I'll conduct a detailed breakdown of road funding in Australia, including the contributions and responsibilities of federal, state, and local governments. This will cover key funding programs, how funds are allocated, and the share of funding by level of government. Additionally, I'll analyze economic and political challenges, particularly in maintaining roads in regional areas. I'll let you know once the research is ready.

Road Funding in Australia: Federal, State, and Local Breakdown

Overview of Roles and Funding Sources

Under Australia's federal system, state and local governments have primary responsibility for building and maintaining roads, while the Commonwealth (federal government) provides significant financial assistance through various programs (). In practice, all three levels collaborate: the federal government sets national road funding strategies and contributes funds (especially for highways of national importance), state/territory governments plan and manage major road networks within their borders, and local governments manage local roads in their communities. Each level draws on different funding sources. The Commonwealth raises revenue through national taxes (e.g. fuel excise, which is currently around **46–50 cents per litre**, and GST on fuel and vehicles) (), state governments levy motor vehicle taxes (like registration fees and vehicle stamp duties) (), and local councils raise funds mainly through property rates. Importantly, taxes like fuel excise are **not hypothecated** (earmarked) to roads – they go into general revenue, and road spending is decided through budget allocations (). Private sector investment also plays a smaller role (e.g. **toll roads** and **public–private partnerships** in some states) (). The following sections detail the key funding programs, expenditure share, and responsibilities at each level of government, as well as how funds are distributed and the challenges faced.

Federal Government Road Funding

Responsibilities: The federal government does not directly own most roads but is heavily involved in funding **Australia's national road network**. This includes the *National Land Transport Network* (formerly National Highways) – major interstate highways and important freight routes of national significance. The Commonwealth works in partnership with states to improve these roads, often funding upgrades, new highway constructions, and major urban arterial projects. Federal funding also extends to supporting state and local road needs through grants.

Key Funding Programs and Sources: Federal road spending is financed from **general revenue** (mainly tax receipts). A major source is the **fuel excise** – a per-liter tax on petrol and diesel (historically intended to fund roads). The Commonwealth's net revenue from fuel excise has averaged about **$12.6 billion** per year over the past decade (Road-related Revenue and Expenditure | Bureau of Infrastructure and Transport Research Economics), making it the largest road-related revenue source at the federal level. However, since 1992 there is no direct link between excise collected and road spending – the government decides how much to spend on roads each year as part of the budget (Fuel taxation in Australia | pbo). Other federal revenue contributions come from diesel fuel excise on heavy vehicles (adjusted by a **road-user charge** system), and to a lesser extent import duties and GST on vehicles. These funds are pooled and then allocated to various programs:

- **Infrastructure Investment Program (IIP):** The overarching federal investment program that funds major road and transport projects nationwide. It includes sub-programs targeting different priorities.
- **National Highway/National Network Projects:** Large-scale upgrades or new construction on the National Land Transport Network, often co-funded with states (e.g. upgrades to the Bruce Highway or Pacific Highway).
- **Roads to Recovery Program:** Provides direct funding to every local government for local road projects. This ongoing program is a cornerstone of federal support to councils, ensuring dedicated funding for maintenance and small upgrades. It was first introduced in 2000 and has been repeatedly extended (New research shows Council roads funding has hit a Federal pothole - Inside Local Government). Every council gets an allocation based on a formula (factors include local road length and population) (Funding boost to Council through Roads to Recovery - Federation Council). Over 2024–29 the program is being **doubled**, reaching **$1 billion per year** by 2027–28 (Funding boost to Council through Roads to Recovery - Federation Council) (Funding boost to Council through Roads to Recovery - Federation Council). This reflects recent policy to boost local road funding.
- **Black Spot Program:** Targets road locations with a history of serious accidents. The federal government fully funds safety improvements at eligible "black spots" (e.g. installing traffic signals, roundabouts, better signage) to reduce crashes (Black Spot site eligibility | Infrastructure Investment Program) (Black Spot Program). Projects are selected based on criteria such as crash history (e.g. at least 2–3 injury crashes over the past five years) and cost-effectiveness of the proposed fix.
- **Roads of Strategic Importance (ROSI):** A program focusing on key freight and connectivity routes (many in regional areas) that might not be part of the national highway network but are vital for economic development. It funds upgrades like widening, new bridges, and flood resilience on these routes (often cost-shared with states).
- **Bridges Renewal and Heavy Vehicle Safety Programs:** Grants to upgrade or replace aging bridges (to higher load capacity) and to improve safety or productivity for heavy vehicles (for example, rest stops, bypass lanes).

