



Enabling Better Infrastructure

**Continuing to drive purpose,
certainty and pace in strategic
infrastructure planning**



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Acknowledgements

Continuing to drive purpose, certainty and pace in strategic infrastructure planning is an update to two earlier versions of the Enabling Better Infrastructure (EBI) guidance produced in 2019 and 2024. In addition to the more than 100 insights from leading stakeholders in strategic planning incorporated into the earlier versions of the guidance, this report includes deep insights gathered from working with 25 governments during 2024 and 2025. Updates have been informed by ongoing findings on what governments need to know to deliver better infrastructure outcomes for people and planet.

Updates to the guidance span the full report. Significant refinements have been made to the scope and need for strategic planning. This includes the incorporation of emerging international themes such as governance, spatial planning, value for money, and delivery. Refinements have also been made to enhance the accessibility and value of the programme's extensive range of case studies.

The process to update the guidance has been overseen by a Task and Finish Group to ensure the guidance responds to timely challenges and debates in strategic infrastructure planning.

EBI thanks the following organisations for their ongoing insight on the programme: Global Infrastructure Investor Association (GIIA), Housing, Infrastructure and Communities Canada, Institute of Fiscal Studies and Democracy (IFSD), Inter-American Development Bank (IDB), International Institute of Sustainable Development (IISD), Organisation for Economic Co-operation and Development (OECD), Overseas Development Institute (ODI), UK Foreign, Commonwealth and Development Office (FCDO), UK Infrastructure Project Authority, now National Infrastructure and Service Transformation Authority (NISTA), UN Environment Programme (UNEP), UN Office for Project Services (UNOPS), World Bank and World Economic Forum (WEF).

The programme also thanks the following governments (part of the EBI network) for their ongoing engagement: Australia, Brazil, Canada, Chile, Colombia, Hong Kong, India, Indonesia, Ireland, Kenya, Kuwait, Mexico, Morocco, New Zealand, Peru, Qatar, Rwanda, Saint Lucia, Saudi Arabia, Singapore, South Africa, Spain, Ukraine, United Kingdom and Wales.

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Foreword

From the earliest human civilisations, infrastructure and development have been interconnected.

Over time, our infrastructure needs have changed immensely, and they continue to evolve. Countries around the world are now facing challenges on multiple fronts, from climate change to urbanisation. To meet these challenges, we need infrastructure that's effective, sustainable and resilient.

Decision-makers must navigate not only these complex demands, but also their own countries' aspirations. To do so successfully, decisive planning and a clear strategic direction are essential.

The ICE convened the Enabling Better Infrastructure programme for exactly this purpose: to engage governments around the world in strengthening strategic planning; to help them act with purpose, certainty and pace in a changing world.

Since the first iteration of the guidance in 2019, we've been in dialogue with governments and infrastructure organisations around the world, building our understanding of the difficulties governments face and how they use the guidance in practice.

The updates in this document reflect learnings from our direct work with 25 governments, as well as vital insight from an expert group.

This builds on the collective wisdom of over 100 leading specialists with whom we have engaged to provide the most comprehensive and up-to-date response possible to today's strategic infrastructure challenges.

Most importantly, this new version of the EBI guidance demonstrates the iterative approach needed to understand and meet needs as they evolve over time.

No government has all the answers. This guidance empowers countries to set out their own approach to developing a clear vision of where they're going and how they're getting there.

Planning strategically will kick-start a virtuous cycle of benefits. A well-defined infrastructure strategy is an important first step towards a world in which people live healthy, happy, and productive lives.

This is the world that the EBI programme envisions. I'm confident that this updated guidance will give its users the tools, knowledge and confidence they need to help build that world.



Professor Jim Hall

Chair, Enabling Better Infrastructure Steering Group

What does this report cover, and who is it for?

EBI guidance has been developed for any government wanting to create a national approach to enhance the impact of their investments in infrastructure.

It sets out systematic steps, including the following key components, to help governments see beyond the uncertainties of the day to develop stable, sustainable and investable infrastructure project pipelines that meet people's needs.

These include:

1.

Eight guiding principles to strengthen strategic infrastructure planning

All the key inputs governments need to consider when creating an effective planning process, taking into account a country's national goals and service needs. *See page 18.*

2.

A core three-step process for building an actionable infrastructure plan

A process outlining how to develop an infrastructure plan, with links to case studies on how other countries have done it. *See page 21.*

3.

A gap assessment tool (GAT) for identifying areas for improvement

A self-guided tool to identify where to start and what to focus on when planning infrastructure, enabling

governments to benchmark themselves against leading practice in other countries. *See page 27.*

The idea to first produce guidance came from conversations with government officials around the world about the uncertainties they face when setting up their strategic planning approach.

Common concerns included achieving national goals such as economic growth, factoring in resilience to shocks, limiting the impacts of climate change, addressing ageing infrastructure and ensuring equitable outcomes.

In addition to the guidance, the EBI programme offers a range of activities to support governments wanting to strengthen their strategic approach including bespoke sessions, events, and reports on topical issues.

For easy access to the Enabling Better Infrastructure programme website, click the link.

<https://www.ice.org.uk/news-views-insights/policy-and-advocacy/enabling-better-infrastructure>

The insights in this report will enable governments to:

- bring clarity to their definition of 'infrastructure'
- identify influential stakeholder groups
- identify national goals and how infrastructure will help achieve them
- establish the link between infrastructure and the economy
- build consensus on key decisions to enhance infrastructure and its outcomes
- identify what is needed to plan infrastructure for the future
- learn how to strengthen planning using international examples
- benchmark progress with other countries.

This report also provides the following insights for international non-profit organisations, financial institutions and industry:

- sets out a systematic approach for strengthening strategic planning
- provides tried-and-tested approaches for strengthening governance
- outlines how to plan for capacity and financing considerations to deliver infrastructure
- supports the development of frameworks and regulation for infrastructure agencies and the private sector.



Case studies and other examples

Case studies showcasing how other countries have strengthened their strategic infrastructure planning are shared in the report using clickable links.

Following these will connect to the EBI online knowledge hub that features regularly updated case studies and learnings from across the programme.

