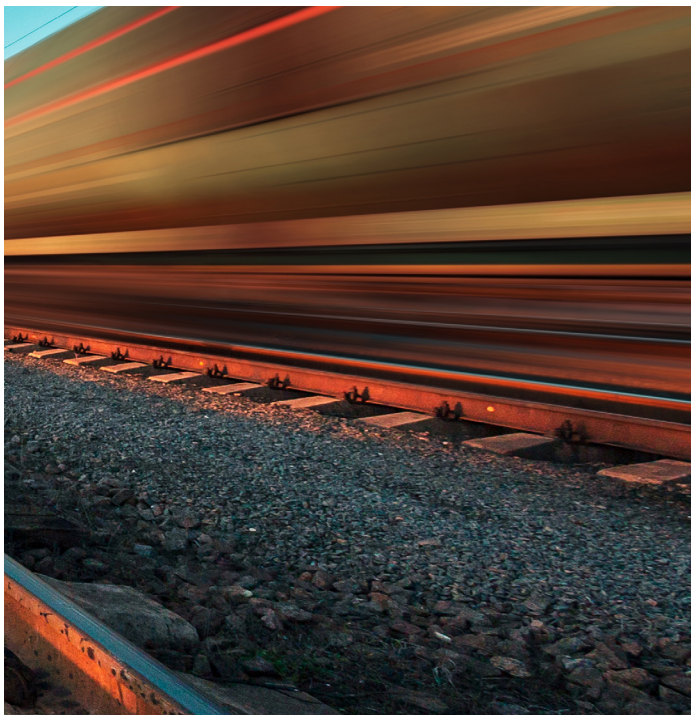
7 decisions that matter most

A practical guide for capital planning leaders



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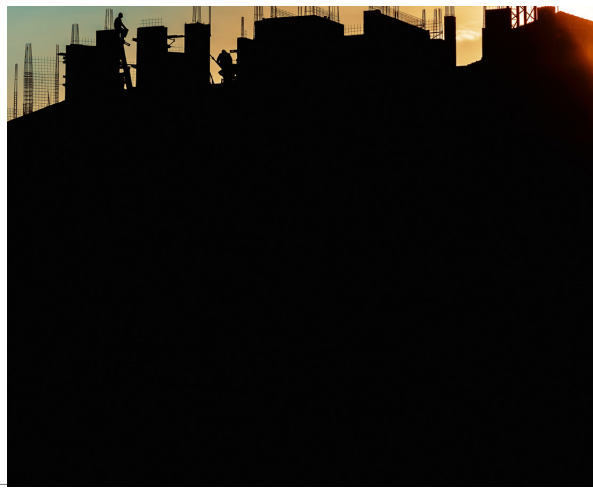
Introduction



Why capital planning fails before it starts

Most capital programs don't struggle during execution. More often, they break down much earlier, when foundational decisions are made without complete visibility, consistent information, or clear accountability.

Long before construction begins, capital programs are shaped by early choices: how projects are defined, how priorities are set, how funding is structured, and how progress is monitored over time. When these decisions are unclear or managed inconsistently, the consequences often follow a familiar pattern: delays, cost overruns, funding gaps, rework, and reduced stakeholder confidence.

Capital planning works best when it is grounded in clear goals, defined roles, and reliable information. With a shared framework in place, organizations can navigate trade-offs among competing projects, funding constraints, and future obligations with greater confidence.

Many government agencies try to address capital planning challenges by refining individual tools or improving isolated processes. However, long-term outcomes depend less on any single system and more on a small set of core decisions that determine how capital is planned, governed, and revisited over time.

This guide distills these practices into seven decisions that consistently influence the success or failure of capital programs. These decisions reflect the responsibilities of owners, finance leaders, planners, and program managers who oversee long-term public investment.

DECISION 1

What qualifies as a capital project

Why it matters?

Capital planning begins with a foundational decision: which investments qualify as capital projects. Capital programs depend on clear, consistent project definitions. Without clear, consistent criteria for capital project classification, agencies struggle to compare investments objectively, prioritize spending, or ensure that limited capital funds are directed to the highest-value initiatives.