- **Local Roads and Community Infrastructure (LRCI) Program:** A recent, time-limited program (launched in 2020 as a stimulus measure) providing additional grants to local councils for local road projects and community infrastructure. This was introduced to spur local construction activity and improve assets, and it has been extended in several federal budget cycles.

Allocation of Federal Funds: Federal funding for major projects is typically delivered through agreements with states. For large highway projects, the Commonwealth often provides a percentage of the cost (e.g. 50–80%) and the state covers the rest. Project selection may involve assessments by **Infrastructure Australia** (which evaluates cost-benefit and priority of projects over $100 million), but political considerations also play a role in final budget allocations. Programs like Roads to Recovery and Financial Assistance Grants use formula-based distribution to ensure all regions get a share (Funding boost to Council through Roads to Recovery - Federation Council), whereas programs like ROSI or urban congestion funds are distributed based on identified needs or government priorities. Overall, the federal government's contribution accounts for roughly **20–30% of Australia's total road expenditure** in recent years (about **$7–9 billion annually**) (Road-related Revenue and Expenditure | Bureau of Infrastructure and Transport Research Economics). Federal funds are directed primarily toward national highways, big inter-regional links, and supporting local road maintenance via grants.

State and Territory Government Road Funding

Responsibilities: State and territory governments are responsible for the **majority of road networks by function**. This includes **state highways, arterial roads, and regional routes** that are not part of the federal network. Each state (and mainland territory) has a road authority (e.g. Main Roads, Transport for NSW, VicRoads (now part of DoT), etc.) managing planning, construction, and maintenance of these roads. States also maintain the federally funded national highways within their borders under agreements – even when the Commonwealth funds a highway upgrade, the state's road authority usually delivers the project and handles ongoing maintenance. In addition, states oversee road safety regulation and driver licensing, and often classify roads into categories (state roads, regional roads, local roads) to delineate funding responsibility. In some states, **"regional roads" or secondary roads are owned by local councils but receive state funding assistance** for upkeep, reflecting a shared responsibility for important local connectors.

Key Funding Programs and Sources: State road funding comes mostly from **state budgets and state-collected revenues**. Key sources include:

- **Vehicle registration fees:** Annual registration charges on cars, trucks, and trailers. Across all states/territories, rego fees bring in about **$8–9 billion per year** (Road-related Revenue and Expenditure | Bureau of Infrastructure and Transport Research Economics), making this the largest dedicated state-level road revenue source.

- **Motor vehicle stamp duties:** Taxes on the sale or transfer of vehicles. These can be significant (several billions nationally) and are generally treated as general state revenue that contributes to infrastructure funding.
- **Driver's license fees and traffic fines:** Smaller revenue streams; fines often fund road safety programs or go into state general funds.
- **Tolls and toll road concessions:** In some states (NSW, Victoria, Queensland), governments have partnered with the private sector to build toll roads. While tolls are paid by users to private operators or government-owned corporations, states sometimes use concession arrangements to fund new roads (e.g. allowing a private company to finance and toll a motorway in exchange for operating it). Toll revenue is not typically counted as government road expenditure, but it reduces the need for public funds on those routes.
- **General state revenues:** Because specific road-related fees often don't cover all costs, states supplement road funding from broader sources like GST revenue (redistributed by the Commonwealth) and other state taxes (land tax, etc.). There is no one-to-one link between a state's road revenue (rego, etc.) and its road spending – shortfalls are filled from general funds.

Each state runs its own **road investment programs** through its budget. For example, states publish transport infrastructure plans or capital programs (e.g. Queensland's QTRIP, Victoria's Big Build) listing major road projects (highways, bridges, bypasses) to be delivered. They also allocate substantial funding to **maintenance programs** for existing roads (resurfacing, rehabilitating pavements, bridge repairs). State-funded programs often include:

- **Upgrades of State Highways and Arterials:** Widening highways, duplicating lanes, improving intersections, installing safety barriers, etc. (often in partnership with federal funding on high-priority corridors).
- **Rural and Regional Roads Programs:** Targeted funds for country roads, which might include sealing gravel roads, strengthening pavements for heavy vehicles, or improving flood resilience on remote routes. Some states, for instance, have dedicated "Country Roads" initiatives or specific funds to address rural road maintenance backlogs.
- **Grants to Local Governments:** Many states provide grants or subsidies to assist councils. For example, NSW and Queensland historically provide a financial assistance grant for council-managed *regional roads* and occasionally special purpose grants for local road improvements (especially if councils struggle after disasters or need help with costly infrastructure like bridges). These grants recognize that purely local revenue is insufficient for some larger roadworks.
- **Public Transport and Other Competing Needs:** (Though not road funding per se, it's worth noting state transport budgets also fund public transport, which can compete with roads for resources. Road funding decisions can thus be political – e.g. balancing new highways vs. new rail projects).

