### Future Connect 2023

Main Report







# Our approach to integrated network planning

Aucklanders travel around the region in increasingly diverse ways. They walk, cycle, scoot, take public transport, drive their cars, or move around goods. This means our road space is in demand, and a lot could be happening in a limited space.

With Auckland expected to grow by another 200,000 people over the next decade, the competing demand for road space is likely to intensify.

We therefore need to ensure that all travel choices are available and work together, so people can make safe and easy journeys; no matter how they choose to travel. Future Connect is Auckland Transport's plan to make this happen. Developed in partnership with Auckland Council and Waka Kotahi, it provides strategic direction for how we plan, fund, deliver and operate our network.

### What is the purpose of Future Connect?

Future Connect is a 10-year system planning tool (building towards a 30-year outlook) for Auckland's transport network. It brings all travel choices (called transport modes) together into an integrated system. Planning for all modes allows us to make better use of existing infrastructure, plan

integrated solutions and ensure we take a 'dig-once' approach.

### What does Future Connect include?

Future Connect has three key outputs. It maps the most important links for all transport modes: our **Strategic Networks**. These are the network links that are most critical to the movement of people, goods and services across the region. The Strategic Networks include two time periods (Current and First Decade) and provide a core planning reference for everyone working to improve Auckland's transport network.



Future Connect then uses a data-driven **Transport System** 

Analysis, to find deficiencies and opportunities expected on our Strategic Networks in the next decade. The most critical locations, where multiple deficiencies overlap, inform our map of Transport Focus Areas. These are Auckland's key

challenges that require further

investigation and investment.

These three key outputs provide strategic guidance for the development of our investment plan, the Regional Land Transport Plan (RLTP), and form a shared evidence base for programmes and projects developed and delivered by Auckland Transport, our partners and stakeholders.



The three key outputs can be accessed through the

### Future Connect Mapping Portal

For more information visit:

### Where does Future Connect fit in?

Future Connect builds on, and adds more detail to The Auckland Plan: Auckland Council's united vision for Auckland. It seeks integrated outcomes for the region over the long term, including strategic directions for transport. These are incorporated in Future Connect.

#### **Future Connect and the RLTP**

Future Connect is developed together with the Regional Land Transport Plan (RLTP) and Auckland Transport Alignment Project (ATAP).

Future Connect and the RLTP work together as a single plan.
Future Connect is the network plan, which provides a vision and strategic overview of Auckland's transport challenges. However, Future Connect does not propose solutions. That is the role of the RLTP, our 10-year investment plan. It takes the system needs

and evidence surfaced by Future Connect and proposes solutions where funding allows.

ATAP is an agreement between Auckland Council and Central Government about the transport priorities for Auckland. ATAP is developed alongside the RLTP, to make sure that local and central government continue to work together to deliver the 2021-2031 investment plan.

Future Connect, ATAP and the RLTP all interface with each other, to ensure we're all working towards the same future vision.

### Other AT plans and strategies

AT is responsible for the planning, funding, delivery, and operation of Auckland's transport system. Multiple plans and strategies exist to manage these processes. Future Connect works hand in hand with a number of these.

most notably the Roads and Streets Framework (RASF) and Network Operating Plan (NOP).

Future Connect and the RASF are AT's two system planning tools. Both tools guide each other. The RASF provides bottom-up guidance for the development of individual roads and streets. It decides on modal priorities based on Future Connect, and also ensures the importance of 'Place' is considered by projects.

Future Connect follows a topdown approach and sets a vision for the full transport network, not just individual streets.

The NOP is our plan for operating the network at different times of day for different modes. It builds on Future Connect and the RASF, ensuring strategy guides how we operate the network today.

# Auckland Unitary Plan Auckland Unitary Plan Auckland Unitary Plan Auckland Unitary Plan Area Plans/Centre Plans Master Plans/Local Board Plans Roads and Streets Framework Network Operating Plan Business Cases and Programmes Transport Design Manual Asset Management Plan Design Guides Engineering Design Code Maintenance Renewals

### Who is it for and how will it affect me?

Future Connect is a core planning resource for people working on, or interested in, Auckland's transport system. It is used extensively within AT, but the Mapping Portal and supporting documentation is also available to the public.

Its use is encouraged for all those involved in the development of Auckland, including the wider Auckland Council family, Central Government agencies, private developers, and industry.

Future Connect does not affect Aucklanders immediately as it is a tool to guide planning and investment. It sets a long-term vision for Auckland's integrated transport system. However, no new projects are proposed as part of Future Connect.

