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NATIONAL Growth Areas ALLIANCE

NGAA

International Best Practices in Infrastructure Funding: Lessons for Australia's Outer Metropolitan Growth Areas

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Contents

Acronyms 4
Executive Summary 5
Section 1: Introduction 6
Section 2: Australia's Infrastructure Funding System 8
Overview of Australia's Funding System 8
Addressing Challenges in Outer Metropolitan Growth Areas 9
Section 3: International Case Studies 10
1. United Kingdom: Local Enterprise Partnerships (LEPs) 10
Case Study: Greater Manchester Combined Authority (GMCA) 10
2. The Netherlands: The Infrastructure and Spatial Planning Fund (IBF) 12
Case Study: The Blue-Green Cities Initiative: The City of Dordrecht 12
3. Germany: Federal Ministry of Digital and Transport (BMDV) Program 14
Case study: The Green Berlin initiative 14
4. United States: Community Development Block Grant (CDBG) and Tax Increment Financing (TIF) 16
(i) Community Development Block Grant (CDBG) 16
Case Study: Community Development Block Grant (CDBG) 16
(ii) Tax Increment Financing (TIF) 17
Case Study: TIFs in Chicago, Illinois 18
5. Canada: Investing in Canada Plan 20
Case Study: Smart Cities Initiative 20
Section 4: Adapting international models to the Australian context 22
Section 5: Conclusion and Recommendations 25

Acronyms

ALGA	Australian Local Government Association
APEC	Asia Pacific Economic Cooperation
BMDV	Federal Ministry of Digital and Transport Program (Germany)
CAD	Canadian Dollars
CDBG	Community Development Block Grant (USA)
CDFA	Council of Development Finance Agencies (USA)
FEMAs	Functional Economic Market Areas (UK)
GHG	Greenhouse Gases
GMCA	Greater Manchester Combined Authority (UK)
GMSF	Greater Manchester Spatial Framework (GMSF)
HUD	Department of Housing and Urban Development (USA)
IBF	Infrastructure and Spatial Planning Fund (The Netherlands)
LEP	Local Enterprise Partnerships (UK)
LGA	Local Government Area
MCA	Mayoral combined authorities (UK)
MHCLG	Ministry of Housing, Communities and Local Government (UK)
MSA	Metropolitan Statistical Areas (USA)
NGAA	National Growth Areas Alliance
PAC	Public Accounts Committee (UK)
SVIR	National Policy Strategy for Infrastructure and Spatial Planning (The Netherlands)
TIFF	Tax Increment Financing (USA)
UK	United Kingdom
USA	United States of America
USD	United States Dollars

Executive Summary

This report supports the National Growth Areas Alliance (NGAA) in advocating for targeted infrastructure investment aligned with housing delivery in Australia's outer metropolitan growth areas.

The report examines international best practices in infrastructure funding to offer insights into strategies that could help tackle the challenges faced in outer metropolitan growth areas. The methodology employed includes a rapid systematic literature review that analyses Federally (or nationally) driven infrastructure funding strategies from selected international case studies, providing timely evidence for policymakers. Key themes evaluated include longevity, sustainability, collaboration, community-defined needs, prioritisation, and evaluation.

The case studies selected include the UK's Local Economic Partnership program, the Netherlands' Infrastructure and Spatial Planning Fund program, the German Federal Ministry of Digital and Transport Program, the US's Community Development Block Grant program and Tax Increment Finance initiative, and Canada's Investing in Canada Plan. These programs demonstrate a commitment to long-term infrastructure needs through multi-year funding frameworks that ensure stability and consistent investment across political cycles. They prioritise projects that address the complex challenges of outer metropolitan growth areas, emphasising sustainability and collaboration among various stakeholders. By aligning funding with community-defined needs, these programs incorporate robust evaluation processes that continually assess and improve outcomes, ensuring that investments are impactful and responsive to local contexts.

The Commonwealth government has an opportunity to enhance infrastructure funding approaches by drawing on international best practices. Current funding systems in Australia could benefit from improvements in areas such as longevity, sustainability, cross-sector collaboration, alignment with community needs, and systematic evaluation. By adapting relevant strategies from abroad, the government can refine these approaches to suit Australia's specific regulatory and institutional context. Key to this adaptation is tailoring international models to local requirements, engaging stakeholders, and implementing ongoing evaluation mechanisms, enabling communities to actively shape and monitor outcomes.

To strengthen funding frameworks in Australia, the Commonwealth government should consider:

- Establishing multi-year funding commitments to ensure stability in infrastructure planning and maintenance.
- Strengthening collaboration with local stakeholders and community organisations.
- Implementing integrated funding frameworks that focus on long-term community needs.
- Developing clear prioritisation criteria for impactful projects that specifically address the needs of outer metropolitan growth areas.
- Incorporating regular evaluation to guide continuous improvement.

Adopting these recommendations can help ensure that infrastructure investment more effectively addresses the specific challenges of outer metropolitan growth areas, fostering the development of resilient and sustainable urban environments.

SECTION 1

Section 1: Introduction

The purpose of this report is to support the National Growth Areas Alliance (NGAA) in advocating for targeted infrastructure investment aligned with housing delivery in growth areas.

The Commonwealth of Australia's draft National Urban Policy (2024) outlines over 100 initiatives aimed at urban development, including programs such as the Housing Support Program, the Thriving Suburbs Program, and the Urban Precincts Program[1]. These initiatives primarily address broader urban issues. They replace earlier models like City Deals and provide opportunities for local governments to plan and deliver infrastructure. However, they do not specifically target the complex needs of outer metropolitan growth areas or greenfield developments, highlighting the need for strengthened support for these rapidly expanding regions[2].

To help bridge this gap, this report examines international best practices in infrastructure funding, offering insights into strategies that have effectively addressed challenges similar to those faced by Australia's outer metropolitan growth areas. The selected international case studies emphasise federally (or nationally) driven, place-based, cohesive, and integrated infrastructure funding models that acknowledge the complex needs of growth areas, such as meeting population and housing targets while balancing the management of biodiversity corridors.

The methodology adopted in this report involves a rapid systematic literature review focused on an analysis of selected case study countries, particularly their successful integrated infrastructure funding strategies. This process entailed searching, screening, and synthesising relevant literature and other pertinent sources. Unlike a full systematic review, a rapid review is completed within a shorter timeframe and is tailored to policy contexts where decision-makers need timely evidence to address urgent issues[3].

In examining these international case studies, examples of successful integrated infrastructure funding emerge, each aligning with best practices in addressing the unique challenges of outer metropolitan growth areas.

These examples are evaluated based on key themes, including:

- **Longevity**: The ability of funding mechanisms to support projects over the long term, ensuring viability beyond initial implementation and political cycles.
- **Sustainability:** The capacity of projects to meet current needs without compromising future generations, emphasising environmental, economic, and social resilience.
- **Collaboration:** Engaging multiple stakeholders—including government, private sector, and community organisations—in planning, funding, and implementing infrastructure projects.
- **Community-Defined Needs:** Involving local communities in identifying infrastructure requirements and priorities to ensure projects address actual needs.
- **Prioritisation:** Establishing criteria for selecting and ranking projects based on impact, urgency, and alignment with community needs, with a specific

focus on addressing the challenges faced by outer metropolitan growth areas.

- **Evaluation:** Systematic assessment of projects to measure effectiveness and inform future decision-making.

The following sections of the report are structured as follows:

Section 2 outlines some important shortcomings of the current funding systems, providing support to the NGAA's argument for reform in how infrastructure is funded in outer metropolitan growth areas.

Section 3 presents five examples of international best practices: the UK's Local Economic Partnership program, the Netherlands' Infrastructure and Spatial Planning Fund program, the German Federal Ministry of Digital and Transport Program, the US's Community Development Block Grant program and Tax Increment Finance initiative, and Canada's Investing in Canada Plan. Each example is evaluated against the key themes, longevity, sustainability, collaboration, aligning to community-defined needs, prioritisation, and evaluation.

Section 4 presents a SWOT analysis to guide the Australian Federal Government in assessing the applicability of international models for addressing the challenges of outer metropolitan growth.

Section 5 concludes, providing recommendations for funding mechanisms designed to address the specific challenges faced by Australia's outer metropolitan growth areas.

SECTION 2

Section 2: Australia's Infrastructure Funding System

This section provides an overview of the shortcomings of Australia's current funding systems and advocates for improvement in the infrastructure funding approach for outer metropolitan growth areas.