Share of Funding and Allocation: State governments collectively carry the largest share of road expenditure. In 2021–22, state/territory road spending reached an all-time high of about **$23 billion** (Road-related Revenue and Expenditure | Bureau of Infrastructure and Transport

Research Economics), roughly **two-thirds of all government road spending**. States allocate these funds through annual budgets and multi-year infrastructure plans, guided by factors like traffic demand, road conditions, and economic development goals. Project prioritization is informed by cost-benefit analysis, engineering assessments, and community input – for instance, projects might be ranked based on congestion relief, safety improvement, freight efficiency, or regional connectivity benefits. However, political considerations can influence timing and selection (e.g. election commitments often include road upgrades targeted at specific regions). Unlike federal programs that have formal distribution formulas, state spending is internally decided, though **coordination with federal initiatives** is common (states will seek federal co-funding for expensive projects, and adjust their spending if Commonwealth grants are available). In summary, states use their revenue tools and federal grants to fund the bulk of major roadworks and keep the existing network serviceable.

Local Government Road Funding

Responsibilities: Local governments (councils) are responsible for the vast network of **local roads and streets** – the residential streets, urban local roads, and rural roads that are not classified as state or federal roads. This is by far the largest share of Australia's road network by length. Local councils collectively manage around **75% of the nation's road length** (New research shows Council roads funding has hit a Federal pothole - Inside Local Government), including minor collectors and access roads that connect communities, farms, and local industries. They handle routine maintenance (pothole repairs, grading of unsealed roads, street signage, drainage) and periodic renewal (resurfacing, local bridge repairs) for these roads. A few larger local roads may serve significant regional purposes, but generally when a road's importance grows beyond a local area, state governments may reclassify and assume responsibility for it (for example, a road might be re-declared a state highway). In unincorporated areas (regions with no local council, such as some remote parts of SA/NT/NSW), state or federal agencies directly manage local roads.

Key Funding Programs and Sources: Councils have limited revenue sources. Their primary income is from **property rates** (an annual tax on local properties), which must cover all local services (roads, parks, libraries, etc.). On average, local governments collect **less than 4% of Australia's total tax revenue** (New research shows Council roads funding has hit a Federal pothole - Inside Local Government), yet they maintain the majority of road length, which illustrates the fiscal challenge they face. Key funding for local roads includes:

- **Council Rates:** A portion of council budgets is devoted to road maintenance and minor capital works. However, the capacity to raise rates varies – rural shires with sparse populations have a very small rate base, making it hard to fund extensive road networks, whereas metro councils have more revenue (but also more infrastructure and services to fund).
- **Federal Financial Assistance Grants (FAGs):** Untied grants from the Commonwealth to local governments. A portion of these grants is identified specifically for local roads. The identified road component is distributed among states by historical formulas and

then to councils based on factors like road length, population and regional costs (via state grants commissions) ([PDF] Chapter 9: Management of the AusLink Roads to Recovery Program). While not huge, these grants are a vital supplement for maintenance budgets.

- **Roads to Recovery (RTR):** The dedicated federal program (discussed above) that directly funds local road projects in every council. For many rural councils, RTR grants are a major source of capital for road renewal that would otherwise be unaffordable. RTR funding is guaranteed but has been **fixed (not indexed)**, meaning its real value erodes with inflation (New research shows Council roads funding has hit a Federal pothole - Inside Local Government). (Recent changes will increase this funding).
- **State Government Grants:** As noted, states may support councils through grants. Some examples include *Regional Roads Block Grants* (NSW) or *Roads and Transport Alliance* funding (Qld), which help councils maintain regionally significant local roads. Additionally, after natural disasters, state and federal disaster relief funding often flows to councils to repair damaged local roads.
- **Developer Contributions:** Councils sometimes require property developers to contribute to local road construction (e.g. a new subdivision must build internal roads or pay infrastructure contributions). These new roads then become council assets. While this helps build new local roads, it doesn't help with ongoing maintenance of the broader network.
- **Loans and Others:** Larger councils might borrow for big projects or use special levies for road improvements, but many smaller councils are debt-averse or have limited borrowing capacity.

