

The governance setup Melbourne uses to deliver lots of infrastructure

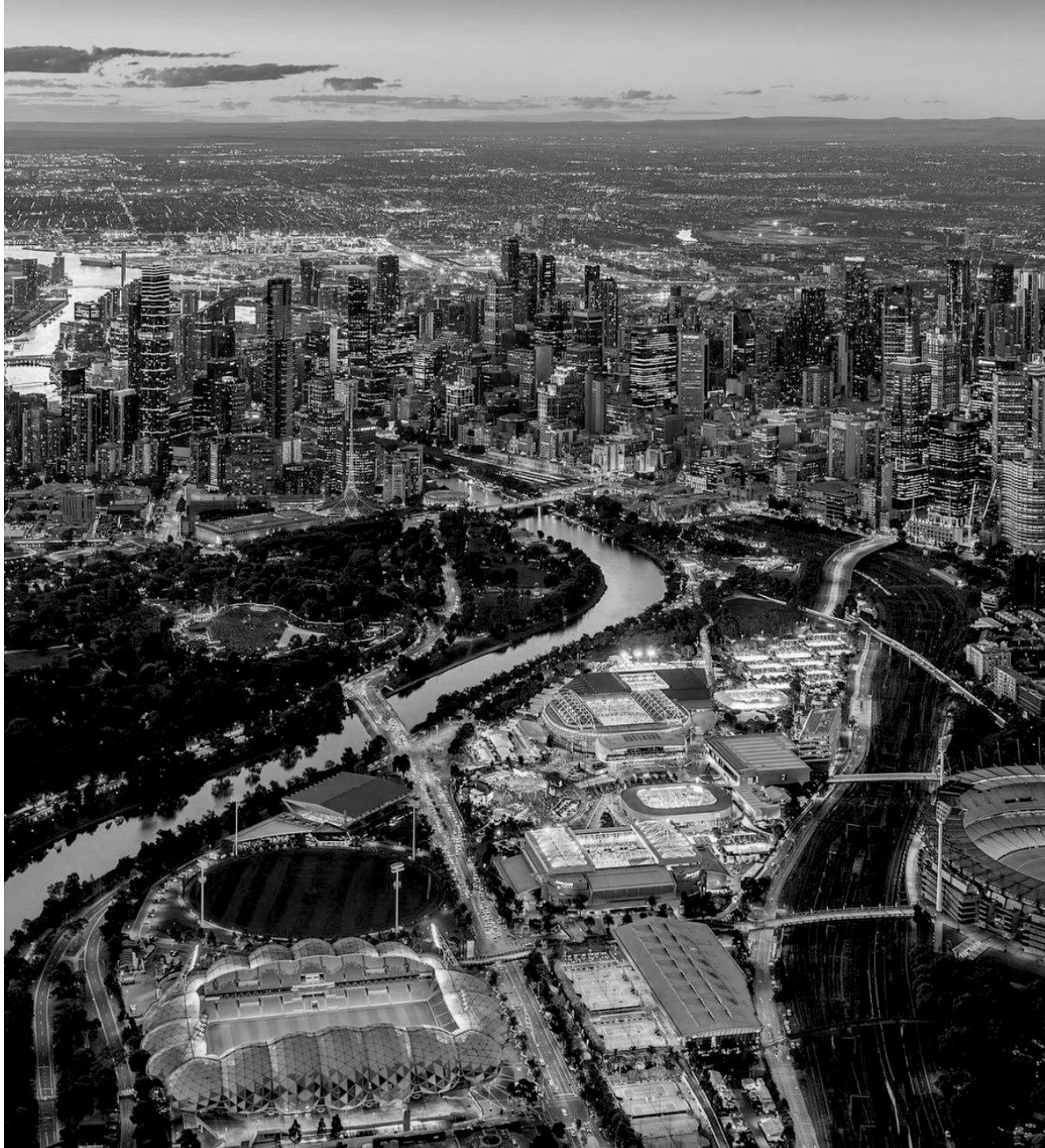
[Seán Keyes](#) 11/12/2024

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Policy Brief

The management of infrastructure is highly idiosyncratic. It's different in every nation. There's no playbook to copy. However, the most efficient builders share a few characteristics. There are principles worth following.



In September, I made the case for rethinking Ireland's infrastructure delivery model. Ireland is about to pour a lot of concrete. Before we do so, it's worth pausing to reflect on which delivery model works best.