Capital projects can take many forms, including new construction, expansion, rehabilitation, replacement, or renewal. Each type carries different implications for cost, risk, funding eligibility, and long-term asset performance. When these categories are not clearly defined, agencies risk misclassifying work—treating routine maintenance as capital or overlooking projects that should be part of the capital program.

Common issues

Project-level issue
Scope creep in capital project definition

Program-level issue
Capital program not linked to strategic outcomes

How capital planning challenges differ by agency type

Large agencies

Challenge	Practical response
Overlapping definitions of what constitutes a capital project across departments (IT, facilities, transportation, utilities) create inconsistent classification.	Establish an enterprise capital policy with standardized capital project categories such as growth, compliance, resilience, and strategic investments.
Political pressure may lead to borderline initiatives being classified as capital projects to shift costs away from operating budgets.	Implement an organization-wide capital intake form that enforces consistent capital project classification within the system of record.
Complex grant and funding requirements can drive inconsistent classification of capital projects across programs.	Periodically audit the capital program to identify and reclassify misaligned projects and adjust policies where necessary.

Local agencies

Challenge	Practical response
Distinctions between maintenance activities and capital projects are often informal, leading to inconsistent classification.	Establish a short written definition of capital projects with 3–5 criteria, such as life cycle impact, regulatory drivers, and minimum asset life.
Capital project classification may rely on a single cost threshold (for example, “anything over $X is capital”).	Provide a simple decision tree or checklist for staff to consistently determine whether a request qualifies as a capital project.
Limited asset data makes it difficult to tie capital projects to asset condition or service outcomes.	Link capital project requests to a basic asset register so each project is associated with a specific asset and its condition.

RECOMMENDED PRACTICES

Effective capital planning begins with disciplined qualification. Agencies should evaluate projects based on:

- Clearly defined scope, cost estimates, and schedule assumptions
- Alignment with strategic objectives and service outcomes
- Readiness for delivery and completeness of supporting information
- Eligibility for funding sources and regulatory requirements
- Long-term impact on asset condition, safety, and sustainability

Agencies should also classify projects into consistent categories, such as state of good repair, expansion, regulatory compliance, or resilience, and require a minimum level of scope definition before projects enter the capital plan.

DECISION 2

How projects enter the pipeline

Why it matters?

The quality of capital decisions depends directly on the quality of information captured during capital project intake and early-stage definition.

How capital projects enter the planning process determines whether they can be evaluated consistently, compared fairly, and advanced efficiently. When intake is informal or inconsistent, projects enter the pipeline with incomplete or conflicting information.

These early-stage gaps compound over time. Projects that are not clearly defined at intake often require repeated clarification, re-estimation, and reapproval, slowing the entire capital program.

Common issues

Project-level issue
Misalignment across planning, engineering, finance, and operations due to inconsistent project intake and definition

Program-level issue
Resource bottlenecks caused by unstructured project intake and reworks

How capital planning challenges differ by agency type

Large agencies

Challenge	Practical response
Multiple intake channels across departments and districts lead to inconsistent submissions.	Establish a single enterprise intake process with standardized templates or digital intake tools.
Shadow pipelines emerge when departments maintain their own project lists outside central planning.	Introduce defined intake cycles with clear submission timelines and governance oversight.
Large volumes of project requests overwhelm central planning teams.	Use a staged intake process that screens ideas before requiring detailed submissions.

Local agencies

Challenge	Practical response
Project ideas often arrive informally through emails, conversations, or council requests.	Implement a simple one- or two-page intake form that all departments must use.
Project proposals arrive with inconsistent levels of detail.	Require a few mandatory fields such as a problem statement, location, cost estimate, and timing.
Staff may bypass intake processes because they view them as additional paperwork.	Ensure leadership support for standardized intake and provide brief guidance on completing requests.