Funding Constraints and Allocation: Local road funding is often **just enough for basic upkeep**, and many councils struggle to maintain standards. The cost of maintaining sealed roads per person is significantly higher in rural and remote areas – up to **five times higher per capita** than in metropolitan areas (New research shows Council roads funding has hit a Federal pothole - Inside Local Government) – because of long distances and low population. Each council prioritizes its road tasks through asset management plans, rating roads by condition and risk. They then allocate their scarce funds to the most critical maintenance and safety needs first. Capital upgrades (like widening a road or replacing a bridge) often require external grants due to their high cost. As a result, local governments rely on **fair distribution of federal programs** (like RTR and FAGs) to ensure even the smallest communities can keep roads open. The funding each council receives from these programs is determined by set formulas based on need (for example, RTR allocations factor in local road length and population to gauge need (Funding boost to Council through Roads to Recovery - Federation Council)). Despite these supports, there is evidence of a persistent **funding gap** for local roads: national analyses have identified an annual maintenance shortfall in the order of **$2.8 billion** for local roads, indicating many councils are under-investing in renewals due to budget constraints ([PDF] Case studies of Rural Local Road efficiency and reform of Australia's ...). This often leads to a growing backlog of repairs.

Share of Road Funding by Level of Government

Each level of government contributes a different share of total road funding in Australia. The balance has shifted over time with various infrastructure booms and budget changes. The table below summarizes the approximate share of road expenditure by each level (using the latest available data for 2021–22):

Level of Government	**Key Funding Sources**	**Annual Road Expenditure** (2021–22)	**Share of Total** (Road-related Revenue and Expenditure | Bureau of Infrastructure and Transport Research Economics)
Commonwealth (Federal)	Fuel excise; general tax revenue; specific road funds	~$7.7 billion	~21%
State/Territory	Vehicle rego fees; stamp duty; state taxes; GST grants	~$23 billion	~64%
Local	Property rates; federal grants (RTR, FAGs); state grants	~$5–6 billion (est.)	~15%

Sources: BITRE data on 2021–22 road expenditure (Road-related Revenue and Expenditure | Bureau of Infrastructure and Transport Research Economics). Federal share can fluctuate (e.g. ~26% the previous year when Commonwealth spending peaked), and local spending has been relatively stable around $5–6 billion/year (Road-related Revenue and Expenditure | Bureau of Infrastructure and Transport Research Economics). State governments consistently fund the largest portion of roadworks.

These figures illustrate that while **states finance the majority** of road spending (especially capital works on highways and main roads), the **federal government provides a crucial portion** (often targeted at strategic projects and local road support), and **local governments fund the remainder** primarily for neighborhood and rural local roads. Notably, local councils' ~15% share is small relative to the extensive length of roads they manage, reflecting their reliance on intergovernmental transfers. The Commonwealth's share often comes in the form of grants to states or councils, which then do the actual spending on projects, meaning cooperation is essential. Funds are allocated through a combination of formula-driven grants (to ensure every region gets base support) and discretionary project funding (driven by policy objectives and needs assessments).

Funding Allocation Methods and Criteria

Funding for roads in Australia is allocated through a mix of **formula-based grants, project evaluations, and political/budget decisions**. Key allocation methods and criteria include:

- **Formula Grants to Local Government:** Both the Financial Assistance Grants (for local roads) and Roads to Recovery use formulas to distribute funds fairly. The **Identified Local Road Grants** (part of FAGs) are divided among states based on historical shares, then allocated to councils by State Grants Commissions considering factors like each council's road length, area, population, and maintenance costs. Similarly, the **Roads to Recovery program allocates funds to every LGA** based on objective factors (primarily population and road length) (Funding boost to Council through Roads to Recovery -

Federation Council), ensuring rural shires with many roads get a larger per-capita support. These formulas are designed to target need: for example, a small remote shire with a huge road network and few ratepayers receives substantially more per person than a city council with short local streets. This helps bridge the inequality in revenue-raising capacity (New research shows Council roads funding has hit a Federal pothole - Inside Local Government).
Criteria: need-based (length of road network, usage, regional cost factors, etc.).