Overview of Australia's Funding System

Current infrastructure funding in Australia is primarily administered through various grant programs, such as the Infrastructure Investment Program, Local Government Grants, and specific state funding initiatives[4]. However, The current funding systems are fragmented and poorly coordinated, leading to inefficiencies and missed investment opportunities. Funding is often allocated on an ad hoc, project-by-project basis without a national strategic framework, resulting in inconsistent service delivery and gaps[5]. While councils develop community strategic plans as required by State Planning legislation, a cohesive national strategy is lacking. The proposed National Urban Policy aims to provide this guidance but will require consistent, coordinated implementation[6].

An independent review of the Infrastructure Investment Program (2023), which primarily focussed on transport infrastructure, found that many projects were allocated funding before detailed planning or costings were completed, and some were not aligned with national investment priorities[7]. Furthermore, there is no requirement for jurisdictions to have a costed and sequenced transport plan as a basis for funding decisions. Current programs are not designed to support local governments seeking funding for major road upgrades or for the strategic sequencing of projects that span multiple councils and regions. The review also acknowledged that councils require additional funding to manage rising costs and increased pressure on transport infrastructure, particularly as these challenges are intensified by climate change and extreme weather events, which are more pronounced in outer metropolitan areas[8].

Political cycles further complicate funding decisions for local governments, as these decisions are frequently influenced by short-term considerations. This focus on immediate political agendas can result in capital investments that lack sustainable operational funding, impacting the long-term maintenance and effectiveness of these projects. Additionally, tensions between different tiers of government can arise, with state and federal priorities sometimes conflicting with local needs and goals[9]. This misalignment can lead to delays and inconsistent funding, making it challenging for local governments to execute long-term infrastructure plans that effectively support outer metropolitan growth areas. The Australian Local Government Association (ALGA) has repeatedly advocated for more sustainable funding streams directly from the Commonwealth government, presenting evidence of potential savings across federal, state, and local levels, including increases in GDP and health benefits. Together, these factors underscore the importance of stable, long-term funding arrangements to support growth and resilience in local communities[10].

Additionally, the competitive nature of many grant systems tends to advantage bids from well-resourced local councils, thereby disadvantaging outer metropolitan growth areas, particularly smaller councils in the early stages of growth. These rapidly growing local government areas are often under significant capacity

strain and ill-equipped to compete effectively in a highly competitive grants process. This dynamic often results in funding being directed away from regions in critical need of infrastructure support, perpetuating existing inequalities[11].

The Commonwealth of Australia is recognising these deficiencies as it develops new funding programs, such as the Urban Precincts and Partnerships Program[12]. This open, non-competitive funding initiative supports both precinct development proposals and the delivery of construction-ready projects, fostering collaboration between governments, businesses, and communities to create multi-purpose urban precincts tailored to local needs. While this is a positive step, the draft National Urban Policy does not adequately address the distinct challenges faced by new growth areas, resulting in a gap in solutions that specifically responds to the needs of these rapidly developing regions[13].

Addressing Challenges in Outer Metropolitan Growth Areas

Currently, around 20 per cent of Australians live within NGAA member council areas—a proportion expected to grow as migration returns to pre-pandemic levels[14]. These outer metropolitan growth areas face distinct challenges due to rapid population growth, increasing housing demands, and an urgent need for supporting infrastructure such as transport and utilities. However, existing funding mechanisms have not kept pace with these needs, leading to decades of underdeveloped infrastructure. Research consistently highlights significant infrastructure and service shortfalls in these regions[15]. Federal advisory bodies like Infrastructure Australia have acknowledged these deficits, noting that delayed provision of essential community infrastructure negatively impacts liveability[16].

Funding gaps have contributed to congestion and strain on services, leaving residents with poorer access to employment, healthcare, education, and other critical services compared to those in more established suburbs. Many residents are forced to travel long distances for essential services, resulting in car dependency and barriers to accessing jobs, healthcare, and education[17]. Poor transport options have been linked to reduced participation in higher education, limited healthcare access, higher unemployment, and lower levels of social engagement. Furthermore, the push to meet housing demands often leads to the neglect of biodiversity and green spaces, as short-term housing priorities overshadow the need for sustainable development[18].

Local governments in these areas also incur higher costs for both hard infrastructure, such as roads and utilities, and soft infrastructure, like social services and community programs, compared to their counterparts in urban centres, further exacerbating the challenges they encounter[19]. These conditions can result in increased government costs due to higher welfare dependency, unemployment, and acute medical needs. Addressing these infrastructure gaps through a dedicated funding model would not only improve liveability but also foster more sustainable, economically resilient communities. Additionally, there is a critical need for integrated planning that aligns long-term community needs with environmental sustainability, which is essential to developing resilient, vibrant metropolitan growth areas capable of supporting healthy, sustainable communities.

Given these pressing challenges, it is important to examine international best practices in infrastructure funding and planning. Insights from successful models in other countries can help address the unique needs of Australia's outer metropolitan growth areas. By adapting proven strategies for funding allocation and community engagement, Australia can develop a cohesive framework that prioritises long-term community wellbeing. Embracing these lessons is essential for creating resilient communities that can thrive amid rapid growth and change.

SECTION 3

Section 3: International Case Studies

This section examines five international case studies that exemplify best practices in infrastructure funding, evaluated against the key themes of longevity, sustainability, collaboration, community-defined needs, prioritisation, and evaluation.

1. United Kingdom: Local Enterprise Partnerships (LEPs)

Local Enterprise Partnerships (LEPs) are non-statutory bodies, serving as strategic organisations that unite leaders from business, local government, education, and other key stakeholders. Since LEPs' takeover of the former Regional Development Agencies (RDAs) in 2010, 38 LEPs were established on functional economic market areas (FEMAs) to foster business development, support economic growth, and stimulate job creation through projects on education, housing, and transport[20]. The LEPs had an official closure in April 2024 with their authority passed onto the mayoral combined authorities (MCAs) and local authorities.

Case Study: Greater Manchester Combined Authority (GMCA)

The Greater Manchester Region covers an area of 500 square miles making it the second largest city-region in the United Kingdom next to London and is home to 5% of the country's population[21]. As of the latest census in 2021, it has a population of 2,867,769 with a growth rate of 6.9% since 2011[22]. This city-region has the Greater Manchester Spatial Framework (GMSF), which outlines the planning policies from 2020 to 2037, aiming for carbon neutrality by 2038. The plan covers the 10 local authorities in Greater Manchester and emphasises maximizing the potential of brownfield sites, prioritising the redevelopment of town centres, and locating new offices, industries, and warehouses outside the current urban areas. It also tackles the housing crisis through initiatives like social housing projects and supports the development of essential transport and utilities infrastructure[23]. Additionally, the GMSF aims to safeguard environmental assets and establishes a new green belt boundary for this city-region[24].

Alongside the GMSF is the refreshed version of the Greater Manchester Transport Strategy 2040, the Four-Year-Transport Delivery Plan (2020-2025) and Local Implementation Plans to ensure that new housing developments and work opportunities are sustainably linked into the existing Greater Manchester transport system[25]. In particular, the Transport Strategy 2040 highlights the need for a balanced network that reduces car dependency and promotes active and public transport to meet 50% of travel demand.

Highlights:

- The Greater Manchester Spatial Framework provides a strategic guide for development.
- A £1.5 billion investment is allocated for enhancements in public transport.
- Long-term funding is secured through the devolution of powers.

- The approach addresses the complex challenges of outer growth areas.

Insights by theme:

Longevity

LEPs operate with long-term goals in mind, often 20 to 30-year-strategies, ensuring that funded projects have lasting impact. They also operate independently of the four-year political cycles that govern local government. This stability allows for ongoing economic support and practical momentum, complementing the vision and authority of political leaders, which in turn fosters confidence among businesses and investors[26].

Sustainability

LEPs focus on sustainable local economic growth by supporting green initiatives, including low-carbon technologies and energy-efficient infrastructure. Their emphasis on local partnerships fosters community-driven, environmentally responsible development[27].

Collaboration

LEPs bring together businesses, local government, and community groups to define priorities and ensure that community needs are met. They proved overtime to have the ability to bring inward investment primarily through engaging with businesses, attracting people who have sound business understanding, and being proactive in lobbying by delivering business briefings and having a good access to members of Parliament (MPs).[28]

Community-Defined Needs

LEPs is part of the wider devolution landscape implemented in England. Their existence is premised on the need to shift England's policies towards becoming 'place-based' as opposed to being 'place-neutral'.[29] During its existence, there were nine city regions in England that had both a LEP and a mayoral combined authority (MCA).

