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Municipal Infrastructure Conditions 2025

INSIGHTS ON LOCAL INFRASTRUCTURE PRIORITY PROJECTS ACROSS AMERICA

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Foreword

THE PAST FEW years have marked a significant turning point in municipal infrastructure development. Cities across the country have leveraged historic federal investments to launch transformative projects that enhance and promote sustainability. The Municipal Infrastructure Conditions Report 2025 explores the state of America's municipal infrastructure. It examines the priorities, obstacles and strategies that municipal leaders use to create and maintain their infrastructure.

The insights presented in this report highlight the adaptability and resourcefulness of municipalities as they navigate a rapidly changing landscape of infrastructure needs. From addressing aging water systems to expanding mobility and transit options, cities are demonstrating a commitment to modernizing infrastructure while tackling pressing social, economic and environmental challenges.

The data reveal a dynamic interplay between the financial and procedural hurdles faced by municipalities and the innovative approaches employed to overcome them. Rising costs, regulatory complexities and workforce shortages stand among the chief obstacles, but cities are meeting these challenges head-on with various funding solutions, such as borrowing from the market and tapping into local budgets and strategic planning.

While this report is based on data collected in the early months of 2025, municipal leaders continue to adapt to shifting economic and policy landscapes. Given federal developments and evolving fiscal conditions, cities remain focused on their core infrastructure priorities, demonstrating remarkable resilience in the face of uncertainty. The ongoing commitment of local governments is focused on forward-thinking strategies, highlights their ability to navigate challenges while delivering essential services to communities.

The report also underscores the importance of evaluating success and ensuring long-term functionality through effective management. By aligning infrastructure projects with measurable outcomes and community needs, municipalities can achieve transformative results that enhance quality of life, public safety and economic vitality.

We hope this report will continue to inspire policymakers and stakeholders at all levels of government to take bold and informed action in shaping the future of municipal infrastructure. With thoughtful planning, sustainable investment and innovative management, cities, towns and villages can rise to the occasion and build a legacy of progress, resilience and opportunity for generations to come.

Clarence E. Anthony

CEO and Executive Director
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Introduction

MUNICIPAL INFRASTRUCTURE LIES at the foundation of thriving, sustainable communities, serving as the backbone for economic development, public safety and quality of life. From water systems to roads and broadband networks, infrastructure touches nearly every aspect of daily life, shaping how cities, towns and villages function and evolve to meet the needs of their residents. However, municipalities face growing challenges in maintaining and modernizing their assets while adapting to rising costs, resource constraints and shifting priorities.

Federal and state funding continue to play a vital role in supporting municipal infrastructure development. Recent legislation, including the Infrastructure Investment and Jobs Act (IIJA), has provided critical funding which has empowered local governments to tackle overdue projects and improve sustainability. This and other funding mechanisms have allowed municipalities to innovate despite economic uncertainty, ensuring that essential infrastructure continues to meet the evolving needs of communities. However, fluctuations in federal funding levels and state allocations remain a key concern for municipal leaders, as they directly impact long-term planning and project execution.

This report discusses the multifaceted process of developing municipal infrastructure, exploring three interconnected themes: setting priorities, overcoming barriers and evaluating success. In the first section, the focus is on identifying the most urgent projects – such as water systems, roads and sidewalks – while understanding their stages of development and their importance to capital planning. The second section shifts to the obstacles municipalities face, including financial challenges like rising costs and procedural hurdles like regulatory compliance. Creative solutions and funding strategies are highlighted as essential tools for overcoming these barriers. Finally, the third section examines how cities measure success and manage their infrastructure assets, emphasizing the importance of operational efficiency, public safety and technological innovation in ensuring resilient infrastructure that serves the community's long-term needs.

As cities, towns and villages strive to ensure strong and resilient communities, municipal infrastructure emerges not just as a practical necessity but also as a catalyst for opportunity and transformation. By addressing infrastructure priorities, challenges and management strategies comprehensively, municipalities have the power to shape a future that enhances quality of life and fosters economic vitality.

SETTING PRIORITIES:

Building Local Infrastructure for Community Impact

INFRASTRUCTURE SERVES AS the foundation of thriving communities, ensuring access to essential services, supporting economic development and enhancing overall quality of life. From transportation networks to water systems, infrastructure enables cities to function efficiently and adapt to evolving needs. However, municipalities across the country have faced mounting challenges in sustaining and modernizing their infrastructure.

While the full effects remain uncertain, shifts in global trade could influence material costs, supply chains and project timelines, adding another layer of complexity to infrastructure planning.[1] As cities face these financial and logistical hurdles, they are forced to re-evaluate priorities, seek alternative funding sources and adopt innovative solutions to meet growing infrastructure demands.

Economic disruptions brought on by the 2020 recession, and its lingering impacts, strained local government budgets, delaying critical projects and limiting available resources.[2, 3, 4] Inflation further exacerbated cost pressures, increasing expenses for materials, labor and maintenance.[5, 6] More recently, ongoing discussions on trade policy ignited new dynamics related to ongoing nfrastructure development.*,**

* The Global Infrastructure Investor Association explores how evolving US trade policies and tariffs could affect infrastructure investments, particularly in sectors like energy, transport and telecommunications.

** Read more about how tariffs could impact local government budgets here.

IDENTIFYING THE MOST NEEDED INFRASTRUCTURE PROJECTS

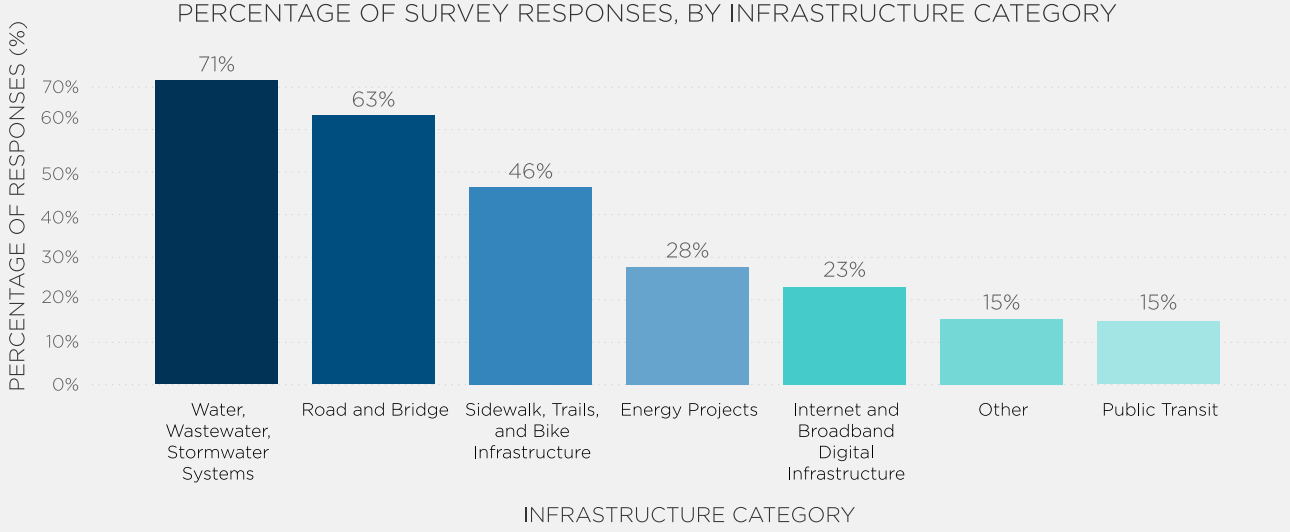
Local governments surveyed highlighted their most urgent infrastructure needs -- a diverse spectrum of projects (see Appendix A for more details on the survey).* **More than 71 percent of municipalities who responded identified water systems as the top infrastructure priority and most needed.** Roads and bridges followed closely, garnering 63 percent of responses.