- **National Project Funding:** For large highway and motorway projects, allocation is usually decided through the federal budget process in negotiation with states. Proposals are often evaluated on **economic criteria** – benefit-cost ratios (valuing travel time saved, vehicle operating cost reductions, safety improvements), engineering readiness, and alignment with strategic plans. **Infrastructure Australia** reviews major proposals and publishes priority lists. Projects that promise high economic returns or address nationally significant bottlenecks (e.g. a congested urban corridor or a critical regional freight route) rank highly (Supporting paper 9: Funding and investment for better roads - Productivity Review) (Supporting paper 9: Funding and investment for better roads - Productivity Review). However, the **final funding decisions are political**: governments may fund lower-ranked projects to fulfill election promises or regional development goals. Typically, there is an **80/20 or 50/50 cost-sharing** on big projects (federal providing the larger share for national priorities), which is determined case by case. States also internally prioritize their contributions via state infrastructure plans.

- **Maintenance Funding:** Routine maintenance is generally allocated by the managing authority (state or local) based on asset management systems. These systems use road condition surveys and performance standards to decide where to resurface or repair each year within the available budget. The **criteria are technical** (pavement roughness, pothole frequency, safety metrics) and **risk-based** (e.g. fix highest-risk defects first). At the federal level, there isn't a specific formula for maintenance grants (aside from programs like Roads to Recovery), but the Commonwealth may provide ad-hoc funding for disaster repairs or special maintenance initiatives on the National Network.

- **Black Spot Program (Safety Hotspots):** This program has a well-defined selection criterion. To qualify as a "black spot," a site or road section must have a proven crash history (commonly, at least 2–3 crashes causing injuries or fatalities within a recent five-year period, above a certain threshold) (Australian Government Black Spot Program). Nominations (by councils, community or state road agencies) are evaluated and ranked by a panel in each state. Projects must also be **cost-effective**, usually demonstrated by a benefit-cost ratio calculated from the crash cost savings if the site is treated. Locations with higher accidents and lower-cost remedies (e.g. adding signage, improving lighting, minor intersection modifications) get priority. **100% federal funding** is provided for approved black spot fixes, and funding is apportioned to states roughly in proportion to their population and crash data, with a minimum allocation for smaller

states/territories.

- **Other Targeted Programs:** The Bridges Renewal, Heavy Vehicle Safety, and Roads of Strategic Importance programs use a mix of **application-based funding** and predetermined envelopes per jurisdiction. For example, councils or states apply for bridge upgrade grants, and projects are assessed on criteria like improving freight productivity (can heavier trucks access the route), safety, and community importance. Funding is then awarded to the highest-priority applications (often with an effort to spread grants across regions). In contrast, the **Local Roads and Community Infrastructure (LRCI)** COVID-era program allocated funds to every council by formula (taking into account road length and population, similar to RTR) to ensure quick rollout nationwide.

- **Intergovernmental Agreements:** Some funding is distributed via agreements such as the National Partnership Agreement on Land Transport. These outline broad funding shares for each state over a period, giving an indicative allocation which states can then direct to specific projects (subject to federal approval). **Geographic equity** is a subtle criterion: governments tend to ensure all states and regions see some benefit from national funding programs (for example, special funding pools exist for Northern Australia roads, or fixing "Outback Way" across multiple states).

In summary, funding allocation is a blend of **formula-driven equity (to address local needs)** and **competitive/strategic funding (to address national priorities and project merits)**. While technical criteria and formulas guide much of the distribution, the system also allows flexibility for governments to respond to political priorities and emergent issues (like disaster rebuilds or new regional economic opportunities). This means not all road funding strictly follows a single formula; instead, Australia uses multiple programs each with their own allocation rules to cover the spectrum from local potholes to mega-projects.

Economic and Political Challenges in Road Funding

Maintaining Australia's extensive road network faces numerous economic and political challenges, especially in **regional and remote areas** where needs are high but resources are scarce. Key challenges include:

- **High Costs and Large Networks in Regional Areas:** Rural and remote councils oversee thousands of kilometers of roads with very few ratepayers to fund them. The cost per person to maintain sealed roads in these communities can be up to **five times higher** than in cities (New research shows Council roads funding has hit a Federal pothole - Inside Local Government). Long distances, harsher conditions, and expensive construction inputs (gravel, asphalt) drive up costs. Low traffic volumes mean traditional cost-benefit analyses often struggle to justify upgrades, yet these roads are lifelines for rural residents and industries. This creates a perpetual funding gap – for instance,

studies have found an annual **$2.8 billion shortfall** in local road maintenance nationwide ([PDF] Case studies of Rural Local Road efficiency and reform of Australia's ...). Many regional roads remain in poor condition (narrow, aging pavements) or are unsealed, which hampers economic growth and safety. It's economically challenging to keep such a dispersed network up to standard without external support.

