agencies have expressed concerns from an IT security and trust standpoint about allowing external parties access to their systems or facilities. In some cases, agencies may be reluctant to grant third-party vendors the same level of access afforded to MAG staff, particularly for sensitive public safety or operational infrastructure. Any move toward outsourced support under this alternative would therefore require careful consideration of security protocols, access controls, and agency comfort levels, and may limit the effectiveness of third-party involvement.

Overall, Alternative C prioritizes short-term continuity over long-term resilience and strategic alignment. While it may be viable as a temporary or transitional posture, it places increasing pressure on existing staff, limits the ability to address emerging risks and perform basic maintenance, and may constrain the RCN's ability to evolve alongside regional needs.

MAG'S ROLE AND REGIONAL VALUE ACROSS ALL FUTURE PATHS

As decisions about the RCN's future direction, level of investment, and operating model are considered, MAG's role remains a central factor. Regardless of which future path is ultimately pursued, MAG's position as a regional convener and steward shapes how coordination occurs, how trust is maintained among member agencies, and how regional value is sustained over time. This section focuses on the governance and management considerations associated with MAG's role, as well as the ongoing value MAG can continue to provide independent of specific investment or organizational outcomes.

GOVERNANCE AND MANAGEMENT CONSIDERATIONS

Regardless of the future path selected for the RCN, MAG's role in governance and management would benefit from being intentionally revisited. As the network has grown in importance and complexity, expectations around coordination, support, and accountability have increased. Clarifying MAG's role provides an opportunity to better align responsibilities, staffing capacity, and decision-making authority with how the RCN is used today and how it may evolve in the future.

Several governance and management models are possible. Under one approach, MAG could retain primary governance and management responsibility, sustaining its current role as the regional steward of the RCN. Other approaches could involve a partial or full transition of RCN management and operations to another public agency while retaining regional oversight. Hybrid models are also possible, combining MAG's governance and convening role with external operational support provided by a third party. Each model carries different implications for coordination, control, and risk.

RCN governance and management models should be revisited to better align responsibilities with expectations and capacity. Clear decisions about roles, oversight, and accountability are essential for long-term sustainability.

Decisions about governance and management should be guided by a consistent set of factors rather than by any single constraint. These factors include the availability and resilience of staffing, the technical capacity required to support evolving use cases, and the level of trust agencies place in those responsible for operating the network. Funding availability and long-term sustainability are equally important, particularly given the constraints associated with transportation-focused funding sources. Evaluating governance options through this lens allows MAG to balance near-term feasibility with longer term regional value.

ONGOING REGIONAL VALUE PROVIDED BY MAG

Independent of how governance or investment decisions unfold, MAG plays a critical and enduring role in supporting the regional value of the RCN. As the region's metropolitan planning organization, MAG is uniquely positioned to convene diverse agencies, mediate competing priorities, and ensure that RCN decisions remain grounded in regional objectives rather than siloed interests. Several opportunities to enhance MAG's role are illustrated in **Figure 4**.

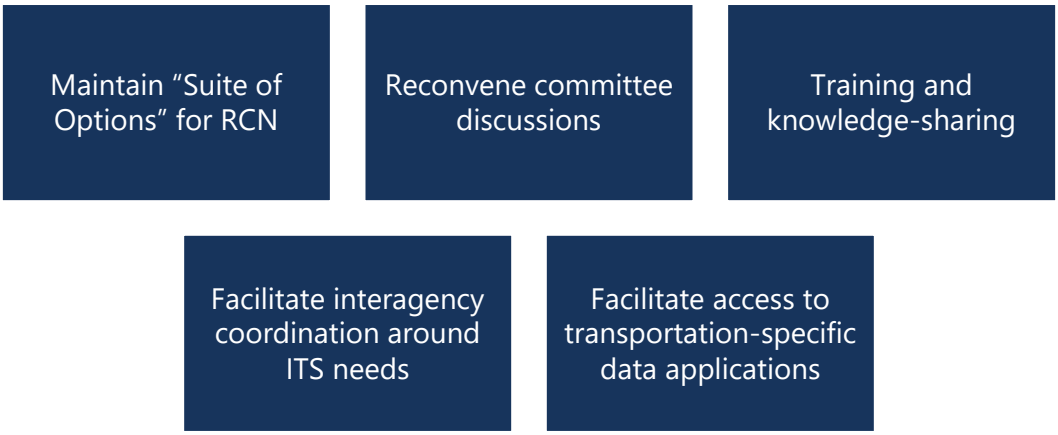


Figure 4. Opportunities to Enhance MAG's Role

MAG may continue to add value by coordinating with member agencies to maintain and advocate for a suite of viable RCN use case options, even as priorities shift. Convening committees or working groups provides a forum for peer exchange, allowing agencies to share lessons learned, surface emerging needs, and build consensus around regional approaches. These forums also help reduce duplication of effort and support more consistent practices across jurisdictions.

In addition, MAG may lead or coordinate training and knowledge sharing efforts, helping agencies make effective use of the RCN and associated tools. MAG's role as a neutral convener also positions it well to facilitate interagency coordination related to the RCN, ITS applications, and communications infrastructure. With MAG's expertise in data and analytics, access to agency data through the RCN also creates

opportunities to generate insights and regional perspectives that individual agencies may not be able to develop on their own. MAG can further support this effort by facilitating access to transportation-specific data applications, such as probe data platforms, regional performance measures, and analysis tools that complement RCN infrastructure. In turn, MAG may also benefit from the insights made available by access to additional data.

Together, these activities underscore that MAG's contribution to the RCN extends beyond technical ownership, emphasizing coordination, trust, and long-term regional alignment.

STAFFING AND FUNDING

Staffing and funding represent foundational considerations for any future path the RCN may take. The level of coordination and long-term planning associated with each alternative has direct implications on the number of staff needed, what roles they serve, and how program costs are managed and allocated over time. This section presents planning-level staffing estimates and funding ranges across the three alternatives, providing a basis for comparing resource requirements as expectations for the RCN shift from reactive operations to more coordinated and proactive models. It also examines broader funding considerations, including the eligibility constraints and compliance obligations associated with the transportation-focused funding sources that have been used to develop, operate and maintain the network.

STAFFING ESTIMATES ACROSS ALTERNATIVES

Staffing needs for the RCN are directly tied to how the network operates, the level of coordination and system management expected of MAG staff, and the role MAG plays in governance and day-to-day operations. As the RCN operations model transitions from reactive break-fix operations to more coordinated and programmatic models, staffing levels should increase in acknowledgement of the greater demand on MAG staff. Consistent with the governing structure outlined in **Appendix A**, MAG staff responsibilities range from RCN program leadership to regional network maintenance and operations support. Responsibilities under these umbrellas include project planning, project execution, documentation, budgeting, day-to-day operations of the RCN, network management, maintenance, and repair.

Staffing considerations should be evaluated alongside governance decisions, as changes to MAG's role would affect how responsibilities are distributed across the region.

The staffing estimates described below assume that MAG continues to play a central role in RCN management and operations, continuing the staff scope defined above. As discussed in **MAG's Role and Regional Value Across All Future Paths**, any changes to how MAG currently manages the RCN, such as transferring existing responsibilities to another agency or using third-party support, would change how these responsibilities are carried out and how staffing is distributed across organizations. It is also important to note that MAG currently has 1.0 full-time equivalents allocated towards the RCN; this position is currently vacant.

Table 1. Planning-Level Staffing Comparison Across Alternatives

Alternative	Estimated MAG Staff Effort (FTE)	How Staffing Would Differ from Today
Alternative A: Expand and Improve Model	1.0 – 1.25 FTE	MAG staff effort increases to support a more proactive, coordinated program that plans for a broad range of potential future uses; includes system improvements and more robust multi-agency coordination beyond current levels.
Alternative B: Primary Mission Model	0.50 – 1.00 FTE	MAG staff effort becomes more focused and structured around a defined mission, with responsibilities shifting from broad support across a range of potential future uses to targeted management aligned with mapped out priorities.
Alternative C: Break-Fix Model	0.20 – 0.30 FTE	MAG staff effort remains generally consistent with current conditions, centered on reactive troubleshooting and maintaining existing functionality with limited proactive planning or system improvements.

Alternative A: Expand and Improve Under Current Distributed Use Model

Under Alternative A, MAG staff responsibilities expand to support a more actively managed and coordinated regional program, with an estimated staffing level of approximately 1.0 to 1.25 full-time equivalents. This level of effort reflects the need to support broad and evolving uses across agencies.

In this model, MAG staff plan for flexibility by ensuring that the system can accommodate a wide variety of applications. This includes planning for additional capacity, building in redundancy, and supporting integration across multiple agency systems, as desired. Because specific future uses may not be fully defined, staff operate with a "use it as needed" approach, preparing the network to reliably support whatever member agencies choose to deploy.

Alternative A requires planning for a wide range of potential uses, driving a need for redundancy, capacity, and ongoing coordination across agencies.

Responsibilities include overseeing system upgrades, maintaining consistent visibility into network performance, supporting improvements to shared tools such as video management systems, and coordinating data sharing and integration across agencies. Planning and oversight for infrastructure improvements, including redundancy upgrades, are also central to this approach. These responsibilities

reflect a programmatic model where staff support both ongoing operations and a flexible, region-wide platform.

Alternative B: Primary Mission Model

Under Alternative B, MAG staff responsibilities become more focused based on a defined primary mission, whether transportation-specific or public safety-specific, with estimated staffing levels ranging from approximately 0.50 to 1.00 full-time equivalents. This model reflects a more defined and structured approach to planning and system management.

In this model, MAG staff would focus on supporting an articulated set of needs tied to the selected mission. Planning efforts are guided by facilitated conversations with member agencies that help define priorities, identify required capabilities, and align program efforts with specific outcomes. This allows system investments and improvements to be rightsized to meet known needs rather than preparing for a broad range of uses.

Responsibilities include monitoring system performance, more robust planning coordination with agencies, and advancing targeted improvements that directly support the chosen mission. Communication infrastructure upgrades are planned around defined needs, creating a clearer path for decision-making and resource allocation. This approach supports more consistent alignment between staffing effort, program goals, and regional priorities.

Alternative B allows staffing to focus on clearly defined needs, with planning guided by structured conversations that help right-size system investments.

Alternative C: Break-Fix Operations

Under Alternative C, MAG staff responsibilities remain aligned with current practices, with an estimated staffing level of approximately 0.20 to 0.30 full-time equivalents. This reflects a continuation of existing effort focused on maintaining system functionality and supporting agency needs as they arise.

MAG staff responsibilities in this model center on responding to outages, addressing connectivity issues, and supporting agency requests. Monitoring and maintenance activities take place as needed, with attention focused on maintaining stable operations. System upgrades and infrastructure improvements are driven by equipment life cycles and critical operational needs. This approach maintains continuity in how staff support the RCN today, with effort focused on sustaining existing capabilities within current resource constraints.

Alternative C maintains current effort levels, with staff focused primarily on responding to issues and sustaining existing operations.

How Staffing Responsibilities Change Across Alternatives

As expectations for coordination, planning, and system improvement increase, MAG staff responsibilities shift from primarily responding to issues to supporting a more structured and coordinated regional program.

Alternative A requires staff to plan for a wide range of potential uses, which drives a need for ongoing coordination, system flexibility, and investment in redundancy and capacity. Alternative B creates a more defined planning environment, where staffing efforts are guided by clear priorities and supported by facilitated discussions with member agencies to ensure investments are aligned and right-sized. Alternative C reflects a more limited and reactive approach, with staff effort focused on maintaining current operations and addressing issues as they arise.

The table below summarizes how these differences appear in practice, including how staff engage with member agencies, how planning is approached, and how system management and risk vary under each alternative.

Table 2. Staffing Responsibilities Across Alternatives

Alternative	Coordination & Engagement	Planning & Proactivity	System Management Approach
Alternative A: Expand and Improve Distributed Use Model	Significant coordination across agencies supporting varied and evolving use cases	Planning focuses on preparing the system for a wide range of potential uses, including capacity and redundancy planning to support less defined future demand	Flexible and programmatic, designed to support multiple applications without strict boundaries
Alternative B: Define Primary Mission Model	Moderate coordination focused on agencies aligned with the selected mission	Planning is guided by structured conversations that define needs and align investments with mission-specific priorities	Focused and structured, with system improvements aligned to clearly defined use cases
Alternative C: Preserve Break-Fix Operations	Limited coordination, primarily in response to issues or specific requests	Limited proactive planning, with activities driven by immediate operational needs	Maintenance-focused, with issue-based monitoring and upgrades

FUNDING NEEDS ACROSS ALTERNATIVES

Like staffing needs, funding needs for the RCN vary based on how the network is managed, coordinated, and expected to perform. As the alternatives move from a reactive operating model to a more coordinated and proactive program, overall costs expectedly increase. This reflects added effort in staffing, system upgrades, maintenance resources, and coordination across agencies.

A noted distinction across alternatives is how predictable and scalable those costs are over time. Alternative A introduces the widest range of potential costs due to the need to support evolving and less defined use cases. Alternative B provides a more structured cost profile aligned with defined priorities. Alternative C limits near-term costs by maintaining current practices but carries greater uncertainty in long-term system needs and risk. Cost differences reflect how each alternative approaches planning and system management. Funding requirements increase as utility expectations shift across alternatives.

Cost Components Overview

Costs to fund the RCN generally fall into three categories: labor, equipment, and professional services. Each of these components scales differently based on the level of coordination, system performance, and planning required under each alternative. Together, these components provide a picture of how program costs change across alternatives.

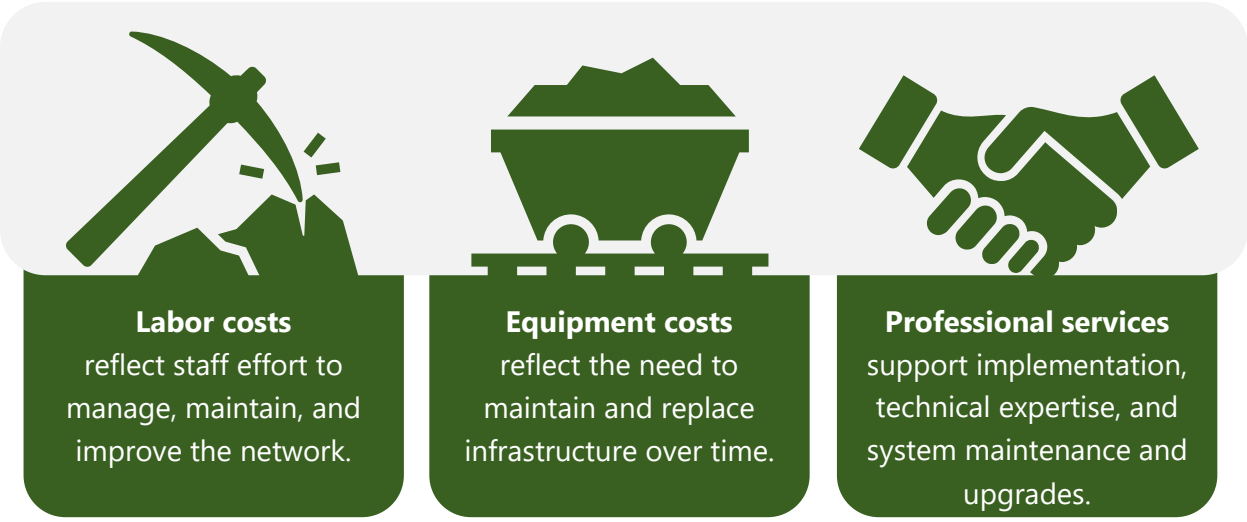


Figure 5. Cost Components Overview

LABOR COSTS

Labor costs scale with the level of coordination and system management expected under each alternative. As described in **Staffing Estimates Across Alternatives**, higher levels of system coordination and proactive planning require increased staff effort and broader responsibilities.

Based on market data for public sector network and ITS professionals in the Phoenix metropolitan region, estimated annual compensation for work types like those supporting the RCN ranges from approximately $98,000 to $144,000. MAG applies an estimated 50 percent overhead factor to account for benefits and related costs, which results in a higher fully-burdened cost when expressed in full-time equivalents.

The table below presents planning-level labor cost ranges associated with each alternative. These values are intended to illustrate how staffing expectations translate into overall program cost.

Table 3. Estimated Annual Labor Cost by Alternative

Alternative	Estimated MAG Staff Effort (FTE)	Low*	High**	Annual Cost – Average Estimate ($)+
Alternative A: Expand and Improve Distributed Use Model	1.0 – 1.25	$147,000	$270,000	**$209,000**
Alternative B: Define Primary Mission Model	0.50 – 1.00	$74,000	$216,000	**$145,000**
Alternative C: Preserve Break Fix Operations	0.20 – 0.30	$29,000	$65,000	**$47,000**

* *calculated as low end of FTE estimate multiplied by low end of compensation range, inclusive of overhead factor*
** *calculated as high end of FTE estimate multiplied by high end of compensation range, inclusive of overhead factor*
+ *calculated as average of low end and high end annual labor estimates*

EQUIPMENT/INFRASTRUCTURE COSTS

MAG supports several categories of physical and system infrastructure that enable the RCN to operate, including network switches, video management systems and software, and miscellaneous field equipment. Each component follows a different replacement pattern, which together shapes overall equipment funding needs.