These responses reflect the critical role these infrastructures play in the daily life of municipal residents – from ensuring safe transportation to providing essential public services.** Sidewalks, trails and bike infrastructure rank third, with 91 responses (accounting for 46.4 percent) emphasizing the importance of mobility.

FIGURE 1 A

Water Systems and Roads and Bridges the Highest Priorities Among Local Infrastructure Projects

PERCENTAGE OF SURVEY RESPONSES, BY INFRASTRUCTURE CATEGORY



Source: National League of Cities Municipal Infrastructure Conditions 2025 Survey. (N=196)

Figure Note: Percentages are calculated as the proportion of all total responses to the question. Respondents were able to select multiple options so the total of the count column is greater than the total number of respondents.

* Interestingly, the Municipal Infrastructure Conditions (MIC) 2022 report similarly found water/sewer/stormwater systems at the top of the priority lists for surveyed municipal governments.

** As part of the same Municipal Infrastructure Conditions (MIC) 2025 survey, responding governments also provided insights into their housing infrastructure needs. Notably, water systems and transportation emerged as major concerns when municipalities evaluated the infrastructure required to support housing production. This underscores the interconnected nature of infrastructure planning, where essential services such as water access and mobility play a critical role in housing development and community sustainability. Read more about municipal governments' housing production challenges in NLC's Fact Sheet on Infrastructure's Role in Housing Development.

Interestingly, when all transportation-related projects – such as roads, bridges, sidewalks, trails and bike infrastructure – are combined, they account for a larger share of municipal infrastructure needs. However, for the purposes of this research, these categories were kept distinct, recognizing that various transportation assets are often owned and managed by different levels or types of government. While cities play a crucial role in maintaining local streets and pedestrian infrastructure, larger-scale projects like highways and major transit systems frequently fall under county, state or federal jurisdiction. This distinction ensures a more accurate assessment of municipalities' direct responsibilities and priorities.

Respondents' choice of "most needed" projects in the survey questionnaire underscores the increasing demand for upgrading municipal infrastructure to meet today's challenges. Water and wastewater systems often require modernization to address deteriorating pipes, ensure water safety, prevent stormwater overflow and meet new regulatory requirements.[7] Roads and bridges, pivotal to transportation networks, demand ongoing maintenance and upgrades to keep pace with population growth.

INFRASTRUCTURE PROJECTS & THE DEVELOPMENT PROCESS

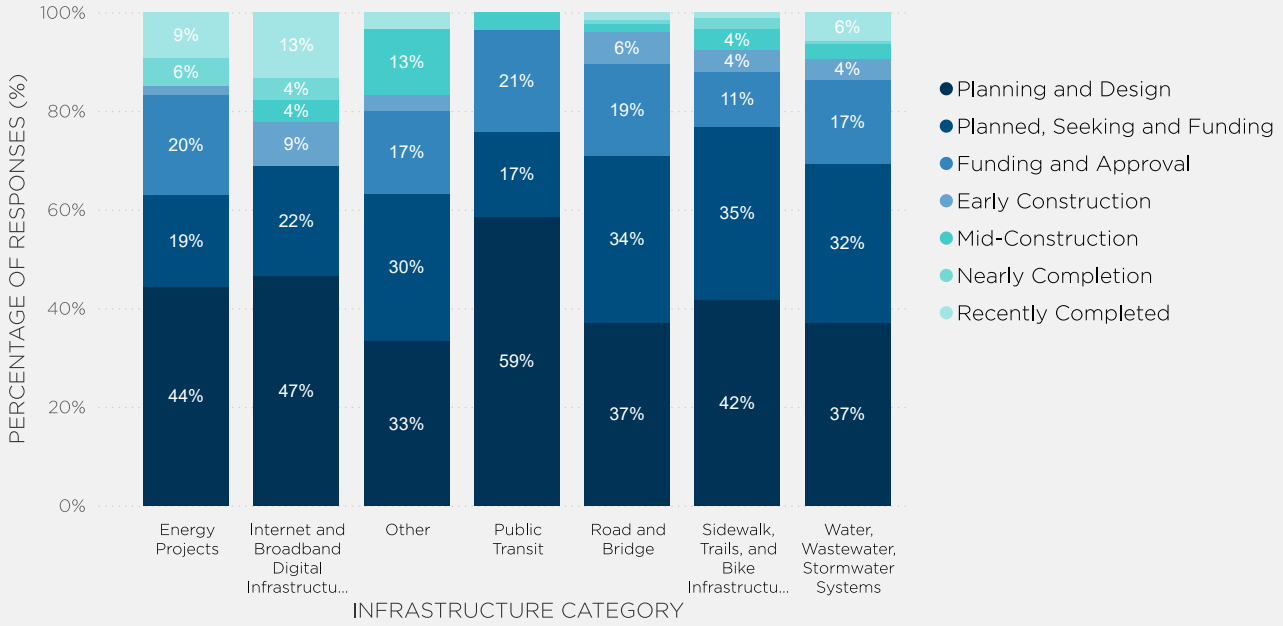
While identifying the most needed projects provides crucial insights, assessing their stage of development adds layers of understanding. According to survey responses, water/wastewater/stormwater systems, roads and bridges, internet/broadband and energy projects are farther along in development compared to other categories. That said, a closer look at Figure 1b shows that the majority of projects in these categories are in the early stages, namely Planning and Design or Funding and Approval. Approximately 40 percent of projects are in the Planning and Design phase and nearly one-third are in the Funding and Approval stage. These projects are ready to execute once they receive funding, indicating the significant importance of infrastructure funding in cities' ability to meet their infrastructure needs.

Projects in many categories, such as public transit and sidewalk/trails/bike infrastructure projects, remain in the infancy of their development. This indicates that cities face hurdles with securing funding[8] or addressing complex planning challenges for these projects to get underway. These varying levels of progress highlight the importance of ensuring resources are adequately allocated to move both advanced and early-stage projects forward.