Prioritisation

Transparent prioritisation processes focus on projects that address local economic and social inequalities. The areas where LEPs were carried out viewed integration as an opportunity to reshape the strategic and operational frameworks of services that serve local interests. These arrangements differ across regions, with some local authorities playing a significant role alongside LEPs in supporting their initiatives.[30]

LEPs play a crucial role in addressing the complex challenges faced by outer growth areas by fostering economic development and promoting sustainable growth. LEPs are designed to bring together local authorities, businesses, and community organisations to identify and respond to regional needs, including infrastructure development, housing, and job creation. By leveraging local knowledge and resources, LEPs facilitate tailored solutions that address specific challenges such as transport connectivity, skills shortages, and community engagement. Furthermore, they often secure funding for projects that enhance public services and promote economic resilience, ensuring that outer growth areas are better equipped to manage the pressures of rapid development and changing demographic trend insights into LEPs and their impact.[31]

Evaluation

There is no available comprehensive evaluation of LEPs yet, to date, despite their closure earlier this year. Different government ministries, such as the Department of Business, Energy and Industrial Strategy (BEIS) have a commissioned report based on self-reported assessments of LEPs' capacity and capabilities in 2020. The goal of this research was to evaluate the institutional capacity—encompassing roles, functions, and resources—of all LEPs to effectively implement relevant place-based policies. The Department for Communities and Local Government also conducted a LEPs review in 2017 in relation to governance and transparency. It is notable that while LEPs' were still in place, the House of Commons had growing doubts and concerns emerged regarding the capabilities of these LEPs as well as their governance and transparency standards (House of Commons, 2016). The Public Accounts Committee urged for structured assessments of LEP capabilities before any further public funding was released, amid reported stakeholder worries about vested interests exploiting inadequate governance and financial decision-making standards.

In total, LEPs received nearly £12 billion in public funding from their establishment in 2010/11 to 2019/20. In 2019, the Public Accounts Committee (PAC) raised concerns about the lack of proper evaluation of this spending by the Ministry of Housing, Communities and Local Government (MHCLG), the department overseeing LEPs. The PAC's inquiry also revealed that LEPs had underspent their Local Growth Fund allocations by more than £1.1 billion in the three years leading up to the end of 2017/18, indicating potential challenges in their capacity to implement ambitious local growth projects.[32]

2. The Netherlands: The Infrastructure and Spatial Planning Fund (IBF)

The government of the Netherlands prioritises investments from the Infrastructure and Spatial Planning Fund (IBF) from 2021 to 2028, as indicated in the National Policy Strategy for Infrastructure and Spatial Planning (SVIR), to improve the standard of accessibility in urban regions around the mainports, brainport *(high-tech areas)* and greenports and their connections with the hinterland (partly on the basis of the accessibility indicator and the results of the National Market and Capacity Analysis). Investments should be 'smart', which means they need to be diversified across various modalities and grounded not just in traffic engineering principles, but also in the needs of users and the overall spatial and economic dynamics of both regions and the country.[33]

Case Study: The Blue-Green Cities Initiative: The City of Dordrecht

To focus on sustainable urban development combining green spaces with urban infrastructure, the City of Dordrecht started its Blue-Green Cities initiative in 2016. With a population of around 122, 000 people in 2024[34], this old Dutch city is located in the west of the Netherlands and is the centre of the Smart Delta Drechtsteden, which is the industrial engine of the Rotterdam region.[35] Dordrecht has an annual growth rate of 7.44%[36] and is located on the on the edge of the conurbation of the Randstad. It is enhancing its vision by focusing on its existing blue-green network, particularly in the Dordwijkzone and along the Wantij river. The plan aims to better utilise green spaces—like parks and green streets—and improve connections between these areas and the city's waterways. By linking them through walking and cycling routes, residents have easier access to vibrant green-blue areas and the nearby Biesbosch park. This initiative not only aims to improve liveability and attractiveness but also to create a climate buffer that enhances social and ecosystem resilience against climate change. Achievements to date include an approved national investment subsidies for three of the blue-green projects in this area; creation of a city forest and completion of six maintenance projects specific to the initiative; widespread political support and acceptance and participation by citizens in greening their immediate environs such as planting out their paved gardens.[37] Ultimately, Dordrecht seeks to develop a city that is enjoyable to live and work in, supporting its goal of increasing the population by appealing to potential residents.[38]

This case study shows how a specific blue-green vision was adopted by Directors at the local level and considered as important for ensuring there was alignment with the city as a whole. This proved to be a key success factor for the projects through which this integrated program was implemented.[39] The neighbourhood approach was identified to be one of the ways to deliver a project within this initiative and residents were regarded as key stakeholders during the process. Traditional physical-technical decision-making was widened to also encompass social-organisational value interests. Flexibility was mainly sought by the municipality - This was then translated into a multi-annual plan.[40]

Highlights:

- Strong collaboration between municipalities, private developers, and NGOs and the local community.
- Projects enhancing urban resilience against flooding.
- Strong emphasis on biodiversity and long-term sustainability.
- The approach addresses the complex challenges of outer growth areas.

Insights by Themes:

Longevity

The extended use of the IBF from 2021-2028 is essential in the overall goals of the SVIR to make the Netherlands among the top ten most competitive economies globally by 2040, fostering a premier environment for businesses and knowledge workers through outstanding spatial and economic infrastructure.[41] The IBF is one of the identified financial instruments in the SVIR to achieve the overall goal of making the Netherlands competitive, accessible, liveable and safe in the medium term (2028).[42]

Sustainability

The Netherlands' IBF focuses on integrating environmental sustainability into spatial planning. It funds projects that reduce environmental impact, enhance resilience to climate change, and promote efficient land use.

Collaboration

The central government aims to bring spatial planning decision-making closer to stakeholders, including individuals and businesses, by delegating more authority to local and provincial governments as the primary option for decentralisation. This approach will prioritise user needs. Additionally, central government policy will be implemented more selectively, concentrating on 13 national interests for which the central government will take responsibility and ensure successful outcomes.[43] The adoption of SVIR signifies the end of a prolonged period of government involvement in landscape planning in the Netherlands. In this policy strategy, the national government focused on infrastructure, logistics, and

economic competitiveness as its primary responsibilities, while delegating urbanisation and environmental policy to the provinces and municipalities. [44]

Community-Defined Needs

In new-growth areas, there is public control over the ultimate form taken by development, including its urban form and placemaking qualities. Local planning authorities make decisions over the content of development proposals and plans, without developers having a right to appeal to a higher decision-making body. The dominant role of the land-use plan and the municipality's monopoly power over the award of planning permission, has meant that private land assembly and development is always closely controlled by planning authorities, and frequently involves some degree of municipal ownership in combination with private ownership. There is now no single or dominant model, there are various different approaches taken between and within municipalities. All approaches emphasise that municipalities ensure that new development prioritise community-defined needs.[45]

Prioritisation

Priorities in the identification of locations for housing development can be made by national, provincial, and municipal tiers of government by means of indicative structure plans prepared at these levels. The national government uses structure plans to set out national scale policy areas such as transport infrastructure and has in the past used them to indicate housing growth areas at a broad scale. Municipalities also use structure visions to indicate housing locations, using the identification of sites within them to invite development interest. Where municipalities pursue an active land policy, sites are usually only indicated once the municipality has acquired a substantial part of the land.

The IBF effectively addresses the complex challenges of outer growth areas by prioritising sustainable development and integrated planning. The IBF facilitates long-term investments in infrastructure projects that improve connectivity and accessibility, particularly in regions experiencing rapid urbanisation. By focusing on collaboration between local governments, businesses, and community stakeholders, the IBF ensures that infrastructure developments align with the specific needs of outer growth areas, such as affordable housing and efficient public transport systems. Moreover, the fund encourages innovative solutions that promote environmental sustainability, addressing issues like flooding and urban sprawl while enhancing the overall quality of life in these communities. This strategic approach fosters resilience and adaptability in the face of demographic changes and economic pressures, crucial for the sustainable development of outer growth areas in the Netherlands.[46]

Evaluation

The Netherlands Environmental Assessment Agency collaborates with the Mobility Expertise Centre to implement the Infrastructure and Spatial Planning monitor. This monitoring framework replaces the Spatial Policy Document monitor and focuses primarily on assessing how well national interests have been implemented in relation to the defined ambitions in the SVIR.[47]

3. Germany: Federal Ministry of Digital and Transport (BMDV) Program

The German Federal Ministry of Digital and Transport Program - Bundesministerium für Digitales und Verkehr, (BMDV) - is a key component of the nation's infrastructure and transport policy, focusing on the development of digital and transport systems with an emphasis on sustainability, innovation, and regional cohesion.[48] The program operates through a structured multi-level governance system, where the federal, state, and local governments collaborate to ensure effective planning and implementation. At the federal level, the Ministry sets national policies, allocates funding, and develops strategic plans like the Federal Transport Infrastructure Plan. States adapt these policies to local needs, manage regional funding, and coordinate with municipalities. Local governments are responsible for detailed planning and delivery of infrastructure, engaging communities through consultations. Public-private partnerships enhance efficiency, while cross-government collaboration ensures integration across sectors. Ongoing monitoring and feedback loops allow the system to evolve and adapt, making it responsive to emerging needs.