Equipment cost estimates for each alternative are summarized in **Table 4**. These estimates assume a seven-year replacement cycle as a reasonable planning framework for maintaining system performance and reliability. This replacement approach most closely aligns with Alternative B, where the network is maintained and upgraded on a regular schedule to keep pace with technology and reduce the risk of failure. Under Alternative A, these baseline costs remain, with additional costs anticipated for expanded capabilities such as video management system upgrades. For planning purposes, these additional needs are represented by an assumed 80 percent increase in equipment-related costs. Under Alternative C, investment is more limited and driven by failure or malfunction, with an assumption that approximately 80 percent of scheduled replacements would occur over time rather than consistently on an annual basis.

Table 4. Estimated Annual Equipment Cost by Alternative

Alternative	Low	High	Annual Cost – Average Estimate
Alternative A: Expand and Improve Distributed Use Model	$30,000	$216,000	**$123,000**
Alternative B: Define Primary Mission Model	$30,000	$120,000	**$75,000**
Alternative C: Preserve Break Fix Operations	$24,000	$96,000	**$60,000**

Switch Infrastructure (Core, Field Node, and Network Switches)

Switches are the backbone of the RCN, allowing data and video to move between agencies and across the network. Within the RCN, this includes three primary types of switches: core switches that manage traffic at central locations, field node switches that connect infrastructure along the fiber network, and network switches located at individual agency facilities.

For planning purposes, replacement assumptions are based on a mix of recurring and cyclical needs. Approximately five network switches are assumed to be replaced annually to account for normal equipment turnover and localized upgrades at member agency sites. Field node switches are replaced less frequently, with an assumption of approximately two units replaced every two to three years based on condition and performance needs. Core switches represent larger, centralized assets and are typically replaced once per life-cycle period, with an assumption of six total core switches replaced over the course of a full replacement cycle. **Figure 6** illustrates the replacement cycle across all components over a seven-year planning horizon, highlighting how some costs recur annually while others occur on a periodic basis. Unit costs vary by switch type and configuration, as indicated in the figure legend.

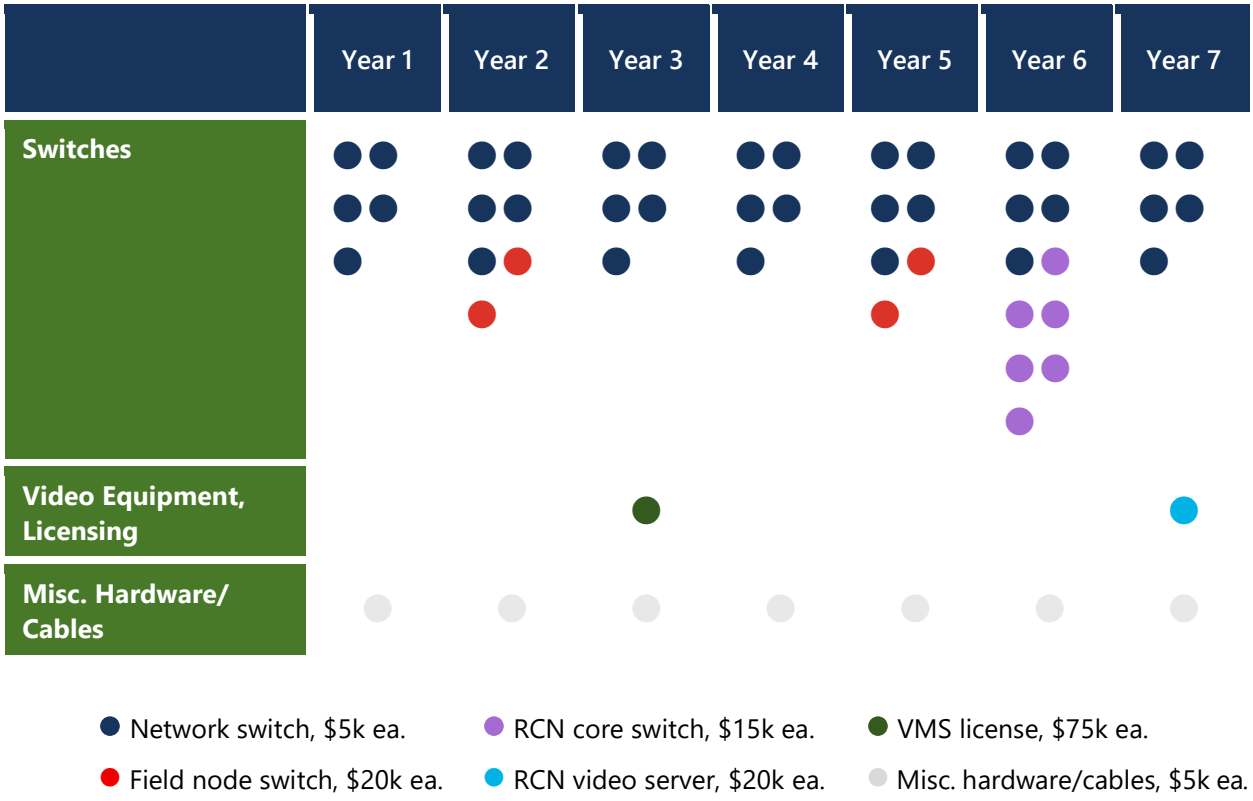


Figure 6. MAG RCN Equipment Replacement Lifecycle

Video Equipment and Software Licensing (Luxriot)

The RCN's video management system (VMS) enables agencies to share camera feeds across jurisdictions. This includes the Luxriot video management system and supporting server infrastructure located at the ADOT Traffic Operations Center. The VMS provides the interface for managing, viewing, and sharing video across the network. Equipment and licensing costs include both hardware, such as the video server, and regional software licensing for the platform. The video server follows a life-cycle replacement approach, with one replacement assumed per cycle at an estimated cost of approximately $20,000. Software licensing costs vary based on the platform and level of use. Current assumptions are based on the Luxriot system; however, costs may change depending on Luxriot's new subscription pricing or if the RCN transitions to a different platform in the future. Such a transition could introduce near-term costs related to licensing, integration, and system configuration, while also impacting interoperability and long-term scalability.

Miscellaneous Hardware and Cables

Miscellaneous hardware and cables include smaller but essential components such as patch panels, cabling, connectors, and supporting field hardware required to maintain network connectivity. These items are replaced on an ongoing basis to address wear, minor failures, and incremental system adjustments. For planning purposes, this category is treated as a recurring annual cost rather than a cyclical replacement, with an assumed expenditure of approximately $5,000 per year. While modest compared to major system components, these costs provide a consistent baseline investment that supports day-to-day network

reliability and incremental system maintenance. There may be additional costs not included in this initial estimate, such as optical transceivers, troubleshooting equipment, and radios for difficult hops.

PROFESSIONAL SERVICES COSTS

Professional services represent a separate and flexible component of RCN funding. MAG has historically used these services to support technical needs such as system configuration, specialized troubleshooting, and project-specific improvements. Annual expenditures have generally ranged from approximately $10,000 to $100,000, depending on the level of activity and system needs.

Future use of professional services is expected to vary across alternatives based on the level of coordination and system improvement pursued. Under Alternative A, these costs increase to support planning, integration, and implementation of system enhancements across agencies. Under Alternative B, professional services are more targeted and align with defined mission-specific needs, supporting focused improvements and upgrades. Under Alternative C, use of professional services remains limited and is primarily associated with addressing specific issues as they arise. This component of funding is particularly sensitive to how proactive or reactive the RCN is expected to be. As the network shifts toward greater coordination and system development, professional services may play a role in supporting specialized technical expertise or implementation capacity.

Total Annual Cost Considerations

The figure below illustrates estimated annual costs across labor, equipment, and professional services for each alternative. These planning-level ranges illustrate how total program costs change as expectations for coordination, system performance, and long-term planning increase.

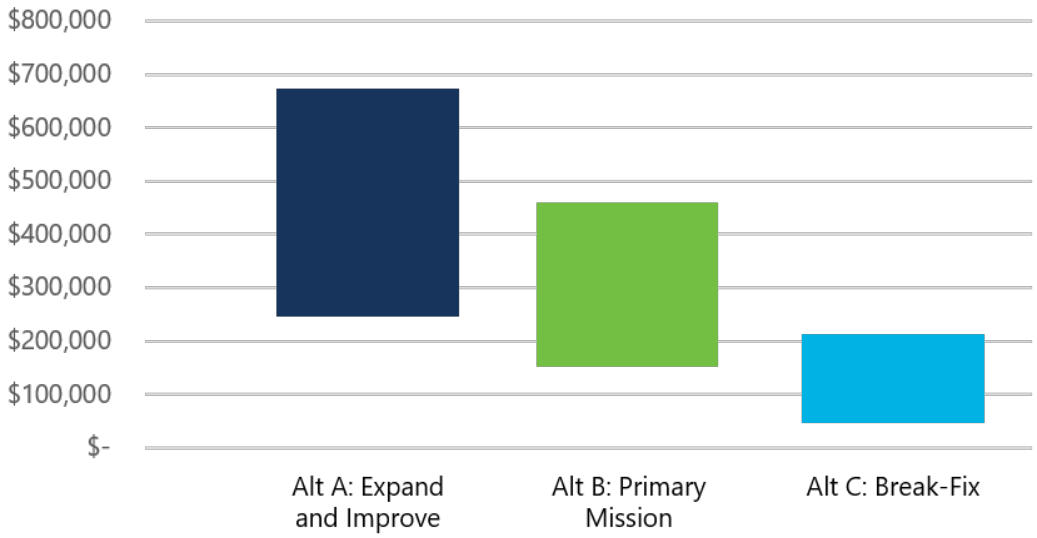


Figure 7. Total Annual Cost Ranges Across Alternatives

Alternative A reflects the highest and most variable cost range, driven by expanded system capabilities, integration efforts, and the need to plan for a wide range of potential uses. Alternative B presents a more structured and moderate cost profile aligned with defined priorities. Alternative C reflects the lowest near-term cost, with spending concentrated on maintaining existing operations.

Differences in cost variability are as important as differences in cost magnitude. Alternatives A and B introduce greater variability because they involve system improvements, software investments, and professional services support. Alternative C provides more stable near-term costs but does not address longer-term system needs in a coordinated way. A summary of the ranges across cost components is shown in **Table 5**.

Table 5. Estimated Total Annual Cost Across Alternatives

	Annual Labor		Annual Equipment		Annual Professional Services		Total Annual Expenditures		
	Low	High	Low	High	Low	High	Low	High	Average Estimate
Alternative A: Expand and Improve Distributed Use Model	$147,000	$270,000	$30,000	$216,000	$75,000	$200,000	$252,000	$686,000	**$469,000**
Alternative B: Define Primary Mission Model	$74,000	$216,000	$30,000	$120,000	$50,000	$125,000	$154,000	$461,000	**$308,000**
Alternative C: Preserve Break Fix Operations	$29,000	$65,000	$24,000	$96,000	$ -	$50,000	$53,000	$211,000	**$132,000**

FUNDING CONSIDERATIONS

Funding considerations for the future of the RCN extend beyond absolute funding levels to include flexibility, eligibility requirements, and alignment between funding sources and how the network is used. As the RCN has evolved to support a broader range of applications, funding structures that were originally well aligned with transportation-focused objectives now require closer examination. This section summarizes the existing and historical funding context for the RCN and discusses how funding considerations intersect with the alternative future paths evaluated in this assessment.

Funding constraints are driven as much by eligibility and flexibility limits as by available dollars. As RCN use cases expand, **aligning funding sources** with how the network is actually used **becomes increasingly important to long-term sustainability.**

Existing and Historical Funding Context

Historically, the RCN's construction and ongoing operational needs have been supported through a combination of transportation-focused funding sources, including Congestion Mitigation and Air Quality (CMAQ) Improvement Program funding, Proposition 400 sales tax revenues, and other federal transportation funds. These sources supported initial construction, system expansion, and/or ongoing operations based on the RCN's role as a transportation and intelligent transportation systems (ITS) asset. As non-transportation uses have expanded, clearer mechanisms may be needed to allocate costs appropriately and ensure compliance with program eligibility requirements.

The RCN was originally **funded as a transportation and ITS asset using CMAQ, Proposition 400 funds, and other federal transportation sources.** Since that time, RCN use cases have broadened.

Transportation eligibility requirements place meaningful constraints on how potential RCN funding sources can be applied, particularly as non-transportation uses grow. While transportation connectivity remains central to MAG's mission, agencies have expressed interest in expanded applications such as public safety, real-time crime centers, and other municipal uses. These expanding demands highlight tensions between evolving use cases and the limitations of transportation-restricted funding sources. In parallel, expectations for agency responsibilities have not always been consistently documented or enforced. Member agencies are generally responsible for infrastructure within their jurisdiction and systems on their side of the network handoff, but interview findings indicate that this division of responsibility has not always been clearly understood, creating challenges for cost allocation and long-term planning.

Should non-transportation uses grow, **clearer cost-allocation and responsibility frameworks may be needed** to manage expectations and compliance.

CMAQ COMPLIANCE

In the early 2000s, CMAQ funding was instrumental to the advancement of RCN design and construction. With the involvement of funding tied to transportation and emissions reduction uses, the RCN's origins may shape future decisions about how the network can be used moving forward. Assets constructed using CMAQ funds carry a continuing federal interest and are required to serve a transportation purpose for their useful life.

For a fiber-optic network, useful life is not defined by a single application but by the continued ability of the asset to support transportation objectives such as traffic management, incident response, system coordination, and emissions reduction. As MAG and its stakeholders explore alternatives for the future of the network, due diligence around agreement terms pertaining to the useful life of the RCN, and what options the Federal Highway Administration (FHWA) may be willing to entertain, would provide an important foundation for future funding and policy discussions. This clarity can help distinguish between permissible evolution of use and changes that could trigger compliance concerns.

A key question is whether the network has moved beyond the period in which CMAQ useful-life requirements reasonably apply, or whether transportation benefits can and should continue to be demonstrated to satisfy those obligations. **Early coordination with federal partners is essential** to ensure expanded or mixed uses remain permissible and aligned with federal stewardship expectations.

As interest grows in expanded or mixed uses of the RCN, coordination with federal partners becomes increasingly important. While CMAQ-funded infrastructure cannot be fully repurposed away from transportation without formal approval, shared or alternative uses may be allowable when transportation remains the primary function and when those uses are determined to be in the public interest. Engaging FHWA early in these discussions allows MAG and its partners to assess the likelihood of approval, explore acceptable structures for mixed use, and understand any conditions that may apply. This proactive approach reduces uncertainty and helps align regional ambitions with federal stewardship expectations.

Early federal coordination also enables discussions around how continued air quality benefits are demonstrated over time. Even as additional public safety or municipal applications are layered onto or evolve to be the primary purpose of the network, the ability of the RCN to support emissions reduction remains central to CMAQ eligibility. Establishing a shared narrative around those benefits, tied to the defined useful life of the asset, creates greater confidence for both near-term decisions and longer-term planning.

PROP 400 AND PROP 479 COMPLIANCE

At present, the RCN is funded, in part, by Proposition 479 (Prop 479) funding as part of Maricopa County's voter-approved half-cent transportation sales tax program. Prop 479 revenues must be used for transportation-related purposes within Maricopa County and are subject to statutory eligibility and voter intent requirements tied to improving regional mobility and transportation system performance.

Prop 479 builds upon the funding framework established under Proposition 400 (Prop 400), its predecessor, which supported transportation investments from 2006 through 2025. Under Prop 400, transportation sales tax revenues were used to support transportation communications and fiber infrastructure as part of larger projects; moreover, federal funding allocated under the Prop 400 framework also directly supported ITS and regional operations. The RCN's use of sales tax funding was therefore rooted in its role as a transportation asset, and that precedent carries forward under Prop 479.

Prop 400 and Prop 479 funds have supported the RCN as a transportation asset, creating ongoing expectations that the network continues to deliver transportation-related benefits.

As a result of leveraging Prop 479 funding, the RCN remains beholden to transportation eligibility requirements and to maintaining alignment with MAG's transportation mission. Investments made with Prop 479 revenues must continue to support transportation purposes, even as agencies pursue expanded or adjacent uses of the network. While the RCN may enable benefits beyond transportation, such as public safety coordination or municipal operations, those uses must remain complementary to a primary transportation function to remain consistent with the sales tax program's intent and statutory framework.

A constraint associated with Prop 479 is its geographic applicability. As a countywide sales tax, Prop 479 revenues may only be used for projects and benefits attributable to Maricopa County. This limitation creates challenges for a regional network designed to provide value across jurisdictional boundaries, including extension to partners whose service areas extend beyond the county line. Agencies such as the City of Apache Junction and the Town of Queen Creek illustrate this tension, as they derive operational value from the RCN despite being partially located outside Maricopa County. In these cases, investments that improve regional connectivity may require additional justification, cost-sharing arrangements, or supplemental funding sources to address benefits that extend beyond the taxing area.

Because Prop 479 is a Maricopa County-only sales tax, **investments must be attributable to benefits within Maricopa County**, even when the RCN provides value to partners outside county boundaries.