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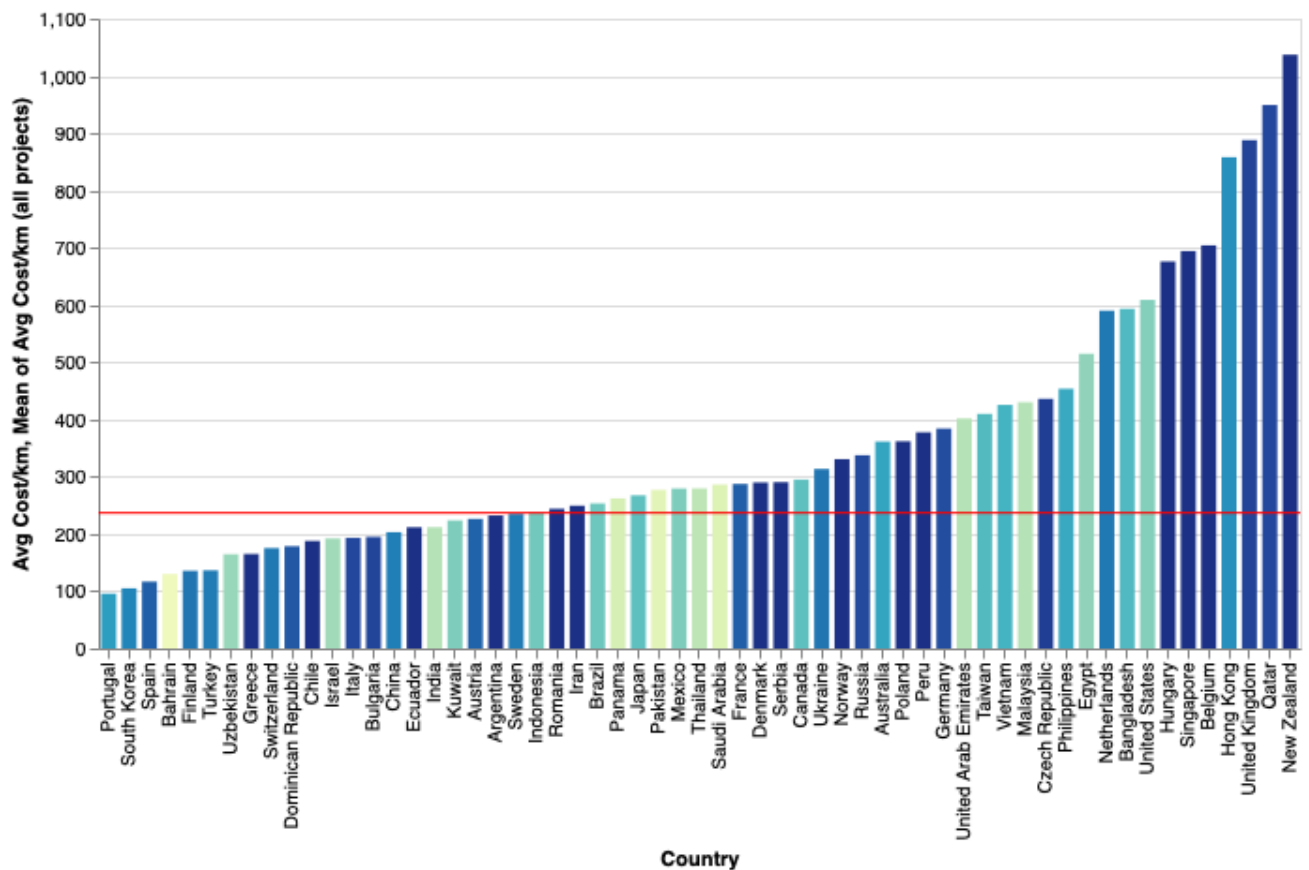
By way of illustration I want to show, in specific detail, how some of the most prolific and efficient infrastructure builders organise complex projects.

First, I'll summarise the case for using a different delivery model.

Summary: why we should rethink our delivery model

Experts agree: there's a good way and a bad way to build complex infrastructure like metros. English-speaking countries do it the bad way, European countries do it the good way.

How bad is bad? Well the newest New York subway cost about 13x more per kilometre than the new Paris metro. English-speaking countries cost 3-4x more per km on average than the average of the most efficient European countries. The figure below is from the [Transit Costs Project](#). The Transit Costs Project gathered data on more than 946 metro projects from 59 countries. The chart shows the average cost per km of metro projects in each country.