For easy access to the Enabling Better Infrastructure programme knowledge hub, click the link.




<https://www.ice.org.uk/news-views-insights/policy-and-advocacy/enabling-better-infrastructure>



EBI guidance key

A useful colour-coded key has been included throughout the report to allow the reader to cross-reference different parts of the guidance.

This will ensure governments know where to go to find out more about how they can achieve purpose, certainty and pace in strategic infrastructure planning.

Principles 	Core process 	Gap assessment tool 
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Why plan infrastructure strategically?

What is strategic infrastructure planning?

Strategic planning is about looking 10 to 50 years into the future to identify, prioritise and coordinate long-term investments to support national priorities and improved outcomes for people and planet.

It includes the following key activities:

- setting national goals for the long term, ensuring infrastructure contributes to a sustainable future
- assessing the current performance of infrastructure and spatial spread of service needs in relation to future trends (e.g. population growth, urbanisation, climate change)

- identifying value for money and using this to prioritise projects (e.g. economic growth, clean energy, sustainability)
- engaging all stakeholders, including infrastructure agencies, private sector partners, communities and experts, to support buy-in on decisions
- identifying funding opportunities and developing models to engage long-term investment
- establishing conditions for success, tracking progress, measuring outcomes and adapting plans as conditions change.

What do governments stand to gain?

Planning for the long term enables governments to deliver better outcomes for the economy, society and the environment. This is achieved by aligning infrastructure investments, improving coordination and buy-in across all stakeholders and creating the conditions for effective delivery.

Taking the time to look to the future and plan for infrastructure needs for the next 10 to 50 years provides clarity on what infrastructure is needed and where, what the deficits are, and how infrastructure can deliver on national goals. Doing so kick-starts a virtuous cycle of benefits (Figure 1).



Figure 1: Planning strategically delivers a virtuous cycle of benefits

Efficiency gains associated with planning infrastructure strategically include:

Governance

One prioritisation structure can be developed with a common evaluation framework, which can be applied to multiple projects.

Procurement and financing

A set of common structures and frameworks can be developed to procure projects. Delivery can be arranged at different scales, such as country, regional or city level, or by sector.

Value for money

Cost savings and greater returns on investment can be achieved across a programme of infrastructure projects.

Data and digitalisation

A system-wide programme can support infrastructure development and evidence gathering across one or more sectors or departments.

Learning

Lessons from delivering projects or programmes can be used to drive continuous improvement.

While it is not easy to quantify the benefits of strategic planning, given the breadth and impacts across sectors, the following have been reported by global institutions working on this topic (Figure 2).



5%-25%

Over the medium to long term, well-planned infrastructure investment can result in an economic return of between 5% and 25% for every dollar spent¹



x1.5

Public investment in infrastructure can have a fiscal multiplier effect, where the return can be 1.5 times higher than the original investment in two to five years³



-40%

By scaling up best practice in the selection of projects, as well as getting greater use out of existing infrastructure, governments can get the same amount of infrastructure by spending 40% less²



20%-30%

Digital twins can improve capital efficiency and the performance of public sector investments by 20-30%⁴

¹World Economic Forum (2012) Strategic infrastructure – steps to prioritise and deliver infrastructure effectively and efficiently

²McKinsey Global Institute (2013) Infrastructure productivity: How to save \$1 trillion a year

³Global Infrastructure Hub (2020) Fiscal multiplier effect of infrastructure investment

⁴McKinsey and Company (2025) Digital twins: Boosting ROI of government infrastructure investments

Ramping up strategic planning – a project in good governance?

Planning for the long term requires careful consideration. Not only does it involve having clear national goals for what a country wants to achieve for the next 10 to 50 years, but it also demands an understanding of what the service needs are, both now and in the future, and how these can be achieved at the country level.

Setting up activities to establish these answers is not straightforward. While there is a set of shared challenges around navigating how to establish the key components, every country will go through its own process to establish the systems, processes and decision-making structures to deliver strategic planning and achieve its national goals.

Furthermore, key decisions on how infrastructure is defined, its relationship with the economy, and how it will be delivered to achieve national goals are bounded by the here and now. These considerations need to be revisited over time to ensure successful outcomes.

Engaging in effective strategic planning is therefore a project in good governance, where governments take steps to develop their systems, processes and decision-making structures in a way that is stable yet adaptable. This requires a conscious effort to build trust between stakeholders and factor in opportunities for expert insights and public engagement from the outset.

Monitoring, review and refinement also play a key role in strengthening country approaches over time.





How to deliver better outcomes for people and planet

Strengthening strategic planning – where to start?

Government officials who are part of the EBI network shared that they faced uncertainty when planning infrastructure strategically.

This included feeling unsure about getting the planning fundamentals right, how to create a supportive context, and how to action the practical changes needed to develop policy and regulation.⁵

To overcome uncertainty, officials looked to use available approaches, tools and models. While there is a plethora of options available, officials outlined that it was not always easy to know which ones to draw on and how to use them in their jurisdiction.

When it came to strengthening strategic planning, countries follow slightly different approaches, and this makes it difficult to know where to start using available tools and approaches.

What are the lessons learned from elsewhere?

Setting up a planning process and strengthening the enabling environment

The EBI programme has captured the different ways governments have set up and strengthened strategic planning.⁶

This has involved gathering insights from countries where robust processes have been set up and where benefits have been realised, and looking at how learnings have been adapted to suit a range of countries.⁷

Common themes across jurisdictions such as Australia, Hong Kong, Singapore and the United Kingdom reveal that the greatest amount of success is achieved where countries have defined national goals, have conducted national service needs assessments, have developed and consulted on long-term strategies, and have set up a pipeline of infrastructure programmes and projects.

Key features of the planning processes of the jurisdictions mentioned above include setting parameters for delivering

on infrastructure goals, identifying service needs and options to deliver on them, and developing an actionable plan with clear links between strategy and delivery (Figure 3).

Establishing this process enables closer engagement with how to prioritise projects according to needs and available budget.

The mentioned jurisdictions also have a strong supporting context or enabling environment that helps to ease the identification, prioritisation and coordination of long-term investments in infrastructure to support economic growth, social well-being and environmental sustainability.