RECOMMENDED PRACTICES

High-performing agencies standardize project intake at the outset. Project requests should be submitted using consistent structures that capture:

- Project goals and intended outcomes
- Scope, location, and asset implications
- Preliminary cost and schedule estimates
- Funding assumptions and constraints
- Known risks, dependencies, and coordination requirements

Agencies should also:

- Require a standard business case or concept form describing the problem, possible alternatives, and the rationale for the recommended approach
- Ask requestors to identify key dependencies early, such as permits, utilities, or third-party partners
- Integrate intake with asset management and financial systems so core data (asset IDs, locations, departments, and funding sources) are captured once and reused downstream
- Evaluate delivery method options early in project development, ideally before or during preliminary design

DECISION 3

How priorities are scored

Why it matters?

Prioritization is where strategy becomes operational. It determines which projects move forward, which are deferred, and how limited resources are allocated across competing demands. Without a clear prioritization framework, capital planning becomes reactive. Decisions are revisited repeatedly, and confidence in outcomes erodes.

Common issues

Project-level issue
Politically driven prioritization

Program-level issue
Portfolios skewed toward shovel-ready projects

How capital planning challenges differ by agency type

Large agencies

Challenge	Practical response
Different departments use different scoring criteria.	Harmonize scoring into a shared enterprise prioritization framework.
Complex scoring models are difficult for stakeholders to understand.	Separate strategic weighting decisions from project scoring and document both clearly.
Priorities frequently change due to leadership or political shifts.	Establish governance rules defining when reprioritization can occur.

Local agencies

Challenge	Practical response
Prioritization is often driven by a few senior leaders rather than formal criteria.	Develop a simple scoring matrix with 5–7 criteria, such as safety, compliance, condition, and readiness.
Difficulty balancing urgent repairs with strategic investments.	Highlight trade-offs clearly using visual scoring tools or color-coded matrices.
Community expectations may create perceptions of favoritism.	Publish summaries explaining why certain projects ranked higher.

RECOMMENDED PRACTICES

Use multi-criteria scoring frameworks that include:

- Safety
- State of good repair
- Regulatory compliance
- Equity and community impact
- Economic outcomes
- Strategic alignment

Scoring should also consider project readiness, such as scope clarity, design status, permitting progress, and partner commitments. Agencies should periodically recalibrate scoring weights while maintaining a clear change history.

DECISION 4

When approvals happen and who owns them

Why it matters?

Even well-defined and well-prioritized projects can stall without timely approvals and clear ownership. Approval delays affect schedules, funding availability, and public commitments. Unclear ownership often leads to bottlenecks, duplicate reviews, or final decisions being revisited.

Common issues

Project-level issue
Slow approval

Program-level issue
Fragmented governance

How capital planning challenges differ by agency type

Large agencies

Challenge	Practical response
Numerous oversight committees slow down decision-making.	Rationalize governance forums and clarify decision rights.
Authority is delegated inconsistently across departments.	Establish enterprise approval matrices tied to risk and project size.
Approval processes are fragmented across systems.	Automate approval workflows within core systems.

Local agencies

Challenge	Practical response
Staff often hold multiple roles, creating unclear decision authority.	Map a simple approval flow that identifies who recommends and who approves decisions.
Approvals occur informally through meetings or emails.	Use standardized decision memos and shared approval logs.
Projects advance without formal authorization.	Align approvals with budget and governing board milestones.

RECOMMENDED PRACTICES

Effective capital planning establishes:

- Clearly defined approval stages tied to key decision milestones
- Explicit ownership and accountability at each stage of the approval process
- Consistent workflows applied across projects and programs

Agencies should define a set of standard decision gates, such as:

- Concept approval
- Inclusion in the capital plan
- Funding authorization
- Procurement authorization

These gates should be applied consistently across programs. Approvals should align with both technical and financial checkpoints so that scope, cost, risk, and funding are evaluated together rather than in separate tracks.

Decision owners and escalation paths should be clearly documented. For example:

- Project manager
- Department head
- Executive sponsor
- Governing body

This ensures issues can be resolved quickly when they cross organizational boundaries.