Source: Transit Costs Project

Why are English-speaking countries bad at building metros? One big difference between them and Europe is their lack of client side technical staff. English-speaking countries don't have many of them. European countries employ more of them.

Why do technical staff matter? It comes down to ownership and control. States are the owners of metro projects. And the defining feature of ownership is control. Control can only be exerted by an owner. Control of a project is a job the state can't delegate. The only question, then, is *how* the state wants to exert control.

In Europe, control is exerted by technicians. In the English-speaking model, control is exerted by generalist civil servants. They hire consultants to help them. But

control ultimately stays with the generalists.

The question of control and expertise matters most for the most complex projects. That's because complex projects are unpredictable. It's not possible to lay out a detailed project plan in advance and then simply carry it out. In complex projects, lots of important decisions must be made on the hoof.

When there are consequential decisions to be made weekly – on things like signalling equipment, grades of concrete, project access – the people in control need to be good at making big decisions. They need to make decisions quickly. Speed matters a lot. For example, between 1995 and 2007, Madrid built an amazing 17 kilometres of Metro per year. That's slightly less than the entire length of Dublin's planned Metrolink.

In Ireland we'll soon start pouring concrete for Metrolink. It'll cost anywhere between €9.5 and €24 billion. We should set ourselves up for success by implementing the European playbook, rather than the English-speaking one.

The idea is that we'd bring in 10-20 experienced people and pay them the going rate. The going rate seems steep (€300-500,000 per year). They're not cheap. But a successful project might cost €15 billion less than an unsuccessful one, so they're well worth it.

The second thing we need is to give the project space. Normal civil service spending oversight, which is designed

to ensure value for money, is poison for a complex infrastructure project in which speed is of the essence. Decision makers need [autonomy](#).

Eric Goldwyn is an NYU Assistant Professor and Program Director of [Transportation and Land Use](#) at the Marron Institute, and lead author of the Transit Costs Project. He described the common factor among the most efficient metro builders: *"Among the cheapest builders there's a wide variety of delivery models. Some use on [public-private partnerships], others do not. They rely on consultants to varying degrees. But what they all have in common is a sophisticated state client who can manage the project."*

It is in large part a question of governance. How has authority been delegated, and to whom?

Why Victoria?

Madrid and Milan are the gold medallists of efficient metro building. And to be sure, Europe is quite different from Ireland. Differing governance models are not the only thing going on. For example, planning law clearly matters a lot. Planning law in civil law countries is very different from common law countries.

The cultural and legal differences between Ireland and Madrid are big. I wanted to study a country a) with a track record for building lots of complex infrastructure quickly