Strategic planning

Prioritisation

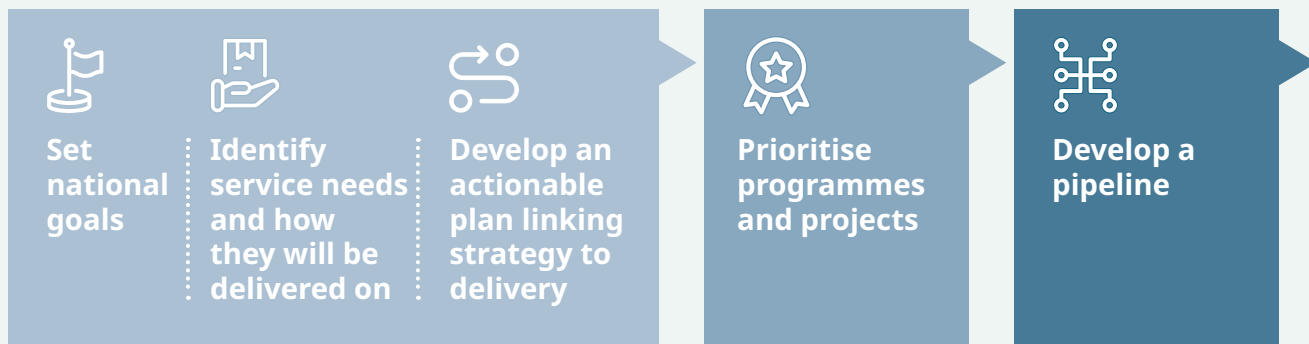


Figure 3:
Using strategic infrastructure planning to deliver a programme of projects

⁵ ICE (2025) ICE insights on working with governments to strengthen strategic infrastructure planning

⁶ ICE (2019) Enabling Better Infrastructure: 12 guiding principles for prioritising and planning infrastructure

⁷ ICE (2024) Driving purpose, certainty and pace in strategic infrastructure planning

How to create a strong enabling environment

The following factors should be considered when creating a strong supporting context at the country level.

Capacity and scope for change

- appetite for change
- government decision-making capacity
- leadership and institutional capacity

Processes for supporting good governance

- government and institutional decision-making structures (e.g. at national, regional and local levels)
- cross-government coordination
- opportunities for stakeholder engagement, including experts and the public

Infrastructure ownership and regulation

- clear asset ownership and government /institutional responsibilities
- legal basis for decision-making (including the regulatory environment) and accountability

Funding and financing

- clear processes for budgeting and funding
- access to financing and funding

Existing assets and processes

- previous or existing activities to strategically plan infrastructure
- current planning and permitting processes
- existing systems for assessing infrastructure performance

Resources and their ease of access

- accessible data on current infrastructure
- access to resources (capacity, skills, time, money)

Factoring in regular review

Another learning from the EBI programme is that governments that treat strategic planning as a process under constant review had the greatest success in delivering on national goals. Regular monitoring and improvement were essential for ensuring the strategic process continued to deliver on the most pressing service needs in the most efficient way (*Figure 4*). This included activities to continually assess evolving service needs and the infrastructure gap and how well programmes and projects delivered on national goals.

Making the best use of monitoring and evaluation requires factoring in feedback loops on how this data will be used to strengthen infrastructure programmes, decision-making and data collection moving forward.



Figure 4:
Strategic planning requires regular refinement and review



Taking advantage of first-hand insight

Government officials who are part of the EBI network also identified the benefits of drawing on first-hand insights to help develop and refine their decision-making processes. This helped them to understand how available approaches, tools and models could 'come to life' in their jurisdiction to bring about meaningful change.

Simply speaking to other officials and audiences, such as academia, who have worked on similar activities helped to sense-check ideas and gauge what was likely to work in practice. Developing and piloting approaches where regional or transboundary best practice could be implemented also proved useful. Both of these activities are supported and encouraged by the EBI programme.

Factoring in review from independent bodies that provide credible and reliable guidance was another way to strengthen decision-making.

Building consensus for achieving longevity

Developing a robust strategic planning process requires inputs from all stakeholders. Governments that actively included insights from a wide range of stakeholders (e.g. infrastructure agencies, experts, industry and the public) were able to achieve buy-in on national goals and boost the longevity of programmes and initiatives on infrastructure.

Findings from EBI stakeholders demonstrate that achieving agreement on what the national goals are, how these are arranged spatially and how they are to be addressed using infrastructure is essential to engage consensus from the start. Taking the time to carry out this groundwork helps to establish buy-in on national goals, which helps to span the full 10- to 50-year planning horizon.

How does EBI guidance help?

EBI works with governments to deliver better outcomes for the economy, society and the environment by providing tried-and-tested insights for addressing uncertainty in the planning process.

To account for key learnings on the programme, the updated guidance includes the following:

- a clear process for developing an infrastructure strategy
- examples of how other countries are doing it
- first-hand insights to help government officials identify their starting point and what 'good' looks like for them.

The guidance also:

- allows governments to benchmark themselves in the strategic planning process
- sets out ways to conduct regular reviews.





Using EBI guidance to drive purpose, certainty and pace – what are the next steps?

Since 2019, the EBI programme has captured international best practice on how to strengthen strategic infrastructure planning.

Throughout the programme's lifetime, it has worked to identify what governments need to plan infrastructure better while also finding ways to share tried-and-tested examples and spark discussion and timely debate.

The EBI guidance has benefited from refinement and review over the last six years, capturing key insights on gaps and how to fill them. More recently, the programme has worked with 25 governments to help them strengthen how they drive purpose, certainty and pace, and deliver better outcomes for the economy, society and the environment.

The guidance is comprised of three key components (Figure 5).

1. Eight guiding principles to strengthen strategic infrastructure planning

All the key inputs to consider when creating an effective planning process, taking into account a country's national goals and service needs. *See page 18.*

2. A core three-step process for building an actionable infrastructure plan

An easy-to-follow process outlining how to develop an infrastructure plan, with links to case studies on how other countries have done it. *See page 21.*

3. A gap assessment tool (GAT) for identifying areas for improvement

A self-assessment tool to identify where to start and what to focus on when planning infrastructure strategically. Drawing on international best practice, the tool enables governments to benchmark themselves against leading practice in other countries. *See page 27.*

The three components work together to set out what is needed to create an infrastructure plan and an integrated strategy of infrastructure investments and policies to deliver on national goals (Figure 6).