Prop 479 provides an important and stable funding source for the RCN, but one that carries ongoing obligations related to purpose, geography, and accountability. As the network evolves, careful alignment between RCN use cases, regional value, and the constraints of transportation sales tax funding will be

essential. These considerations reinforce the need for strategic direction and clear policy guidance to ensure that future investments both protect the integrity of the funding source and support the RCN's long-term role as a regional asset.

ROADMAP FOR THE RCN'S FUTURE DIRECTION

Looking ahead, MAG and its member agencies face an important decision. The RCN continues to deliver real value today, but growing reliance on the network, expanding use cases, and constrained staffing and funding mean that continuing forward without clearer direction carries increasing risk. Before making decisions about investment, governance, or operations, there is a need for a structured way to navigate the choices ahead.

The roadmap presented in this section and illustrated in **Figure 8** is intended to serve as that next step. Rather than prescribing a single outcome, it offers a practical framework for moving from shared understanding to deliberate decision-making and action. The roadmap recognizes that different future paths remain viable at this stage and that reaching the right outcome requires alignment, engagement, and pacing. By laying out a phased path forward, the roadmap gives MAG the ability to pause where needed, build consensus, and advance only when there is clarity and readiness. In doing so, it positions strategic planning and alignment as enabling steps rather than barriers, helping ensure that future actions strengthen the RCN as a resilient regional asset rather than locking it into a direction that has not been fully considered.

Figure 8. A Roadmap for the Future

PHASE 1: PURPOSE AND NEED ASSESSMENT (CURRENT STATE)

Phase 1 reflects the work completed through this assessment and establishes the starting point for future decision-making. During this phase, the study documented how the RCN is used today, how it is governed, and the constraints that influence its operation, including staffing, funding, and technical factors. Input from member agencies, combined with technical review, helped clarify where the RCN is functioning effectively and where gaps, risks, or pressures are beginning to emerge as reliance on the network grows.

This phase also brought a set of fundamental questions into focus that MAG and its member agencies now face. These include the long-term purpose and value of the RCN, the appropriate level of investment going forward, and MAG's role in managing and coordinating the network. By elevating these questions, Phase 1

establishes why a decision about the RCN's future direction is needed and why continuing forward without alignment will become increasingly difficult over time.

PHASE 2: STRATEGIC PLANNING (0–6 MONTHS)

Advancing from where we are today, Phase 2 would focus on building shared direction before committing to structural or financial changes. In this strategic planning phase, MAG and its member agencies would work collaboratively to establish a long-term vision for the RCN, supported by guiding principles and a clear understanding of what success looks like. This work would build directly on the alternatives presented in this report, allowing stakeholders to refine options, weigh tradeoffs, and clarify priorities.

Strategic planning during this phase would also define MAG's desired role in governance, day-to-day management, and regional coordination. Just as importantly, it provides a forum to align expectations across agencies and determine which future paths are both feasible and supported. Engagement during this period should focus on stakeholders best positioned to support adoption and implementation, ensuring the resulting direction reflects both operational realities and policy objectives.

PHASE 3: DIRECTION SETTING AND ALIGNMENT (6–12 MONTHS)

Phase 3 shifts from planning to decision making and organizational alignment. In this phase, the recommended direction for the RCN, along with any proposed governance updates, would be brought forward to MAG policy committees and the MAG Regional Council for consideration. Advancing recommendations through established processes ensures transparency and reinforces shared accountability for the direction chosen.

This phase would also align governance structures, roles, and responsibilities with the adopted direction. That includes confirming MAG's role in oversight, clarifying the function of committees or working groups, and establishing clear decision-making and escalation paths. Staffing expectations would be aligned accordingly, and funding implications would be reviewed to determine whether existing programs are sufficient or whether new funding approaches are needed to support the chosen path.

PHASE 4: NEAR-TERM IMPROVEMENTS (12–24 MONTHS)

Phase 4 focuses on putting the chosen direction into action through near-term improvements that reinforce alignment and build momentum. With direction and governance in place, MAG and its partners would move forward on priority actions that can be addressed relatively quickly and that provide visible value to member agencies.

Efforts during this phase may include formalizing regional protocols and agreements, improving documentation, resuming or refining committee and working group structures, and reintroducing training or knowledge-sharing opportunities. Strengthening coordination and communication with member

agencies is a central objective, helping ensure that improvements are understood, adopted, and trusted across the region.

PHASE 5: LONGER-TERM INVESTMENTS AND EVOLUTION (24+ MONTHS)

Phase 5 looks beyond initial implementation toward longer-term investment and ongoing evolution. As the RCN matures under its adopted direction, MAG and its partners can pursue larger system upgrades, platform investments, and expanded applications that align with the agreed mission and long-term vision.

This phase also recognizes that the RCN cannot remain static. Technology, funding conditions, and agency needs will continue to evolve. Periodic reassessment of performance, relevance, and regional value allows MAG to adjust strategy, governance, and investments over time, ensuring the network remains resilient, responsive, and aligned with regional priorities rather than locked into a fixed plan.

CONCLUSIONS

The RCN has evolved into a critical regional asset supporting transportation operations, public safety coordination, and interagency connectivity. Over time, member agencies have come to rely on the RCN in ways that extend beyond its original intent, reflecting both the network's value and its adaptability. This assessment confirms that the RCN continues to meet real operational needs, but it also shows that growth has occurred largely without a shared long-term vision, leading to increasing misalignment between purpose, governance, staffing, and funding.

Each future path alternative presented in this report offers advantages and tradeoffs related to flexibility, focus, investment, and risk. What is clear is that maintaining the current trajectory without clear strategic direction will make it harder to manage expectations, justify investments, and ensure long-term sustainability.

This assessment report recommends moving forward with a deliberate strategic planning effort supported by a phased roadmap that partners with RCN stakeholders and works within existing governance structures to plan for staffing, funding, and structural changes where relevant. This approach gives MAG and its member agencies the space to align on purpose, evaluate tradeoffs, and build consensus before committing to change. By proceeding intentionally, MAG can recognize the regional value the RCN provides today while preserving the flexibility to make informed decisions about its future direction as priorities evolve.

Appendix A History of the RCN Memo

MARICOPA ASSOCIATION of GOVERNMENTS
302 N 1st Ave #200
Phoenix, AZ 85003
(602) 254-6300

TECHNICAL MEMORANDUM

March 17, 2026

To: Maggie Wong, Maricopa Associations of Governments

From: Kittelson & Associates, Inc.

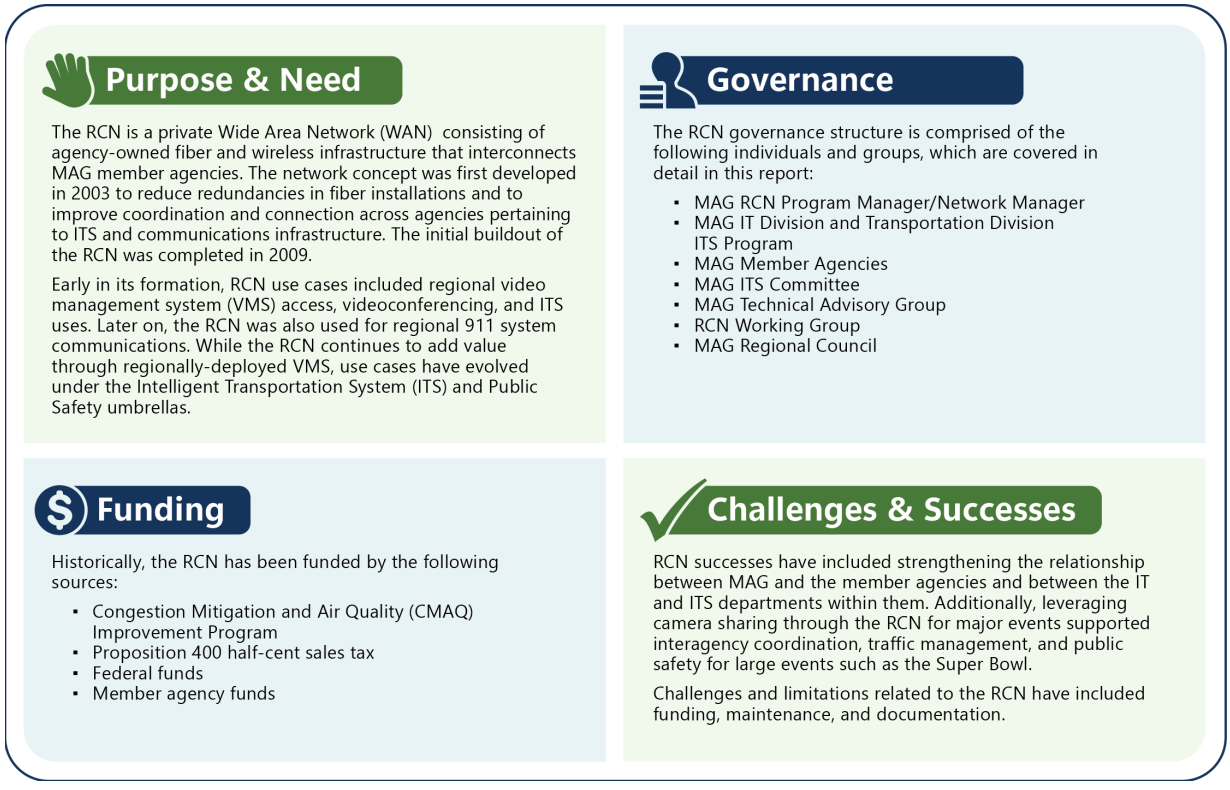
CC: David Lucas, Maricopa Associations of Governments

RE: History of the RCN Program - Technical Memorandum

EXECUTIVE SUMMARY

The Maricopa Association of Governments (MAG) currently operates the Regional Community Network (RCN), a private Wide Area Network (WAN) used to interconnect MAG member agencies for the purpose of sharing transportation-related data and information.

Figure 1. RCN at a Glance



To best understand the current state of the RCN, and determine its regional role moving forward, this technical memorandum documents the history of the RCN and how it came to be, including changes that have been made to the RCN's applications, governance, and management along the way and why these changes occurred. Specifically, this technical memorandum documents the following:

- History and evolution of the RCN
- Governance structure and participant roles and responsibilities
- Past and present funding, operations, and maintenance resources and responsibilities
- Themes around past challenges, limitations, and successes related to the RCN

THE REGIONAL COMMUNITY NETWORK – A BRIEF OVERVIEW

The concept of the RCN was initially developed with an intention to reduce redundancies in municipal fiber line installations and to leverage the fiber for several uses, including video conferencing, remote monitoring and management of traffic signals, closed-circuit television (CCTV) cameras, and dynamic message signs.

Over time, the RCN also became one of the communication channels for Maricopa Region 9-1-1 (MR911). After about a decade, MR911 was moved off the RCN, and at least one agency who used the RCN for MR911 stopped using the network altogether.

Today, MAG member agencies cite CCTV traffic camera video feed sharing for public safety, traffic operations, and special event management as one of the top use cases for the RCN, along with data sharing for traffic operations and management applications (e.g., ATSPMs). Because the RCN depends primarily on member agency network infrastructure to provide connectivity, the extent of the connections between agencies and the usage of the RCN within agencies varies significantly, but over time, the RCN has become an increasingly important part of the region's critical transportation infrastructure.

RCN HISTORY – BEGINNINGS AND EVOLUTION

The RCN concept was developed by MAG in 2003 as an outcome of a Regional Community Wide Area Network study conducted in 2001. The original goals of the RCN centered around intergovernmental connectivity, cost savings, pollution reduction, and effective use of existing infrastructure.

After securing federal funding in 2004 to develop design concept reports and Phase 1 design plans, the initial fiber infrastructure build-out began in 2006 and continued through 2009 when Phase 1A completed construction. The initial funding for the RCN came from a combination of Congestion Mitigation and Air Quality (CMAQ) Improvement Program, Proposition 400 half-cent sales tax, and federal funding.

The Arizona Department of Transportation (ADOT) agreed to oversee the construction of the RCN and managed it during the initial implementation. However, the intent was always to transition management to MAG. Once construction was completed in 2009 and the RCN became operational, ownership was transitioned to MAG. The transfer of RCN-related electronics and equipment from ADOT to MAG ownership gradually happened from 2011 to 2012.

On April 22, 2009, MAG Regional Council adopted a governance structure for management and reporting around the RCN. The backbone of the RCN governance structure that was established included joint

oversight by the MAG Intelligent Transportation Systems (ITS) Committee and the MAG Technology Advisory Group (TAG), which together would elevate key decisions to Regional Council through the normal committee process as needed. The Regional Council also delegated authority to the two technical committees to jointly approve no-cost service additions to the RCN without Regional Council action. The RCN Working Group, comprised of representatives from the TAG and ITS Committee, was also established to develop recommendations for management of the RCN and its future expansion.

Shortly after the adoption of the RCN governance structure in April 2009, and the subsequent adoption of the RCN Roles and Responsibilities document in February 2010, the following agencies solidified RCN membership: ADOT, Maricopa County Department of Transportation, the Cities of Chandler, Glendale, Mesa, Peoria, Phoenix, Surprise, Tempe, and the Town of Gilbert. Memos of agreement were established with these member agencies stating that they would provide the following:

- Timely access to MAG to install and maintain RCN equipment
- Space, power, and environmental conditioning for the network equipment necessary to establish the RCN and keep it operational.
- Technical personnel support (a site coordinator) to coordinate any network/equipment installation, maintenance, and fiber repair issues and to make a best effort at timely repair of such issues.

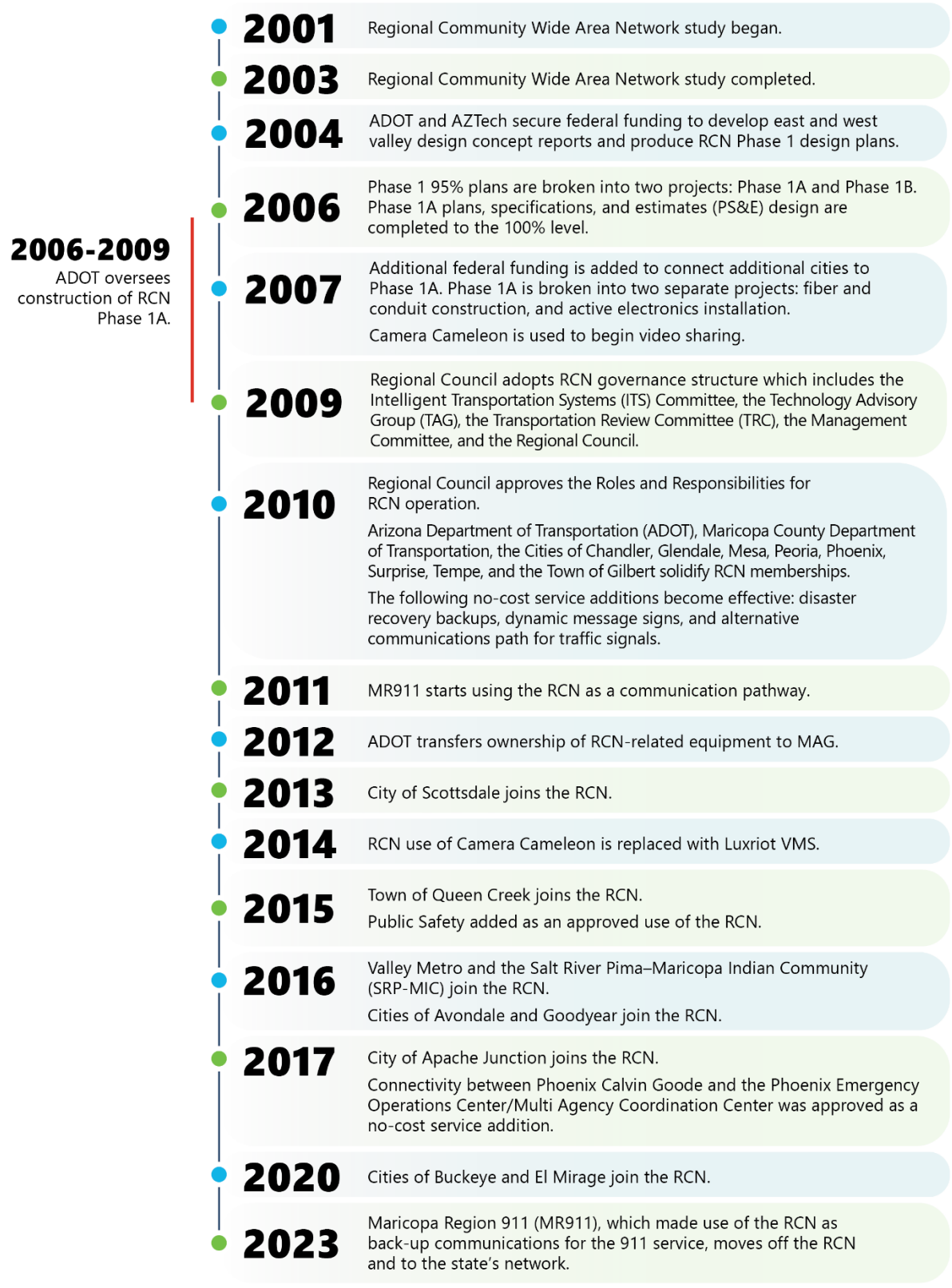
In addition to the aforementioned agreements, MAG members that share cameras through the RCN must have a signed agreement in place with sharing agencies for access to cameras. MAG does not have a determinative role in providing camera access.