FIGURE 1 B

Water Systems and Roads and Bridges Among Most Currently Advanced Local Infrastructure Projects

PERCENTAGE OF SURVEY RESPONSES, BY INFRASTRUCTURE CATEGORY AND COMPLETION STAGE



Source: National League of Cities Municipal Infrastructure Conditions 2025 Survey. (N=196)
Figure Note: Percentages are calculated as the proportion of all total responses to the question. Respondents were able to select multiple options so the total of the count column is greater than the total number of respond

MOTIVATIONS BEHIND PROJECT SELECTION

Understanding the reasons why municipalities select specific projects as "most needed" is vital for crafting strategic infrastructure plans (see *Appendix C, Table C-1* for more detail). When asked *why* a municipality selected a certain project as the most urgent and critical, 78 percent of respondents emphasized the need to modernize aging systems. From deteriorating water pipes to fragile bridges, municipal government projects focus on fixing long-serving infrastructure to ensure safe, reliable and sustainable daily use. Local governments may be upgrading their infrastructure for modern uses, but this response rate clearly indicates a focus of responsible asset replacement as infrastructure reaches the end of its useful lifespan.

Almost half of responding municipalities (nearly 49 percent) recognize the close relationship between infrastructure and economic opportunities. Upgraded systems can attract businesses, foster local entrepreneurship and create jobs, ultimately strengthening the local economy. For example, investing in public transit would not only improve mobility but also alleviate traffic congestion. Of note, more than 40 percent of respondents selected projects based on the impact to community resilience and disaster preparedness. Building resilient infrastructure has become increasingly important, especially in the face of more frequent natural disasters and extreme storms throughout the U.S.

INFLUENCE OF ECONOMIC DEVELOPMENT ON INFRASTRUCTURE

Economic considerations hold a significant place in the selection and implementation of infrastructure projects (see *Appendix C, Table C-2*).[9] When asked about the ways in which economic development considerations can influence overall infrastructure projects, 9 percent of respondents noted the importance of stimulating local business growth and job creation. With many of the responses noting this impact of economic development, municipalities are articulating how targeted investments serve as a vehicle for economic vitality.

Infrastructure often acts as a catalyst for business expansion, enabling establishments to thrive through better connectivity, resource access and development opportunities. Roads, bridges and broadband systems, for instance, serve as lifelines for economic activity, allowing commerce to flourish.

About 65 percent of respondents pinpointed equitable economic opportunities as a critical factor. Infrastructure projects that promote inclusivity ensure that marginalized communities receive equitable access to resources, support and economic growth prospects, fostering balanced development across diverse neighborhoods.

Around 54 percent of respondents also emphasized the importance of projects that promote mixed-use spaces, enhancing community vitality. Through thoughtful planning, cities can integrate residential, commercial and recreational spaces within shared locales, amplifying vibrancy and sparking innovation in municipal design.

OVERCOMING BARRIERS:

Financing the Future of Municipal Infrastructure

MUNICIPAL INFRASTRUCTURE PROJECTS represent essential building blocks for community progress, yet cities, towns and villages face a myriad of challenges that impede their development. Insights from responding municipal governments reveal that these obstacles span financial and non-financial domains, creating a complex landscape that municipalities must navigate to deliver impactful solutions. The data also shed light on the funding sources that cities utilize to move their infrastructure plans forward.

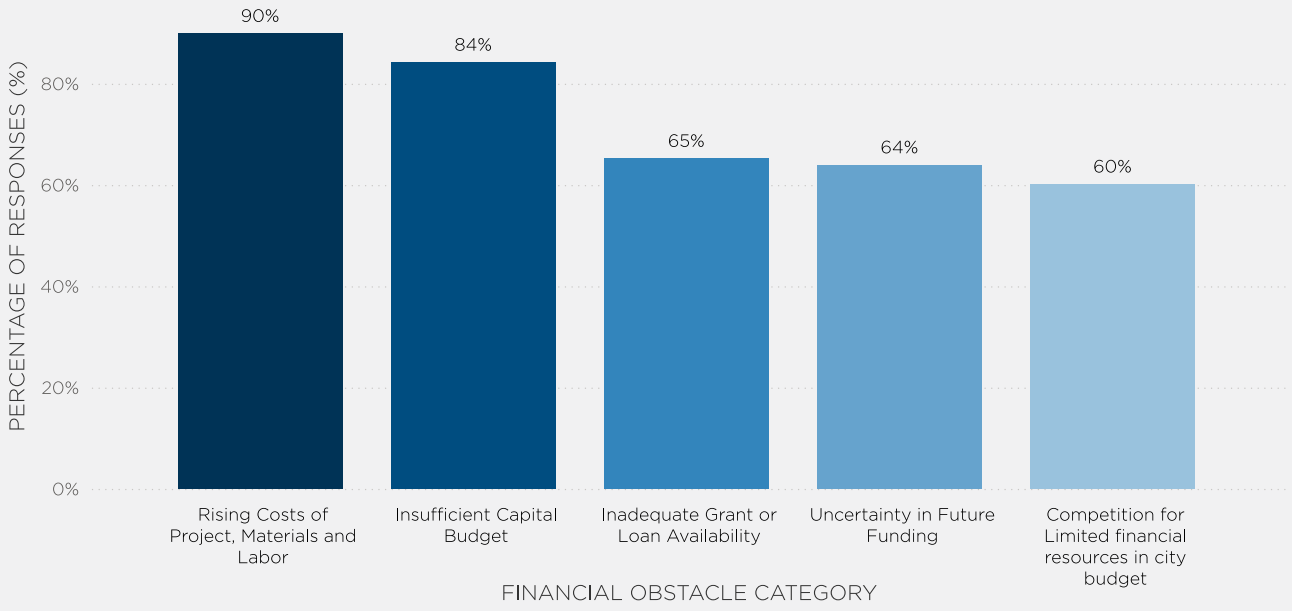
FINANCIAL CHALLENGES

Financial challenges continue to be the most pressing concern for municipalities working on infrastructure projects. Among the most significant hurdles, rising costs of projects, materials and labor emerged as the leading issue, cited by nearly 90 percent of respondents. This reflects how inflation and increasing demand on resources place significant strain on municipal budgets (identified by 84% of respondents) and pose substantial limitations, especially for cities, towns and villages tackling large-scale initiatives with ambitious scopes. Access to external funding as well as uncertainty about future funding also remain as challenges, each garnering almost 64 percent of responses.* These top financial concerns highlight the urgent need for action and innovative funding mechanisms to address the gap between available resources and municipal infrastructure demands.

FIGURE 2

Rising Costs and Insufficient Capital Budgets Among the Most Hindering Financial Obstacles Facing Municipal Infrastructure Projects

PERCENTAGE OF SURVEY RESPONSES, BY FINANCIAL OBSTACLE



Source: National League of Cities Municipal Infrastructure Conditions 2025 Survey. (N=158)

Figure Note: Percentages are calculated as the proportion of all total responses to the question. Respondents were able to select multiple options so the total of the count column is greater than the total number of respondents. The following options not shown as responses totaled less than 10% each: High debt levels, limits by state on raising revenue, delays in funding approval, unreliable state or private sector partnerships.

* Municipalities face growing uncertainty regarding future funding due to external economic pressures. Cost fluctuations on imported materials can significantly increase infrastructure costs, forcing cities to reassess project feasibility and budget allocations. Additionally, Federal funding freezes have disrupted financial planning for local governments, delaying critical projects and creating instability in long-term investment strategies. These factors compound existing fiscal challenges, making it increasingly difficult for municipalities to secure reliable funding sources and maintain essential services.