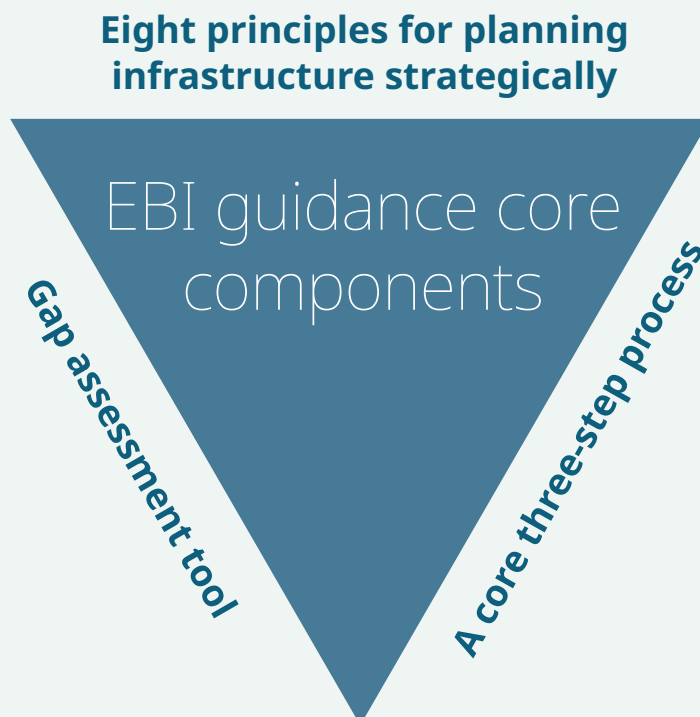


Figure 5:
Three components of the EBI guidance

Creating an integrated strategy of investments and policies using EBI guidance



Figure 6:
Creating an integrated strategy of investments and policies using EBI guidance

Process: Step 2



Service needs
will be

and the
of the
system.

and how
addressed.

a range of options.



Core process: Step 3

When?



Develop an actionable plan linking strategy to delivery

- Identify what value for money looks like.
- Decide how to pay for infrastructure and develop supporting regulation.
- Set out conditions for success.

Principles: 4,5,7,8



Integrated strategy of infrastructure investments and policies:

- Create programmes to deliver on national goals.
- Improve investor and public confidence.
- Streamline delivery.
- Enhance the affordability of programmes.

outcomes and need

Principle: 7

EBI Principles

- Principle 1 – Create goals for the long term
- Principle 2 – Understand the infrastructure system
- Principle 3 – Consider a range of options
- Principle 4 – Plan for the long term

- Principle 5 – Assess value for money
- Principle 6 – Build consensus among stakeholders
- Principle 7 – Strengthen information gathering and data use
- Principle 8 – Connect the strategy to delivery



Eight guiding principles to strengthen strategic planning

The EBI programme has developed eight principles to strengthen strategic planning.

The principles include guiding information to support the refinement and review of existing processes and can be used at any stage of the planning process (Figure 7).

Follow this link to navigate to the EBI online knowledge hub to access examples of how countries have embodied the EBI principles in practice.

<https://www.ice.org.uk/news-views-insights/policy-and-advocacy/enabling-better-infrastructure#ebi-principles>

Principle 1

Create clear goals for the long term

When planning infrastructure, governments must begin with a clear understanding of the economic, social and environmental goals they want to achieve for their country.

Setting national goals around infrastructure service needs provides clarity on what is needed now and in the future, enables cross-cutting priorities to be identified (e.g. missions) and encourages buy-in from the whole of government to gear up coordinated action.

The UN Sustainable Development Goals (SDGs) provide a complete framework of goals for people and the planet, making them a worthwhile starting point for establishing national goals. The SDGs cover a wide range of social and environmental outcomes, including inclusivity, gender and equity.

Core process: Step 1

GAT: 1,2,3

Principle 2

Understand the infrastructure system and its services

Infrastructure planning should be based on a clear picture of the condition of existing infrastructure assets, where they are located, what services they provide and how they may deteriorate as assets age.

Mapping the interlinkages between infrastructure types, assessing the ownership status of infrastructure (e.g. government or private) and how it is funded can further help to identify and deliver on cross-cutting priorities.

Knowing more about the infrastructure system from the outset supports a common understanding of what infrastructure is (e.g. social, economic, other) and facilitates joined-up planning across levels of government (e.g. national, regional, local).

Core process: Step 1

GAT: 3,4,5,6

Figure 7: Principles for continuing to achieve purpose, certainty and pace in strategic infrastructure planning



Principle 3

Consider a range of options to deliver on future service needs

Future service needs can be assessed by considering the gap between national goals and the current service provision, allowing the best infrastructure solution to be selected to deliver on them.

Rather than building new infrastructure every time, understanding service needs can encourage the selection of alternative solutions, ranging from low- and no-build interventions, infrastructure demand reforms (e.g. pricing and efficiency) and options to prolong the working life of infrastructure.

Selecting the best solution requires a good understanding of asset performance and maintenance needs, including a robust sensitivity analysis to ensure existing infrastructure can provide services at a high standard in a range of possible futures.

Core process: Step 2

GAT: 4,5,6

Principle 4

Plan for the long term

Infrastructure has a long life, and major infrastructure takes time to create, so it is essential to plan with the future in mind. Factoring in adaptability enables projects and policies to be strengthened and modified over time as needed.

Critical considerations include the sequencing of projects and how this might be impacted by funding and financing, supply chain concerns, technological advancement and changes in the market.

Skills also play an essential role in delivering successful planning (e.g. leadership, institutional and local-level capacity). As they take time to develop, they need to be considered as early as possible.

Core process: Step 2,3

GAT: 3,5,9

Principle 5

Assess value for money

Agreeing on what value for money looks like, how it is measured and how trade-offs will be addressed is essential for prioritising projects and supporting policies.