- **Maintenance vs. New Projects (Political Incentives):** There is a political bias toward funding new road projects over maintenance of existing roads. New highways or big upgrades are visible and can be announced as major initiatives, whereas maintenance lacks "ribbon-cutting" appeal. This can lead to deferred maintenance – roads quietly deteriorating until they become a crisis. In regional electorates, local MPs often campaign for new sealing projects or bypasses, while routine maintenance funding might be stagnant. Over time, under-investment in maintenance can balloon into a much larger reconstruction cost. Politically, it's also harder to secure funding for remote roads serving small populations, as opposed to urban projects that benefit tens of thousands of drivers (and voters). This urban-rural imbalance in political priority means regional road networks can fall behind in quality.

- **Funding Uncertainty and Short-Term Cycles:** Both state and federal road programs can be subject to shifting priorities with changing governments. Critical funding sources for councils – like the Roads to Recovery program – have been time-limited grants, renewed every few years, which creates uncertainty in long-term planning. Until the recent decision to boost and extend RTR, councils could not be sure that money would continue beyond each five-year window. Similarly, state road budgets can fluctuate with economic conditions and elections, leading to "feast or famine" cycles. **Lack of indexation** in grants (R2R was not indexed for inflation until now) means their real value declines each year (New research shows Council roads funding has hit a Federal pothole - Inside Local Government), eroding purchasing power. Small councils particularly struggle when construction costs rise faster than funding. This uncertainty makes it hard to plan multi-year maintenance strategies and can increase costs (urgent temporary fixes instead of scheduled rehabs).

- **Geographic and Climate Challenges:** Australia's geography poses serious challenges – from the tropics to alpine areas – requiring resilient road designs. **Extreme weather events** are increasing with climate change, and these hit roads hard. In recent years, widespread flooding in Queensland, New South Wales, Victoria, and South Australia caused an estimated **$3.8 billion** in road damage (New research shows Council roads funding has hit a Federal pothole - Inside Local Government). Remote outback roads can be cut for weeks by floods, while in northern Australia, seasonal cyclones and monsoons regularly wash away roads. Rebuilding to a higher standard (e.g. raising road levels, bigger culverts) is expensive but necessary for resilience. Securing funding for "betterment" (not just like-for-like repairs) is a challenge under current disaster funding arrangements, which can leave communities rebuilding the same vulnerable roads repeatedly. Climate-related damage is straining budgets at all levels and requires

forward-looking investment, yet politically it's hard to allocate funds for preventive upgrades as opposed to reacting after disasters.

- **Economic Constraints and Competing Priorities:** Governments operate under budget constraints, and road funding must compete with other sectors like health, education, and rail transport. In downturns or periods of fiscal tightening, road projects can be delayed or scaled back. Regional areas often worry that *"city projects"* take a disproportionate share of funding. For example, billions might be spent on a single urban motorway interchange while hundreds of minor country road improvements go unfunded. This **equity concern** is both economic (optimal allocation of resources) and political (fairness to rural Australians). Conversely, some argue that rural roads serve fewer people and the economic return is lower, so spending is naturally lower – but this utilitarian approach leaves remote communities at risk of isolation and economic stagnation.

- **Administrative and Capacity Barriers:** Smaller councils sometimes lack engineering expertise and resources to manage large road projects or apply for complex grants. This can result in under-utilization of available funds or less optimal outcomes. The federal government's move to make local funding more "untied" (letting councils set their own priorities under RTR) helps, but capacity remains an issue. There's also the challenge of coordinating hundreds of local governments to maintain a coherent national road network standard – something noted in discussions about improving road **network resilience and coordination** (Chapter 3 - A national approach to road infrastructure resilience). Reforms often call for better coordination, but implementation is difficult across so many jurisdictions.

- **Heavy Vehicle Impacts and Funding Mismatch:** Australia's economy relies on heavy trucks, especially in regional areas (for agriculture and mining outputs). Heavy vehicles cause significantly more wear on road pavements. There's an ongoing issue of whether heavy freight users are paying enough for the road damage they cause on local and state roads. The current mechanism – a federal heavy vehicle road user charge embedded in fuel excise – channels revenue to central coffers, but local roads carry trucks too and often do not receive proportionate funding to repair the damage. This is a particular concern for regional councils with freight routes: they face road maintenance costs driven by national industry supply chains, yet the funding to cover those costs doesn't directly follow the trucks. It's both an economic inefficiency and a political issue (trucking and farming lobby groups resist higher charges, and governments fear unpopular moves that might raise transport costs).