Clarifying roles and responsibilities improves transparency, shortens approval cycles, and strengthens governance without sacrificing oversight.

DECISION 5

How capital is phased and funded

Why it matters?

Capital programs unfold over multiple years and often rely on multiple funding sources. Decisions made in a single budget cycle rarely reflect long-term commitments or constraints. Short-term funding perspectives can distort sequencing, delay delivery, or leave programs exposed when funding assumptions change.

Common issues

Project-level issue
Budget overruns

Program-level issue
Overprogramming or unused capital

How capital planning challenges differ by agency type

Large agencies

Challenge	Practical response
Multiple funding sources with different rules create complexity.	Use capital programming tools to align funding with delivery capacity.
Programs often include more projects than funding allows.	Maintain multiyear funding envelopes that define funding limits by source and year.
Political and budget cycles disrupt long-term planning.	Establish clear rules for rephasing projects when funding changes.

Local agencies

Challenge	Practical response
Planning focuses only on current-year funding.	Create a simple 5–10-year capital outlook.
Limited forecasting capacity delays the identification of funding gaps.	Develop basic project cash flow projections.
Projects begin without certainty about the funding for completion.	Apply phasing principles such as ‘finish what we start.’

RECOMMENDED PRACTICES

Sound capital planning relies on multi-year funding strategies that:

- Align cash flow and funding availability with project delivery schedules
- Account for funding eligibility, availability, and timing across sources
- Balance flexibility with fiscal discipline when adjusting capital programs
- Enable program-level trade-offs across years

Agencies should also:

- Establish multiyear capital envelopes by defining how much funding is available by source and year, requiring projects to fit within those limits before inclusion in the program
- Phase work intentionally, bundling projects where it improves delivery efficiency and sequencing work where it helps manage risk, community disruption, or resource constraints
- Incorporate life cycle costs and future operations and maintenance obligations into funding decisions, not just initial capital affordability
- Use scenario planning (such as revenue shortfalls or cost escalation) to define how projects would be rephased, slowed, or accelerated if conditions change

Viewing capital through a multiyear lens enables more resilient plans and more informed investment decisions.

DECISION 6

How risk and contingency are handled

Why it matters?

Risk is inherent in capital programs. Financial, regulatory, environmental, and delivery risks are unavoidable, but unmanaged risks create instability and erode confidence. Addressing risk late in the process limits options and increases the likelihood of disruption.

Common issues

Project-level issue
Unexpected technical or market conditions

Program-level issue
Portfolio-wide delivery risk

How capital planning challenges differ by agency type

Large agencies

Challenge	Practical response
Risk information is dispersed across departments.	Implement portfolio-level risk registers.
Contingency policies vary across programs.	Define consistent contingency policies across projects and programs.
Strategic risks are not linked to capital decisions.	Integrate risk reviews into portfolio governance meetings.

Local agencies

Challenge	Practical response
Risk discussions occur informally and are rarely documented.	Maintain a simple risk register.
Contingency is applied as a flat percentage without explanation.	Tie contingency levels to project stage and risk profile.
Project-level and program-level risks are not distinguished.	Define rules governing how contingency funds can be used.

RECOMMENDED PRACTICES

Effective risk management identifies and assesses risks early across organizational, program, and project levels.

Agencies should:

- Evaluate funding, regulatory, and delivery risks early in project and program planning
- Prioritize risks based on likelihood and impact
- Define contingency measures as part of program planning

Agencies should also:

- Maintain an integrated risk register spanning strategic, program, and project risks, with clear owners, triggers, and mitigation strategies
- Differentiate contingencies for known uncertainties (such as estimate variability or market volatility) from those for unforeseen risks, establishing clear policies defining how each type is calculated, allocated, and governed
- Regularly review key risks and contingencies at the portfolio level, reallocating funds or adjusting phasing when risk concentration becomes too high
- Make risk and contingency assumptions explicit in approvals so decision-makers understand trade-offs between cost, schedule, and risk appetite

Managing risk at the portfolio level reduces surprises and supports more confident approvals and funding decisions.