Part of this also involves thinking through how infrastructure is funded (e.g. government-funded public infrastructure, where budgets must be prioritised, or private/consumer-funded, where putting in place regulation is key).

Used alongside affordability considerations, projects can be rigorously prioritised and added to the pipeline to ensure they have the greatest benefit. Proper evaluation of the wider economic benefits of infrastructure may enable investments with high upfront costs to be shown to be affordable over time.

Core process: Step 3

GAT: 7

Principle 6

Build consensus among stakeholders

Consensus on national goals can be achieved by including all stakeholders – including public engagement - in the planning process, supporting agreement on the current state of infrastructure and on which evidence or models are used to make changes (e.g. economic, demographic, climate change).

Stakeholder mapping can be used to decide who to include in decision-making from the outset, where activities can be undertaken at different times to capture insights from a variety of stakeholders. Doing so helps to build trust, and support buy-in on government plans.

Building consensus can also enhance cross-stakeholder prioritisation, reduce conflicting demands and drive the longevity of decisions.

Core process: Step 1,2

GAT: 8



Principle 7

Strengthen information gathering and data use

Evidence-based decision-making relies on quality data that is regularly gathered and made available to inform the planning process.

Data agreements between sectors and stakeholders can incentivise the collecting of quality data and its use. This is particularly useful for monitoring and ex-post assessments (e.g. progress on achieving national goals, pipeline monitoring and stakeholder accountability) across the system to make necessary changes over time.

 **Core process: Step 1,3**

 **GAT: 3,4,10**

Principle 8

Connect the strategy to delivery

Aligning the strategy with delivery is critical for ensuring national goals are actually delivered through long-term planning.

The wider set of processes and policies that support the design and procurement of projects should be considered, ensuring priority projects are funded and delivered with the requisite technical skills and service outcomes.

Considerations include aligning procurement and regulatory mechanisms to enable the delivery of priority projects, steps to build and sustain capacity in the delivery industry, and whether procurement delivers on service needs and priority projects.

 **Core process: Step 3**

 **GAT: 3,5,9,10**



A core three-step process to build an actionable infrastructure plan

The EBI programme has identified three steps to support countries in developing an infrastructure plan that is well thought out and actionable.

It includes key insights for incorporating national goals, assessing interdependencies between infrastructure types, determining infrastructure service needs and connecting strategy to delivery.

Each of the three steps includes a set of sub-steps which can be completed before moving on to the next step (Figure 8).

Follow this link to navigate to the EBI online knowledge hub to access case studies and examples of how countries have implemented the three steps.

<https://www.ice.org.uk/news-views-insights/policy-and-advocacy/enabling-better-infrastructure#step-process>

1.
Set national goals

Principles: 1,2,6,7

GAT: 1,2,3,7,8

Define national goals and priorities

- Define national goals for the long term (e.g. economy, society, infrastructure, other) and decide how infrastructure can help to achieve them.
- Outline infrastructure priorities and constraints (e.g. economic growth, healthcare, education).
- Identify spatial considerations.
- Establish which kinds of future projections will be used to inform planning (e.g. demographic, economic, climate).
- Use sustainability frameworks (e.g. the UN Sustainable Development Goals) as a baseline to drive equitable outcomes.

Understand the infrastructure system

- Define what infrastructure is (economic, social) and how it links with the economy.
- Map interdependencies between infrastructure networks at different scales.
- Consider how infrastructure is owned and funded (e.g. public/private, government budgets or user charges).
- Understand how infrastructure is governed (e.g. national, regional and local levels of government).

Figure 8:
Three core steps to develop an actionable infrastructure plan



Build consensus

- Identify stakeholders (e.g. the private sector, academia and the public) via mapping, matrices, or other activities and decide who to include in the development of the strategy.
- Establish opportunities for stakeholders to share their insights and input into the planning process (forums, consultation, reviews).
- Agree on what evidence base will be used to inform planning.
- Establish what infrastructure can and cannot deliver.
- Agree on the criteria for evaluation.

Include country-level considerations

- Identify geographical, political and economic considerations.
- Consider the individuals, institutions and incentives for infrastructure and associated changes.
- Identify key concerns with the current project design and delivery system and the skills base (leadership, construction, other).
- Review the relevance of existing objectives and progress to date.

Refine national goals

- Include any spatial variations (geographic, known areas for demand).
- Review expected outcomes and decide what further policy interventions are needed.
- Outline short-term versus long-term drivers and trends.

Consider value for money

- Decide what value for money looks like.
- Identify measures of affordability (fiscal and user charges).
- Use affordability measures to consider upfront fiscal and budgetary concerns (early assessment).



2.

Identify service needs and how they will be delivered on



Principles: 3,4,6



GAT: 3,4,5,6,7,8,9

Conduct a needs assessment that also considers trade-offs:

Identify service needs

- Assess the current and possible future service needs.
- Consider how needs are spread geographically and note any underserved areas or areas of rapid change.

Assess the performance of existing infrastructure

- Assess the performance of the current infrastructure stock, considering geographical differences.
- Consider the maintenance requirements of the existing stock.
- Identify gaps and agree on which gaps to address.

Coordinate plans at different levels of government

- Consider strategies across levels of government (e.g. national, regional, local).
- Agree on roles and responsibilities between levels of government (e.g. national, regional, local).
- Coordinate with subnational or sectoral plans (planning, funding).
- Create a framework to streamline planning across levels of government.

Consider infrastructure options

- Develop frameworks and processes for assessing options (e.g. business cases).
- Consider environmental, social and governance benefits and trade-offs and no-build, retrofit and repurposing solutions.
- Identify priority programmes or projects for addressing gaps.

Identify implications now and in the future

- Identify financial, technical and delivery requirements.
- Assess impacts: multi-decade and economic.
- Assess risks and uncertainties.

Finalise the assessment

- Complete a final assessment and set a baseline.



3.

Develop an actionable plan linking strategy and delivery



Principles: 4,5,7,8



GAT: 3,4,5,7,8,9,10

Identify the process to develop the plan

- Agree on steps to develop the plan.
- Identify short-, medium- and long-term outcomes and set out key milestones for monitoring and review.
- Gather inputs from specialists and the public.