The plan is owned by the Integrated Network Planning Team at Auckland Transport, and will be updated regularly. Networks are updated every six months, and the full suite of outputs are updated every three years ahead of the development of the RLTP.

More Information about Future Connect, including access to the Mapping Portal, can be found at

AT.govt.nz/FutureConnect



## **Auckland's Strategic Networks**

All modes have a role to play in the movement of people, goods and services around Auckland. In order to unlock their full potential, it is essential that each modal network does not just work on its own, but is integrated with the other networks to develop a coherent system.

Future Connect is the tool that allows us to plan that system. It identifies the most important links for each mode. We call these our Strategic Networks.



### **The Strategic Networks are:**

- The most critical links for movement of people, goods and services, that are to be managed as part of an integrated multi-modal network
- Key connections with important regional activity and a high volume of users linking sub regions and key centres with other parts of New Zealand
- The backbone of the transport system, providing safe, efficient and reliable movement of people, goods and services across the region
- Providers of easy whole-oftrip journeys for customers.



The Strategic Networks guide potential solutions for a corridor, but do not always indicate dedicated infrastructure is currently present, or required in the future. If strategic issues are flagged by Future Connect's Transport System Analysis, infrastructure solutions to problems may be proposed by the RLTP.

### **Development**of the networks

The Strategic Networks were developed by bringing together various mode-specific network plans.

For this 2023 update, all networks have been updated to reflect the latest projects, plans and strategies. The current and first-decade networks cover the 2024 and 2034 time period respectively.

Each of the modal networks has its own hierarchy to indicate the relative importance of each link.

To provide alignment between these modes, Future Connect developed a three-level hierarchy for each of the Strategic Networks. This makes it easier to make comparisons between the different modal networks, and integrate them as part of the overall system.

Each network also has a set of principles and definitions, to guide the ongoing development of the Strategic Networks.

The illustration below indicates which parts of each network are Primary, Secondary, Tertiary Strategic Network links, or lower order Supporting Network links.



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# The current and future Strategic Networks

The Current Strategic Network describes the network as we would like it to operate today. The First Decade Strategic Network builds on the current network, but adds important connections needed to support Auckland's expected growth.

The First Decade Strategic Network will better connect metropolitan centres around the region, as these will play an increasingly important role in the future. Providing these connections unlocks the multinodal model aspired to by the Auckland Plan.

The First Decade network also takes into account planned land use changes, including

brownfield and greenfield growth areas.

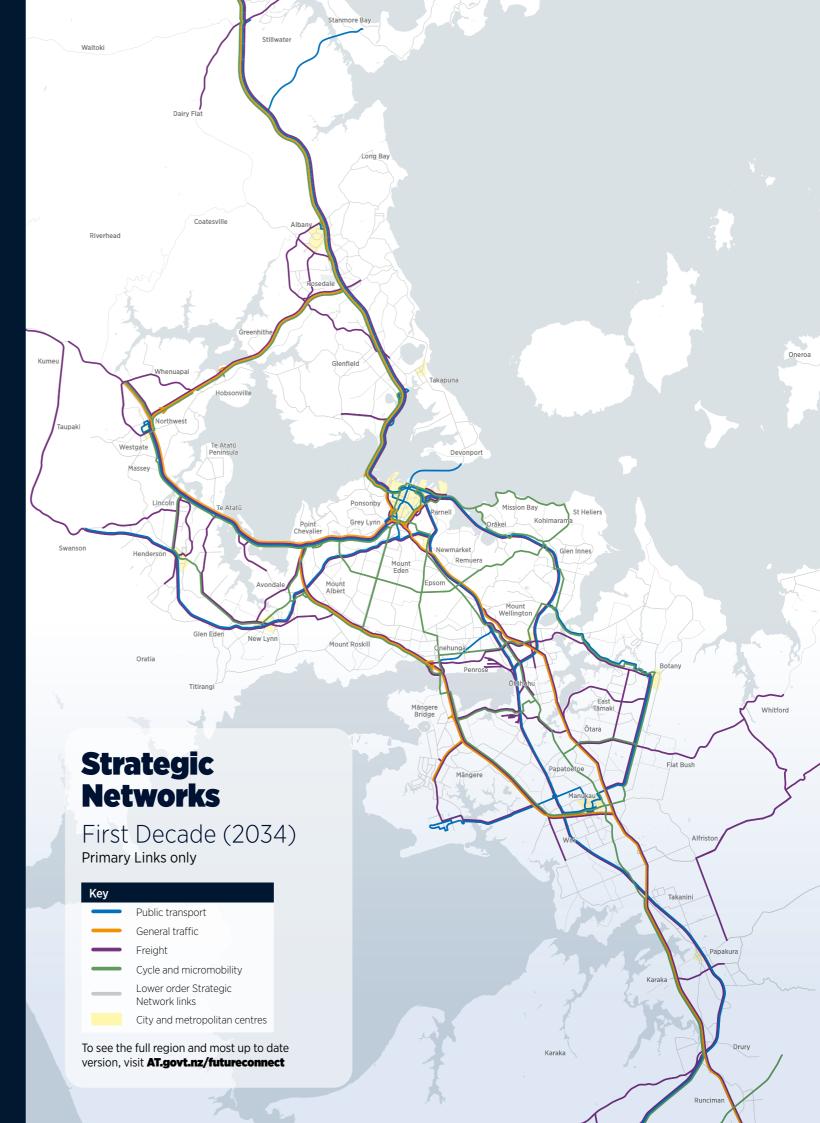
Strategic Network growth in the next decade.