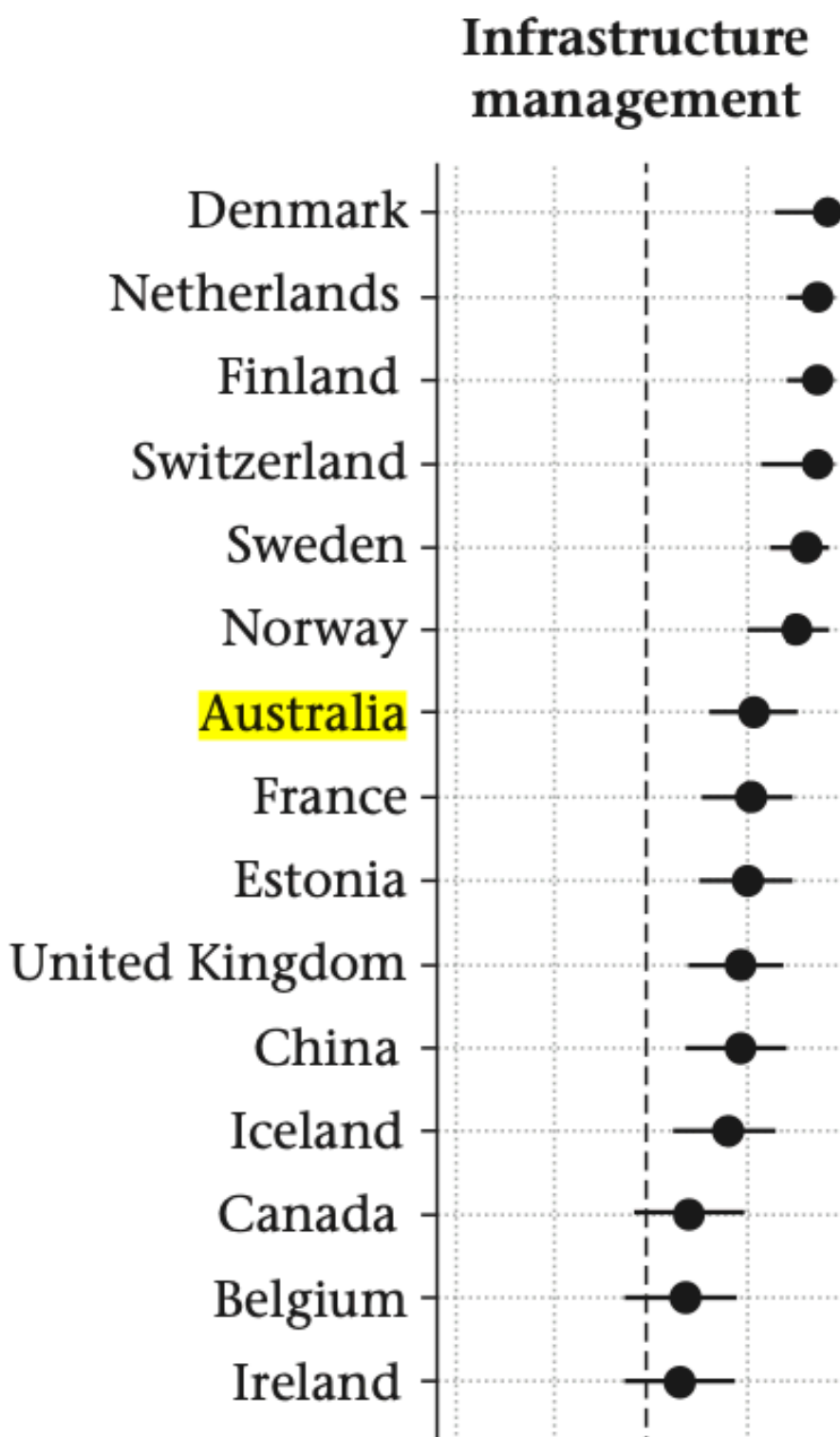
and at a reasonable cost b) using the same governance principles found in the world's most efficient builders c) whose legal and cultural setup was like Ireland's. I landed on the state of Victoria, in south Australia. It's an English speaking, common-law country with a strong track record for building infrastructure. Critically, it uses similar governance structures to the gold-medallist Europeans.

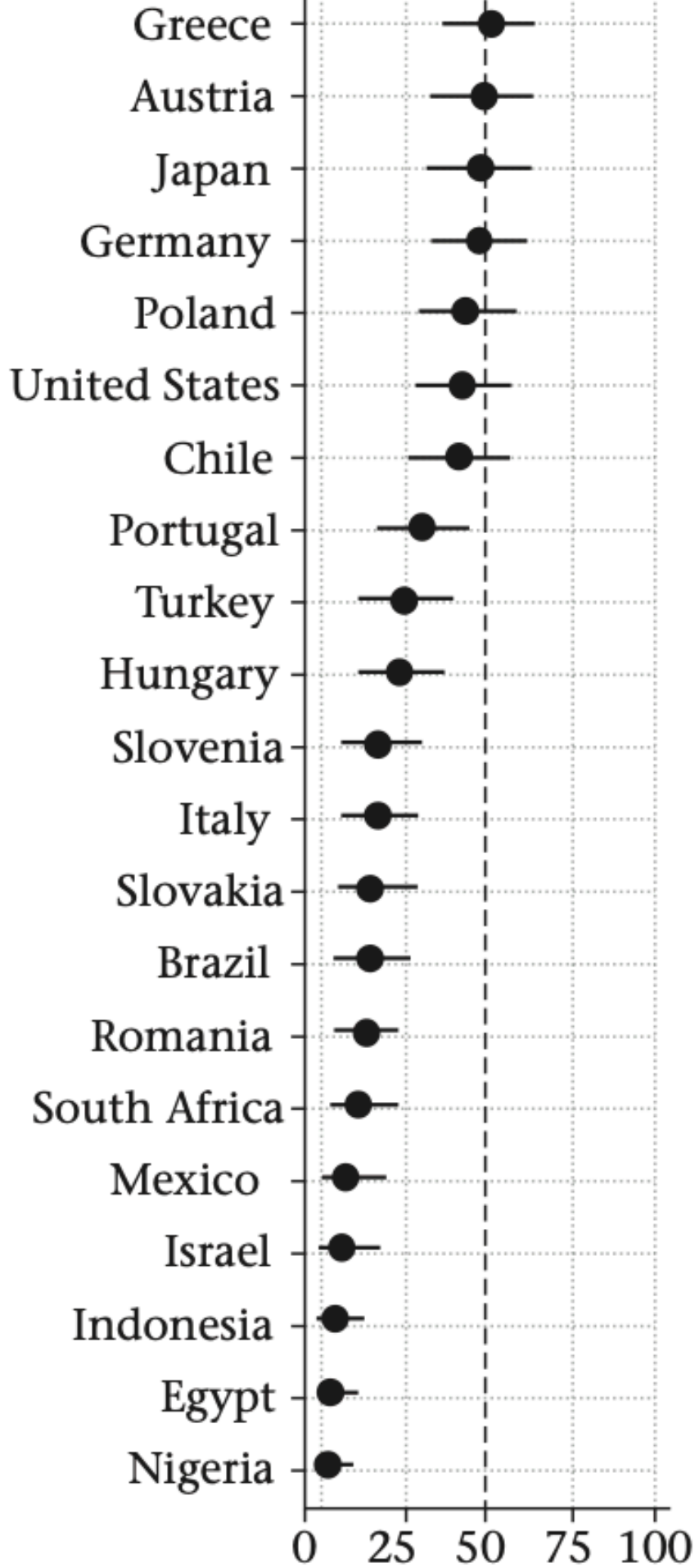
Victoria is a big and important state. With a population of seven million, it's the second-most populous state in Australia. It's home to the city of Melbourne, Australia's biggest.