NON-FINANCIAL CHALLENGES

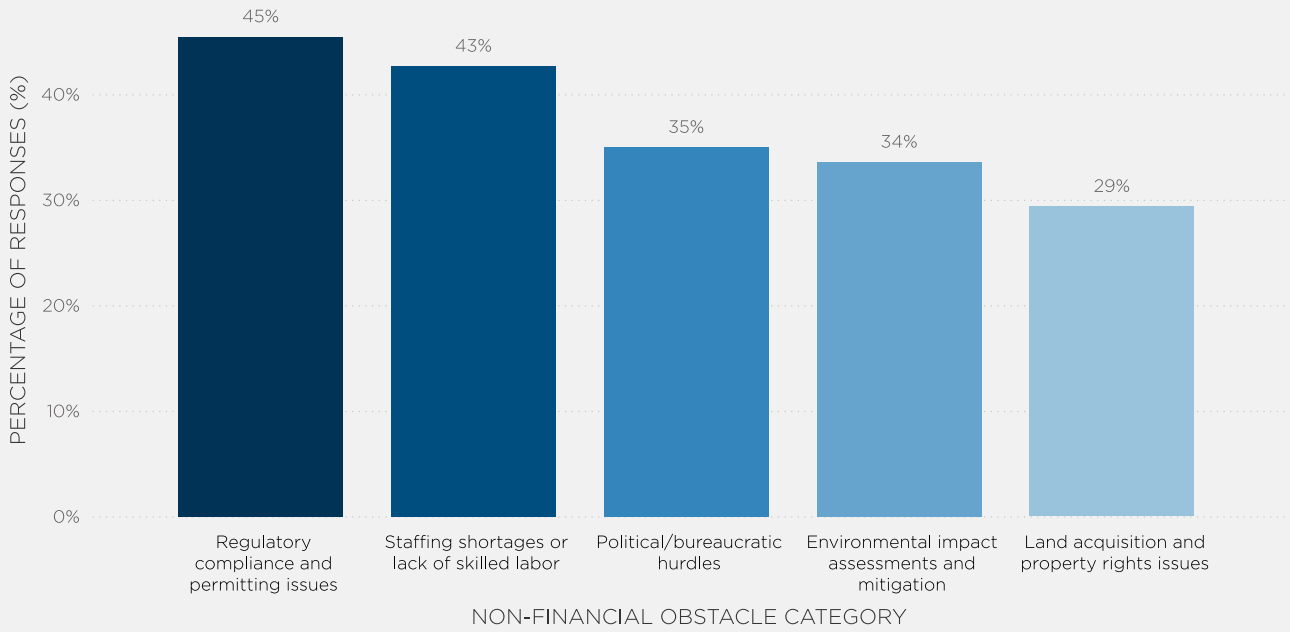
Non-financial obstacles also play a prominent role in shaping the difficulties that municipalities encounter in managing their infrastructure. Leading this category are regulatory compliance and permitting issues, reported by 46 percent of respondents as the most significant non-financial challenge.[10] These processes, while necessary for ensuring environmental and legal standards, often cause delays that disrupt project timelines. Environmental impact assessments and mitigation add further complexity, identified as a barrier by 34 percent of respondents. Together, these challenges illustrate the interplay of procedural and technical factors that influence the pace and success of infrastructure initiatives. Staffing shortages or the lack of skilled labor rank second, affecting nearly 43 percent of municipalities.[11] These shortages underscore the difficulty of finding personnel equipped with the technical expertise needed to oversee and execute complex infrastructure projects.

Beyond skilled labor shortages, municipalities are also grappling with a broader decline in local government employment. Between March 2020 and March 2022, municipal employment fell by more than 300,000 workers, significantly impacting cities' ability to perform essential functions and deliver services to residents.[12]

FIGURE 3

Regulations And Lack of Personnel Capacity Among the Most Hindering Non-Financial Obstacles Facing Municipal Infrastructure Projects

PERCENTAGE OF SURVEY RESONSES, BY NON-FINANCIAL OBSTACLE.



Source: National League of Cities Municipal Infrastructure Conditions 2025 Survey. (N=143)

Figure Note: Percentages are calculated as the proportion of all total responses to the question. Respondents were able to select multiple options so the total of the count column is greater than the total number of respondents.

METHODS TO TACKLE CHALLENGES

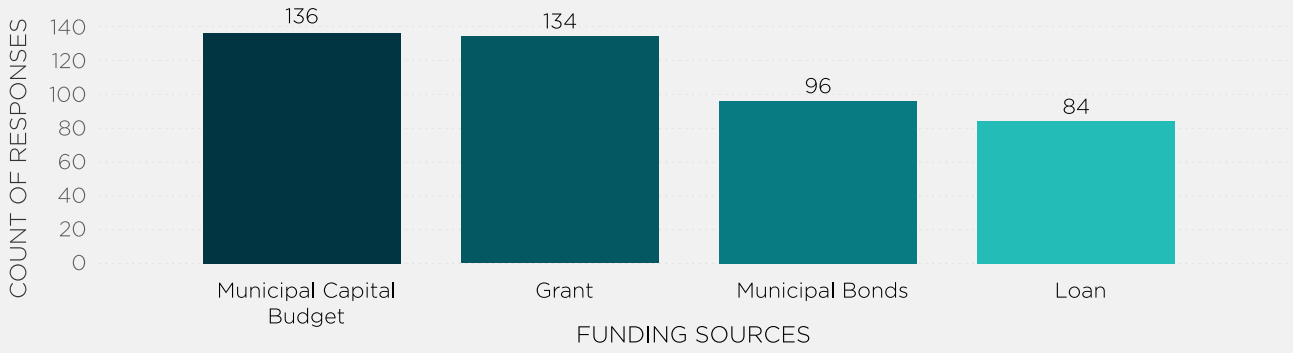
To combat these challenges, municipalities draw on an array of funding sources to sustain their projects. Municipal capital budgets and grants stand out as the most widely utilized funding avenues, with 58 and 65 percent of respondents, respectively, relying on these financial injections to support their initiatives. Municipal capital budgets play a crucial role in financing infrastructure, reflecting cities' efforts to allocate internal resources toward their top-priority initiatives that they alone can finance. Grants, on the other hand, not only provide significant resources for major projects that municipalities often can't afford on their own but also offer opportunities for municipalities to align their plans with state or federal priorities.

In addition to longstanding infrastructure-related intergovernmental transfers, increased federal assistance over the past few years has provided a boost to municipal infrastructure funding. The American Rescue Plan Act (ARPA), enacted in 2021, allocated $350 billion to state and local governments, helping cities, towns and villages stabilize budgets and maintain essential services amid the economic uncertainty caused by the COVID-19 pandemic.[13, 14] The flexibility of ARPA funds allowed municipalities to address revenue shortfalls, support critical government operations and avoid delaying investments in infrastructure upgrades. Also, the Infrastructure Investments and Jobs Act (IIJA), also enacted in 2021, designated $1.2 trillion for long-term infrastructure revitalization, including roads, bridges, broadband, water systems and public transit. These federal funds have enabled municipalities to accelerate long-overdue projects, modernize aging infrastructure and expand sustainability efforts.