Decide on how to pay for infrastructure

- Consider the wide range of options that can be used to fund and finance infrastructure for both the long and short term:

Publicly funded projects

- Set out criteria for developing project options that deliver value.
- Decide on the approach to prioritise projects (e.g. variables, weights, scores).
- Select shortlisted project options (e.g. government, industry, other).
- Identify and apply measures of affordability.

User pays or privately financed projects

- Develop the regulatory tools for privately or user-funded infrastructure.

Develop the pipeline of future projects

- Identify how a pipeline will be developed, shared and monitored.
- Assess alignment and sequencing of the projects.
- Identify risks to implementation, including any financing, technical and delivery bottlenecks.

Connect the strategy to delivery

- Define the conditions for success.
- Consider the effectiveness of processes to design and procure projects.
- Identify market and supply-chain constraints (includes delivery capacity).
- Consider skills and ongoing training needs (leadership, construction, other).

Create structures for monitoring and review

- Decide on data needed to evaluate success.
- Define which measures to use to monitor progress.
- Ensure there are clear feedback loops to inform future planning.
- Factor in forward-looking milestones to boost accountability.



Finalise the plan

- Outline how changes, updates and improvements will be made at key milestones.
- Engage with the public and other key stakeholders on a draft plan.
- Integrate insights and finalise the plan.

Engage internal and external stakeholders

- Consult publicly on the plan (government, public, other).
- Embed across departments, agencies and other supporting bodies.

Refine complementary policies

- Consider existing policies and regulations and which changes are needed to improve practice and productivity.
- Update the infrastructure decision-making framework (e.g. land use planning).
- Develop guidance for the private sector.

Decide how the plan will be delivered

- Consider which contract forms to use.
- Consider existing laws and regulations around implementation and make any necessary modifications.





A gap assessment tool for identifying areas for improvement

The EBI gap assessment tool enables governments to know where to start and what to focus on when it comes to planning infrastructure strategically. It outlines key milestones for setting up a robust strategic approach, including which parts of the EBI guidance can be drawn on to focus time and resources.

The assessment tool helps to provide clarity to governments on:

- how their country compares against others when it comes to strategic infrastructure planning
- what is missing from a country's current approach
- establishing their country's direction of travel and where to prioritise action
- how to draw on EBI guidance to strengthen the next steps.

The stakeholder groups below can also gain value from the gap assessment tool, where it can help them to understand where further work and input from government is needed:

- **Arms-length bodies** - technical support on assessing and managing infrastructure needs, including how to monitor and evaluate progress.
- **Private sector** – expertise to build robust business cases to inform the design and or infrastructure projects.
- **Research and academia** – thought leadership on the next steps and best practice for refinement and review.
- **Civil society and the public** – inputs on national, regional and local needs and support for good governance through ensuring accountability.

The assessment tool identifies the following options:

- **Limited initial work needed**
Adequate systems and activities are in place for this milestone. Focus can be shifted to areas requiring further work, as outlined by the *requires development or refinement* or *requires support* categories. Considerations will need to be assessed again as part of regular review and monitoring.
- **Requires development or refinement** – Systems and activities are in place, providing a good foundation for further work on this milestone. *The limited initial work needed* category provides direction on the refinements needed.
- **Requires support** – There are limited or no systems and activities in place for this milestone. Further work is needed to strengthen this milestone through government or external support. The *limited initial work needed* or *requires development or refinement* categories provide insight on which activities require improvement and what a good outcome looks like for this milestone.



For easy access to the **Enabling Better Infrastructure gap assessment tool**, [click this link](https://www.ice.org.uk/news-insight/policy-and-advocacy/enabling-better-infrastructure#strategic-planning-tool).

<https://www.ice.org.uk/news-insight/policy-and-advocacy/enabling-better-infrastructure#strategic-planning-tool>



To use the gap assessment tool, consider the following questions:

1. How are national goals incorporated into policymaking?

Having a strong national process for translating a country’s vision into clear goals is central to creating and delivering an effective infrastructure strategy. This should consider all needs – economic, social and environmental – in an inclusive manner.

Stages towards incorporating national goals into policymaking:

- **Limited initial work needed**
There is an agreed-upon definition of infrastructure across one or more stakeholders (government and other) responding to a clear mandate to integrate the national goals into existing and new policy and decision-making structures. Stakeholders work together to agree on how they will interpret the vision, seeking input from other government departments and bodies (internal/external) where necessary.

- **Requires development or refinement**
There is a limited or fragmented set of government departments or other stakeholders that plan infrastructure strategically. Each works within a narrow or siloed operational mandate. There is some communication around national goals, where inputs across departments take place for some core decisions.

- **Requires support**
No government departments or supporting stakeholders are mandated or step in to plan infrastructure. There is limited or no capacity to identify and action a national vision to meet infrastructure service needs.



Principle: 1



Core process: Step 1

2. How are sustainability outcomes embedded into decision-making?

Embedding sustainability measures such as the UN Sustainable Development Goals into decision-making can set out clear social and environmental outcomes for infrastructure programmes, including inclusivity, gender and equity.

Stages towards embedding sustainability outcomes into decision-making:

- **Limited initial work needed**
A sustainability measure, such as the UN Sustainable Development Goals, is used as a baseline for setting national goals and securing investment. There is also a list of clearly defined sustainability goals or outcomes, including steps to considering them as part of the long-term planning process, including skills needs and funding and financing.

- **Requires development or refinement**
Some sustainability goals are incorporated into planning on an ad hoc basis. There is a limited understanding of how sustainability measures and the UN Sustainable Development Goals are used to set national goals and secure investment, including how sustainability measures link with skills and funding and financing programmes.

- **Requires support**
There are no agreed sustainability goals or clear outcomes in place. There is a limited use of the UN Sustainable Development Goals or associated measures to plan and deliver infrastructure, including the skills and funding and financing requirements.