Victoria is also exceptionally fast-growing. The city of Melbourne has grown its population by an average of 1.5 per cent per year for the last 30 years. That's fast. By European standards, Ireland is an exceptionally fast-growing country, and last year was one of exceptional population growth. Yet Ireland's population increased by just 0.9 per cent last year. The United States' population grew 0.5 per cent last year.

Since 1994, Victoria's population has grown from 4.4 million to 7 million. In that time Melbourne surpassed Sydney as Australia's most populous city. A state growing as quickly as Victoria has an insatiable appetite for infrastructure. Between 1981 and 2026, Melbourne will have built: 12km of rail tunnels under the central business district; four traffic tunnels at a combined length of 10.6km; and a 9km metro tunnel.

The following chart is from the [Hertie School](#) in Berlin. It measures the perceived quality of infrastructure management in OECD countries. It was based on a survey of 250 experts in transportation, energy, water, waste and sanitation, IT/communications, building, and defense. Australia is ranked at the top of the English-speaking world. This is despite – or perhaps, because of – its rapidly increasing population.





Source: *The Hertie School–OECD expert survey, 2016.*

How Victoria governs projects

The Victoria Infrastructure Delivery Authority (VIDA) is a delivery agency tasked with building Victoria's transport and health infrastructure. VIDA was previously known as the Major Transport Infrastructure Agency (MTIA). Earlier this year it was given additional responsibility for health infrastructure delivery, and renamed.