(Excluding walking network)





Future multi-nodal city served by an efficient transport system (based on Auckland Plan 2050)



# **Transport System Analysis**

Future Connect uses a datadriven, repeatable process to understand the most critical needs across the regional transport system. The Transport System Analysis has four key elements, explained further below.

**Deficiencies** highlight corridors where customers or the environment experiences outcomes that fall short of our strategic objectives. This part of the analysis investigates the Current and First Decade Strategic Networks, using both

current and forecast data. It shows us where things may get worse without further investment. The deficiency analysis looks at each mode of transport, as well as two intermodal problems affecting all networks: **safety** and the **environment.** 

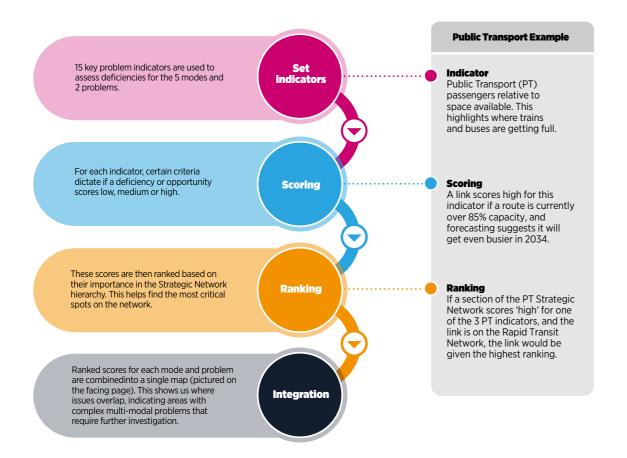
For each mode and problem, the severity of the deficiency is ranked using the hierarchy in the network, so deficiencies on the most critical links come out as most important. The result of this analysis is displayed here.

The System Analysis also maps **opportunities** (corridors most suitable for proactive improvement) and a **Rapid** 

#### **Transit Station Assessment**

These outputs can be viewed online. This update also includes a **transport equity** analysis, which is detailed later in this report.

Future Connect 2023 incorporates new and better data to analyse the networks. It has also fully integrated the walking network into the System Analysis, which was not the case in Future Connect 2021.



#### Note

The forecast indicators used for the Deficiency and Opportunity Mapping take into account the full impact of the 2021-2031 RLTP.