Since the initial member agencies joined, RCN participation has grown to nearly 20 member agencies that have shared their own infrastructure, needs, and use cases for the benefit of all RCN users. Each additional member agency signed an agreement reflecting the bullet points above. Since its inception, there continue to be no recurring costs to member agencies for use of the RCN.

The last 15 years have brought significant technological changes to the RCN. While the initial ideation of using the RCN for video conferencing gave way to other digital communication technologies, the sharing of video feeds and data streams among neighboring agencies for use by transportation and public safety took hold. As demand for network use grew, MAG and RCN member agencies made additional investments in fiber expansion, regional licensing of the Camera Cameleon platform for video sharing, and transportation data sharing through AZTech's Regional Archive Data System (RADS).

The Camera Cameleon platform was eventually replaced in 2014 by the Luxriot Video Management Software (VMS). This was due to issues trying to connect, while using Camera Cameleon, across all the agencies. The RCN WG conducted an evaluation of multiple alternative platforms and identified Luxriot as the most appropriate replacement. Today, VMS access through the RCN continues to play an important role for both transportation and public safety uses. Recent trends with the proliferation of Real-Time Crime Centers (RTCCs) are placing additional demands and reliance upon the RCN as critical infrastructure for the MAG region. The MR 911 system migrated to State Contract Services, leaving the RCN in 2025.

Figure 2. RCN Timeline



GOVERNANCE STRUCTURE

Multiple agencies, groups, and departments contribute to the governance of the RCN. This section outlines the specific roles and responsibilities of these entities and explains their historical and current collaboration in the management, operation and maintenance of the RCN. Responsibilities of the governing bodies pertain to:

- Long-range planning
- Requirements development
- Documentation
- Architecture
- System expansion
- Design and implementation for member agency projects
- Maintenance and repair
- Operations
- Central work order tracking system

Table 1 summarizes the governing entities, their membership, role, and a high-level overview of their responsibilities. Figure 3 provides an overview of the relationships among the entities. The subsections that follow provide more detailed summaries of the roles and responsibilities of each entity.

Table 1. Summary of Governance Structure Stakeholders

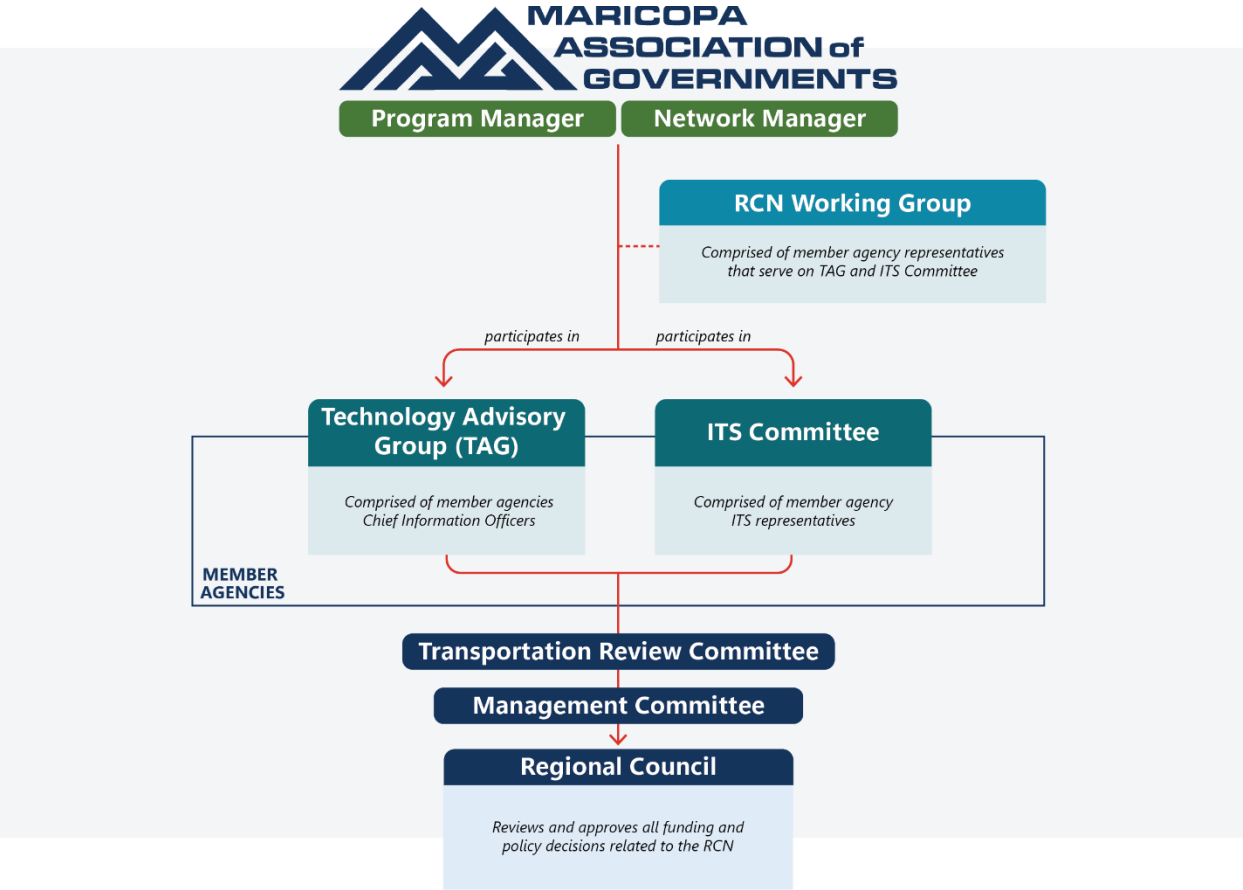
Stakeholder	Membership	Role	Responsibilities
Program Manager (PM)	MAG staff member at the center of RCN operations, maintenance, and planning	To provide RCN program leadership and act as a liaison between the TAG and ITS Committee	Coordination, planning project execution, maintenance and repairs, documentation, and identifying and providing funding
Network Manager (NM)	Originally staffed by a consultant but is now held by a MAG staff member. Throughout the history of the RCN, the NM role was commonly handled by the PM.	To provide regional network maintenance and operations support	Day-to-day operations of the RCN, including reviewing maintenance requests and conducting repairs
Participating Member Agencies	Comprised of all agencies that have agreements with MAG to be connected to the RCN	To establish regional collaboration and partnership for common network access	The ultimate end users of the RCN, critical throughout the operations and expansion processes

Table 2. Summary of Governance Structure Stakeholders (Continued)

Stakeholder	Membership	Role	Responsibilities
Intelligent Transportation System (ITS) Committee	Comprised of ITS professionals from MAG member agencies	To provide ITS expertise in the governance of the RCN	Review and recommend policies and guidelines related to the RCN for formal adoption by MAG and approval of no-cost service additions
Technology Advisory Group (TAG)	Comprised of Chief Information Officers or staff who oversee enterprise network technology from MAG member agencies	To provide information technology (IT) expertise in the governance of the RCN	Review and recommend policies and guidelines related to the RCN for formal adoption by MAG and approval of no-cost service additions
RCN Working Group (RCN WG)	Comprised of Subject Matter Experts (SME) from the member agencies, who often serve on the TAG or ITS Committees or are IT and ITS Network Administrators; the RCN WG functions as a resource to the ITS Committee and TAG; this group changes based on need and is not a formal committee	To act as a resource to the two technical oversight committees by vetting documents and recommendations with SMEs	Reviews documentation and provides recommendations for the management of the RCN and its future expansion
Regional Council	Elected officials appointed by each MAG member agency	Governing body with overall authority over MAG policy direction, oversight, and funding approvals	Reviews and approves all funding and policy decisions related to the RCN; the Transportation Review Committee and Management Committee review decisions before they are presented to Regional Council for final approval

Figure 3 illustrates the general communication process and member involvement of the MAG RCN governance. There may be exceptions to committee membership or to approval processes.

Figure 3. MAG RCN Governance Structure Overview



MARICOPA ASSOCIATION OF GOVERNMENTS (MAG)

MAG has several groups and roles responsible for the management of the RCN, including the RCN Program Manager, RCN Network Manager, and MAG's Information Technology (IT) Division and Intelligent Transportation Systems (ITS) program.

Program Manager

The MAG Program Manager (PM) is at the center of RCN operations, review, and development. The PM plays a major role in coordination, planning and project execution, maintenance and repairs, documentation, and funding as described below. This involves the support of communication between related groups (e.g., between IT and ITS), coordinating and executing agreements among parties, overseeing and acting as the primary point of contact for the Network Manager, acting as the interface to the member agencies through the working group, collecting RCN recommendations and feedback on planning efforts from the various groups, and presenting ITS and Technology Advisory Group recommendations to MAG committees.

Network Manager

The Network Manager (NM) plays a significant role in the day-to-day operations of the RCN, including reviewing maintenance requests and conducting repairs. The NM role was originally contracted out to a third party but is now held by a MAG staff member who may also serve as the Program Manager. This transition in role fulfillment was done to streamline communication and response time and to support a trusted longer-term relationship between MAG and the member agencies.

The NM plays a significant role in troubleshooting the RCN and coordinating repairs and maintenance. They may also enforce usage restrictions and address potential bandwidth limitations and service impacts, though this has not been an issue, and has mostly been addressed through educating members on accepted use of the RCN. When the NM and PM roles are held by different MAG staff members, the NM works with the PM to review requests related to RCN development and impacts on budget and operations. The NM coordinates with the groups submitting requests to clarify the needs and to provide responses to their requests. During years of RCN expansion, the NM also conducted risk assessments for new runs and services.

IT DIVISION

When the RCN was first created, MAG's IT Division held responsibility over the RCN program. In September 2024, responsibility transitioned to MAG's ITS Program in the Transportation Division to integrate the external service provision of the RCN within the externally-focused Transportation Division's ITS program.

ITS PROGRAM

The ITS Program was a key stakeholder during the RCN's early years. Over the years, the ITS Program has shifted to an ownership role of the RCN. Today, the MAG ITS Program Manager is heavily involved in maintenance and operations of the RCN and serves as the PM to meet member agency needs, with the IT Network Manager providing support for NM tasks on an as-needed basis during this transition period.

Since both IT and ITS groups have critical roles within the RCN, MAG has historically served as a connection between the IT Division and the ITS Program both internally and for member agencies. MAG has provided training courses to both groups (e.g., IT for ITS Training and ITS for IT Training) to allow each to have a better understanding of the other's functions.

MEMBER AGENCIES

Membership: Member agencies include all agencies that have entered into formal agreements with MAG to be connected to the RCN. Member agency status is not dependent upon the agency having infrastructure available to share with the RCN beyond that necessary to facilitate their direct RCN connection.

Member agencies are the ultimate end users of the RCN and are critical throughout the operations and expansion processes. Member agency staff can take on advisory roles through involvement with advisory groups, such as the ITS Committee and TAG.

Current and former RCN Member Agencies include:

- Arizona Department of Transportation (ADOT)
- City of Apache Junction
- City of Avondale
- City of Buckeye
- City of Chandler
- City of El Mirage
- City of Glendale
- City of Goodyear
- City of Mesa
- City of Peoria
- City of Phoenix
- City of Scottsdale
- City of Surprise
- City of Tempe
- Fort McDowell Yavapai Nation
- Gila River Indian Community
- Maricopa County
- Salt River Pima–Maricopa Indian Community (SRP-MIC)
- Town of Gilbert
- Town of Queen Creek
- Valley Metro

RCN member agencies assume primary responsibility for fiber network operations. Per the agreements, ownership of RCN-installed fiber is transferred to the agency in whose jurisdiction it resides and agencies are responsible for repairing this fiber through a best effort approach.

Historically, agencies would provide a list of authorized users who can submit service requests and coordinate with the NM to report events that may affect RCN operations. In recent years, the MAG NM/PM accepts calls from any member agency staff, but ensure that TAG/ITS representatives are informed of any issues or updates. Regarding network maintenance, member agencies are expected to notify the NM of repairs and coordination activities and to facilitate repairs as needed. In practice, member agencies have also engaged the NM where resources or expertise is limited to restore network functionality in a timely manner.

Coordination and Communication. Member agencies historically held regular RCN WG meetings to support coordination and communication across the network. In recent years, meetings have typically occurred on an as-needed basis. Continued engagement in the standing forum has been impacted by staffing transitions, a reduced number of requests for new modifications, and limitations in available funding.

Cybersecurity: The RCN is a private WAN, and MAG does not provide any cybersecurity measures, so member agencies are responsible for managing all aspects of network security on their side of any RCN connections. MAG does not provide cybersecurity services and does not have access to member agency networks. Each agency is responsible for securing its own connections. MAG advises member agencies to treat the RCN as a private network connecting trusted partners that each have responsibility for securing their connection to said network and implementing appropriate security measures, such as firewalls. Historically, MAG has assisted agencies during cyber incidents by temporarily shutting down the agency's RCN access and restoring it once the threat was resolved.

INTELLIGENT TRANSPORTATION SYSTEMS (ITS) COMMITTEE AND TECHNOLOGY ADVISORY GROUP (TAG)

Membership: Both groups are comprised of representatives of the local member agencies. The TAG is largely comprised of Chief Information Officers or staff who oversee technology from RCN member agencies. As a result, the TAG offers an IT perspective with RCN governance while the ITS Committee offers an ITS perspective.

The PM acts as the liaison to the TAG and the ITS Committee, supporting communication and elevating common interests. Communication with both groups is essential, as some agencies place control of their fiber network solely under their IT or ITS groups, while others implement a hybrid approach.

As part of their larger set of responsibilities, the ITS Committee and TAG have played a large role in the review and recommendations of policies and guidelines related to the RCN for formal adoption by MAG. Before a new service was added to the RCN, both the TAG and ITS Committee would convene to vet and approve the request. These groups would also receive annual reports from the PM on the status and function of the RCN and provide recommendations to Regional Council.

RCN WORKING GROUP (RCN WG)

Membership: The RCN WG is comprised of representatives of the member agencies that often serve on the TAG and the ITS Committee. The RCN WG was much more active during the early years of the RCN and is now primarily only called into service when there is a new service addition.

The RCN WG reviews documentation and provides recommendations for the management of the RCN and its future expansion. It receives direction from the ITS Committee and the TAG and works closely with member agencies to make sure the RCN provides the functionality they need. The group operates ad hoc in an advisory role when changes to the RCN are proposed, and their input is needed. In the early years of the RCN, when changes were happening more often, the RCN WG played a pivotal role in providing recommendations and reviews related to the RCN's development, including:

Providing recommendations on:

- Initial policies and guidelines
- Issues to be researched for the NM and PM
- Service expansion
- Long-range planning
- Architectural designs and equipment standards

Reviewing:

- The NM's recommendations related to RCN design, implementation, operations, and management.
- Project progress briefings and performance reports from the NM.

REGIONAL COUNCIL

The role of the Regional Council in relation to the RCN is to review and approve major funding and policy changes. The initial set of RCN policies was approved by Regional Council in 2009. Prior to being considered by Regional Council, items must first pass through the MAG policy committee review process for vetting and recommended approval by the Transportation Review Committee and Management Committee. Regional Council also receives annual reports, primarily through the budgeting process, on the status and function of the RCN and review and approve the following:

- Annual funding to support network management activities
- Requests for additional funding for system maintenance*
- Requests for expansion funding*
- Policy changes
- Removal of a previously approved agency service

*These items are done through MAG's Unified Planning Work Program (UPWP) and Budget.

FUNDING

Historically, the RCN has used a combination of funds from the following sources:

- **Congestion Mitigation and Air Quality (CMAQ) Improvement Program.** This federal program provides formula funds to state and local governments for transportation projects and programs that support meeting the Clean Air Act requirements.
- **Proposition 400 half-cent sales tax.** This 0.5% tax is added to services and goods in Maricopa County to fund transportation projects within the County.
- **Other Federal funds.** When available, federal discretionary funding programs were used to support RCN-related planning, deployment, and operational activities.
- **Member agency funds.** Some member agencies have funded the installation of some of the RCN fiber and to manage and maintain such fiber in their jurisdictions after installation. They also fund any RCN-supporting infrastructure that sits behind their firewalls.

SUCCESSES

Over the past twenty years, the operations, governance, and applications of the RCN have evolved to meet the needs of RCN member agencies. Throughout this time, the RCN has continued to support its primary transportation use. Looking ahead, it is important to recognize the RCN's past successes. The following is a summary based on available records, documents, and interviews.

Regional Relationships:

- **Built Trust Between MAG and Member Agencies.** Over the years, MAG successfully supported member agencies through its investment in the RCN, which strengthened relationships and fostered trust between MAG and the member agencies.
- **Added Value to Existing Entities.** The development of the RCN has added value to member agency ITS infrastructure, Traffic Management Centers (TMCs) and staffing, increasing their capabilities in regional traffic management, communication and safety. This is particularly evident in supporting large-scale events in the region such as the Super Bowl through camera sharing and traffic management.
- **Improved Communications Between IT and ITS.** MAG has been successful in serving as the liaison between member agencies' IT and ITS departments through the RCN Program, improving communication and understanding between these two groups.
- **Gauging Agency Priorities.** The RCN has been a helpful tool in understanding the priorities of the member agencies. It has allowed MAG to better understand how they can serve and support the agencies through the network's operations.