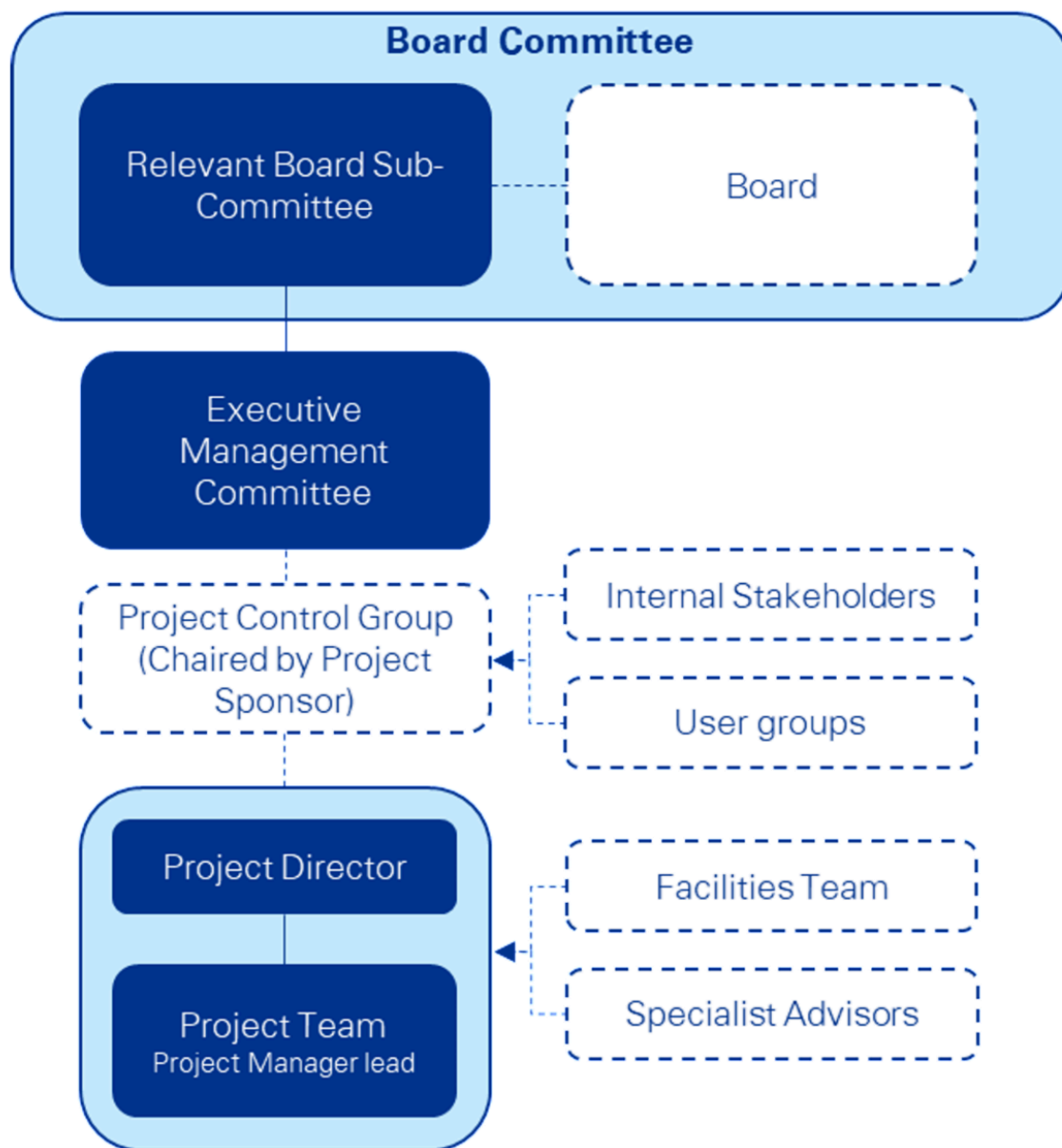
Victoria understands that governance is critical to project delivery, and that different types of projects have different governance needs. It uses a framework to assign projects to one of four categories: business as usual; low complexity; medium complexity; and high value high risk. The principle is that more [complex projects need more autonomy](#).

The Victoria system is designed to give high-value high-risk projects the autonomy they need, while balancing the need for oversight.

There are formal channels for sharing information with outside stakeholders like the treasury and the relevant ministry. And because governance arrangements are bespoke to each project, there is no risk of an agency "going rogue".

An innovation Victoria uses is that every individual project, big and small, gets its own board. The board has bureaucratic control over the project. The project director,