Case study: The Green Berlin initiative

The Green Berlin initiative, part of the German Federal Ministry of Digital and Transport Program, focuses on promoting sustainable urban mobility through eco-friendly transportation options like electric vehicles, e-bikes, and integrated public transport. It operates through collaboration between federal, state, and local governments, with the federal level providing funding and strategic direction, while Berlin's local authorities adapt the initiative to city-specific needs. The program incorporates digital technologies such as smart traffic management and real-time transport apps and encourages private sector investment. Community consultations ensure the project addresses local challenges, and ongoing monitoring evaluates its effectiveness in reducing emissions and traffic congestion, aligning with Germany's broader sustainability goals.[49]

Highlights:

- Expands 5G, broadband, and smart transport systems.
- Promotes green mobility, including electric vehicles and eco-friendly public transport.
- Invests in autonomous driving and smart city initiatives.
- Ensures alignment across federal, state, and local governments.
- The approach addresses the complex challenges of outer growth areas.

Insights by Themes:

Longevity

The BMDV program is designed for long-term impact, particularly through its focus on sustainable transport solutions and the digitalisation of infrastructure. By addressing the future needs of urban and rural mobility, it envisions lasting improvements to both the environment and the economy. The program prioritises climate-neutral transport solutions and the digitisation of transport networks, ensuring the program remains relevant and effective over time. It also integrates technological innovation, such as smart traffic management systems and digital infrastructure for electric vehicles, supporting a sustainable long-term vision. Furthermore, Germany's commitment to climate goals and the European Green Deal ensures that the BMDV is embedded in broader national and international policies, reinforcing its long-term strategy.

Sustainability

The BMDV program prioritises sustainable transport and infrastructure development, including green mobility solutions, digital connectivity, and eco-friendly technologies, all contributing to reducing environmental impacts in growing urban areas.

Collaboration

Collaboration is at the core of the BMDV program. It promotes partnerships at various levels, including federal, state, and local governments, as well as private sector stakeholders and research institutions. The multi-level governance approach ensures that all relevant actors are involved in decision-making and implementation. The program also encourages cross-sector collaboration between transport, digital infrastructure, and environmental policy, aligning with Germany's approach to integrated planning. Through collaborative frameworks, such as regional task forces and joint planning initiatives, the program fosters innovation and creates synergies between sectors. Furthermore, the BMDV facilitates public-private partnerships, ensuring that private investment plays a role in expanding digital infrastructure and transport solutions.

Community-Defined Needs

The BMDV program places significant emphasis on community input and region-specific needs. By focusing on local mobility challenges, the program ensures that transport solutions are tailored to the specific characteristics of communities. This approach helps in overcoming disparities between urban and rural regions by prioritising needs such as affordable public transport, electromobility infrastructure, and digital connectivity. The federal government actively engages local governments and community-based organisations in the design and

implementation of projects. For example, public consultation processes allow communities to voice their concerns and priorities regarding transportation accessibility, safety, and environmental impacts. The participatory planning model ensures that projects are not imposed from the top down but are aligned with local needs, contributing to a sense of ownership, and fostering community support.

Prioritisation

The BMDV program prioritises digitalisation and sustainability in transport infrastructure. Key areas include expanding digital connectivity (5G, broadband), supporting green mobility (electric vehicles, eco-friendly public transport), and fostering innovation in smart city technology and autonomous vehicles. Long-term infrastructure projects are guided by the Federal Transport Infrastructure Plan, ensuring alignment with environmental goals and future transport needs.

Evaluation

Evaluation is a critical component of the BMDV program, with a strong focus on ensuring that projects meet their intended goals and contribute to broader policy outcomes. The program employs both quantitative and qualitative evaluation methods, assessing factors such as project efficiency**,** environmental impact, and user satisfaction. Regular assessments help identify potential shortcomings and adjust strategies to improve implementation. The BMDV also conducts longitudinal studies to monitor the sustainability and impact of transport projects over time, including their role in reducing emissions and improving regional connectivity. Furthermore, data collection and digital tools are integrated into the evaluation process, allowing for real-time monitoring and feedback loops. By incorporating performance indicators and tracking progress toward key objectives like carbon neutrality and mobility equity, the BMDV ensures that its initiatives remain on track and continue to evolve in response to changing community and environmental needs.

Initiatives like the Green Berlin leverages significant public funding, aligning with the cities and Germany's broader sustainability goals. Berlin's commitment to climate neutrality by 2030 ensures substantial support for green initiatives, with funding coming from both local resources and national programs. The program relies heavily on public funding from the Berlin state government, which can ensure a stable source of revenue. However, this dependence also exposes the program to budgetary constraints and political fluctuations.[50] Additionally, Berlin municipality accesses EU funds such as Horizon Europe for research and innovation and the European Green Deal initiatives, further boosting its green agenda.[51] These funding sources are crucial for driving the city's clean energy, environmental sustainability, and green innovation efforts. While this support is crucial for expanding financial resources, it can also introduce bureaucratic complexities that may slow project implementation.[52]

The German Federal Ministry of Digital and Transport (BMDV) program addresses the challenges of outer growth areas through a combination of targeted infrastructure development, multi-level governance, and strong public-private partnerships. By aligning national policies with regional priorities, BMDV ensures that projects meet the specific needs of rapidly expanding urban fringes. These projects often focus on sustainable transport systems, improved connectivity, and integrating green technologies, helping to manage population growth while minimizing environmental impact. Moreover, through EU funds like Horizon Europe, the program supports innovation and sustainable development in these areas, tackling challenges such as congestion, environmental degradation, and economic inequality.[53]

4. United States: Community Development Block Grant (CDBG) and Tax Increment Financing (TIF)

The United States has the Community Development Block Grant (CDBG) and the Tax Increment Financing (TIF) initiative as its two longest running financing tools used to fund infrastructure projects. This section provides highlights about these two funding tools.

(i) Community Development Block Grant (CDBG)

The Community Development Block Grant (CDBG) is a formula-based program managed by the United States Department of Housing and Urban Development (HUD) that offers federal grants to localities to fund economic development, neighbourhood redevelopment, and community services.[54] It allocates about USD $3.5 billion each year to these kinds of projects.[55] To obtain this funding, grantees must show that their funded activities align with one of the program's three statutory objectives: benefiting low- and moderate-income (LMI) individuals; helping to prevent or eliminate slums or blight; or addressing urgent needs that pose an immediate threat to the health and safety of residents.[56]

The HUD uses a dual formula, known as Formula A and Formula B to allocate grants to entitlement communities and to states. As shown in Table 1, Formula A for both entitlement communities and states allocate funds according to metropolitan shares of population, poverty, and overcrowding. Meanwhile, Formula B allocates funds based on growth lag, poverty, and pre-1940 housing. After HUD's calculation of the amounts for each entitlement jurisdiction under each formula, jurisdictions are assigned the larger of the two grants. Under this dual formula system, the total amount allocated to CDBG grantees has consistently surpassed the total funds available through appropriation. To ensure the total grant amount for entitlement communities stays within the appropriated limit, the HUD applies a pro rata reduction.[57]

Case Study: Community Development Block Grant (CDBG)

The US HUD features CBDG project profiles to showcase examples of projects under this grant program. These project profiles include cases on suitable housing, economic development, neighbourhood revitalisation, and suitable living environment. The case of the Joplin Early Childhood Centre in Missouri, a state of 6,154,913 people in 2020 and spanning an area of 68,727.3 square miles[59] , for example, highlights how the CDBG was used to construct this facility. It was a collaborative effort between the City and the State of Missouri. Recognising the urgent need to improve early childhood education, these two levels of government partnered to utilise the CDBG-Disaster Recovery (DR) funds from both entities to build the USD10 million Early Childhood Centre after a tornado hit Joplin in 2011. Through this project, a key result of having an affordable new learning centre became possible.

Highlights:

- USD $3.5 billion allocated annually for local development.
- Flexible funding to address specific community needs.
- Strong emphasis on stakeholder collaboration and citizen engagement.
- The approach addresses the complex challenges of outer growth areas.