Continued Usage:

- **Interest in Additional Applications.** While the agencies using the RCN and the specific applications have changed over time, there has been continuous usage of the RCN. Member agencies have also expressed interest in expanding the RCN to support new applications, including connections to crime centers as well as vehicle counts and detection. This reflects a desire to better understand available options and explore ways to continue evolving the system.

Appendix B RCN Current Conditions Memo

MARICOPA ASSOCIATION of GOVERNMENTS
302 N 1st Ave #200
Phoenix, AZ 85003
(602) 254-6300

TECHNICAL MEMORANDUM

June 2, 2026

To: Maggie Wong, Senior Management Analyst
Maricopa Association of Governments
302 N 1st Ave #200
Phoenix, AZ 85003

From: Kittelson & Associates, Inc.

CC: David Lucas, ITS Manager

RE: Current Conditions of the RCN - Technical Memorandum

EXECUTIVE SUMMARY

The Regional Community Network (RCN) is a shared, multi-jurisdictional asset that establishes telecommunications access for public agencies across the region. The RCN is built on fiber-optic infrastructure contributed by member agencies and the Maricopa Association of Governments (MAG). MAG supports the RCN by managing the network equipment at agency endpoints, providing Luxriot Video Management System licenses, providing technical and logistical support for new connections and existing connection repairs, and monitoring overall network status to enable regional sharing of video and data feeds. The network's core provides high-capacity connectivity linking the Arizona Department of Transportation (ADOT), Phoenix Sky Harbor International Airport, and the City of Phoenix (Calvin C. Goode building). This core is supported by subregional rings serving additional member agencies in the West and East Valley.

While current use of the RCN spans a range of applications, the network predominantly supports transportation and public safety needs, including traffic camera sharing, traffic management, special event support, and interagency data exchange. Intelligent Transportation Systems (ITS) and law enforcement professionals rely heavily on camera feed sharing for day-to-day monitoring capabilities. Network maintenance costs to support transportation and public safety needs have generally been modest for member agencies. For MAG, these costs have typically been absorbed within existing transportation or information technology budgets. However, resource and staffing capacity has emerged as a growing concern, as RCN management is no longer a full-time position within MAG. RCN documentation is also incomplete within MAG and inconsistent across agencies, resulting in outdated records, unclear ownership of assets, and uncertainty around who to contact during network incidents.

While the RCN provides important regional connectivity, network resiliency is uneven. Some agencies rely on single connections or fiber routes that share underground conduit, creating vulnerability to disruptions from a single fiber cut. These conditions highlight opportunities to improve network redundancy and overall system resilience.

Looking ahead, the most significant challenges facing the RCN relate to strategic planning and governance, resiliency, and resource allocation. Addressing these issues will be important to ensure the network can continue to meet current needs and support potential future uses. The next phase of this study will evaluate potential future applications of the RCN and assess how those uses may affect funding eligibility, governance approaches, and program management resource requirements.

INTRODUCTION

This memorandum summarizes the current condition of the Regional Community Network (RCN) program at the Maricopa Association of Governments (MAG). It provides a high-level overview of the network's structure, operations, current uses, available funding, resource needs, and key challenges. The goal of this existing conditions assessment is to identify strengths, gaps, and risks in the current program to inform future planning, governance, and investment decisions.

The assessment is based on input from member agency interviews and survey responses, MAG staff interviews, and a review of existing network assets. A detailed asset inventory is included in **Appendix A**, and a list of participating agencies is provided in **Appendix B**.

NETWORK ARCHITECTURE AND ASSET INVENTORY

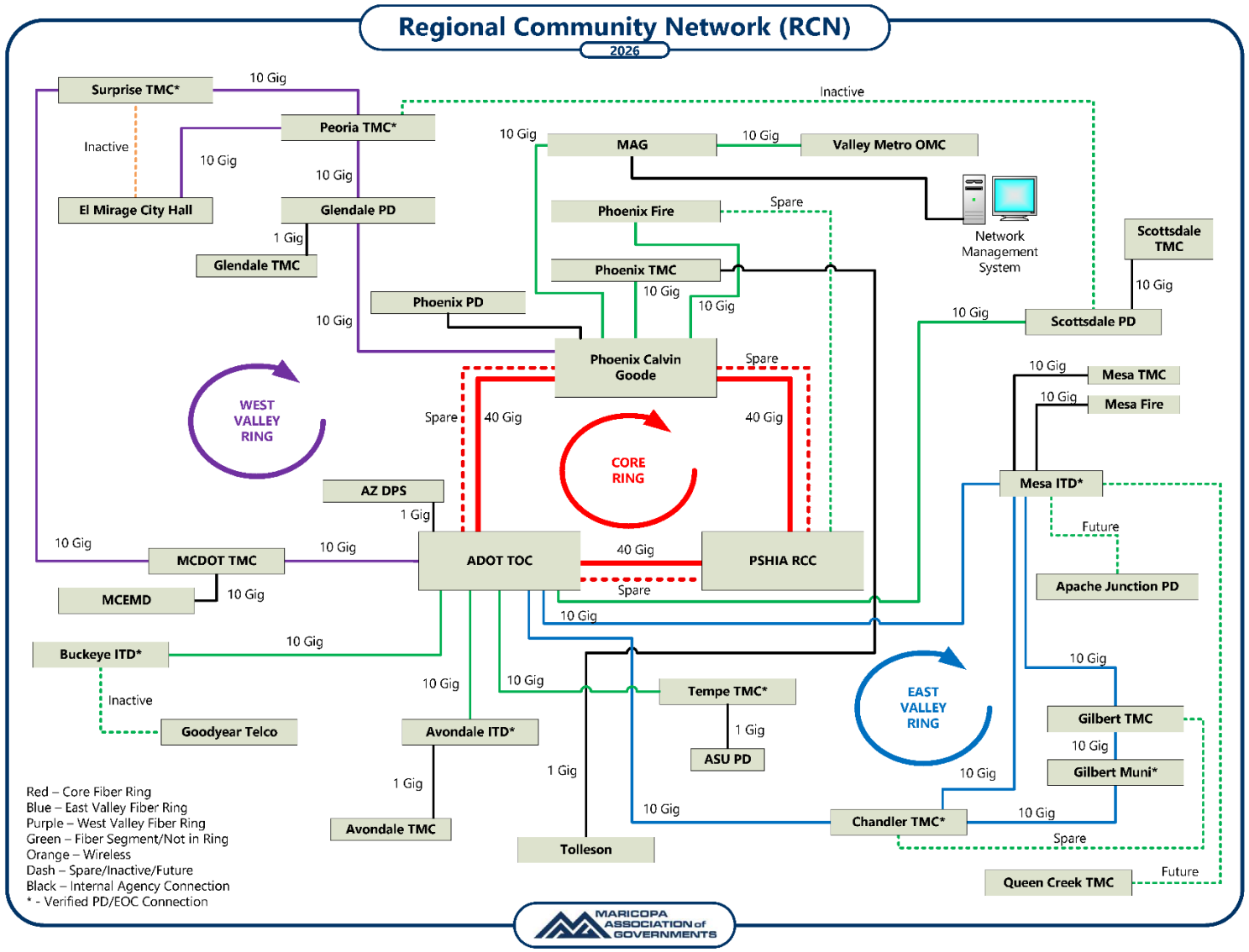
The RCN is a shared system of fiber-optic and wireless connections used by public agencies across the MAG region to exchange data in support of transportation and public safety applications. At its center is a core "ring" network: a circular loop of fiber that allows data to travel in both directions, improving reliability if a connection is disrupted. This core ring connects ADOT, Phoenix Sky Harbor Airport, and the City of Phoenix and provides 40-gigabit bandwidth, enabling the network to carry large volumes of data at high speed. This high-capacity connection serves as the network's backbone, which is the main pathway that moves data between major hubs and supports all other connected locations. The core ring uses two strands of fiber between each agency. Two additional spare fibers are reserved within each segment of the core ring; however, they are not being used at this time.

In addition to the core ring, smaller subregional rings operate in the West Valley and East Valley at 10-gigabit speeds, extending high-speed connectivity to an additional set of local agencies. A similar configuration, known as a folded ring, was implemented in the Southwest Valley primarily relying on ADOT-owned fiber while still needing operational local agency fiber to be operational and to provide redundancy. The subregional and folded rings each use two strands of fiber to provide connectivity between each of the agencies.

Many RCN member agencies further expand the network by providing 1-gigabit connections to law enforcement facilities. Each agency is responsible for maintaining the fiber it owns, while MAG has supplied the networking equipment installed at agency locations to support regional communications.

Figure 1 illustrates RCN connectivity across the Valley as of April 2026. **Appendix A** provides tables detailing the current inventory of MAG RCN assets and Luxriot license assignments.

Figure 1. RCN Network Diagram



Abbreviations: **ADOT** (Arizona Department of Transportation), **ASU** (Arizona State University), **ITD** (Innovation & Technology Department), **MAG** (Maricopa Association of Governments), **MCDOT** (Maricopa County Department of Transportation), **MCEMD** (Maricopa County Emergency Management Department), **OMC** (Operations and Management Center), **PD** (Police Department), **PSHIA** (Phoenix Sky Harbor International Airport), **RCC** (Rental Car Center), **TMC** (Traffic Management Center), **TOC** (Traffic Operations Center).

Most RCN member agencies connect to the network through one of the two subregional rings. Some agencies, including the cities of Scottsdale and Tempe, connect directly to the core ring but rely on a single physical connection, which means there is no backup route if that connection is disrupted. In the East Valley, the subregional ring directly connects to Mesa, Chandler, and Gilbert, while Apache Junction and Queen Creek access the RCN through connections to Mesa's local network. In some areas, multiple fiber lines are located in the same underground conduit, so a single construction incident could interrupt all of them at once. The existing condition highlights resiliency challenges within certain areas of the network. While there is a desire to implement more redundancy across the network, the capability to do so is often limited by the fiber each of the member agencies have available.

RCN OPERATIONS, MAINTENANCE, AND REPAIRS

RCN operations, maintenance, and repairs are jointly managed by MAG and member agencies. Each member agency is responsible for maintaining and repairing the fiber-optic infrastructure that it owns. These responsibilities are defined through formal agreements with MAG and are essential to keeping the shared regional network operational.

Member agencies provide access to their facilities so MAG and its contracted partners can install, operate, and maintain RCN equipment. This includes making space available for network equipment, supplying electrical power, and cooling and ventilation to ensure appropriate environmental conditions. Each member agency also designates technical staff to serve as a primary point of contact. These staff members coordinate with MAG on equipment installation, scheduled and unscheduled maintenance, and troubleshooting activities.

When fiber damage or service degradation occurs, member agencies are responsible for completing repairs to their own infrastructure. As noted in the RCN agreements, member agencies are expected to make best efforts at timely fiber repair, while MAG supports coordination and communication during outages.

NETWORK MONITORING AND DIAGNOSTIC TOOLS

MAG uses several technical tools to monitor the health of the RCN and support maintenance and repair efforts. The primary monitoring tool is SolarWinds, a network management platform that continuously tracks the status and performance of network equipment.

SolarWinds displays the condition of network nodes using simple visual indicators, such as green for normal operation, yellow for warning conditions, and red for outages. The system also generates automated alerts when problems occur.

Some member agencies have expressed interest in faster or more direct outage notifications so they can respond and adapt more quickly when disruptions occur. To address this, MAG has been working to

enhance network alerting and reporting. These improvements aim to support member agencies in better understanding network conditions in real time.

To diagnose fiber-optic issues, MAG maintains equipment including a power meter and an optical time domain reflectometer (OTDR). MAG also maintains network documentation, including high-level diagrams that show how member agencies and departments are connected, as well as network equipment diagrams showing how individual ports are configured. These materials support troubleshooting, staff onboarding, and shared understanding between agencies.

An **OTDR** is a specialized testing device that sends light pulses through a fiber line and measures how the light reflects back. This information helps identify the location of fiber breaks, signal loss, or other physical issues along the cable before repairs begin.

FIBER OUTAGE DETECTION AND RESPONSE

When a fiber outage occurs, MAG is often notified through automated alerts generated by SolarWinds. Member agencies may also contact MAG directly if they notice a loss of access to shared resources such as traffic cameras or other connected devices.

MAG reviews monitoring and diagnostic information to determine whether the outage is likely related to fiber infrastructure, network switches, or another system component. MAG contacts each affected member agency's designated technical point of contact to share available information and discuss next steps. MAG continues to coordinate during the outage by tracking repair progress and sharing status updates with affected agencies until service is restored.

Because MAG does not own fiber and there are no formal service-level agreements, MAG cannot enforce specific maintenance response times. Repair timelines therefore vary by agency, depending on staffing levels, maintenance practices, and available resources.

TROUBLESHOOTING AND NETWORK MANAGEMENT

MAG's Network Manager serves as the primary regional technical resource for the RCN. In earlier years, this role included more involvement in long-term planning, system upgrades, and capacity expansion since the role was jointly held by the RCN Program Manager. Over time, responsibilities have gradually shifted toward day-to-day operations, including reviewing maintenance requests and conducting repairs.

Historically, the RCN Network Manager was a full-time position. Currently, the Network Manager responsibilities for RCN maintenance and management are shared between MAG's Information Technology Manager and the ITS Manager, in addition to their other core MAG duties. While this approach has allowed the network to continue operating in a break-fix mode, it limits the time available for preventative maintenance, updates, proactive improvements, system enhancements, and added functionality like general ITS and network management support, which became a growing part of the RCN Network Manager's duties. There is also no dedicated full-time backup for this role, which creates risk during staff absences.

Member agencies typically report issues when access to shared resources is disrupted. The Network Manager performs an initial assessment using SolarWinds data, recent outage reports, and known fiber conditions to identify the likely source of the problem. For MAG-owned equipment, the Network Manager coordinates repairs directly. For agency-owned infrastructure, the Network Manager notifies the appropriate agency and supports coordination while repairs are completed. The RCN Network Manager consults regularly with the RCN Program Manager as part of these activities.

MAG staff have expressed concern that demand for their role as a **trusted regional technical partner** exceeds what current staffing levels can support.

CYBERSECURITY

Cybersecurity for the RCN is largely managed through the member agencies. MAG does not provide cybersecurity services and does not have access to member agency internal networks. Each member agency is responsible for securing its own connection to the RCN and protecting its own systems from cyber threats.

Member agencies are encouraged to treat the RCN as a private network that connects trusted public partners, with each partner responsible for protecting its own entry point. This typically includes implementing security measures such as firewalls, access controls, and internal monitoring.

In past cybersecurity incidents, MAG has assisted member agencies by temporarily disconnecting an affected agency's RCN access to help contain the issue and then restoring service once the threat was resolved.

Some member agencies have indicated that **clearer communication around the RCN's security posture**, along with guidance on best practices, would help them better align their security approach with their own risk tolerance and operational needs.

DOCUMENTATION AND INFORMATION SHARING

Many member agencies have indicated that their RCN documentation, including maps and records, is not fully up to date. Outdated documentation presents risk around gaps in agreement details, system parts, fiber paths, and equipment connections, among other areas. Current documentation practices vary across agencies, with responsibility sometimes falling to ITS, Information Technology (IT), or other departments depending on the organization. Keeping documentation current is important for troubleshooting, onboarding new staff, and ensuring continuity as personnel change over time.

CONTACT INFORMATION AND COORDINATION

When member agencies detect an RCN outage, they have historically contacted the RCN Program Manager or reached out to peers at other agencies. Due to staff turnover and organizational changes, member agencies have reported uncertainty about who to contact when issues arise.

During interview conversations, some member agencies requested that MAG create, maintain, and distribute a current RCN contact list. Efforts are already underway to update and distribute a contact list.

A shared and **regularly updated contact list would improve coordination**, reduce response times, and support more efficient communication during incidents.

TRAINING AND EDUCATION

Member agencies also expressed a desire for increased education about the RCN, including its capabilities, limitations, and potential benefits. There is interest in training opportunities for new staff so they can better understand how the network works and how to engage with it effectively. Targeted education could help agencies make better use of the RCN, set realistic expectations, and strengthen regional collaboration. In the past, MAG has provided training around the topics of "IT for ITS" and "ITS for IT" to educate the two groups about their differing needs and responsibilities. The sessions have been well-received and credited with forging closer working relationships within agencies and across the region.

RESOURCE NEEDS AND RESPONSE EXPECTATIONS

Member agencies have communicated through agency interviews that they perceive RCN maintenance to have required relatively low levels of effort in recent years. For most agencies, the resources needed to support the RCN are similar to those required for their other communications infrastructure. This may be attributed to a major upgrade to RCN switches within the last five years, leading to more reliable and less maintenance-intensive switch operation, and MAG and peer agency relationships that member agencies rely on to address RCN maintenance and repair needs. Additionally, the process for Luxriot licensing, previous training efforts, and good relationships between the member agencies and MAG contribute to MAG's ability to maintain a high level of performance, even in the current "break/fix" mode.

MAG's current resource needs differ from those of member agencies, due, in part, to the level of RCN expertise and trusted service that MAG staff have come to be known for. Despite the steps that have been taken and the procedures that have been put into place to reduce resources needed to maintain the RCN, MAG still has less dedicated RCN resources available than in the past. In time, these deficiencies could negatively impact RCN operations.