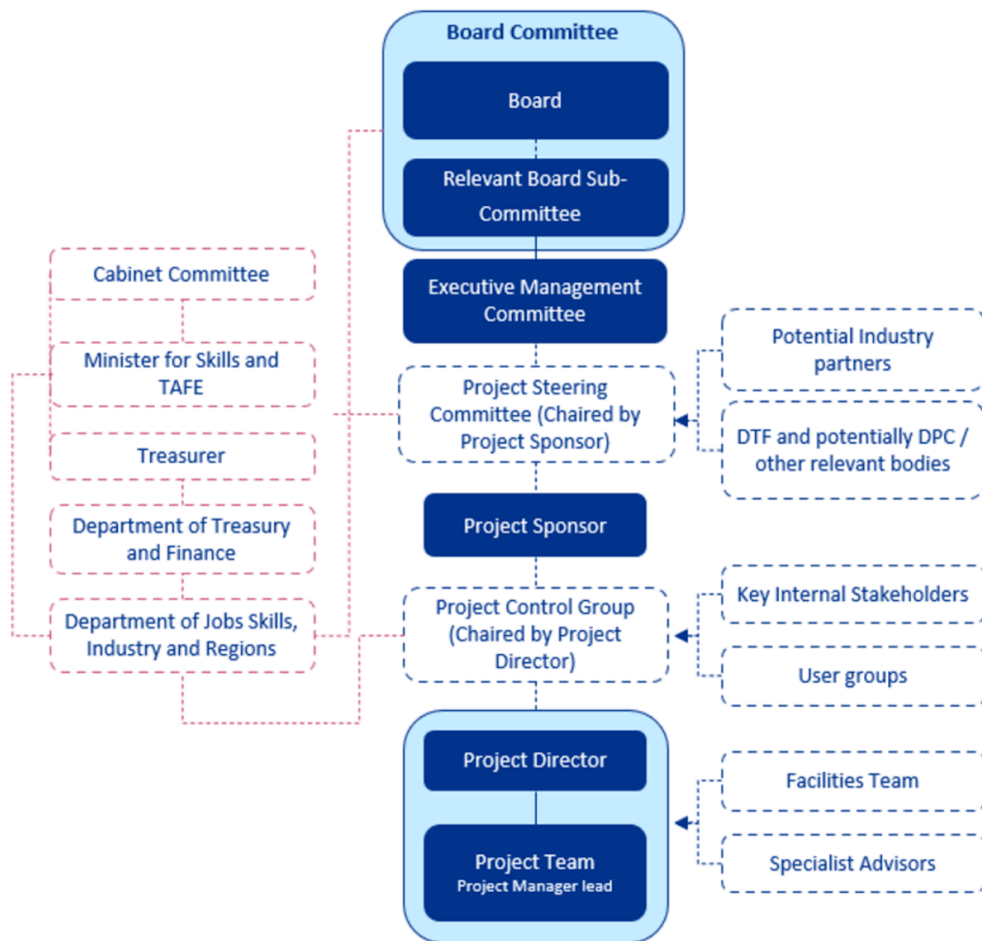
ie the “operations person”, reports to the board. The board has ultimate control over the project. The following examples are taken from the Victoria Government’s [governance structures toolkit](#). The first is a suggested governance structure for a project of low complexity:



Suggested governance for a low complexity project. Source: Government of Victoria.

As the degree of project complexity increases, the composition of the board changes. More complex project boards are composed to a greater degree of independent experts. In addition, layers of consultation and oversight

are added.



Suggested governance for a high value, high risk project. Source: Government of Victoria

In a high-value high-risk project, the board's job is to act as the primary approval body for important decisions around the project's initial scope and changes to the agreed scope. It approves all contracts. The board is appointed by the relevant minister and consists of independent experts, a representative from the project team, and representatives of the minister.

There are parallels between Victoria's governance and that used in Milan. Milan is another city with an outstanding track record for efficient delivery of metro

projects. Both cities have devised systems for empowering project managers and insulating them from the wider bureaucracy. Both cities' governance systems are designed to elapse at the end of each project, so that long-term control stays with the state.

In [Milan](#), each project has a key position called High Supervisor, or *Alta Soveglianza* (AS). The AS is responsible for the correct execution of the contract. They have final say about all major changes in the project that involve cost or scope variations. They have the ultimate power to accept or refuse the payment to the contractors based on progress, quality of work and contract adherence. Milanese projects have a second key civil service position called Chief Project Manager, or *Responsabile Unico del Procedimento* (RUP). The RUP has sole legal responsibility for the project. This arrangement protects the design team from excessive interference from elected officials and other stakeholders.

In Madrid – which built an astonishing 204km of metro in 12 years – the state established a special purpose vehicle called [MINTRA](#) to build out its metro network. The arms-length MINTRA vehicle gave the city of Madrid additional flexibility in recruitment and management of staff. MINTRA was dissolved in 2011, with its mission completed.

Irish project governance differs from these proven

governance models in two important ways. First, the Irish system does not specify governance setups based on project complexity. Second, the Irish system does not delegate full spending and decision making power to individual project managers and/or their boards. In international metro projects, governance setups like Ireland's have been associated with slower projects and much [higher costs per kilometre](#).

The key insight of the European delivery agencies is that complex projects require specialist staff and specialist governance setups. They hire the right people. And then they empower them to deliver.

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One Pager

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The most efficient builders of complex infrastructure have one thing in common.