FIGURE 4A

Seeking Grants and Reliance On Capital Budgets Among the Most Sought After Infrastructure Financing Techniques

COUNT SURVEY RESPONSES INDICATING FUNDING APPROACH FOR INFRASTRUCTURE

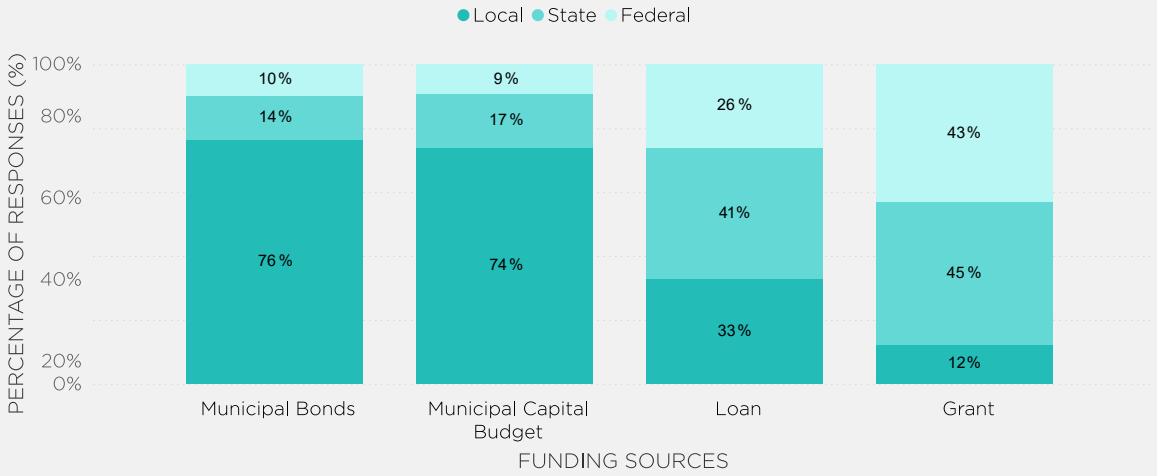


Source: National League of Cities Municipal Infrastructure Conditions 2025 Survey. (N=108)
Figure Note: Percentages are calculated as a proportion of all total responses to the question. Respondents were able to select multiple options so the total of the count column is greater than the total number of respondents.

FIGURE 4B

Municipal budgets and bonds the most sought after financing techniques at the local level

PERCENTAGE OF SURVEY RESPONSES INDICATING FUNDING APPROACH FOR INFRASTRUCTURE, BY GOVERNMENT FUNDING LEVEL



Source: National League of Cities Municipal Infrastructure Conditions 2025 Survey. (N=108)
Figure Note: Percentages are calculated as a proportion of all total responses to the question. Respondents were able to select multiple options so the total of the count column is greater than the total number of respondents.

The $4.2 trillion[15] in outstanding municipal bonds and loans represent another prominent funding channel, enabling issuing cities, towns and villages to address needs that exceed their current budget capacity.* Together, these funding mechanisms emphasize municipalities' adaptability and creativity in navigating financial constraints.

Perhaps the most prevalent form of municipal bonds is the tax-exempt general obligation bond, which plays a crucial role in municipal finance, allowing cities, towns and villages to fund essential infrastructure projects at lower borrowing costs. These bonds, often backed by the full faith and credit of the issuing municipality, provide a reliable mechanism for financing roads, schools, water systems and other public services. Their tax-exempt status makes them attractive to investors, as interest earned is not subject to federal income tax, resulting in lower interest rates for municipalities and enabling them to allocate more resources toward infrastructure improvements rather than debt servicing.

However, if the tax-exempt status of these bonds were removed, municipalities would face significantly higher borrowing costs, potentially delaying or reducing the scope of infrastructure projects.[16] The loss of tax exemption could also lead to decreased investor demand, further increasing interest rates and limiting access to affordable financing.[17] Ultimately, such a policy shift could strain municipal budgets, reduce public investment and hinder long-term economic growth, or even potentially force their hands to raise taxes.

* Recent initiatives by the Public Finance Initiative (PFI) highlight how municipal bond markets can serve as a catalyst for advancing racial and social equity. PFI's framework on bond markets and racial equity provides municipalities with strategies to optimize financial outcomes while addressing systemic disparities in infrastructure investment and public services.

Evaluating Success & Managing Municipal Infrastructure

MUNICIPAL INFRASTRUCTURE SERVES as the backbone of economic growth, demanding thoughtful evaluation, strategic prioritization and effective management. Survey responses from city, town and village government staff members provide key insights into how municipalities measure the success of their projects, prioritize maintenance and manage their assets.

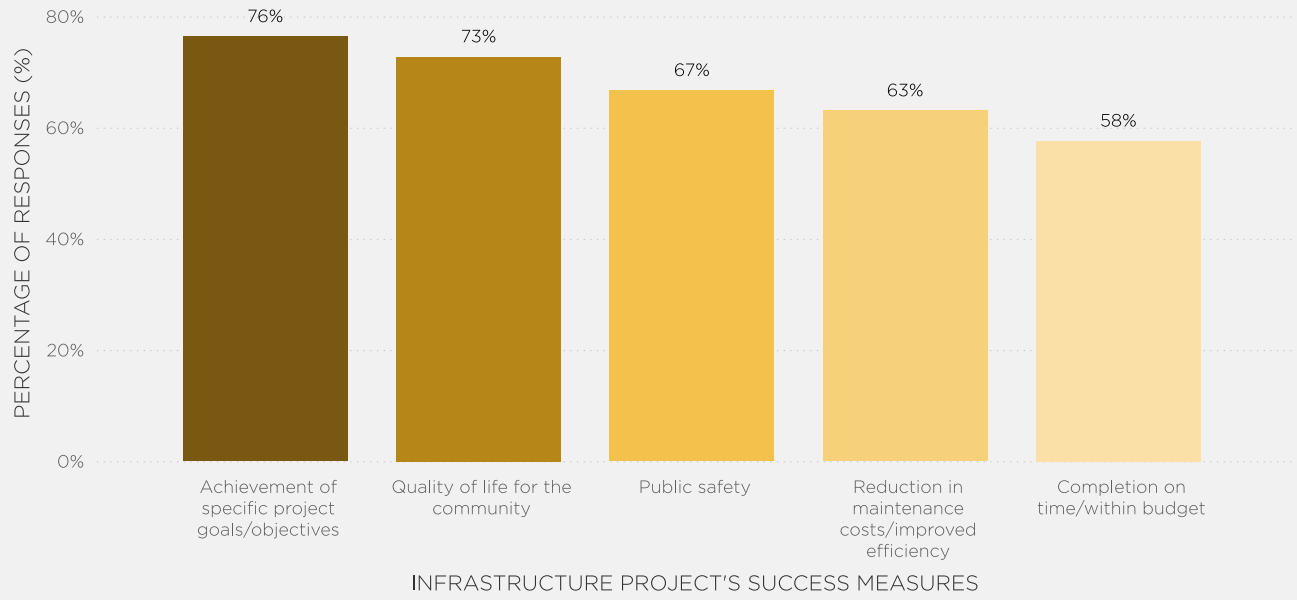
MEASURING THE SUCCESS OF INFRASTRUCTURE PROJECTS