In summary, maintaining Australia's roads, especially in the regions, involves navigating a complex set of challenges: **financial limitations, vast distances, climatic assaults, and political trade-offs**. These barriers mean that innovative solutions and sustained commitments

are needed to prevent deterioration of road infrastructure, ensure safety, and support economic development across all areas.

Recent Policy Developments and Emerging Trends

Road funding in Australia is evolving as governments respond to emerging economic, technological, and environmental trends. Notable recent changes and trends include:

- **Towards a National Road User Charging Model:** With the rise of electric vehicles and more fuel-efficient cars, revenue from fuel excise (the longstanding pillar of road funding) is projected to decline steadily. This has sparked discussions on reforming how we pay for roads. In 2023, the issue came to a head when the High Court struck down Victoria's electric vehicle road usage charge, ruling it an unconstitutional excise for a state to levy (EV charge ruled out by High Court - Roads Australia). This effectively bars other states from implementing their own per-kilometer charges and places the onus on the Commonwealth to lead reform. Industry and policy experts are increasingly calling for a **national road user charging system** to replace or supplement fuel excise (EV charge ruled out by High Court - Roads Australia). The idea is to charge drivers based on road use (distance, vehicle type, possibly location) in a fair and sustainable way, ensuring all vehicles – including electric – contribute to road funding. The federal government has been examining this, and while no decision has been made, **trials and studies** are expected as part of future reform. This is a major shift on the horizon aimed at shoring up the road funding base as the vehicle fleet changes.

- **Increased Federal Investment and New Funding Commitments:** The current Commonwealth government (Albanese Government) has made several policy shifts to bolster road funding, especially for local communities. As noted, the Roads to Recovery program is being expanded significantly (Funding boost to Council through Roads to Recovery - Federation Council), doubling annual funding by 2027–28 to help councils catch up on maintenance and safety works. Additionally, recent Budgets have allocated substantial sums to **infrastructure pipelines** – e.g. the 2022–23 and 2023–24 federal budgets put billions into road and rail projects over a decade, including upgrades to national highways, urban congestion projects, and rural road improvements. There has also been a continuation of the **Local Roads and Community Infrastructure (LRCI)** program initiated during the COVID recovery, which injected funds into local shovel-ready projects (this was extended into new phases due to its popularity in stimulating regional economies). While federal spending saw a peak in 2020–21 (as part of pandemic stimulus, hitting $9.5 billion) (Road-related Revenue and Expenditure | Bureau of Infrastructure and Transport Research Economics) and then a slight pullback, the overall trend is a growing Commonwealth contribution over the longer term. Major new projects (such as Western Sydney transport links, Bruce Highway upgrades, Outback road upgrades) are evidence of this commitment. The challenge will be balancing these commitments with budget pressures and ensuring projects are delivered

on time and on budget amid rising construction costs.

- **Indexation and Growth of Grants:** A noteworthy policy change is the move to **index some funding programs to inflation**. Historically, programs like Roads to Recovery were fixed, meaning their value eroded. The push to index grants (and the decision to increase them) came after lobbying from local government (e.g. Australian Local Government Association advocated raising federal grants to 1% of Commonwealth tax revenue (New research shows Council roads funding has hit a Federal pothole - Inside Local Government)). This change will help road funding keep pace with construction cost inflation, which has been significant in recent years (bitumen, fuel, labour costs have all risen). For example, if RTR reaches $1 billion a year and remains indexed, councils can plan with more certainty and preserve purchasing power. Similarly, state governments are revisiting their road budgets in light of high inflation – many are injecting extra maintenance funds to offset cost increases so that work programs don't shrink in real terms.

- **Focus on Resilience and Climate Adaptation:** After consecutive years of severe floods and bushfires impacting infrastructure, there's an emerging trend of emphasizing **resilience** in road funding. Governments are increasingly funding projects that strengthen roads against extreme weather – raising flood-prone road sections, improving drainage, or using more resilient materials. For instance, federal and state disaster recovery programs now often include a "betterment" component where they pay not just to restore a damaged road, but to rebuild it to a higher standard so it's less likely to fail again. In policy forums, there's recognition that climate change will require sustained investment to climate-proof essential road corridors (especially in flood-prone regional areas and along coastal highways). The Commonwealth and states are working on frameworks to assess infrastructure vulnerability and prioritize resilience projects. Over time, we can expect **road funding criteria to include resilience benefits** as a key factor, and possibly the creation of dedicated resilience funds.