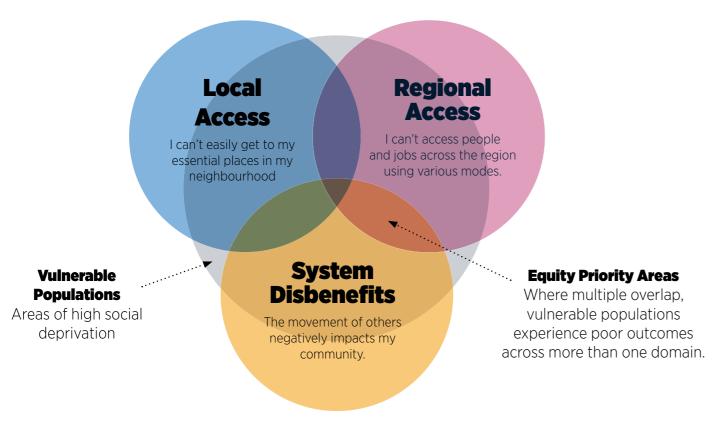
### **Transport Equity**

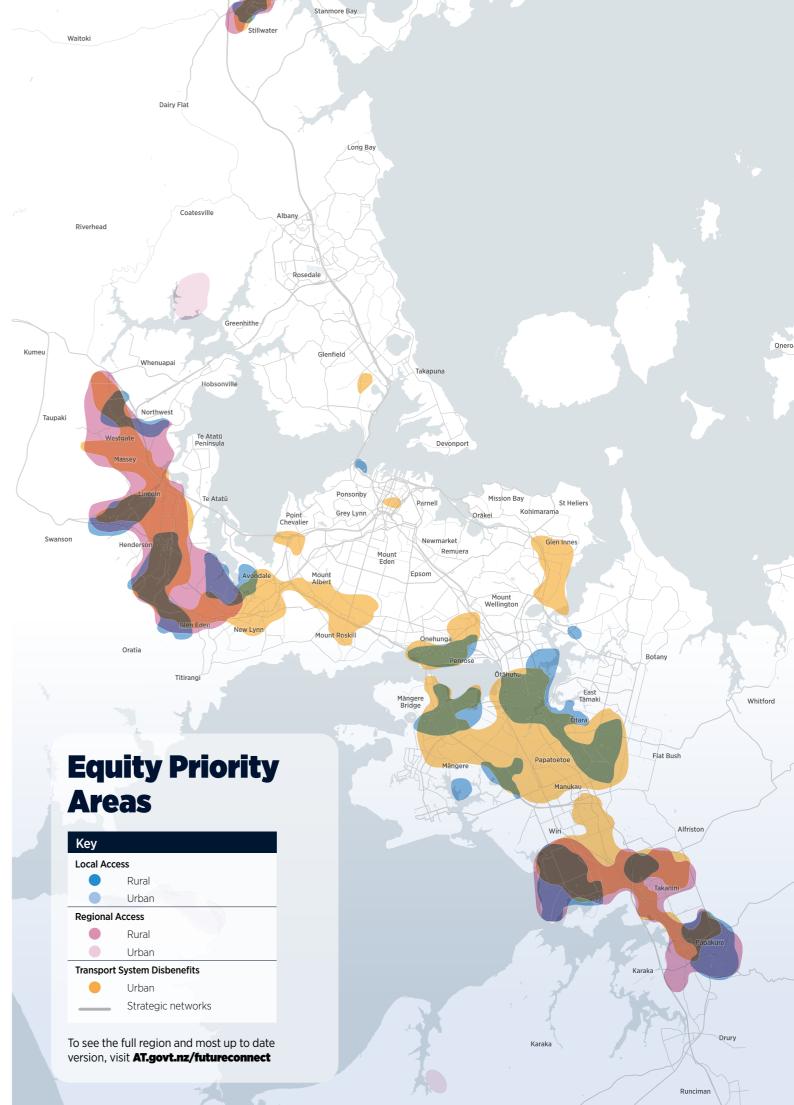
In Future Connect 2023 we've added a third intermodal problem area to investigate: transport equity. This analysis does not investigate corridors, but instead looks at the transport outcomes experienced by different communities in Auckland. To do so, we've looked at three domains of transport equity:

- **Local Access:** the ability to get to local destinations within a reasonable distance, using safe and appropriate infrastructure.
- **Regional Access:** the ability to get to work and visit people from where you live, using various modes of transport.
- Transport system disbenefits: the negative impacts of the transport system that people experience, like noise, road safety hazards and severance.

In the map to the right, we've highlighted areas with high social deprivation which experience transport outcomes that are worse than the average Aucklander. People in these areas may not have the means to overcome the barriers put up by the transport system, which should be considered when prioritising projects.

However, not all high deprivation areas experience poor outcomes, and areas without high deprivation can also experience poor outcomes.





### Auckland's Transport Focus Areas

The Transport System Analysis follows a quantitative, data-driven process which uses and creates a lot of data. Our Focus Areas apply a more qualitative layer of thinking, summarising this data into a few key challenges for the Auckland region. We've identified four categories of Focus Areas:

#### **Deficient Movement Patterns**

- Network deficiencies are impacting major regional commuting flows.
- People are reliant on congested and worsening general traffic networks with high safety/environmental risks and limited competitive alternatives.
- Likely to require significant central government investment.

### **Multimodal Streets with Space and Safety Constraints**

- Local Roads that users of many modes rely on, with high deficiencies for most of those modes.
- Often historically developed corridors with complex land-use interactions that further impact movement function.