The success of infrastructure projects is often defined by their ability to achieve measurable outcomes while enhancing community well-being. Among the criteria cited by respondents (when asked about the measures used to gauge success of infrastructure projects), achievement of specific project goals and objectives, identified by 77 percent, stands out as the leading measure of success. This underscores the importance of aligning projects with clearly defined targets and addressing priority needs. Similarly, achieving quality of life improvements for the community, noted by 73 percent, reflects how infrastructure projects are intrinsically connected to enhancing day-to-day experiences for residents – whether through safer roads, accessible public spaces or improved mobility.*

FIGURE 5

Achieving Specific Project Goals and Improving Community Quality of Life Among the Top Measure of Infrastructure Project Success

MEASURES OF SUCCESS USED BY MUNICIPALITIES IN EVALUATING INGFRASTRUCTURE PROJECTS, BY PREVALENCE



Source: National League of Cities Municipal Infrastructure Conditions 2025 Survey. (N=165)

Figure Note: Percentages are calculated as the proportion of all total responses to the question. Respondents were able to select multiple options so the total of the count column is greater than the total number of respondents.

* However, the way cities measure quality of life varies significantly based on local priorities and available data. Some municipalities rely on resident satisfaction surveys, tracking public sentiment on infrastructure, safety, and accessibility. Others use quantitative indicators such as commute times, air quality, or access to green spaces to assess urban livability.

Public safety also plays a critical role in assessing success, highlighted by two-thirds of the respondents. Whether through disaster-resistant systems, secure environments or reduced risks, ensuring the safety of residents remains a cornerstone of impactful infrastructure. The devastating Norfolk Southern train derailment in East Palestine, OH [18] serves as a stark reminder of the risks posed by aging infrastructure and inadequate safety measures. The National League of Cities' Interactive Rail Safety Map highlights how derailments disproportionately impact urban areas, with nearly two-thirds of all rail accidents occurring within cities. These incidents underscore the need for municipalities to prioritize resilient infrastructure.

Reduction in maintenance costs and improved efficiency, cited by 63 percent of respondents, demonstrates the focus on operational optimization and sustainability, aiming to ensure infrastructure remains reliable while minimizing long-term expenses. Together, these measures reveal a multifaceted approach to evaluating success, blending technical objectives, safety considerations and tangible community benefits.

PRIORITIZING MAINTENANCE AND UPGRADES

Municipalities often face the challenge of prioritizing which infrastructure assets require attention, balancing technical evaluations, safety concerns and resource availability. When asked about how they prioritize which capital asset need maintenance or upgrade (see *Appendix C, Table C-3*), availability of funding and resources, cited by more than 80 percent, emerges as the most critical factor influencing prioritization. This highlights the practical considerations that guide maintenance and upgrades, ensuring that plans align with the financial capacity to execute them effectively.

Asset condition assessments, noted by 71 percent, serve as another key driver for maintenance decisions, offering detailed evaluations that allow cities to focus on the most urgent and impactful concerns. Safety and risk assessments, identified by 63 percent, further reflect the emphasis on mitigating hazards and ensuring infrastructure reliability (not shown here). Together, these factors shape how municipalities strategically prioritize their efforts.

MANAGING AND MAINTAINING INFRASTRUCTURE ASSETS

Infrastructure management requires proactive and adaptable strategies to ensure assets remain functional and resilient. In-house maintenance teams, highlighted by 87 percent of respondents, form the foundation of asset management, providing municipalities with direct oversight and the ability to address emerging issues swiftly. Maintenance based on reported issues, cited by 82 percent, complements these efforts, allowing municipalities to respond to feedback and observations while targeting problem areas promptly.

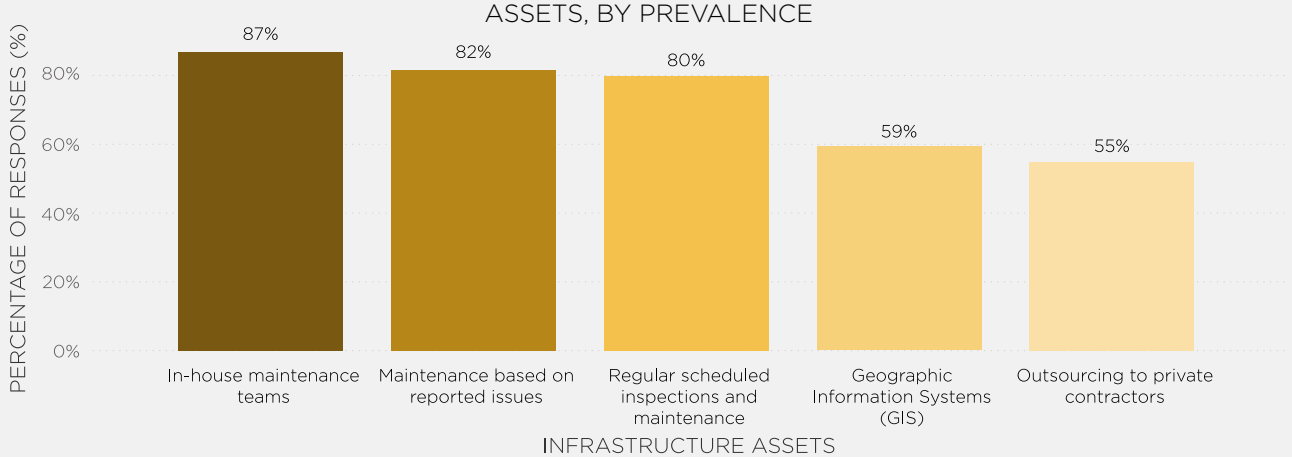
Regularly scheduled inspections and maintenance, noted by almost 80 percent of respondents, establish a systematic approach to infrastructure management, preventing the escalation of potential concerns and preserving the long-term functionality of assets. Technological tools also play a critical role, with Geographic Information Systems (GIS), used by nearly 6 out of 10 responding governments. GIS allows municipalities to map infrastructure components precisely, optimizing management strategies and improving decision-making.

Other technologies, such as asset management software systems, sensors and monitoring devices like drones, while less commonly used, also contribute to efficient infrastructure management. The integration of these tools reflect growing opportunities for cities, towns and villages to embrace innovation and enhance asset oversight.

FIGURE 6

In-house Maintenance Teams and Issue-Reported Maintenance Among the Most Common Capital Asset Management Practices Among Municipalities

METHODS OF MANAGING AND MAINTAINING CAPITAL/INFRASTRUCTURE ASSETS, BY PREVALENCE



Source: National League of Cities Municipal Infrastructure Conditions 2025 Survey. (N=157)

Figure Note: Percentages are calculated as the proportion of all total responses to the question. Respondents were able to select multiple options so the total of the count column is greater than the total number of respondents.