- **Private Investment and Toll Roads:** In urban areas, the trend of using public–private partnerships (PPPs) for major toll roads continues. Cities like Sydney and Melbourne have seen expanded toll networks through companies like Transurban financing and operating motorways (WestConnex, NorthConnex, CityLink expansions, etc.). While this doesn't directly "fund" roads from government budgets, it's a policy trend for funding infrastructure by leveraging private capital and user charges. Economically, this can deliver projects sooner, but politically tolls can be contentious (due to costs to motorists). There's also discussion about the **limits of toll financing** – many easy-to-toll corridors are already done, and future private funding might require government support or availability payments. Still, partnership models are an entrenched part of Australia's road funding landscape and likely to persist, especially for expensive tunnels and urban megaprojects.

- **Governance Reforms and Efficiency:** Another trend is improving how road funding is managed for better outcomes. The concept of treating roads more like an "asset service" (sometimes called "road reform") is being explored. The Productivity Commission and Infrastructure Australia have suggested more transparent funding models where road agencies are funded based on performance and maintenance needs, possibly with independent pricing/regulatory oversight (analogous to how utilities are regulated) (Supporting paper 9: Funding and investment for better roads - Productivity Review) (Supporting paper 9: Funding and investment for better roads - Productivity Review). While these ideas are in early stages, pilot projects like heavy vehicle charging trials or asset management reforms are underway. Additionally, the creation of bodies like **Infrastructure Australia** and state infrastructure advisory boards brings a more evidence-based approach to prioritizing road investments, aiming to take some politics out and ensure economic merit in spending. Over time, these governance shifts may lead to more consistent long-term road investment strategies that survive political cycles.

- **Community and Political Dynamics:** Politically, road funding remains a hot topic, especially in regional electorates where roads can be the top issue. We see ongoing debates over fairness (city vs country funding) and pledges of "bridging the divide." The current environment has the federal government committing to a review of infrastructure projects announced by the previous government to ensure value for money – this may reshape some funding allocations and trim or re-scope certain projects. At the local level, communities are increasingly vocal about potholes and degraded roads (helped by social media), which is putting pressure on officials to allocate emergency road repair funds (e.g. many state governments in 2022–2023 announced one-off "Pothole funds" or maintenance boosts to tackle the post-flood pothole epidemic). These short-term responses could become more routine if extreme weather continues. Politically, there is also pressure to ensure road funding supports **road safety goals** – with Australia grappling to reduce road fatalities, investments in safer road infrastructure (widening shoulders, installing barriers, fixing black spots) are being highlighted. Programs like the Black Spot Program or the new federal **Safer Local Roads and Infrastructure Program** (announced in 2023 to fund road safety upgrades) reflect this safety-oriented trend.

In conclusion, road funding in Australia is at a pivotal point. Traditional funding sources are under pressure, and there is recognition that **new models** (like road user charges) and **increased investment** (especially for maintenance and resilience) will be needed to meet future challenges (EV charge ruled out by High Court - Roads Australia). The interplay between federal, state, and local governments is crucial – no single level can address all needs, so coordination and sustained partnerships are essential. Recent policy changes, such as boosting local road grants and exploring charging reform, show an understanding of the issues. Going forward, maintaining and improving Australia's roads will require adapting to technological change, ensuring equity between urban and rural areas, and overcoming economic constraints through smart, long-term planning. The structured funding arrangements and programs in place

provide a framework, but continuous improvement and innovation in road funding policy will be vital to keep Australia moving safely and efficiently.

Sources: Government reports and data on road expenditures (Road-related Revenue and Expenditure | Bureau of Infrastructure and Transport Research Economics) (New research shows Council roads funding has hit a Federal pothole - Inside Local Government); official information on funding programs (Funding boost to Council through Roads to Recovery - Federation Council) (Black Spot site eligibility | Infrastructure Investment Program); Australian Local Government Association and Infrastructure Australia analyses of local road challenges (New research shows Council roads funding has hit a Federal pothole - Inside Local Government) ([PDF] Case studies of Rural Local Road efficiency and reform of Australia's ...); Productivity Commission and Bureau of Infrastructure, Transport and Regional Economics (BITRE) publications on road funding and revenue () (Road-related Revenue and Expenditure | Bureau of Infrastructure and Transport Research Economics); Roads Australia and media coverage on emerging issues like EV road user charges (EV charge ruled out by High Court - Roads Australia) (EV charge ruled out by High Court - Roads Australia). These provide a detailed picture of how each level of government contributes to road funding, the mechanisms for allocating funds, and the economic and political factors influencing Australia's road infrastructure landscape.