Member agencies vary in how they approach maintenance, ranging from having dedicated staff to relying on ad hoc, as-needed support. While these differences have not created widespread concerns, MAG staff are increasingly concerned that service expectations may outpace available resources without targeted investment in staffing, redundancy, and tools.

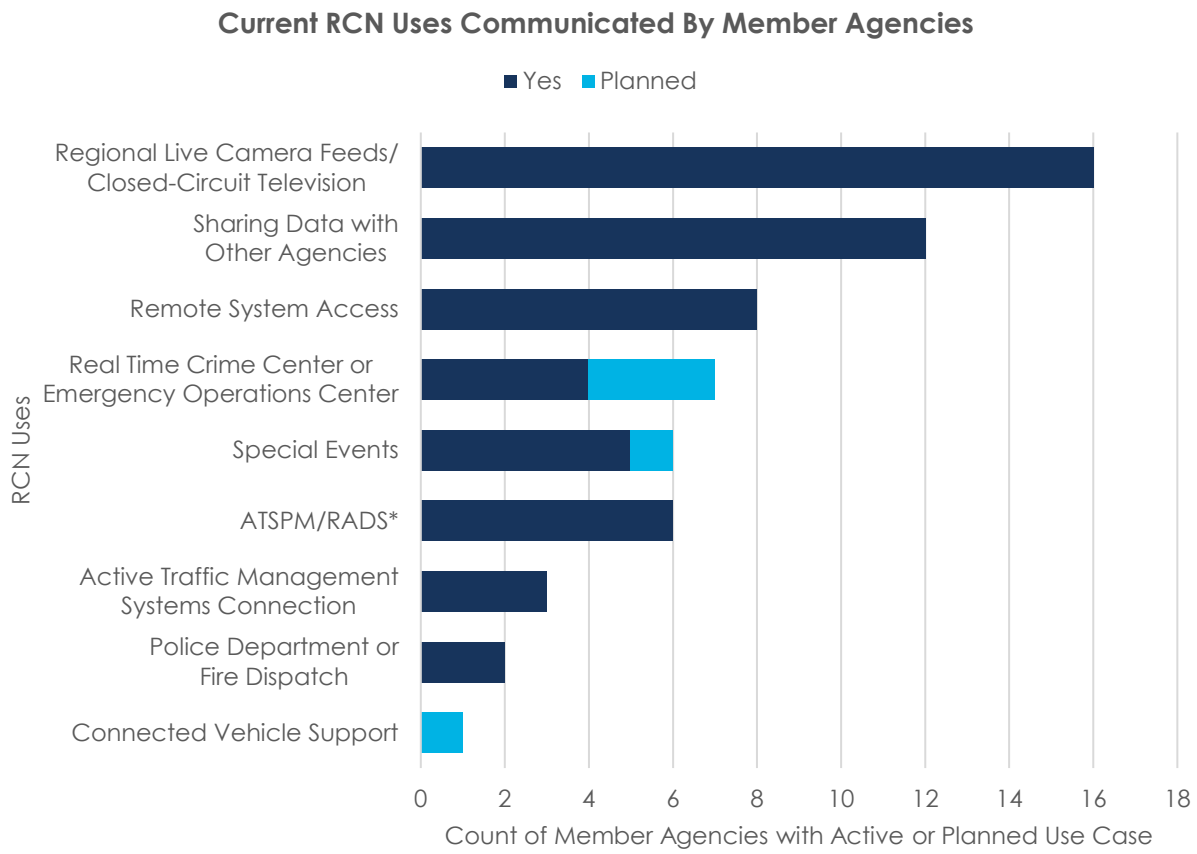
Despite member agencies' indication that resource demands for RCN upkeep are low, limited staffing and the lack of formal response standards have occasionally resulted in **delays between outages and repairs**, particularly when multiple issues occur at once.

CURRENT RCN USES AND APPLICATIONS

Many member agencies use the RCN to support both transportation and public safety by sharing real-time information across jurisdictional boundaries. Since the RCN was funded with transportation funding, transportation applications have been and continue to be the focus of the RCN. More recently, public safety (e.g., real-time crime centers) has become a major application for the RCN as well.

Several member agencies consistently described the use of the RCN to view live traffic camera feeds during crashes, roadway closures, and emergency incidents that affect more than one jurisdiction. This shared visibility allows traffic operations staff and public safety personnel to quickly confirm conditions, align response strategies, and reduce reliance on phone calls during time-sensitive situations.

Figure 2 provides a snapshot of all current and planned uses of the RCN by each member agency. This information was collected through survey responses in July 2025 and through interviews with representatives from select agencies December 2025 – January 2026. Each agency provided a single response. A full listing of survey and interview questions is included in **Appendix B**.



**ATSPM = Automated Traffic Signal Performance Measures; RADS = Regional Archived Data System*

Figure 2. Graph of Member Agency Responses Regarding Various RCN Uses Currently Deployed
(source: Jul '25 member agency survey, Dec '25 – Jan '26 interviews)

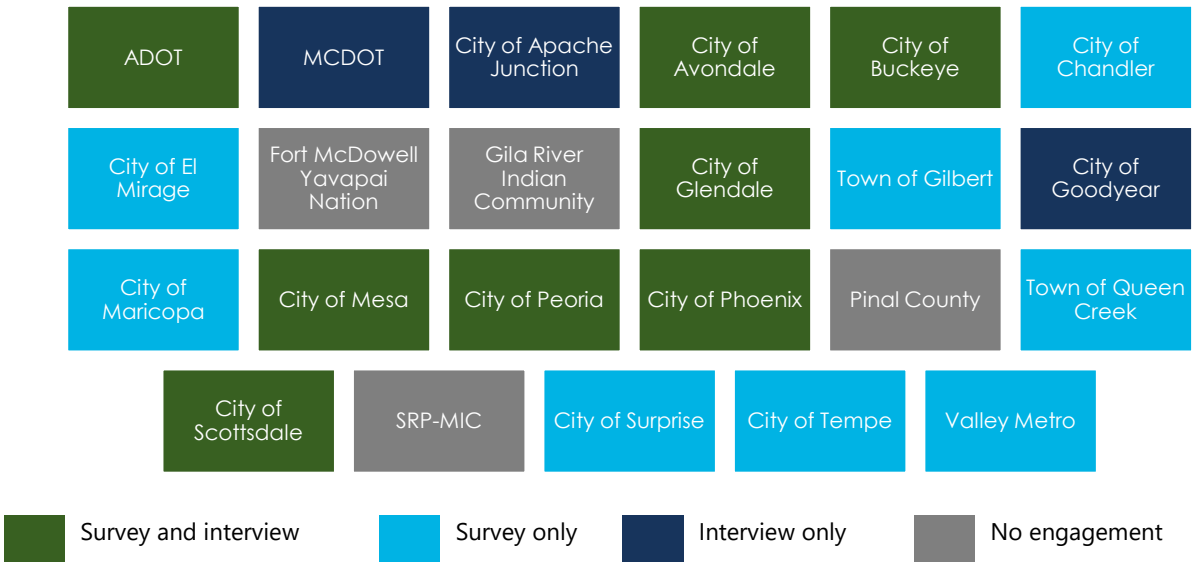


Figure 3. RCN Member Agency Participants in Survey or Interview Engagement, 2025/26

Throughout interviews, member agencies communicated traffic management and signal coordination as common uses of the RCN, particularly along corridors that cross jurisdictional boundaries. Agencies including Mesa, Chandler, Gilbert, and Tempe described using the network to share traffic camera feeds, support coordinated signal operations, and manage detours during crashes, construction, or maintenance activities. Several agencies noted that the RCN provides a stable and secure way to share operational data that would otherwise require temporary connections or duplicated systems.

Special event management emerged as another widely shared application of the RCN. Agencies supporting major sporting events, concerts, and large community events reported using the network to monitor traffic conditions near venues, manage temporary traffic control, and coordinate responses across city boundaries. Interviews with Phoenix, Tempe, Scottsdale, and Glendale highlighted the value of sharing camera feeds and traffic information during events that draw regional travel demand and affect nearby freeways and arterials.

Regarding public safety, member agency representatives have communicated a reliance on the RCN to support coordinated response during large-scale incidents, pursuits, and planned activities that require multi-agency involvement. Agencies emphasized that the RCN provides a reliable and trusted connection that supports collaboration without requiring agencies to grant access to their internal networks.

Some interviewed agencies noted that the RCN is frequently used to support **law enforcement coordination** during pursuits and/or dispatch. Law enforcement responses to the survey suggest CCTV access is crucial to regional public safety operations.

Four agencies described using the RCN to support existing or future Real Time Crime Center (RTCC) or Emergency Operations Center (EOC) operations. RTCCs rely on timely access to video, sensor data, and other situational awareness tools to support law enforcement decision-making. Through the RCN, and because MAG continues to provide Luxriot software licenses and configuration support to member agencies, RTCC staff can access traffic cameras and other shared video sources operated by transportation agencies and neighboring jurisdictions. While interconnect between RTCCs is not yet widespread, several agencies expressed this as a desired future use case for the RCN.

Interviews indicated that live camera feed access made possible by the RCN enhances the ability of **Real-Time Crime Centers (RTCCs)** to track incidents across jurisdictional boundaries, support investigations (particularly through pan-tilt-zoom cameras where available), and provide field officers with real-time information.

The level of reliance on the RCN varies across member agencies. Interviews consistently identified the Maricopa County Department of Transportation (MCDOT) as one of the largest network benefactors, providing critical camera and data access to surrounding municipalities. Smaller cities tend to use the RCN more selectively, often focusing on public safety coordination and special event support rather than continuous daily operations. Even among agencies with lighter use, interview responses consistently emphasized that the RCN becomes a critical tool during large events or major incidents when rapid, cross-agency coordination is required. These themes are documented throughout the agency interview summaries.

Network capacity and network throughput is not currently a concern for the RCN. None of the member agencies surveyed or interviewed identified network capacity or network throughput as a liming factor or operational concern, even for bandwidth-intensive data sharing like video feeds.

There are structural concerns related to physical redundancy in some locations. Since the completion of the SR-202 around South Mountain the East Valley Ring has evolved into a physically separated system. This increases redundancy and resiliency for connections along the ring. In contrast, the West Valley Ring functions as a collapsed ring that relies on a single shared fiber optic cable through portions of I-10 and Loop 101. Due to this lack of physical separation, the West Valley Ring is vulnerable to connectivity disruptions caused by construction, vandalism, or similar events if that single fiber cable were to be cut or damaged.

Additionally, the I-17 corridor—running north-south from the Durango Curve to I-10—carries fiber optic infrastructure supporting the Core, East Valley, and West Valley Rings. As a result, this segment represents a critical point within the network, and protecting the fiber in this corridor is essential to maintaining reliable communication across the region.

OPERATING EXPENSES

As detailed in prior project documentation on the "History of the RCN," costs associated with the RCN generally fall into several broad areas, including staffing; repair and restoration time; system expansion; and the hardware, software, data services, and licenses needed to operate the network. These operating expenses are shared across MAG and the member agencies, depending on ownership and operational responsibility. Additional in-kind expenses shared by MAG and the member agencies but often not directly budgeted for the RCN include rack space, climate control, and electricity.

Throughout interviews, many member agencies indicated that funding for the upkeep of their RCN fiber and related systems is not treated as a separate or standalone expense. To date, routine member agency operating expenditures specific to RCN components have generally been modest and, in most cases, absorbed within existing operations and maintenance budgets tied to Intelligent Transportation Systems (ITS) or Information Technology (IT) programs.

For member agencies, **RCN operating expenditures** are typically addressed as part of each agency's broader responsibility to maintain its communications infrastructure. The cost of maintenance, including time required for upkeep, is not considered substantial or treated as stand-alone.

While current operating costs have not been a significant burden for most agencies, the full level of effort and long-term resource demands associated with supporting the RCN are not well documented. This includes staff time dedicated to coordination, troubleshooting, and outage response, as well as the potential costs associated with future system expansion, increased redundancy, and more advanced monitoring or security tools.

As expectations for the RCN continue to grow, **better documentation of recurring costs** through strategic planning efforts may help inform future funding, staffing, and investment decisions.

CHALLENGES AND LIMITATIONS

Member agencies identified current challenges and limitations related to policies, practices, and education; consistency across jurisdictions; operations and maintenance; and risk management and security. MAG is well-positioned to address some challenges related to sharing information across member agencies. Other challenges may require more planning and resources to upgrade the RCN.

POLICIES, PRACTICES, AND EDUCATION

Many member agencies indicated that documentation related to the Regional Community Network is not consistently current. In some cases, records of agreements, system components, fiber routes, and equipment connections are incomplete or outdated. Responsibility for maintaining this information varies by agency and may fall to transportation, information technology, public safety, or other departments depending on local organizational structure. This inconsistency can make it more difficult to troubleshoot issues, onboard new staff, and coordinate across jurisdictions. Agencies also noted the absence of a

current, centralized RCN contact list, which can create uncertainty about who to reach when problems arise or coordination is needed. As noted previously, efforts are currently underway by MAG to update and distribute a contact list.

Agencies have also expressed a desire for additional education about the RCN. This includes a better understanding of the network's capabilities, how it can be used, and what benefits it may offer beyond current applications. There is particular interest in training opportunities for new staff so they can quickly understand how the RCN functions and how to engage with it effectively as part of their role.

CONSISTENCY ACROSS JURISDICTIONS

Member agencies use the RCN for different purposes, which reflects differences in size, mission, and operational priorities. While this flexibility is a strength, it can also create challenges when agencies target communications bandwidth increases or new fiber runs that support their own needs rather than the performance and benefit of the regional network as a whole. This variation in priorities can lead to fragmented decision making and make it more difficult to advance shared regional goals.

Smaller agencies may face additional challenges due to limited staffing and technical resources. In some cases, MAG has taken on additional responsibilities to help these agencies remain connected to the RCN, such as supporting last-mile connections. While this approach helps maintain regional connectivity, it can also place added demands on MAG staff and resources.

Sharing infrastructure information across jurisdictions has also been identified as a challenge. Some agencies have been cautious about sharing details about their infrastructure due to security concerns. Identifying ways to share essential information in a manner that addresses these concerns is important to supporting a functional and well-coordinated regional network, even though this information sharing is not a direct application of the RCN itself. Future RCN direction may consider information sharing as a necessary component in RCN agreements for managing and maintaining the overall system effectively.

MAG plays an important role sharing information across RCN partners, assisting smaller member agencies, and creating a regional vision for the RCN, but these services require **MAG staff time and resources**.

OPERATIONS AND MAINTENANCE

Limited staffing and resource availability affect how the RCN is operated and maintained. Contracting external information technology support can help address these limitations, but some agencies are hesitant to grant network access to third parties, which can reduce buy-in and complicate coordination. At the same time, the MAG RCN Network Manager role is no longer a full-time position, which may limit responsiveness and reduce the capacity for proactive system improvements.

Maintenance of the RCN relies on coordination between MAG and member agencies. When resources are constrained, delays between outages and repairs can occur. As a result, approaches to maintenance vary widely across agencies, ranging from dedicated staff to as-needed, break-fix support based on availability.

Some agencies have also expressed a desire for faster outage detection and clearer reporting when disruptions occur. Improved alerting and a more resilient network design, including physically separate backup connections, could help agencies maintain service while repairs are underway.

Because MAG does not own the fiber and there are no formal service-level agreements in place, **MAG cannot enforce response times**.

RISK MANAGEMENT AND SECURITY

Concerns about operational redundancy remain a significant limitation. In some areas, multiple fiber lines are located within the same underground conduit, meaning a single conduit cut could disrupt service for multiple agencies at once. This lack of physical separation increases the risk of widespread outages and highlights opportunities to improve network resiliency.

Cybersecurity is another area of concern. Each agency is responsible for securing its own connection to the RCN, including managing firewalls and controlling access by external vendors. Agencies have expressed a need for clearer communication about the overall security posture of the RCN and for guidance on steps they can take to meet their desired level of security. Improving clarity and shared understanding in this area could help agencies better manage risk while continuing to collaborate through the network.

If the RCN is used for safety-critical functions, upgrades and education may be needed to design a more **resilient and secure** network.

LOOKING FORWARD

The RCN continues to function as a reliable, shared communications asset that has been able to achieve significant regional impacts, including the implementation of numerous TSMO and ITS technologies, with modest resources relative to identified needs.

Member agencies are responsible for maintaining their own fiber, while MAG provides coordination, monitoring, and regional technical expertise. Monitoring tools such as SolarWinds and diagnostic equipment like OTDRs support timely outage detection and repair, but opportunities exist to improve alerting, documentation, and coordination. Continued use of the RCN would require member agencies to share information about their network infrastructure, continue maintaining and fixing infrastructure in a timely manner, and maintain up to date documentation and resources. Agreements for camera-sharing through the RCN are currently administered by AZTech, a third-party entity. MAG wants to incorporate camera-sharing into its future updated RCN member agency agreements.

Current staffing constraints at MAG limit the ability to pursue proactive improvements and create risks during absences. Member agencies have identified needs related to clearer points of contact, updated documentation, cybersecurity guidance, training, and faster outage awareness. Addressing these areas

through targeted investments and improved information sharing would strengthen the resiliency, effectiveness, and long-term sustainability of the RCN under any number of future uses and applications.