DECISION 7

How progress is tracked and communicated

Why it matters?

Visibility builds trust. When progress is difficult to verify or reporting lags behind reality, confidence erodes and decision-making slows. Effective communication is not just about reporting status; it is about enabling timely intervention when conditions change.

Common issues

Project-level issue

Weak project controls with limited visibility into cost, schedule, and risk performance, leading to delayed issue detection and reactive decision-making

Program-level issue

Limited portfolio visibility

How capital planning challenges differ by agency type

Large agencies

Challenge	Practical response
Multiple systems contain conflicting data.	Establish a single authoritative data model for capital reporting.
Leaders receive detailed reports but lack portfolio insights.	Provide tiered reporting dashboards for executives and managers.
Public dashboards may be difficult for non-experts to understand.	Use simplified public dashboards with visual summaries.

Local agencies

Challenge	Practical response
Project reporting relies on manual spreadsheets.	Standardize a simple monthly project status report.
Public communication occurs inconsistently.	Publish a basic public project list or map.
Limited visibility into outcomes and impact, with success measured primarily by spending.	Track outcome-based indicators such as service improvements.

RECOMMENDED PRACTICES

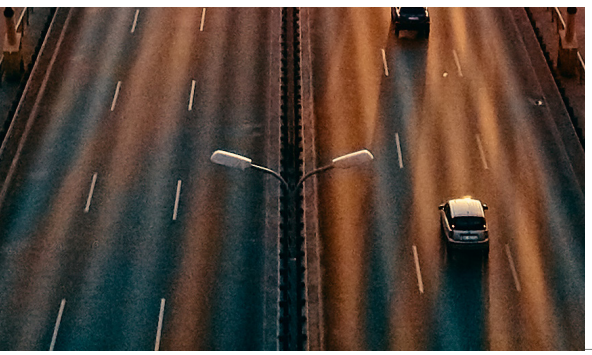
Effective tracking and communication depend on:

- Clearly defined performance indicators tied to agency goals and program outcomes
- Timely and accurate reporting across projects and programs
- Role-appropriate visibility into status, approvals, funding, and risk

Agencies should:

- Define a core set of metrics for all projects, such as phase status, budget versus forecast, schedule versus baseline, risk status, and benefits realization, applying consistent definitions across departments
- Implement an integrated portfolio dashboard that aggregates data from project management, financial, and asset systems into a single authoritative view
- Provide tailored views for different audiences, such as executives, project managers, finance teams, governing bodies, and the public
- Establish regular portfolio review forums where leaders review performance, risks, and trade-offs across the entire capital program rather than relying only on project-by-project updates

When stakeholders share a consistent, up-to-date view of progress, alignment improves, and corrective action can occur sooner.



Turning decisions into durable capital programs

Capital planning success is rarely determined by a single project, tool, or budget cycle. More often, outcomes are shaped by how consistently government agencies make and revisit a small set of foundational decisions.

When decisions about qualification, prioritization, approval, funding, risk, and performance tracking are clearly defined and governed, capital programs gain structure, predictability, and credibility. When they are not, even well-intentioned plans become difficult to sustain.

Agencies with effective capital planning are defined less by the complexity of their processes and more by the consistency of their decision-making. They emphasize clarity, transparency, and shared accountability, managing capital at the program and portfolio level rather than reacting project by project.

The seven decisions outlined in this guide offer a practical lens for evaluating any capital planning approach. The key question is not whether these decisions exist in every organization, but whether they are made deliberately, consistently, and with the clarity required to support long-term outcomes.

About Aurigo Software

Aurigo builds software that helps build the world. Aurigo is an AI-native company that helps capital owners connect planning, construction, and operations in a single environment, improving decision-making and execution. Trusted by over 300 organizations across infrastructure and facilities, Aurigo manages more than $450 billion in capital programs, with over 40,000 projects throughout North America. Aurigo is a privately held U.S. corporation headquartered in Austin, Texas, with global offices in Canada, South Africa, and India.

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