Principle: 1



Core process: Step 1

Figure 9:

A gap assessment tool for identifying areas for improvement



3. How does a systematic approach contribute to planning and delivery?

A systematic approach is the broader set of processes and actions for developing and implementing infrastructure strategies and policies, ensuring they lead to the effective delivery of infrastructure programmes. A systematic approach ensures evidence, needs and outcomes align to create a robust strategic planning approach that can be delivered in practice.

Stages towards adopting a systematic approach:

- **Limited initial work needed**
An existing internal or regulatory process sets out clear steps for integrating evidence, needs and outcomes into a clear national strategy or plan for the long term. This process is adaptable and includes responsibilities from across government departments (e.g. national, regional and local) for planning and delivery. There is a clear set of activities to benchmark progress with other countries.

- **Requires development or refinement**
A fragmented departmental or broader regulatory process identifies steps for integrating evidence, needs and outcomes for building a national strategy or plan for the long term. This process is followed ad hoc, with limited coordination across government departments (e.g. national, regional and local) to support planning and delivery. Actions to benchmark progress with other countries are limited or non-existent.

- **Requires support**
There are no departmental or other regulatory processes setting out clear steps for integrating evidence, needs and outcomes for building a national strategy or plan for the future. There is no coordination between government departments or activities to benchmark progress with other countries.

Principles: 1,2,4,7,8

Core process: Steps 1,2,3

4. How are service needs understood?

Structures for ensuring data is gathered and used to inform decision-making are key to ensuring infrastructure service needs are met. Without a data-informed approach to understanding infrastructure needs, it can be difficult to identify priority areas for strategic infrastructure planning. Setting up structures and data-gathering techniques from the start is essential for driving success in the strategic planning process.

Stages towards understanding service needs:

- **Limited initial work needed**
Data gathered through existing structures for data collection is used to inform evidence-based decision-making. Initiatives are set up at the national level, where sectoral stakeholders or agencies regularly share their information. Data needs are actively reflected on, and steps are taken to meet these needs over time. New or refined methodologies are used to gather robust data and there is consensus on which long-term projections are being used (e.g. economic, demographic, climate change) across infrastructure sectors.

- **Requires development or refinement**
Available data gathered through existing systems for data collection informs evidence-based decision-making. This could be set up at the national level or where sectoral stakeholders or agencies share their information on an ad hoc basis. There is some reflection on data needs, but more steps could be taken to improve this to strengthen strategic planning. The same methods are used with little refinement or innovation and there is limited consensus on which long-term projections are being used (e.g. economic, demographic, climate change).

- **Requires support**
Intuition is used to understand needs rather than data from sectoral stakeholders or agencies. Limited initiatives are in place to gather evidence at the national level to draw together existing data sets. There are no clear plans to gather data on needs in the future and there is no consensus on how long-term projections are used.

Principles: 2,3,7

Core process: Steps 2,3



5. How is the condition of infrastructure assets assessed?

Understanding the condition and performance of existing infrastructure assets is essential for establishing what further policy work is needed to ensure government delivers on infrastructure service needs. This requires a clear assessment of what services infrastructure delivers, the services it can provide over the asset's lifetime, and its maintenance requirements. Processes and initiatives for integrating data into strategic planning ensure visibility and that all needs can be catered to.

Stages towards assessing the condition of infrastructure assets:

- **Limited initial work needed**
Existing initiatives and reporting databases capture data on the accessibility, cost and quality of infrastructure and how it is expected to change in the future. This includes a clear picture of the maintenance requirements, the costs of maintenance and its benefits in enhancing infrastructure performance and reliability. There is consensus among leading government and other stakeholders on how the data is used to inform decision-making (e.g. via agreements, other). New or refined methodologies are used to ensure asset registers are accurate and transparent.

- **Requires development or refinement**
Incomplete or incorrect data on accessibility, cost and quality is used to understand the state of existing infrastructure assets as part of routine reporting initiatives. Limited accessible databases are available outlining the state of the infrastructure stock and its maintenance requirements. There is a weak connection between existing service provision and decision-making, with limited work to ensure the accuracy and transparency of asset registers.

- **Requires support**
There are no individual or routine initiatives to understand service provision and the state of existing infrastructure assets, including their maintenance requirements. No accessible databases or asset registers exist outlining this information and no connection is made between service needs, state of infrastructure and decision-making functions.

 **Principles: 2,3,4,8**

 **Core process: Steps 2,3**

6. How are infrastructure options considered to deliver on service needs?

Delivering on infrastructure needs in the most efficient way possible requires thinking through the range of options that would best deliver on them and adding these as programmes or projects to the infrastructure pipeline. This can include the delivery of new infrastructure, or the use of alternative solutions such as repurposing infrastructure or low- or no-build solutions.

Stages towards considering options:

- **Limited initial work needed**
There is an established process for generating and appraising the options that can deliver on service needs (e.g. business cases or cost-benefit analysis). This includes a wide spread of options incorporating existing infrastructure, where the impacts on the economy, society and the environment are understood. Options are selected based on a clear framework for delivery that achieves national goals and value for money.

- **Requires development or refinement**
Some of the methods for evaluating options that can deliver on service needs are established (e.g. business cases or cost-benefit analysis). This includes some options incorporating existing infrastructure, where the impacts on the economy, society and the environment are considered in part or full. There is inconsistent appraisal, with some decisions taken without considering the full range of options.

- **Requires support**
Service needs are not used to scope infrastructure options. The impacts on the economy, society and the environment are not considered in full and there is no clear basis for option or solution selection. There is limited options appraisal, with most decisions taken without consideration of all the options.

 **Principles: 2,3**

 **Core process: Step 2**



7. How is value for money delivered on?

Deciding what value for money looks like is essential for having an informed conversation about what should be prioritised in the short and long term and how infrastructure will be paid for. When considered at the start of the planning process, it can support transparency around what is needed to achieve national goals, inform the appraisal of infrastructure options, and determine how infrastructure programmes can be funded or financed.

Stages towards delivering on value for money:

- **Limited initial work needed**
Value for money is well understood, where it is used to prioritise options and sources of funding and financing for infrastructure programmes decided on at the national level. A reliable measure of affordability is used for publicly funded programmes (e.g. fiscal remit) and clear regulations for the private sector are established and actively used.