Insights by Themes:

Longevity

The CBDG was established by the *Housing and Community Development Act of 1974*, which serves as the largest formula-based block grant from the United States HUD to state and local governments.[60] It is notable that the formula used for assessing CBDG projects has not changed in the past 40 years despite numerous reports since 1977 highlighting issues in the current formula that lead to inequitable distribution of funds.[61] Depending on the project of the grantee, these grants can be used for over a period of one to three years ensuring that at least 70% of CBDG funds must be allocated to activities that benefit low- and moderate-income individuals.[62]

Table 1: CBDG Dual Formula for Entitlement Communities and States[58]

Entitlement Communities		States (Non-entitlements)	
Formula A	Formula B	Formula A	Formula B
25% population	25% growth lag	25% population	25% growth lag
50% poverty	30% poverty	50% poverty	30% poverty
25% overcrowding	50% pre-1940 housing	25% overcrowding	50% pre-1940 housing
Metropolitan denominators except for growth lag. Grant is larger of two formulas less a pro rata reduction.		State non-entitlement total denominators. Grant is larger of two formulas less a pro rata reduction.	

Sustainability

CDBG targets sustainability by funding projects that enhance housing, utilities, and public spaces in low-income areas.

Collaboration

In the case of the CBDG, a grantee must create and adhere to a comprehensive plan that promotes citizen participation, particularly engaging individuals of low- and moderate-income, especially those from predominantly low- and moderate-income neighbourhoods, slum or blighted areas, and areas targeted for CDBG funding. The plan must:

- Ensure citizens have reasonable and timely access to local meetings, information, and records related to both proposed and actual fund usage.
- Include provisions for public hearings to gather citizen input and address proposals and questions at all stages of the community development program, including the identification of needs, review of proposed activities, and evaluation of program performance.
- Outline a process for providing timely written responses to complaints and grievances.
- Specify how the needs of non-English speaking residents will be addressed in public hearings where a significant number of such residents are expected to participate.[63]

Community-Defined Needs

CDBG's flexible funding enables eligible grantees to address specific local needs that are not met by other federal funding sources. Most annual CDBG expenditures are allocated to five main categories:

1. **Public Improvements**: Enhancements to public facilities and infrastructure, including water and sewer upgrades, street and sidewalk improvements, senior centres, and homeless services.
2. **Housing**: Activities related to housing construction and rehabilitation, public housing modernization, housing assistance, building code enforcement, and hazard remediation.
3. **Administration and Planning**: This includes general program administration, fair housing initiatives, and regional planning efforts.
4. **Public Services**: Services such as housing counselling, youth programs, transportation, mental health support, childcare, and food banks.[64]

Prioritisation

Priorities for the CDBG include principal cities of Metropolitan Statistical Areas (MSAs), other metropolitan cities with populations of at least 50,000, and qualified urban counties with populations of at least 200,000 (excluding the population of entitled cities).[65] The allocation of CDBG funds is determined by factors such as poverty levels, population size, growth lag, housing overcrowding, and the age of housing stock. Recipients must ensure that at least 70 percent of the funds received are directed toward individuals with low- or moderate-incomes.[66]

The Community Development Block Grant (CDBG) program addresses the complex challenges of outer growth areas by providing flexible funding that supports a range of community development initiatives tailored to local needs. This program enables jurisdictions to allocate resources for public improvements, housing, and essential services, ensuring that infrastructure development keeps pace with rapid growth. By prioritizing investments in areas that benefit low- and moderate-income residents, CDBG fosters economic revitalization and helps alleviate issues such as housing shortages and inadequate public amenities.[67] Additionally, the program encourages community engagement and collaboration among stakeholders, including local governments, businesses, and residents, to identify specific needs and develop targeted solutions.[68] This participatory approach ensures that CDBG-funded projects are aligned with the unique challenges faced by outer growth areas, ultimately enhancing community resilience and quality of life.

Evaluation

A recent US HUD-commissioned study assessing the CBDG shows that the current grants allocation formula's effectiveness in fairly distributing funds to areas with similar needs has significantly declined with each decade as new data has been introduced. Overall, this study highlights that CDBG funding has decreased in real terms, providing 76% less than it did in 1978 when adjusted for inflation. If CDBG appropriations had kept pace with both inflation and population growth, the program would be worth USD $21.3 billion today.[69] Previous studies such as by Greg Miller and Todd Richardson in 2023 and Robert Collinson in 2013 also strongly reiterated the need to evaluate the allocation formula in relation to community need.

(ii) Tax Increment Financing (TIF)

Tax Increment Financing is the most common public financing tool used for economic development in the United States.[70] It designates funds for economic development activities in a specific area by allocating the expected increases in property tax revenue—commonly referred to as the "increment"—that are anticipated from TIF investments, which aim to encourage new development

and enhance real estate value.[71] As of recent reports, 49 states have active TIF-enabling legislation, with variations depending on the state.[72]

Case Study: TIFs in Chicago, Illinois

TIF case studies are available from various sources, showing how it is being used in various locations across the country.[73] Mixed outcomes are found in these studies showing the context-based status in each case. The 2016 Urban Land Institute study, for example, shows cases of smaller communities utilising creative finance combining TIF with other sources of funding such as the Federal government, the private sector, and conventional bank loans. David Merriman's 2018 study also provides a comprehensive assessment and examples of how TIFs are used in selected cities. The Council of Development Finance Agencies (CDFA) has also an available online resource database on the variety of TIF-related studies and topics.

To highlight a particular TIF user case, the state of Illinois introduced TIF in 1977 with the enactment of the *Tax Increment Allocation Redevelopment Act*, which was reinstated in 1999.[74] The primary goal of TIF in Illinois is to stimulate economic revitalisation by supporting development in distressed areas, thereby increasing property values and making further development more appealing. In particular, the City of Chicago, which has a population of 2,746,388 people in 2020[75] and spanning an area of 228 square miles (591 square km)[76], has been using this financing tool since the late 1980s.[77] It is also the biggest TIF user in the country with the local government collecting USD $461 million in property tax revenues alone.[78] However, despite its large-scale use, it is notable that the use of TIFs have been faced by controversies, primarily centred around who has the authority to make decisions regarding property tax dollars and how the city government monitors and reports the collection and distribution of TIF funds.[79]

Highlights:

- Emphasis on smart growth principles to prevent sprawl.
- Involvement of various stakeholders, including local government, businesses, and community groups.
- Long-term funding secured for infrastructure projects, focusing on transportation and public amenities.
- The approach addresses the complex challenges of outer growth areas.

Insights by Themes:

Longevity

TIFs have been used in the United States since 1952 when California first used this method lasting up to the present time.[80] Since redevelopment, infrastructure improvement, and community regeneration require significant time to complete, TIF mechanisms are typically established for extended periods to support these long-term projects. This allows local governments to capture future tax revenues generated from increased property values over time, effectively funding ongoing investments in the community. By maintaining TIFs for a longer duration, municipalities can better manage the financial aspects of urban development and ensure that the necessary infrastructure is in place to support growth.

In Illinois, for example, each TIF district is authorised for a period of 23 years, based on a broad set of standards that define what qualifies as an eligible area.[81] Since a TIF is not a property tax reduction; rather, it signifies a departure from the standard budgetary process. Most non-capital government spending on economic development goes through an annual appropriation cycle, competing with other priorities for approval from a city council or similar governing body. These funds are explicitly appropriated, while TIF district revenues are considered tax expenditures—meaning the tax revenues are redirected before they reach higher levels of government—requiring no explicit appropriation once the TIF district is established by officials.[82]

Sustainability

TIFs promotes sustainability by funding eco-friendly infrastructure projects through future tax revenues from increased property values. It supports investments in green buildings, renewable energy, and climate-resilient urban systems, helping reduce environmental impacts while encouraging private sector participation in sustainable development.