The next phase of this study is to define future path alternatives and assess potential uses of the RCN. These future uses may affect alignment with future funding eligibility and program management resource needs. The discussion around future uses of the RCN will consider the potential of the RCN to continue to act as a conduit for using shared platforms and standardization to enable future enhancements and coordination.

REFERENCE DOCUMENTS

- RCN Network Maps (2024)
- Member Agency survey (July 2025)
- MAG Meeting Notes:
  - Kick-Off Meeting (October 2025)
  - Interview: David Worley (October 2025)
  - Interview: Audrey Skidmore (November 2025)
  - Interview: David Lucas (November 2025)
  - Funding Interview: Cathy Colbath (November 2025)
- Stakeholder Interviews Notes:
  - Arizona Department of Transportation (ADOT)
  - City of Apache Junction
  - City of Buckeye
  - City of Glendale
  - City of Goodyear
  - City of Mesa
  - City of Peoria
  - City of Phoenix
  - City of Scottsdale
  - Maricopa County Department of Transportation (MCDOT)

APPENDIX A: ASSET INVENTORY DETAILS

Table 1. RCN Asset Inventory

Agency	Device	Manufacturer	MAG Asset Tag #
ADOT	Switch	Juniper	Unknown
ADOT	Switch	Juniper	Unknown
ADOT	Switch	Juniper	2796
Apache Junction	Switch	Brocade	Unknown
Apache Junction	Point-to-Point Radio	Ubiquity	3419
Apache Junction	Point-to-Point Radio	Ubiquity	3418
Apache Junction	Switch	Brocade	Unknown
ASU PD	Switch	Juniper	Unknown
Avondale	Switch	Juniper	3075
Buckeye	Switch	EtherWAN	Unknown
Chandler	Luxriot Server	Dell	1820
Chandler	Switch	Juniper	3077
El Mirage	Switch	Juniper	3066
Gilbert	Switch	Juniper	3071
Glendale	Media Converter	10Gtek	Unknown
Glendale	Switch	Juniper	3068
Glendale	Firewall	Juniper	Unknown
Glendale	Media Converter	Unknown	Unknown
Goodyear	Switch	Juniper	3074
MAG	Switch	Juniper	3067
MCDOT	Switch	Juniper	3069
Mesa	Switch (Active)	Juniper	3072
Mesa	Switch (Inactive)	Brocade	2146
Mesa	Switch	Netonix	Unknown
Mesa	Point-to-Point Radio	Mimosa	Unknown
Mesa	Switch	Netonix	Unknown
Mesa	Point-to-Point Radio	Mimosa	Unknown
Mesa	Switch	Netonix	Unknown
Mesa	Switch	Juniper	Unknown
Mesa	Wavelength Division Multiplexer	Ciena	Unknown
Mesa	Media Converter	JDSU	Unknown
Mesa	Switch	Juniper	Unknown
Mesa	Switch	Juniper	2365
Peoria	Switch	Cisco	Unknown
Peoria	Server	Dell	Unknown
Peoria	Switch	Juniper	Unknown
Peoria	Switch	Juniper	Unknown
Peoria	Firewall	Juniper	Unknown

Agency	Device	Manufacturer	MAG Asset Tag #
Phoenix	Switch	Juniper	2795
Phoenix	Switch	Juniper	2788
Phoenix	Switch	Juniper	3076
Phoenix	Switch	Juniper	3217
Phoenix	Switch	Juniper	3218
Phoenix	Switch	Juniper	Unknown
Phoenix	Media Converter	e-Link	PHX-RCN-CG-XPE
Phoenix	Switch	Juniper	Unknown
Phoenix	Switch	Juniper	Unknown
Queen Creek	Switch	Juniper	Unknown
Scottsdale	Luxriot Server	Dell	Unknown
Scottsdale	Switch	Juniper	3070
Surprise	Switch	Juniper	3073
Tempe	Switch	Juniper	Unknown
Tempe	Switch	Juniper	2787
Valley Metro	Switch	Juniper	2793
Valley Metro	Luxriot Server	Dell	2307

Table 2. Luxriot Inventory

Agency	# of Channels	Expires
Surprise	96	SUP- 2029/10/18
Queen Creek	96	SUP- 2029/10/18
El Mirage	96	SUP- 2029/10/18
Avondale	96	SUP- 2029/10/18
Glendale	Unlimited	SUP- 2029/10/18
Chandler	Unlimited	SUP- 2029/10/18
Tempe	Unlimited	SUP- 2029/10/18
Peoria	Unlimited	SUP- 2029/10/18
Valley Metro	Unlimited	SUP- 2029/10/18
Gilbert	Unlimited	SUP- 2029/10/18
Phoenix	Unlimited	SUP- 2029/10/18
ADOT	Unlimited	SUP- 2029/10/18
Mesa	Unlimited	SUP- 2029/10/18
Avondale	Unlimited	SUP- 2032/10/18
AJ	Unlimited	SUP- 2029/10/18
Scottsdale	Unlimited	SUP- 2029/10/18
MCDOT	Unlimited	SUP- 2029/10/18

APPENDIX B: SURVEY AND INTERVIEW SUMMARY

The following pages provide a summary of the survey and interview data collected for this study. Below is the list of questions asked during the stakeholder interviews.

Current Use and Applications

- What high-level architectural RCN components and network connectivity are in place for your agency today?
- Are IT or ITS representatives primarily or jointly responsible for RCN coordination and operations? What drives your agency's approach to this? Are there any plans for this to change?
- How does your agency currently use the Regional Community Network (RCN) (e.g., transportation operations and traffic management, special event management, public safety)?
- What are the most critical applications or services your agency relies on through the RCN?
- What transportation performance metrics or data, if any, does the RCN enable access for your agency?
- What successes or added value has your agency experienced through participation in the RCN?

Technical Challenges and Support Needs

- What types of technical support does your agency need most to ensure reliable RCN operations?
- How effective is the coordination between your agency's ITS group and MAG regarding RCN operations? And coordination between your agency's IT group and MAG?

Interagency Coordination

- Describe your experience with interagency coordination as it pertains to RCN infrastructure needs and data sharing. What challenges and successes stand out?
- What resources has your agency allocated for RCN operations and maintenance? How does this allocation compare against your resource needs?

Future Needs

- For your agency, what upcoming needs depend on current or increased RCN functionality?
- What is most important for us to understand about your participation in the RCN?
- How can MAG best support your agency in accomplishing transportation-related objectives into the future?

RCN Member Agency Responses to Current Use Cases

Data from July 2025 - January 2025

ID	Agency	Completed Survey? (July 2025)	Interview Participant? (Dec 2025 - Jan 2026)	Category	Current Use Case?	Source	Interview Notes
1	ADOT	Yes	Yes	Regional Live Camera Feeds / CCTV	Yes	Interview	“RCN is primarily used for traffic camera and CCTV network sharing to grant ability for other city TMCs to view ADOT’s cameras.” and “Using our cameras for interstate traffic management and sharing our cameras to the local cities.”
2	MCDOT	No	Yes	Regional Live Camera Feeds / CCTV	Yes	Interview	“At the surface level, our main use for the RCN is camera sharing through Luxriot.” and “The day-to-day video monitoring is the most critical.”
3	City of Phoenix	Yes	Yes	Regional Live Camera Feeds / CCTV	Yes	Interview; Survey Response	“We share our traffic camera video with other agencies over the RCN.” and “For some special events, the police department (PD) requests view of traffic cameras.”
4	City of Tempe	Yes	No	Regional Live Camera Feeds / CCTV	Yes	Survey Response	"Provides communication to other Agencys' CCTVs. Also provides support for troubleshooting general communication issues and device setup for all types of ITS applications."
5	City of Avondale	Yes	Yes	Regional Live Camera Feeds / CCTV	Yes	Interview; Survey Response	“Primary use is camera access and sharing via Luxriot.” and “Supporting the Glendale Real-Time Crime Center’s access to Avondale cameras through Luxriot.”
6	City of Chandler	Yes	No	Regional Live Camera Feeds / CCTV	Yes	Survey Response	
7	City of Mesa	Yes	Yes	Regional Live Camera Feeds / CCTV	Yes	Interview; Survey Response	“Cameras on county and adjacent roads are available to view… Use the cameras to view traffic or incidents during major events.”
8	Town of Gilbert	Yes	No	Regional Live Camera Feeds / CCTV	Yes	Survey Response	"Video sharing for ITS and PD Dispatch"
9	City of Glendale	Yes	Yes	Regional Live Camera Feeds / CCTV	Yes	Interview; Survey Response	“PD uses it for public safety and emergency management.” and “When protests/riots were happening… the camera feeds were used to monitor the protests.”
10	City of Goodyear	No	Yes	Regional Live Camera Feeds / CCTV	Yes	Interview; Survey Response	“We will be sharing video soon with Goodyear PD, and would like to benefit from RCN video sharing, from ADOT cameras.”
11	City of Peoria	Yes	Yes	Regional Live Camera Feeds / CCTV	Yes	Interview; Survey Response	“Getting neighboring cameras into Luxriot. Feeds go into real time crime center.” and “Police… gives them access to neighboring cameras, used all the time, every day.”
12	Town of Queen Creek	Yes	No	Regional Live Camera Feeds / CCTV	No	Survey Response	"we do not currently access the RCN"
13	SRP-MIC	No	No	Regional Live Camera Feeds / CCTV	No/Unverified		
14	City of Scottsdale	Yes	Yes	Regional Live Camera Feeds / CCTV	Yes	Interview; Survey Response	“We’re also heavy users of Luxriot, have access to all agencies’ cameras and use that as well.” and “PD does have access, and have full access.”
15	City of Surprise	Yes	No	Regional Live Camera Feeds / CCTV	Yes	Survey Response	
16	Valley Metro	Yes	No	Regional Live Camera Feeds / CCTV	No/Unverified		
17	Gila River Indian Community	No	No	Regional Live Camera Feeds / CCTV	No/Unverified		
18	Fort McDowell Yavapai Nation	No	No	Regional Live Camera Feeds / CCTV	No/Unverified		

RCN Member Agency Responses to Current Use Cases

Data from July 2025 - January 2025

ID	Agency	Completed Survey? (July 2025)	Interview Participant? (Dec 2025 - Jan 2026)	Category	Current Use Case?	Source	Interview Notes
19	Pinal County	No	No	Regional Live Camera Feeds / CCTV	No/Unverified		
20	City of Apache Junction	No	Yes	Regional Live Camera Feeds / CCTV	Yes	Interview	“Video sharing via Luxriot across traffic operations, dispatch, and public works.” and “Video management and camera sharing through Luxriot.”
21	City of El Mirage	Yes	No	Regional Live Camera Feeds / CCTV	Yes	Survey Response	
22	City of Buckeye	Yes	Yes	Regional Live Camera Feeds / CCTV	Yes	Interview; Survey Response	“The officers are now able to see camera feeds in real time on a single pane.” and “Right now the only thing we’re really using the RCN for is video feed from ADOT.”
23	City of Maricopa	Yes	No	Regional Live Camera Feeds / CCTV	No/Unverified	Survey Response	City Traffic Engineer response to survey indicates a gap in RCN awareness for the City of Maricopa
24	ADOT	Yes	Yes	Sharing Data with Other Agencies	Yes	Interview; Survey Response	“RCN is primarily used for traffic camera and CCTV network sharing to grant ability for other city TMCs to view ADOT’s cameras.” and “We see indirect future needs for MCDOT’s RADS to share data over the RCN.”
25	MCDOT	No	Yes	Sharing Data with Other Agencies	Yes	Interview	“We use RCN for RADS with other agencies sharing data over the RCN to MCDOT.” and “Agencies are sharing batches of second-by-second high-resolution data.”
26	City of Phoenix	Yes	Yes	Sharing Data with Other Agencies	Yes	Interview; Survey Response	“ATSPM data is being passed over the RCN.” and “We share our traffic camera video with other agencies over the RCN.”
27	City of Tempe	Yes	No	Sharing Data with Other Agencies	Yes	Survey Response	Sharing data with other agencies, e.g. travel time or adaptive signal system coordination
28	City of Avondale	Yes	Yes	Sharing Data with Other Agencies	Yes	Interview; Survey Response	“Viewing ADOT and MCDOT cameras for situational awareness.” and “Supporting the Glendale Real-Time Crime Center’s access to Avondale cameras through Luxriot.”
29	City of Chandler	Yes	No	Sharing Data with Other Agencies	Yes	Survey Response	
30	City of Mesa	Yes	Yes	Sharing Data with Other Agencies	Yes	Interview	“Mesa is currently sending data to MCDOT for ATSPM.” and “Mesa could share data for their specific intersections to MCDOT over the RCN.”
31	Town of Gilbert	Yes	No	Sharing Data with Other Agencies	Yes	Survey Response	
32	City of Glendale	Yes	Yes	Sharing Data with Other Agencies	No	Interview	"Uses RCN for connectivity and video, but no explicit non-video data sharing today"
33	City of Goodyear	No	Yes	Sharing Data with Other Agencies	No	Interview	"Limited use today; future interest noted but no active data sharing"
34	City of Peoria	Yes	Yes	Sharing Data with Other Agencies	Yes	Survey Response	“Getting neighboring cameras into Luxriot. Feeds go into real time crime center.”
35	Town of Queen Creek	Yes	No	Sharing Data with Other Agencies	No	Survey Response	"we do not currently access the RCN"
36	SRP-MIC	No	No	Sharing Data with Other Agencies	No/Unverified		
37	City of Scottsdale	Yes	Yes	Sharing Data with Other Agencies	Yes	Survey Response	
38	City of Surprise	Yes	No	Sharing Data with Other Agencies	Yes	Survey Response	

RCN Member Agency Responses to Current Use Cases

Data from July 2025 - January 2025

ID	Agency	Completed Survey? (July 2025)	Interview Participant? (Dec 2025 - Jan 2026)	Category	Current Use Case?	Source	Interview Notes
39	Valley Metro	Yes	No	Sharing Data with Other Agencies	Yes	Survey Response	
40	Gila River Indian Community	No	No	Sharing Data with Other Agencies	No/Unverified		
41	Fort McDowell Yavapai Nation	No	No	Sharing Data with Other Agencies	No/Unverified		
42	Pinal County	No	No	Sharing Data with Other Agencies	No/Unverified		
43	City of Apache Junction	No	Yes	Sharing Data with Other Agencies	No/Unverified		
44	City of El Mirage	Yes	No	Sharing Data with Other Agencies	No/Unverified	Survey Response	
45	City of Buckeye	Yes	Yes	Sharing Data with Other Agencies	No/Unverified	Interview	“We’ve only worked with ADOT.”
46	City of Maricopa	Yes	No	Sharing Data with Other Agencies	No/Unverified	Survey Response	City Traffic Engineer response to survey indicates a gap in RCN awareness for the City of Maricopa
47	ADOT	Yes	Yes	Remote System Access	No/Unverified		
48	MCDOT	No	Yes	Remote System Access	Yes	Interview	“Also use it for firewalls in Chandler and Surprise that go over the RCN and connect to MCDOT.”
49	City of Phoenix	Yes	Yes	Remote System Access	Yes	Interview; Survey Response	“Connecting to other cities is much faster if ITS department can go through RCN rather than through IT group.” and "Besides the usual video/ATMS sharing the RCN has helped with major events like Superbowl or during remote access during comm issues"
50	City of Tempe	Yes	No	Remote System Access	Yes	Survey Response	
51	City of Avondale	Yes	Yes	Remote System Access	Yes	Interview	“Enabling remote access to traffic signal controllers for traffic operations staff.” and “Supporting remote operations from City facilities, homes, or during off-hours.”
52	City of Chandler	Yes	No	Remote System Access	No/Unverified	Survey Response	
53	City of Mesa	Yes	Yes	Remote System Access	Yes	Interview; Survey Response	
54	Town of Gilbert	Yes	No	Remote System Access	No/Unverified	Survey Response	
55	City of Glendale	Yes	Yes	Remote System Access	No/Unverified		
56	City of Goodyear	No	Yes	Remote System Access	No/Unverified		
57	City of Peoria	Yes	Yes	Remote System Access	No/Unverified		
58	Town of Queen Creek	Yes	No	Remote System Access	No	Survey Response	"we do not currently access the RCN"
59	SRP-MIC	No	No	Remote System Access	No/Unverified		
60	City of Scottsdale	Yes	Yes	Remote System Access	Yes	Survey Response	
61	City of Surprise	Yes	No	Remote System Access	No/Unverified	Survey Response	
62	Valley Metro	Yes	No	Remote System Access	No/Unverified		
63	Gila River Indian Community	No	No	Remote System Access	No/Unverified		