Conclusion

MUNICIPAL LEADERS SEE their infrastructure as a cornerstone of sustainable economic growth, with far-reaching implications for community well-being and resilience. Cities, towns and villages must focus on setting clear priorities, overcoming barriers and implementing robust management strategies to address their infrastructure needs effectively.

In Section 1, the emphasis on urgent projects such as water systems, roads and sidewalks underscores the necessity of modernizing aging infrastructure to meet contemporary challenges. With these projects at various stages of development, municipalities must balance advanced initiatives with early-stage projects to foster economic growth, safety and inclusivity. Economic opportunities and resilience emerged as key drivers for prioritization, demonstrating how infrastructure connects communities with resources while fortifying them against future uncertainties.

Section 2 discusses the financial and procedural challenges cities, towns and villages face, revealing the complexities of rising costs, regulatory hurdles and labor shortages. The creative use of funding sources – grants, loans and municipal budgets – highlights the adaptability of cities striving to meet infrastructure demands. Addressing both financial and non-financial barriers is crucial for moving projects from planning to execution without compromising quality or timeliness. Federal and state investments remain central to overcoming these challenges. Programs like the Infrastructure Investment and Jobs Act provided municipalities with historic funding opportunities, empowering them to advance transformative infrastructure projects that would otherwise be difficult to finance. **Continued federal support will be essential in ensuring that municipal infrastructure remains resilient, modernized, and prepared for future demands.**

In Section 3, municipalities' approaches to evaluating success and managing infrastructure reveal the importance of aligning projects with measurable outcomes and community needs. Criteria such as goal achievement, quality of life improvements and public safety emphasize the human-centric impact of infrastructure development. By prioritizing funding availability, asset condition and safety assessments, cities ensure that maintenance and upgrades are targeted in ways that optimize resource allocation. Proactive strategies, including regular inspections and the use of innovative technologies like GIS, further enhance infrastructure management, securing long-term functionality and adaptability.

Together, this report illustrates a holistic approach to municipal infrastructure development. Cities, towns and villages that embrace strategic planning, long-term investment, partnerships and technological innovation are better equipped to build resilient, equitable and thriving communities that create opportunities for generations to come.

Appendices

APPENDIX A: METHODOLOGY

The National League of Cities (NLC) employed a survey methodology sending a survey (from February 1 through March 30 of 2025) to a sample of municipalities of varying sizes from different regions across the nation to identify their infrastructure priorities, practices, and financial challenges facing their infrastructure projects. The following figure shows the breakdown of population categories and geographic regional distribution of the sample:

Population (%)						
Region (%)	<10000	10,000 - 49,000	50,000-99,999	100,000-299,999	300,000+	Total
NE/Mid-Atlantic	8.74%	3.40%	0.49%	0.00%	0.00%	12.62%
Midwest	49.03%	6.80%	1.94%	0.00%	0.00%	57.77%
South	8.25%	4.37%	0.97%	1.46%	0.97%	16.02%
West	4.85%	3.88%	1.94%	1.46%	1.46%	13.59%
Total	70.87%	18.45%	5.34%	2.91%	2.43%	100.00%

Source: National League of Cities Municipal Infrastructure Conditions 2025 Survey. (N=206)

The Municipal Infrastructure Conditions (MIC) 2025 survey does not include Oregon because that state conducted its own survey shortly prior to MIC 2025 survey, and the results were shared with NLC internally. Additionally, state municipal leagues sent the survey to their respective member cities. In total, 35 state leagues shared the survey with a total of 206 municipalities across the country.

The distribution of the respondents is mostly balanced among the different population size categories. A greater percentage of respondents are municipalities with population sizes greater than 10,000, and the lower percentage are cities with over 300,000 residents. As for regional distribution, we observed a low rate of response from the West and NorthEast/mid-Atlantic census regions and a high rate of responses from the Midwest. Most responses are from small municipalities, mirroring the size disctribution of national cities, towns and villages.

Municipal government staff were asked to assess their city's most needed infrastructure project and financial/non-financial obstacles in their top infrastructure projects as well as some of the ways the local governments go about managing and prioritizing their infrastructure assets (contact authors for more detail). Specifically, we asked about

(a) the most critical infrastructure projects prioritized by municipal governments and their stage of development,

(b) the financial/non-financial obstacles of their infrastructure projects,

(c) the asset management techniques employed by responding municipalities.

APPENDIX B: FIGURE TABLES

TABLE 1

Water systems and roads and bridges among the highest priorities and most currently advanced local infrastructure projects.

PERCENTAGE OF SURVEY RESPONSES BY INFRASTRUCTURE CATEGORY AND COMPLETION STAGE.

	Percent							
	Total by Category (%)	Planning and Design	Planned, Seeking and Funding	Funding and Approval	Early Construction	Mid-Construction	Near Completion	Recently Completed
Water, wastewater and/or stormwater systems	**71.43%**	37.14%	32.14%	17.14%	4.29%	2.86%	0.71%	5.71%
Road and Bridge	**63.27%**	37.10%	33.87%	18.55%	6.45%	1.61%	0.81%	1.61%
Public Transit	**14.80%**	58.62%	17.24%	20.69%	0.00%	3.45%	0.00%	0.00%
Sidewalk, trails and bike Infrastructure	**46.43%**	41.76%	35.16%	10.99%	4.40%	4.40%	2.20%	1.10%
Energy projects	**27.55%**	44.44%	18.52%	20.37%	1.85%	0.00%	5.56%	9.26%
Internet and broadband digital infrastructure	**22.96%**	46.67%	22.22%	0.00%	8.89%	4.44%	4.44%	13.33%
Other	**15.31%**	33.33%	30.00%	16.67%	3.33%	13.33%	0.00%	3.33%

Source: National League of Cities Municipal Infrastructure Conditions 2025 Survey. (N=196)

Notes: Percentages are calculated as the proportion of all total responses to the question. Respondents were able to select multiple options so the total of the count column is greater than the total number of respondents.

TABLE 2

Rising costs and insufficient capital budgets among the most hindering financial obstacles facing municipal infrastructure projects.

PERCENTAGE OF SURVEY RESPONSES BY FINANCIAL OBSTACLE.

	% Responses
Rising costs of project, materials and labor	89.87%
Insufficient capital budget	84.18%
Inadequate grant or loan availability	65.19%
Uncertainty in future funding	63.92%
Competition for limited financial resources in city budget	60.13%
High debt levels or financial constraints	34.81%
Limits by state on raising revenue locally	33.54%
Delays in funding approval	31.65%
Unreliable state or private sector business partnership	17.72%
Other	5.06%

Source: National League of Cities Municipal Infrastructure Conditions 2025 Survey. (N=158)

Notes: Percentages are calculated as the proportion of all total responses to the question. Respondents were able to select multiple options so the total of the count column is greater than the total number of respondents.

TABLE 3

Regulations and lack of personnel capacity among the most hindering non-financial obstacles facing municipal infrastructure projects.

PERCENTAGE OF SURVEY RESPONSES BY NON-FINANCIAL OBSTACLE.