Collaboration

As an 'economic development method', TIFs links government with the for-profit sector. TIFs function as a flexible network of individuals, documents, events, materials, and technologies—some intentionally curated and others coincidentally gathered—to promote and advocate for the TIF program to city officials through events like annual conferences.[83] The fundamental principles of TIF operation generally involve having a state legislation to outline the criteria for establishing TIF districts and, with state oversight, allows cities to implement TIFs. Typically, city governments enact an ordinance to create the TIF district, detailing its objectives, permissible expenditures, and operational terms.[84]

Community-Defined Needs

A TIF district is a powerful tool that can address various

needs within a community. It is commonly used to stimulate development, eliminate blight, tackle environmental issues, and facilitate adaptive reuse. TIF financing leverages the increased property and/or sales taxes generated by new developments to cover associated costs, which may include public infrastructure, land acquisition, relocation, demolition, utilities, debt service, and planning expenses. Additionally, a TIF district can support a range of other improvements, such as:

- Sewer expansion and repair
- Park enhancements
- Bridge construction and repair
- Street lighting
- Property and building acquisition
- Environmental remediation
- Street construction and expansion[85]

Prioritisation

In setting priorities for TIFs, state-enabling legislation provides for distinct qualifying conditions for various types of TIF districts.[86] They are often used for the following economic development priorities:

- Guiding public finance dollars towards targeted investment and development
- Developing industry niches and opening new markets for services that do not exist in a given geographic area
- Supporting overall development within a specific geographic area
- Reusing existing infrastructure and cleaning up polluted or brownfield land
- Creating or retaining jobs and supporting industrial development[87]

TIF approaches effectively address the complex challenges faced by outer growth areas by promoting smart growth principles, engaging diverse stakeholders, and securing long-term funding for infrastructure projects. By focusing on efficient land use, TIFs help prevent urban sprawl, fostering the development of higher-density, walkable communities that are essential for sustainable growth. The collaborative nature of TIF projects involves local governments, businesses, and community groups, ensuring that the specific needs of the community are met and aligning projects with local development goals. Additionally, TIF mechanisms provide critical long-term funding for transportation and public amenities, laying the groundwork for improved infrastructure and enhanced quality of life in these rapidly expanding regions. This comprehensive approach makes TIFs a valuable tool for urban development, as they effectively stimulate economic growth while addressing the multifaceted issues associated with growth in outer metropolitan areas.

Evaluation

TIFs have been a topic that intrigues many scholars, primarily for two reasons: (1) to see if TIFs are adopted by municipality officials to stimulate growth in their localities or due to growth already available that the local government wants to capture a tax base, which might otherwise slip away to overlying governments (e.g., counties, schools districts, or other special districts) and (2) if TIFs are used to gain competitive advantage over neighbouring areas.[88] Although there is limited clear evidence that TIF has significantly benefited the municipalities that implement it, proponents highlight that affected jurisdictions benefit from a larger tax base after the termination of a TIF district with an increment.[89]

However, critics have a strong emphasis that TIFs can be a financial burden for overlapping jurisdictions because TIF can impact both the base value and the increment that these jurisdictions would otherwise have access to.[90] Additionally, it has become a source of intergovernmental tension and conflict regarding the extent of public support for the private sector.[91] Critics argue that TIF is a financial burden, diminishing property values in impacted areas, particularly for school districts.[92]

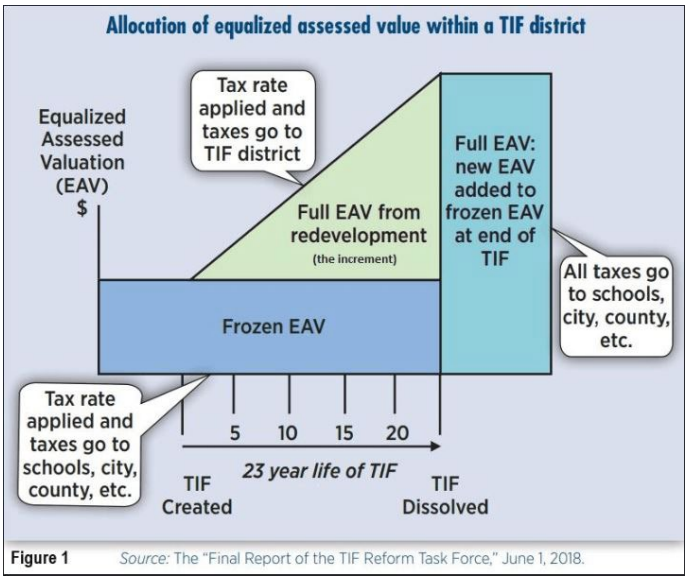

Figure 1 *Source:* The "Final Report of the TIF Reform Task Force," June 1, 2018.

5. Canada: Investing in Canada Plan

The Investing in Canada Plan was launched in 2016 by the Government of Canada. It is a long-term infrastructure investment strategy aimed at stimulating economic growth, creating jobs, and improving the quality of life for Canadians. The plan commits significant funding—over CAD 180 billion over 12 years—to a wide range of projects to enhance infrastructure across the country, including public transit, green infrastructure, social infrastructure, trade and transportation, and rural and northern communities. This initiative involves 21 federal departments and agencies[93] and has three objectives: create long-term economic growth to build a stronger middle class; support the resilience of communities and transition to a clean growth economy; and build social inclusion and socio-economic outcomes for all Canadians.[94]

Case Study: Smart Cities Initiative

The Smart Cities Challenge is part of Canada's broader infrastructure and innovation efforts. It was launched in 2017 and will run until 2027. The initiative is a nationwide competition open to all municipalities, local and regional governments, as well as Indigenous communities. It encourages these communities to adopt a smart cities approach by utilising innovation, data, and connected technologies to improve the quality of life for residents. The competition focuses on integrating infrastructure and technology, particularly in outer and more remote areas, to address various urban challenges. By embracing smart solutions, communities can address issues related to sustainability, transportation, and public services, while also enhancing economic opportunities and overall liveability. The first round of winners was announced in 2019, with the Montréal In Common project named the top winner, with this city of 1,762,949 people and spanning an area of 364.74 square km[95] receiving CAD 50 million to innovate in mobility, food, and data and access to municipal legislation.

Highlights:

- Enhancement of public transit and digital infrastructure.
- Strong emphasis on sustainable development and community engagement.
- Collaboration with private technology firms and community organisations.
- The approach addresses the complex challenges of outer growth areas.

Insights by Themes:

Longevity

The Investing in Canada Plan is a 12-year plan that ensures infrastructure projects continue beyond political cycles. It sets itself apart from earlier infrastructure initiatives by focusing on long-term goals, clear priorities, and measurable outcomes rather than just outputs. It provides sustained funding to facilitate planning and prioritisation across all levels of government. The plan addresses a diverse range of needs, supporting large-scale transformative projects in areas such as housing, public transit, community centres, and highways, all aimed at benefiting Canadians both now and in the future.[96]

Sustainability

This program promotes sustainability through large-scale investments in green infrastructure, including clean energy, public transportation, and water systems, aiming to reduce carbon footprints and enhance environmental resilience.

Collaboration

Provinces, territories, municipalities, and Indigenous communities have been essential partners that collaborate in this initiative since its inception. Over the 12-year period of the Investing in Canada Plan, Infrastructure Canada is responsible for managing over CAD 113 billion in federal funding, which is being distributed to provincial, territorial, and municipal partners. This distribution occurs through bilateral agreements and targeted funding programs, including the Disaster Mitigation and Adaptation Fund, the federal Gas Tax Fund, and innovative initiatives such as the Smart Cities Challenge and the Canada Infrastructure Bank.[97] The federal government's increased infrastructure investment, bolstered by contributions from all levels of government, more than doubles the Plan's funding impact.[98]

Community-Defined Needs

The plan acknowledges that local needs differ significantly across the country, and that local governments are best positioned to understand their communities' requirements and identify effective solutions. It also recognises that outer urban areas have unique infrastructure needs that differ from urban centres, rural regions, and Northern communities. Moreover, factors such as climate change, demographics, and economic growth potential vary by jurisdiction. In addition to these locational differences, a key focus of the Investing in Canada Plan is to address the infrastructure gap in Indigenous communities. The plan aims to promote reconciliation and shared economic interests by making unprecedented investments in critical infrastructure for these communities. This includes funding for new and renovated housing, clean drinking water, essential community infrastructure like roads and wastewater systems, as well as facilities for culture, recreation, and community services.[99]

Prioritisation

The Investing in Canada Plan allocates funds through four key investment streams, designed to meet the Plan's objectives and desired outcomes: public transit, green infrastructure, social infrastructure, rural and northern communities, and trade and transportation.[100]

The Investing in Canada Plan addresses the complex challenges of outer growth areas by providing targeted funding for infrastructure projects that enhance economic development and community resilience. This multi-billion-dollar initiative aims to improve public transit, roads, and green infrastructure, fostering connectivity and accessibility in rapidly growing regions. By emphasizing collaboration among federal, provincial, and municipal governments, the plan ensures that investments align with local needs, such as affordable housing and sustainable urban development. Additionally, it focuses on supporting growth areas by facilitating infrastructure development that accommodates increasing populations, while also promoting smart growth principles to prevent urban sprawl and ensure sustainable community development.[101]

Evaluation

To allow these programs to be viewed collectively and understood as a whole, departments track how programs are achieving the following seven outcomes:

1. Rate of economic growth is increased in an inclusive and sustainable way.
2. Environmental quality improved, GHG emissions reduced, and community resilience improved.
3. Urban mobility in Canadian communities is improved.
4. Housing is affordable and in good condition and homelessness is reduced yearly.
5. Early learning and childcare is of high quality, affordable, flexible and inclusive
6. Canadian communities are more inclusive and accessible.[102]

According to the APEC Policy Report 2018, the Investing in Canada Plan faces key challenges that include insufficient data on existing asset conditions and performance, a lack of innovation in infrastructure development, and the need to optimise public funding while attracting private capital. To tackle these issues, the plan aims to introduce new methods for measuring the impact of infrastructure investments, starting with enhanced data collection.[103] The APEC Policy Report cites the Investing in Canada Fund has introduced new ways to analyse the impact of infrastructure investments. For instance, the Canada Mortgage and Housing Corporation has enhanced housing data through improved analytics and comprehensive economy-wide surveys, along with expanding program data collection. Similarly, Employment and Social Development Canada has utilised existing administrative data to bolster early learning and childcare data analysis and to establish a new methodology for tracking shelter use patterns among the homeless.[104]

SECTION 4

Section 4: Adapting international models to the Australian context

This section presents a SWOT analysis to guide the Australian Federal Government in assessing the applicability of international models for addressing the complex challenges of outer metropolitan growth. By examining the strengths, opportunities, weaknesses, and threats associated with these programs, the government can identify which elements may be most effective in supporting sustainable development and growth in Australia's rapidly expanding outer metropolitan areas.

Strengths

UK Local Economic Partnership (LEP): LEPs encourage collaboration between local authorities and businesses, focusing on regional autonomy and adapting to local needs. Strong ties between business and public sectors help reduce reliance on government funding, making this model attractive for Australian councils seeking sustainable, locally driven growth.

The Netherlands' Infrastructure and Spatial Planning Fund (IBF): The Netherlands' program promotes integrated spatial planning, prioritising environmental impact and strategic land use. This model is well-suited for Australian councils aiming to manage rapid growth sustainably while preserving environmental resources, particularly in areas vulnerable to climate impacts.

Germany's BMDV program focuses on sustainability through green mobility and digital infrastructure, promoting eco-friendly transport systems and innovative technologies. By prioritising sustainable urban growth and fostering public-private partnerships, it offers valuable lessons for Australian councils seeking to enhance resilience and reduce environmental impacts in outer metropolitan areas.

US Community Development Block Grant (CDBG) and Tax Increment Finance (TIF): The CDBG program prioritises low- to moderate-income residents through housing, public facilities, and economic development, while TIF encourages private investment by leveraging future tax revenue projections. These programs could serve as models for Australian councils to stimulate private investment and promote equitable growth and community resilience.

Canada's Investing in Canada Plan***:*** With a comprehensive focus on infrastructure—including rural and urban development, green initiatives, and digital connectivity—Canada's program supports broad-based infrastructure improvements. This approach could benefit Australian councils by providing a blueprint for enhancing public services, connectivity, and sustainable growth in outer metropolitan areas.

Weaknesses

There are a number of factors that could limit the applicability of these programs in the Australian context, such as differences in governance models and funding structures.

Funding Structures: These programs depend on significant national or federal funding. To replicate the scale of investment seen in these international examples, Australia would need broader governmental support and would require funds to be allocated within the Commonwealth budget.

Local Autonomy Constraints: Programs like the UK's LEP rely on a high level of local decision-making autonomy, which may not align with Australia's state-based governance structure. Australian councils generally lack the legal authority to independently implement similar strategies without intervention from state or federal government. Germany's BMDV model, with its strong central coordination between federal, state, and local authorities, may not directly transfer to Australia's decentralised system, where states and territories hold more power.

Policy and Legislative Differences: Programs like the CDBG in the US are shaped by socio-economic policies and regulatory frameworks that differ significantly from Australia's. Adapting these models would require extensive legislative adjustments and intergovernmental collaboration. Similarly, the Netherlands' IBF and Germany's BMDV program are centrally administered and would necessitate major changes to Australia's existing policy landscape and the roles of state and local governments.

Implementation Costs and Complexity: Implementing comprehensive models like Canada's Investing in Canada Plan may require high initial costs and stable long-term funding, which could be difficult to achieve within Australia's political and fiscal constraints. This complexity, combined with the need for a high level of coordination between various levels of government, could present challenges in implementing similar models effectively in Australia.

Opportunities

There are numerous potential benefits these programs could bring, particularly in areas where Australian outer metropolitan councils face specific challenges.

Addressing Infrastructure Gaps: Canada's Investing in Canada Plan and the Netherlands' IBF both focus on infrastructure development, highlighting opportunities for targeted investments. Adopting similar models could allow Australian councils to make significant improvements in transport, housing, and public utilities, enhancing community welfare and connectivity. BMDV's focus on infrastructure development, including transport and digital networks, could also inform Australian councils in addressing these gaps, particularly in regions experiencing rapid growth.

Public-Private Collaboration: Programs like the UK's LEP and the USA's TIF initiative demonstrate successful public-private partnerships. Australian councils could similarly leverage partnerships with private sectors to attract investment, diversify funding sources, and stimulate local economies, reducing their reliance on government support. BMDV's emphasis on collaborative governance across federal, state, and local levels could help Australian councils create more cohesive partnerships, fostering sustainable infrastructure projects.

Environmental and Climate Resilience: The Netherlands' IBF emphasises sustainable urban development and land conservation, offering a model for integrating resilience into infrastructure planning. Australian councils could adopt similar approaches for flood risk management and environmental preservation in rapidly growing regions. BMDV also focuses on sustainable mobility and the digitalisation of infrastructure, aligning with Australia's growing need for resilient urban solutions, especially in the face of climate challenges.

Equitable Development: CDBG's needs-based funding model provides support based on socio-economic indicators, prioritising disadvantaged, and underfunded regions. This approach could help Australian councils address equity concerns, ensuring that public funds support those who need them most. Similarly, BMDV's prioritisation of regional cohesion and digital inclusion aligns with these goals, offering insights for addressing socio-economic disparities in Australia's outer metropolitan areas.

Threats

Potential risks and challenges would need to be identified that could arise from attempting to adapt these programs to the Australian context.

Political and Public Acceptance: Public opposition may emerge if programs are seen as favouring private interests (e.g., through TIF) or as imposing foreign models that may not fully consider Australian values and community dynamics. There may also be resistance to centralised, cooperative funding models that limit local discretion. BMDV**'s** approach, which involves collaboration across multiple governance levels, could face similar challenges in Australia, where state-based control may limit local government involvement.

Economic Viability and Sustainability: The US TIF programs, which depend on future tax revenue projections, may not be viable in areas without a strong or growing tax base. Councils could face financial shortfalls if projected economic benefits do not materialise, posing a risk to their financial stability. The other programs' reliance on significant federal funding could also face similar challenges if the Australian government's funding priorities shift or face budget constraints.

Implementation Complexity: Programs like the LEP, which require robust governance and public-private partnership frameworks, may be challenging to establish and manage

effectively within Australia's existing local government structures. This complexity could limit the scalability or success of such programs. BMDV's integrated governance system, involving multiple layers of coordination, could be similarly complex to implement within Australia's more fragmented governance structure.

Fiscal Sustainability and Long-Term Funding: Initiatives like Canada's Investing in Canada Plan, the Netherlands' IBF, and Germany's BMDV's model depend on stable, long-term funding. Ensuring similar sustainability within Australia would require committed bipartisan support, which may be difficult to secure amidst changing political priorities.

A Way forward

To resolve these threats and effectively adapt international models to the Australian context, the Federal Government should focus on fostering a cooperative approach that addresses both governance constraints and financial sustainability. One crucial step is establishing a national framework for intergovernmental collaboration, ensuring that state and local governments are fully engaged in decision-making processes. This would help address concerns about local autonomy while ensuring that federal funding and policy frameworks are tailored to Australia's unique needs. The Australian Government could create incentive-based funding mechanisms to encourage private investment and public-private partnerships, particularly in areas with lower tax bases, to address economic viability challenges.

The governance models in these countries provide valuable lessons for developing collaborative frameworks. For example, Germany's BMDV program emphasises multi-level coordination, bringing together federal, state, and local governments to create a cohesive strategy for infrastructure and regional development. Similarly, in the US, the UK, Canada, and the Netherlands, integrated governance approaches ensure strong coordination between different levels of government, enabling more effective planning and implementation of infrastructure projects. These models highlight the importance of multi-level collaboration to achieve sustainable development and create infrastructure that meets both local and national needs.