RCN Member Agency Responses to Current Use Cases

Data from July 2025 - January 2025

ID	Agency	Completed Survey? (July 2025)	Interview Participant? (Dec 2025 - Jan 2026)	Category	Current Use Case?	Source	Interview Notes
64	Fort McDowell Yavapai Nation	No	No	Remote System Access	No/Unverified		
65	Pinal County	No	No	Remote System Access	No/Unverified		
66	City of Apache Junction	No	Yes	Remote System Access	Yes	Interview	“Remote monitoring and management of traffic signals”
67	City of El Mirage	Yes	No	Remote System Access	No/Unverified	Survey Response	
68	City of Buckeye	Yes	Yes	Remote System Access	Yes	Survey Response	
69	City of Maricopa	Yes	No	Remote System Access	No/Unverified	Survey Response	City Traffic Engineer response to survey indicates a gap in RCN awareness for the City of Maricopa
70	ADOT	Yes	Yes	RTCC or EOC	No/Unverified		
71	MCDOT	No	Yes	RTCC or EOC	No/Unverified		
72	City of Phoenix	Yes	Yes	RTCC or EOC	No/Unverified		
73	City of Tempe	Yes	No	RTCC or EOC	No/Unverified	Survey Response	
74	City of Avondale	Yes	Yes	RTCC or EOC	Yes	Interview	“Public safety uses are a major value of the RCN. Dispatch staff use Luxriot to view local and regional cameras. Police use camera access when tracking incidents across jurisdictions. Emergency Operations Center (EOC) uses Luxriot during major events (e.g., NASCAR). RCN access is available in mobile command vehicles.”
75	City of Chandler	Yes	No	RTCC or EOC	No/Unverified	Survey Response	
76	City of Mesa	Yes	Yes	RTCC or EOC	Yes	Survey Response	"Used for Mesa Realtime Crime Center"
77	Town of Gilbert	Yes	No	RTCC or EOC	Planned	Survey Response	
78	City of Glendale	Yes	Yes	RTCC or EOC	Yes	Survey Response	"It helps connect to the other cities traffic cameras for when [Glendale PD/RTCC] have regional joint operations."
79	City of Goodyear	No	Yes	RTCC or EOC	No/Unverified		
80	City of Peoria	Yes	Yes	RTCC or EOC	Yes	Interview	“Feeds go into real time crime center. Besides that, no other data. Uses include both traffic and public safety.” and “police. That’s what gives them access to neighboring cameras, used all the time, every day.”
81	Town of Queen Creek	Yes	No	RTCC or EOC	No	Survey Response	"we do not currently access the RCN"
82	SRP-MIC	No	No	RTCC or EOC	No/Unverified		
83	City of Scottsdale	Yes	Yes	RTCC or EOC	No/Unverified		
84	City of Surprise	Yes	No	RTCC or EOC	Planned	Survey Response	"This could be an opportunity to connect cities with real time crime centers. Additionally business continuity/DR sites could benefit in lieu of leased lines."
85	Valley Metro	Yes	No	RTCC or EOC	No/Unverified		
86	Gila River Indian Community	No	No	RTCC or EOC	No/Unverified		

RCN Member Agency Responses to Current Use Cases

Data from July 2025 - January 2025

ID	Agency	Completed Survey? (July 2025)	Interview Participant? (Dec 2025 - Jan 2026)	Category	Current Use Case?	Source	Interview Notes
87	Fort McDowell Yavapai Nation	No	No	RTCC or EOC	No/Unverified		
88	Pinal County	No	No	RTCC or EOC	No/Unverified		
89	City of Apache Junction	No	Yes	RTCC or EOC	No/Unverified		
90	City of El Mirage	Yes	No	RTCC or EOC	Planned	Survey Response	"We were interested to see if it could be used to backhaul DR network. Glendale has a Real Time Crime Center and we may connect a stream of our ITS cameras back to them via the RCN"
91	City of Buckeye	Yes	Yes	RTCC or EOC	No/Unverified		
92	City of Maricopa	Yes	No	RTCC or EOC	No/Unverified	Survey Response	City Traffic Engineer response to survey indicates a gap in RCN awareness for the City of Maricopa
93	ADOT	Yes	Yes	ATMS Connection	No/Unverified		
94	MCDOT	No	Yes	ATMS Connection	No/Unverified		
95	City of Phoenix	Yes	Yes	ATMS Connection	Yes	Survey Response	"We share intersection video with the other cities and see theirs with Luxriot. We have used the RCN to connect our ATMS/Transuite to other cities , Tolleson/Tempe for read only rights. " and “The ITS and IT departments work with MAG on specific needs, such as getting ATMS data over the RCN.” and “Phoenix has connected their ATMS system to Tempe.”
96	City of Tempe	Yes	No	ATMS Connection	Yes	Survey Response	“The ITS and IT departments work with MAG on specific needs, such as getting ATMS data over the RCN.” and “Phoenix has connected their ATMS system to Tempe.” (from Phoenix interview)
97	City of Avondale	Yes	Yes	ATMS Connection	No/Unverified		
98	City of Chandler	Yes	No	ATMS Connection	Yes	Survey Response	"We are connected to Phoenix with TransCore (ATMS) to see each other's intersections live status. We were also supposed to get connected to Tempe like we did with Phoenix, but it fell through for some reason."
99	City of Mesa	Yes	Yes	ATMS Connection	No/Unverified		
100	Town of Gilbert	Yes	No	ATMS Connection	No/Unverified	Survey Response	
101	City of Glendale	Yes	Yes	ATMS Connection	No/Unverified		
102	City of Goodyear	No	Yes	ATMS Connection	No/Unverified		
103	City of Peoria	Yes	Yes	ATMS Connection	No/Unverified		
104	Town of Queen Creek	Yes	No	ATMS Connection	No	Survey Response	"we do not currently access the RCN"
105	SRP-MIC	No	No	ATMS Connection	No/Unverified		
106	City of Scottsdale	Yes	Yes	ATMS Connection	No/Unverified		
107	City of Surprise	Yes	No	ATMS Connection	No/Unverified	Survey Response	
108	Valley Metro	Yes	No	ATMS Connection	No/Unverified		

RCN Member Agency Responses to Current Use Cases

Data from July 2025 - January 2025

ID	Agency	Completed Survey? (July 2025)	Interview Participant? (Dec 2025 - Jan 2026)	Category	Current Use Case?	Source	Interview Notes
109	Gila River Indian Community	No	No	ATMS Connection	No/Unverified		
110	Fort McDowell Yavapai Nation	No	No	ATMS Connection	No/Unverified		
111	Pinal County	No	No	ATMS Connection	No/Unverified		
112	City of Apache Junction	No	Yes	ATMS Connection	No/Unverified		
113	City of El Mirage	Yes	No	ATMS Connection	No/Unverified	Survey Response	
114	City of Buckeye	Yes	Yes	ATMS Connection	No/Unverified		
115	City of Maricopa	Yes	No	ATMS Connection	No/Unverified	Survey Response	City Traffic Engineer response to survey indicates a gap in RCN awareness for the City of Maricopa
116	ADOT	Yes	Yes	PD or Fire Dispatch	No/Unverified		
117	MCDOT	No	Yes	PD or Fire Dispatch	No/Unverified		
118	City of Phoenix	Yes	Yes	PD or Fire Dispatch	No/Unverified		
119	City of Tempe	Yes	No	PD or Fire Dispatch	No/Unverified	Survey Response	
120	City of Avondale	Yes	Yes	PD or Fire Dispatch	No/Unverified		
121	City of Chandler	Yes	No	PD or Fire Dispatch	No/Unverified	Survey Response	
122	City of Mesa	Yes	Yes	PD or Fire Dispatch	No/Unverified		
123	Town of Gilbert	Yes	No	PD or Fire Dispatch	Yes	Survey Response	"Video sharing for ITS and PD Dispatch"
124	City of Glendale	Yes	Yes	PD or Fire Dispatch	No/Unverified		
125	City of Goodyear	No	Yes	PD or Fire Dispatch	Yes	Interview; Survey Response	“Goodyear only uses RCN for 911 telecom, for fire dispatch, with RCN as primary and Cox comm and lumen as secondary failovers.”
126	City of Peoria	Yes	Yes	PD or Fire Dispatch	No/Unverified		
127	Town of Queen Creek	Yes	No	PD or Fire Dispatch	No	Survey Response	"we do not currently access the RCN"
128	SRP-MIC	No	No	PD or Fire Dispatch	No/Unverified		
129	City of Scottsdale	Yes	Yes	PD or Fire Dispatch	No/Unverified		
130	City of Surprise	Yes	No	PD or Fire Dispatch	No/Unverified	Survey Response	
131	Valley Metro	Yes	No	PD or Fire Dispatch	No/Unverified		
132	Gila River Indian Community	No	No	PD or Fire Dispatch	No/Unverified		
133	Fort McDowell Yavapai Nation	No	No	PD or Fire Dispatch	No/Unverified		
134	Pinal County	No	No	PD or Fire Dispatch	No/Unverified		
135	City of Apache Junction	No	Yes	PD or Fire Dispatch	No/Unverified		
136	City of El Mirage	Yes	No	PD or Fire Dispatch	No/Unverified	Survey Response	

RCN Member Agency Responses to Current Use Cases

Data from July 2025 - January 2025

ID	Agency	Completed Survey? (July 2025)	Interview Participant? (Dec 2025 - Jan 2026)	Category	Current Use Case?	Source	Interview Notes
137	City of Buckeye	Yes	Yes	PD or Fire Dispatch	No/Unverified		
138	City of Maricopa	Yes	No	PD or Fire Dispatch	No/Unverified	Survey Response	City Traffic Engineer response to survey indicates a gap in RCN awareness for the City of Maricopa
139	ADOT	Yes	Yes	Special Events	No/Unverified		
140	MCDOT	No	Yes	Special Events	No/Unverified		
141	City of Phoenix	Yes	Yes	Special Events	Yes	Survey Response	"Besides the usual video/ATMS sharing the RCN has helped with major events like Superbowl or during remote access during comm issues" (survey) and “They were able to push all traffic videos to a centralized management location… for emergency and special event management day-of.” (interview)
142	City of Tempe	Yes	No	Special Events	No/Unverified	Survey Response	
143	City of Avondale	Yes	Yes	Special Events	Yes	Interview	“Emergency Operations Center (EOC) uses Luxriot during major events (e.g., NASCAR).” and “Cross-jurisdictional visibility is especially valuable during… Special events affecting Avondale traffic.”
144	City of Chandler	Yes	No	Special Events	No/Unverified	Survey Response	
145	City of Mesa	Yes	Yes	Special Events	Yes	Interview	“When there were planned events (e.g., Black Lives Matter marches), Mesa was able to use the RCN to view the cameras to monitor the paths of the marches and the crowd size.”
146	Town of Gilbert	Yes	No	Special Events	No/Unverified	Survey Response	
147	City of Glendale	Yes	Yes	Special Events	Yes	Interview	“For a majority of use, we use it for special event management, for traffic management around special events.”
148	City of Goodyear	No	Yes	Special Events	No/Unverified		
149	City of Peoria	Yes	Yes	Special Events	Yes	Interview	“We did use neighboring cameras for the Charlie Kirk memorial, but that’s an exception.”
150	Town of Queen Creek	Yes	No	Special Events	No	Survey Response	"we do not currently access the RCN"
151	SRP-MIC	No	No	Special Events	No/Unverified		
152	City of Scottsdale	Yes	Yes	Special Events	No/Unverified		
153	City of Surprise	Yes	No	Special Events	No/Unverified	Survey Response	
154	Valley Metro	Yes	No	Special Events	No/Unverified		
155	Gila River Indian Community	No	No	Special Events	No/Unverified		
156	Fort McDowell Yavapai Nation	No	No	Special Events	No/Unverified		
157	Pinal County	No	No	Special Events	No/Unverified		
158	City of Apache Junction	No	Yes	Special Events	Planned	Interview	“Current and near-term planned uses include… Special event and emergency traffic management.”
159	City of El Mirage	Yes	No	Special Events	No/Unverified	Survey Response	

RCN Member Agency Responses to Current Use Cases

Data from July 2025 - January 2025

ID	Agency	Completed Survey? (July 2025)	Interview Participant? (Dec 2025 - Jan 2026)	Category	Current Use Case?	Source	Interview Notes
160	City of Buckeye	Yes	Yes	Special Events	No/Unverified		
161	City of Maricopa	Yes	No	Special Events	No/Unverified	Survey Response	City Traffic Engineer response to survey indicates a gap in RCN awareness for the City of Maricopa
162	ADOT	Yes	Yes	CV Support	No/Unverified		
163	MCDOT	No	Yes	CV Support	Planned	Interview	“Our biggest need will be around Connected Vehicles. There will be many more devices around the region that need to be connected… Using the RCN will be the simplest and safest way to connect.”
164	City of Phoenix	Yes	Yes	CV Support	No/Unverified		“Phoenix would appreciate support from MAG on any knowledge sharing they can provide related to regional connectivity projects (like connected vehicles).”
165	City of Tempe	Yes	No	CV Support	No/Unverified	Survey Response	
166	City of Avondale	Yes	Yes	CV Support	No/Unverified		“Traffic/ITS staff become more involved when RCN use expands into new or regional applications (e.g., connected vehicle initiatives).”
167	City of Chandler	Yes	No	CV Support	No/Unverified	Survey Response	
168	City of Mesa	Yes	Yes	CV Support	No/Unverified		
169	Town of Gilbert	Yes	No	CV Support	No/Unverified	Survey Response	
170	City of Glendale	Yes	Yes	CV Support	No/Unverified		
171	City of Goodyear	No	Yes	CV Support	No/Unverified		
172	City of Peoria	Yes	Yes	CV Support	No/Unverified		
173	Town of Queen Creek	Yes	No	CV Support	No	Survey Response	"we do not currently access the RCN"
174	SRP-MIC	No	No	CV Support	No/Unverified		
175	City of Scottsdale	Yes	Yes	CV Support	No/Unverified		
176	City of Surprise	Yes	No	CV Support	No/Unverified	Survey Response	
177	Valley Metro	Yes	No	CV Support	No/Unverified		
178	Gila River Indian Community	No	No	CV Support	No/Unverified		
179	Fort McDowell Yavapai Nation	No	No	CV Support	No/Unverified		
180	Pinal County	No	No	CV Support	No/Unverified		
181	City of Apache Junction	No	Yes	CV Support	No/Unverified		
182	City of El Mirage	Yes	No	CV Support	No/Unverified	Survey Response	
183	City of Buckeye	Yes	Yes	CV Support	No/Unverified		
184	City of Maricopa	Yes	No	CV Support	No/Unverified	Survey Response	City Traffic Engineer response to survey indicates a gap in RCN awareness for the City of Maricopa

RCN Member Agency Responses to Current Use Cases

Data from July 2025 - January 2025

ID	Agency	Completed Survey? (July 2025)	Interview Participant? (Dec 2025 - Jan 2026)	Category	Current Use Case?	Source	Interview Notes
185	ADOT	Yes	Yes	ATSPM/RADS	Yes	Interview	“We see indirect future needs for MCDOT’s RADS to share data over the RCN.”
186	MCDOT	No	Yes	ATSPM/RADS	Yes	Interview	“Second use is ATSPM data sharing.” and “We are mainly sharing the high-precision data from the ATSPM over the RCN… Agencies are sharing batches of second-by-second high-resolution data.”
187	City of Phoenix	Yes	Yes	ATSPM/RADS	Yes	Interview	“ATSPM data is being passed over the RCN.”
188	City of Tempe	Yes	No	ATSPM/RADS	No/Unverified	Survey Response	
189	City of Avondale	Yes	Yes	ATSPM/RADS	No/Unverified		
190	City of Chandler	Yes	No	ATSPM/RADS	No/Unverified	Survey Response	
191	City of Mesa	Yes	Yes	ATSPM/RADS	Yes	Interview	“Mesa is currently sending data to MCDOT for ATSPM.” and “Typically configured to send once per day or once per hour (near real time).”
192	Town of Gilbert	Yes	No	ATSPM/RADS	Yes	Survey Response	
193	City of Glendale	Yes	Yes	ATSPM/RADS	No/Unverified		
194	City of Goodyear	No	Yes	ATSPM/RADS	No/Unverified		
195	City of Peoria	Yes	Yes	ATSPM/RADS	No/Unverified		
196	Town of Queen Creek	Yes	No	ATSPM/RADS	No	Survey Response	"we do not currently access the RCN"
197	SRP-MIC	No	No	ATSPM/RADS	No/Unverified		
198	City of Scottsdale	Yes	Yes	ATSPM/RADS	Yes	Interview	“MCDOT is launching ATSPMs for the valley as a whole… Very critical pipeline.” “We are hooked up with a lot of the event data, through the RCN to RADS from the City.” and “The transferring of data is invaluable… very critical pipeline.”
199	City of Surprise	Yes	No	ATSPM/RADS	No/Unverified	Survey Response	
200	Valley Metro	Yes	No	ATSPM/RADS	No/Unverified		
201	Gila River Indian Community	No	No	ATSPM/RADS	No/Unverified		
202	Fort McDowell Yavapai Nation	No	No	ATSPM/RADS	No/Unverified		
203	Pinal County	No	No	ATSPM/RADS	No/Unverified		
204	City of Apache Junction	No	Yes	ATSPM/RADS	No/Unverified		
205	City of El Mirage	Yes	No	ATSPM/RADS	No/Unverified	Survey Response	
206	City of Buckeye	Yes	Yes	ATSPM/RADS	No/Unverified		
207	City of Maricopa	Yes	No	ATSPM/RADS	No/Unverified	Survey Response	City Traffic Engineer response to survey indicates a gap in RCN awareness for the City of Maricopa