- **Requires development or refinement**
Value for money is not well understood and it is inconsistently used to prioritise infrastructure options and sources of funding and financing at the national level for infrastructure programmes. A reliable measure of affordability is not routinely used for publicly funded programmes (e.g. fiscal remit) and there are limited regulations for the private sector to identify and deliver programmes and projects.

- **Requires support**
No clear understanding of value for money exists. Affordability and regulation are not used to prioritise infrastructure programmes.

 **Principle: 5**

 **Core process: Steps 1,2,3**

8. How are inputs from all stakeholders included in the strategic planning process?

Gathering inputs from all stakeholders ensures that the needs of clients, users and consumers of infrastructure services are factored into the strategic planning process. Although this may not be standard practice across all countries, there is value in bringing in stakeholders from other sectors to share insights into what is needed, how it could be delivered and what blockages there are. Furthermore, including all stakeholders helps to factor in scrutiny, critical review and the needs of any vulnerable groups.

Stages towards including all stakeholders:

- **Limited initial work needed**
Stakeholders from the private sector (e.g. infrastructure users, financiers, owners, designers and constructors) and civil society are involved in project planning from its inception. Opportunities for stakeholder involvement are revisited to ensure balanced insights are used to inform planning and that these include inputs from vulnerable groups. Opportunities for public scrutiny of policies, strategies and plans are used to strengthen collectively agreed outcomes.

- **Requires development or refinement**
Stakeholders from the private sector or civil society are involved in at least one aspect of programme and project planning. Some options for public scrutiny of policies, procedures and plans exist. Inputs from vulnerable groups are incorporated on an ad hoc basis.

- **Requires support**
No other stakeholders (e.g. private sector and civil society) are involved in programme and project planning. There are no opportunities for public scrutiny of policies, strategies and plans. Inputs from vulnerable groups are not considered.

 **Principle: 6**

 **Core process: Steps 1,2,3**



9. How is delivery considered as part of long-term planning?

Early consideration of project delivery can add significant value to strategic infrastructure planning. Considering how infrastructure programmes or projects will be delivered upfront, including their skills (e.g. technical and leadership), financing, and market or supply chain requirements, is vital to overcoming bottlenecks later in the infrastructure life cycle. Taking this step supports the development of a stable and sustainable infrastructure pipeline.

Stages towards considering delivery:

- **Limited initial work needed**
Delivery and implementation are always considered in the planning process, where they are considered upfront. Stakeholders involved in delivery are included at the start of the planning process, and potential risks are identified and addressed upfront. This also includes the skills (e.g. technical and leadership), funding and financing concerns, and market-based considerations.

- **Requires development or refinement**
Some aspects of delivery and implementation are considered in the planning process. Stakeholders involved in the implementation stage are not included in the planning process. Skills (e.g. technical and leadership), funding and financing concerns, and market-based considerations are only sometimes or inconsistently considered in planning, where they are intrinsically linked to the key deliverables of one or more programmes or projects.

- **Requires support**
Delivery is not considered at any stage of the strategic infrastructure planning process. Stakeholders involved in the delivery stage are not included in the planning process. Skills (e.g. technical and leadership), funding and financing concerns, and market-based issues are not considered upfront.

Principles: 4,8

Core process: Steps 2,3

10. How is evidence used to improve the planning process over time?

Reviewing the effectiveness of strategic infrastructure planning requires data capture and its use in decision-making processes. Central to this process is putting in place structures to capture and use data. The strongest review systems also incorporate a periodic appraisal of the methods and data used, highlighting where this can be refined over the lifetime of a project or programme.

Stages towards embedding data capture:

- **Limited initial work needed**
Established structures for data collection and monitoring and evaluation measures are used. Steps are in place to gather, integrate and refine methods to ensure data helps assess policy outcomes accurately. There are also systems in place to enhance the accessibility and shareability of data. Available data is used to inform a regular review of strategic planning and data-gathering processes over time.

- **Requires development or refinement**
Fragmented or imperfect data is available. Some monitoring and evaluation measures are in place but infrequently match available data or evaluation needs. Some steps are taken to gather, integrate and refine methods to ensure data helps assess policy outcomes accurately. Structures are in place to enhance the accessibility and shareability of data. Some data is used to inform a regular review process.

- **Requires support**
There are no established structures for data collection and no monitoring and evaluation measures in place. No systems are in place to enhance the accessibility and shareability of data. Existing data is not used to inform a strategic planning review process.

Principles: 7,8

Core process: Step 3



Conclusion

Infrastructure challenges today – ranging from climate change to rapid urbanisation – are more complex and interconnected than ever before.

Meeting these challenges requires more than just investment – it demands a clear, strategic approach grounded in long-term thinking, collaboration and adaptability.

Countries in the EBI network have consistently identified uncertainty as a key barrier to effective planning, whether in defining national goals, creating enabling environments or implementing practical reforms.

In response to this, the EBI programme has developed guidance to support the development of infrastructure strategies for the long term that are evidence-based and actionable.

The updated EBI guidance has set out eight guiding principles, a core three-step process and a gap assessment tool to help governments create infrastructure strategies that are not only visionary but also practical – designed to evolve with changing needs.

It recognises that while no government has all the answers, shared learning and structured planning can unlock better outcomes.

Looking forward, the EBI programme remains committed to supporting governments in achieving the most out of their investments in infrastructure, helping them to build infrastructure that delivers better outcomes for people and planet.



Image captions:

Front and back cover:
Overpass at night,
Jakarta, Indonesia.



Inside front and inside back cover
Overflowing streets,
Myanmar.



Page 6:
Aerial highway junction,
Shanghai.



Page 9:
Underground transport system,
New Delhi.



Page 10:
Seville Railway Station.



Page 11:
Streetscene in Monrovia,
Liberia.



Page 13:
Industrial port with
containers in Hong Kong.



Page 14:
Hoover Dam and the
Colorado River, USA.



Page 26:
Skytower, Auckland.



Page 27:
The Jabodebek Light Rail Transit track,
Jakarta, Indonesia.



Page 33:
Panama Canal and
Centenario's Bridge,
Panama.



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