	%Responses
Regulatory compliance and permitting issues	45.45%
Staffing shortages or lack of skilled labor	42.66%
Political/bureaucratic hurdles	34.97%
Environmental impact assessments and mitigation	33.57%
Land acquisition and property rights issues	29.37%
Multi-department project coordination challenges	20.98%
Weather-related delays or natural disasters	20.28%
Community opposition or lack of support	13.99%
Technological limitations or constraints	6.99%
Other	6.29%

Source: National League of Cities Municipal Infrastructure Conditions 2025 Survey. (N=143)

Notes: Percentages are calculated as the proportion of all total responses to the question. Respondents were able to select multiple options so the total of the count column is greater than the total number of respondents.

TABLE 4

Seeking grants and reliance on capital budgets among the most sought-after infrastructure financing techniques.

PERCENTAGE OF SURVEY RESPONSES INDICATING FUNDING APPROACH FOR INFRASTRUCTURE BY GOVERNMENT LEVEL.

	Percent			
	Total	Local	State	Federal
Municipal Capital Budget	**66.02%**	73.99%	16.76%	9.25%
Municipal Bonds	**46.60%**	76.47%	13.73%	9.80%
Impact Fees (or System Development Fees)	**26.21%**	91.07%	5.36%	3.57%
Loan	**40.78%**	32.77%	41.18%	26.05%
Grant	**65.05%**	12.32%	44.55%	43.13%
Other Governmental Funds	**32.52%**	31.46%	37.08%	31.46%
Private Funds	**12.62%**	88.89%	7.41%	3.70%
Other	**3.40%**	85.71%	14.29%	0.00%

Source: National League of Cities Municipal Infrastructure Conditions 2025 Survey. (N= 148 for Local, 119 for State and 108 for Federal)

Notes: Percentages are calculated as the proportion of all total responses to the question. Respondents were able to select multiple options so the total of the count column is greater than the total number of respondents.

TABLE 5

Achieving specific project goals and improving community quality of life among the top measure of infrastructure project success.

MEASURES OF SUCCESS USED BY MUNICIPALITIES IN EVALUATING INFRASTRUCTURE PROJECTS BY PREVALENCE.

	%Responses
Achievement of specific project goals/objectives	76.36%
Quality of life for the community	72.73%
Public safety	66.67%
Reduction in maintenance costs/improved efficiency	63.03%
Completion on time/within budget	57.58%
Positive feedback from residents	56.36%
Economic development	53.94%
Regulatory compliance	42.42%
Accessibility/inclusivity	33.94%
Climate resilience	26.06%
Other	1.82%

Source: National League of Cities Municipal Infrastructure Conditions 2025 Survey. (N=165)

Notes: Percentages are calculated as the proportion of all total responses to the question. Respondents were able to select multiple options so the total of the count column is greater than the total number of respondents.

TABLE 6

In-house maintenance teams and issue-reported maintenance among the most common capital asset management practices among municipalities.

METHODS OF MANAGING AND MAINTAINING CAPITAL/INFRASTRUCTURE ASSETS BY PREVALENCE.

	%Responses
In-house maintenance teams	86.62%
Maintenance based on reported issues	81.53%
Regular scheduled inspections and maintenance	79.62%
Geographic information systems (GIS)	59.24%
Outsourcing to private contractors	54.78%
Sensors and monitoring devices	30.57%
Asset management software systems	28.66%
Public-private partnerships	15.92%
Drone surveillance	7.01%
Other	1.27%

Source: National League of Cities Municipal Infrastructure Conditions 2025 Survey. (N=157)

Notes: Percentages are calculated as the proportion of all total responses to the question. Respondents were able to select multiple options so the total of the count column is greater than the total number of respondents.

APPENDIX C: ADDITIONAL ANALYSES

Several questions of the survey questionnaire were discussed throughout the text but were not included as a figure. These questions are referenced in the text and explained in details in this appendix section.

What Makes a Project Top Priority for a Municipality

As part of the survey, respondents were asked what makes an infrastructure project a top priority for them. Their responses are recorded in the following table.

TABLE C-1

Upgrading outdated assets and economic development considerations among the top reasons for selecting an infrastructure project.

PERCENTAGE AND COUNT OF SURVEY RESPONSES REGARDING THE TOP REASONS FOR SELECTING AN INFRASTRUCTURE PROJECT.

	Percentage
Upgrade outdated infrastructure	78.24%
Support economic development and job creation	48.82%
Advance long-term strategic planning	47.06%
Respond to public demand or support	42.35%
Enhance community resilience and disaster preparedness	41.18%
Increase new and available housing	35.29%
Comply with regulatory requirements	33.53%
Other	14.12%

Source: National League of Cities Municipal Infrastructure Conditions 2025 Survey. (N=170).

Survey Question: Why was this project identified as a top priority?

Notes: Percentages are calculated as the proportion of all total responses to the question. Respondents were able to select multiple options so the total of the count column is greater than the total number of respondents.

Impacts of Economic Development Considerations on Capital Projects

As part of the survey, the respondents were asked to select the most impactful economic development factors on their governments' capital projects. Their responses are captured in the table that follows.

TABLE C-2

Boosting local business growth and job creation and promoting equitable economic opportunities among the top factors affecting decisions on capital projects.

PERCENTAGE AND COUNT OF SURVEY RESPONSES REGARDING THE TOP ECONOMIC DEVELOPMENT REASONS FOR SELECTING AN INFRASTRUCTURE PROJECT.

	Percentage
Prioritize projects that stimulate local business growth and job creation	87.80%
Promote equitable economic opportunities across all communities	64.63%
Encourage the development of mixed-use spaces to enhance urban vitality	53.66%
Secure private/corporate investment	50.00%
Increase tourism/commerce	43.90%
Balance economic growth with climate resilience	37.80%
Other	4.88%

Source: National League of Cities Municipal Infrastructure Conditions 2025 Survey. (N=82)

Survey Question: In what ways do economic development considerations influence your infrastructure projects?

Notes: Percentages are calculated as the proportion of all total responses to the question. Respondents were able to select multiple options so the total of the count column is greater than the total number of respondents.

Top reasons for governments to prioritize capital asset maintenance or upgrade

As part of the survey, the respondents were asked about how their respective governments prioritize which capital asset to maintain or upgrade. Their responses are shown in the table that follows.

TABLE C-3

Funding availability and asset condition among the top reasons for governments to prioritize capital asset maintenance or upgrade.

PERCENTAGE AND COUNT OF SURVEY RESPONSES REGARDING THE MAJOR REASONS FOR CAPITAL ASSET MAINTENANCE OR UPGRADES.

	Percentage
Availability of funding and resources	80.25%
Based on asset condition assessments	71.34%
Recommendations from engineering consultants	63.69%
Safety and risk assessments	63.06%
Regulatory and compliance requirements	59.24%
Public complaints and feedback	58.60%
Strategic planning and budgeting priorities	57.96%
Other	1.91%

Source: National League of Cities Municipal Infrastructure Conditions 2025 Survey. (N=157)

Survey Question: How do you prioritize which infrastructure assets need maintenance or upgrades?

Notes: Percentages are calculated as the proportion of all total responses to the question. Respondents were able to select multiple options so the total of the count column is greater than the total number of respondents.

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