Additionally, the Australian government should streamline legislative processes to enable the integration of successful international models, such as adapting the CDBG program to meet Australia's socio-economic context or adjusting infrastructure planning to reflect the Netherlands' approach to environmental sustainability. Long-term funding models, such as the Investing in Canada Plan, can be adapted to Australia's fiscal environment by introducing targeted grants and flexible funding strategies that allow for sustainable investment in infrastructure while preserving fiscal stability. Germany's BMDV program focus on sustainability, digital transformation, and long-term infrastructure planning can be leveraged in this context, ensuring that future investments are future-proof and resilient.

Finally, public education and engagement campaigns would be essential to securing political and public support, demonstrating how these programs align with Australian values and will lead to tangible benefits for disadvantaged communities and outer metropolitan growth areas. By addressing these challenges, the Australian Government can successfully implement adaptable, scalable solutions to support the future development of Australia's outer metropolitan regions.

SECTION 5

Section 5: Conclusion and Recommendations

The five international best practice country examples - the UK's Local Economic Partnership program, the Netherlands' Infrastructure and Spatial Planning Fund program, the German Federal Ministry of Digital and Transport Program, the US's Community Development Block Grant program and Tax Increment Finance initiative, and Canada's Investing in Canada Plan - all share a commitment to addressing the long-term infrastructure needs of their respective regions. These Federally (or nationally) driven programs demonstrate longevity by adopting multi-year funding frameworks that provide stability for large-scale projects and ensure consistent investment across political cycles. For example, the UK's LEP and Canada's Investing in Canada Plan both span multiple years, ensuring sustained funding for regional development and infrastructure priorities. Similarly, Germany's BMDV supports multi-year funding structures, focusing on infrastructure that drives digital and transport innovation, particularly in underserved areas.

In terms of sustainability, all five countries' programs integrate goals that promote environmental sustainability alongside economic development. Canada's Investing in Canada Plan prioritises green infrastructure, while the Netherlands' Infrastructure and Spatial Planning Fund (IBF) focuses on projects that support long-term ecological balance. Similarly, the US's CDBG program encourages development that enhances community resilience and sustainability. Germany's BMDV program contributes to environmental sustainability by prioritising green transportation initiatives and digital innovations that reduce environmental impacts and increase connectivity, particularly in rural and suburban regions.

Collaboration is a central feature of these programs, with partnerships between different levels of government, the private sector, and local communities. The UK's LEP program is particularly notable for fostering close collaboration between local authorities and businesses, while Canada's Investing in Canada Plan works across provincial, territorial, and municipal lines. The US programs involve both federal and local governments, while the Netherlands' Infrastructure Fund supports cross-sectoral partnerships to deliver projects effectively. Similarly, Germany's BMDV program emphasises inter-governmental and public-private partnerships, fostering collaboration across various sectors to deliver infrastructure projects that enhance both urban and rural connectivity, especially in emerging digital transport solutions.

All five countries prioritise projects that address the specific challenges of outer growth areas. The UK's Local Enterprise Partnerships (LEPs) focus on regional economic drivers, ensuring funding is directed to initiatives that stimulate local growth. Similarly, the Netherlands' Infrastructure and Spatial Planning Fund (IBF) uses a robust evaluation framework to prioritise projects based on their long-term community benefits, reinforcing a commitment to sustainable development in outer growth areas. Germany's BMDV program emphasises multi-level coordination between federal, state, and local governments, fostering a cohesive strategy for infrastructure and regional development. In the US, the Community Development Block Grant program supports local governments in developing vital infrastructure to improve housing, economic opportunities, and quality of life for low- and moderate-income communities while the Tax Increment Financing (TIF) initiative is designed to stimulate economic development in underdeveloped areas, revitalising struggling communities.

The Investing in Canada Plan prioritises infrastructure projects that enhance connectivity and sustainability in rapidly growing regions.

Regular and robust evaluation is also integral to all five countries' programs, ensuring that funds are allocated effectively to the most impactful projects. For instance, the US's CDBG program employs criteria that consider community needs, ensuring flexibility in funding allocation. Each initiative demonstrates the importance of assessing projects not only for their immediate economic impacts but also for their long-term contributions to community resilience and sustainability. Germany's BMDV program undertakes evaluation by continually refining transport and digital infrastructure projects to ensure they meet the evolving needs of the digital economy and climate resilience. These programs' systematic evaluation processes allow for the continuous refinement of strategies to better meet the complex challenges faced by outer growth areas.

Collectively, these international examples underscore essential strengths and highlight specific opportunities that Australia can adapt to strengthen infrastructure funding frameworks.

Strengths of International Best Practice Examples: A significant strength of these programs is their approach to federal funding distribution, which allows local authorities to make decisions based on specific, place-based needs, promoting scalability and multi-agency collaboration. Infrastructure provision is strategically timed to align with or precede development, preparing communities for growth. Long-term funding commitments, particularly in the UK and the Netherlands, provide stability beyond political cycles through non-competitive frameworks and criteria-based assessments, ensuring resources are directed to objectively identified areas of need. Additionally, the emphasis on clean growth economies reflects a global commitment to environmentally sustainable development.

Opportunities for Australia: Australia has a valuable opportunity to adopt a federally driven funding program that addresses place-based infrastructure requirements, with objective criteria to ensure resources are equitably distributed. A long-term funding approach could protect infrastructure investments from political shifts, supporting stable development and aligning with the transition to a clean growth economy. By adopting a place-based framework, Australia can also identify augmentable funding opportunities, enhancing local resilience and maximising the impact of public investment.

In light of the insights gained from international best practices in infrastructure funding, it is crucial that the Commonwealth of Australia adopts these recommendations to improve funding frameworks for outer metropolitan growth areas. By establishing ongoing, multi-year commitments and prioritising need-based criteria, the local councils in these growth areas can ensure that funding initiatives are effective, responsive, and aligned with the evolving needs of these communities. Emphasising collaboration with local stakeholders and incorporating robust evaluation processes will further enhance the program's effectiveness, ensuring that investments are targeted towards sustainable solutions that reflect community-defined needs. Ultimately, these strategies will contribute to the development of more resilient and sustainable urban environments in Australia's outer metropolitan growth areas

Endnotes

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Appendix: Summary Table of each country's program

	Pros	Cons	Application to Australia	Principles
UK LEPs	• Strategic guide for development • Place-based approach • Long term funding • Devolution of powers • Combination of stakeholders • Clean growth economy transition	• Vested interests exploiting inadequate governance and financial decision-making standards	• Collaborative approach to place-based approach • Transparency	a) Federal provision/ subsidiary decision b) Scalable c) Long-term non-competitive d) Allows for variety of infrastructure
NL IBF	• Collaborative approach Federal/municipalities/ developers/residents • Framework established and early land acquisition by authorities prior to re-zoning • Developers cannot challenge municipally driven framework • Multi-agency delivery	• Delay in delivery secondary to large working group and timing of major infrastructure delivery	• Infrastructure delivery prior to residential occupation • Locally driven	a) Federal provision/ subsidiary decision b) Scalable c) Long-term non-competitive d) Allows for variety of infrastructure
Germany BMDV	• Promotes green mobility • Strong alignment across federal, state, and local governments	• Relies heavily on public funding • Bureaucratic complexities	• Federal collaborative approach • Municipalities working together	a) Federal provision/ subsidiary decision b) Scalable c) Long-term non-competitive d) Allows for variety of infrastructure
USA CDBG	• Formulae to assess needs. • Active citizen participation • Identification of local needs	• Unchanged formulae since inception • Not sufficiently indexed	• Local identification of requirements • Application of formulae to ensure appropriate granting of funds	a) Federal provision/ subsidiary decision b) Scalable c) Allows for variety of infrastructure
USA TIF	• Long-term funding provision (up to 30 years) • Specific geographical application • Locally driven	• Benefits areas with capacity to increase rates for residents.	Facility for loans to deliver infrastructure sooner for new communities in greenfield sites. • Look at Early land Acquisition • Multi-LGA groupings for impact	a) Federal/State enabled subsidiary decision b) Scalable c) Long-term non-competitive d) Allows for variety of infrastructure
Canada Investing in Canada	• Long-term significant funding • Clean growth economy transition • Collaborative federal/ provincial/municipal and integrated multi-agency delivery • Assessed against criteria	• Competitive funding rounds	• Broader package of integrated funding across multiple portfolios encourages greater coordination and place-based solutions. • Targeted areas for delivery	a) Federal provision/ subsidiary decision b) Scalable c) Allows for variety of infrastructure