### **Major Destinations with Complex Transport Interconnections**

- Key hubs around the city where people work, study and live.
- Hubs coincide with major transport interchanges where multiple modes and regional and local networks interact with each other.
- Complex web of transport and land-use interaction

### **Transport Deprivation Priority Areas**

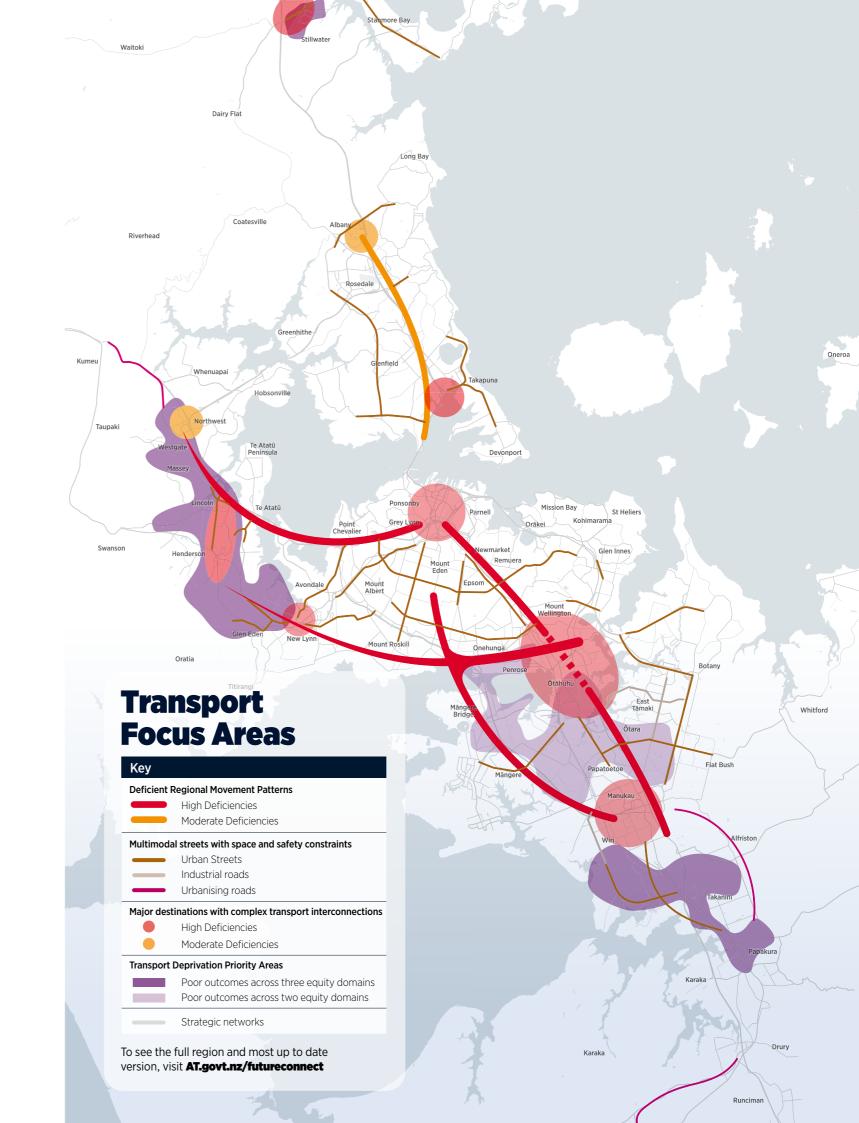
 Areas with high social deprivation experiencing poor outcomes across at least two of the three equity domains

#### How the Focus Areas will be used

We want to ensure that AT addresses deficiencies or opportunities surfaced by Future Connect in it's plans and programmes.

When work starts on the 2024-2034 Regional Land Transport Plan, Future Connect's Focus Areas and deficiencies will inform which projects we prioritise. If no projects are investigating these areas yet, further plans will be developed.

The Focus Areas, and the extensive evidence behind them, are all made available in the Future Connect Mapping Portal. This means everyone can use this data in their work.



### **Next steps**

### A living plan

Future Connect provides a snapshot of the current network, and a desired future state. None of these are ever fixed. The system is always evolving as new infrastructure gets delivered, and future plans can change for a wide range of reasons.

Future Connect will be updated as these changes occur. Major updates are scheduled every three years, to coincide with our three-yearly RLTP planning cycle.

Between these major updates, the Strategic Networks will always be kept up to date in our online Mapping Portal.

More Information about Future Connect, including the Mapping Portal, can be found at **AT.govt.nz/FutureConnect** 

