



# Infrastructure Strategy - Transport





# Outline

- Transport (45 mins)
  - What is an Infrastructure Strategy (5 mins)
  - Key challenges summary (5 mins)
  - What we do/what we have/condition/performance
  - How the challenges impact what we do
  - What we plan to do
- 3 Waters (45 mins)
  - What we do/what we have/condition/performance
  - How the challenges impact what we do
  - What we plan to do





# What is an Infrastructure Strategy?

The Local Government Act 2002 (LGA) mandates that a strategy must be produced as part of the Long-Term Plan (LTP) process.

## **It must include: -**

- Identify significant, long-term infrastructure issues over the 30-year timeframe.
- Outline the principal options and implications for managing these issues.
- Include indicative capital and operating expenditure estimates

## **It must cover critical public assets: -**

- Transportation: Roads, footpaths, and public transit infrastructure (regional councils).
- Flood Defences: Rivers, drainage, and flood protection assets (especially for regional councils)
- Three Waters was included in the 2025-34 LTP but will be captured in a Water Services Strategy in the next cycle





# What is an Infrastructure Strategy?

An Infrastructure Strategy must outline how it will manage its infrastructure, considering the need to:

- Renew or replace assets
- Respond to growth or demand for services
- Allow for planned increases or decreases in levels of service
- Maintain or improve public health and environmental outcome, or mitigate adverse effects on them
- Manage risks relating to natural hazards
- Respond to Council's zero carbon target





# What is an Infrastructure Strategy?

Links with :

- Financial Strategy
- Asset and Activity Management Plans (AMP)
- Capital budgets
- Future Development Strategy
- Significant forecasting assumptions
- Zero carbon targets
- Levels of Service





# Key Infrastructure Themes and Challenges

## Themes common to Transport and 3 Waters:

- Aging infrastructure
- Growth / changing demands
- Resilience
- Zero carbon
- Successful infrastructure delivery programmes
- Strong emphasis on Asset Management

## Transport specific challenges:

- Economic productivity
- Safety

## 3 Waters specific challenges:

- Regulatory, Services Delivery
- Public Health / Environmental





# What Transport Does

The Roding and Footpaths group delivers a range of activities and services that support the transport network across Dunedin.

These services are essential to maintaining a safe, efficient, and connected transport corridor for the city and surrounding areas.

The Transport team, supported by contractors, is responsible for:

- Planning transport infrastructure
- Constructing new assets
- Maintaining existing infrastructure
- Upgrading the network to meet future demand





# Transport Assets



## Carriageway

1,756 km total: 1,075 km sealed 682 km unsealed

**\$1,121.67m**



## Drainage

1,130 km of surface water channel, 8,760 catch pits, 5,780 culverts

**\$356.37m**



## Structures

249 bridges, 58,728m<sup>2</sup> retaining walls, 101,969m<sup>2</sup> sea walls

**\$244.37m**



## Footpaths & Cycleways

983 km of footpaths and cycleways

**\$211.75m**



## Streetlights

3,994 streetlight poles, 13,741 streetlights

**\$39.07m**



## Traffic Control

Traffic controllers, signals, signs, markings

**\$17.45m**



## Minor Structures

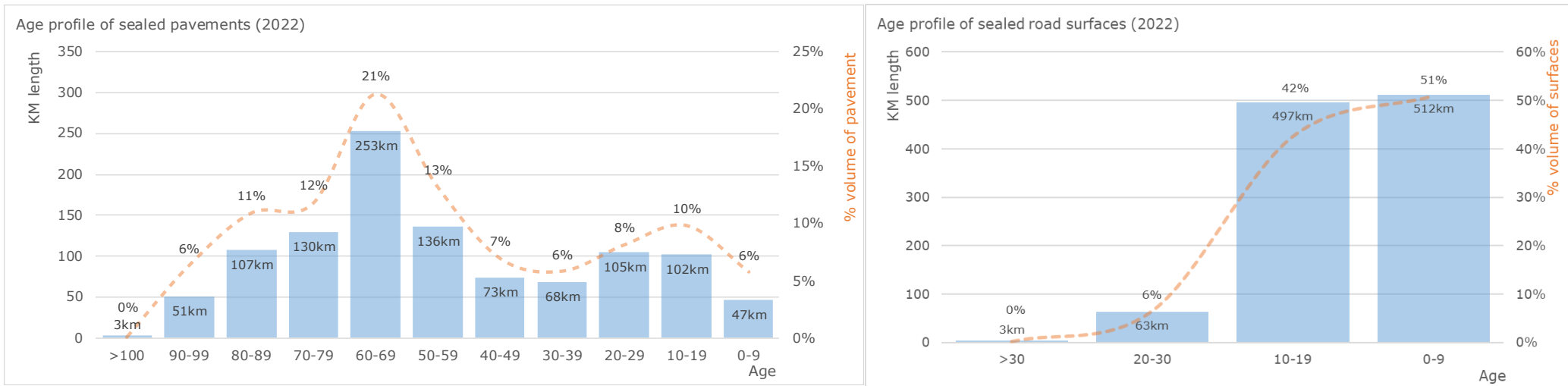
Rails, bollards, barriers, furniture

**\$26.02m**



# The condition of the assets

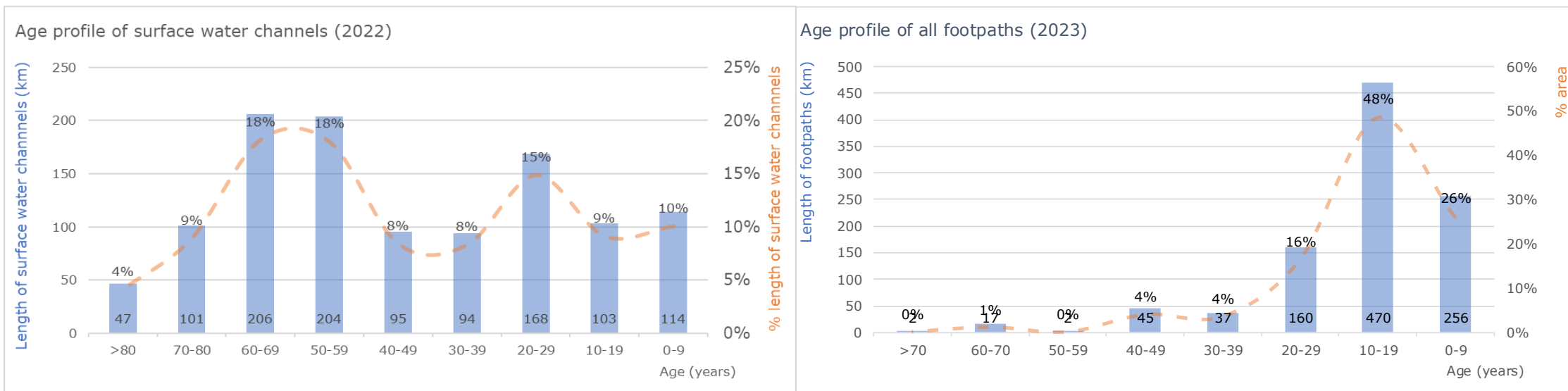
- 50% of Dunedin's sealed pavement is 60 years or over (life of 60-100 years)
- 42% of Dunedin's current road surfaces will reach the end of their life in 10-20 years (surfacing has a life of 10-20 years)
- Dunedin's roads have been built up over many years overlaying surfaces with new seal. This has resulted in the crown being higher than the kerb height in some locations reducing the capacity of the carriageway to hold water.
- The maximum number of seals should be 6. 16.9% of the network is facing its last seal.





# The condition of the assets

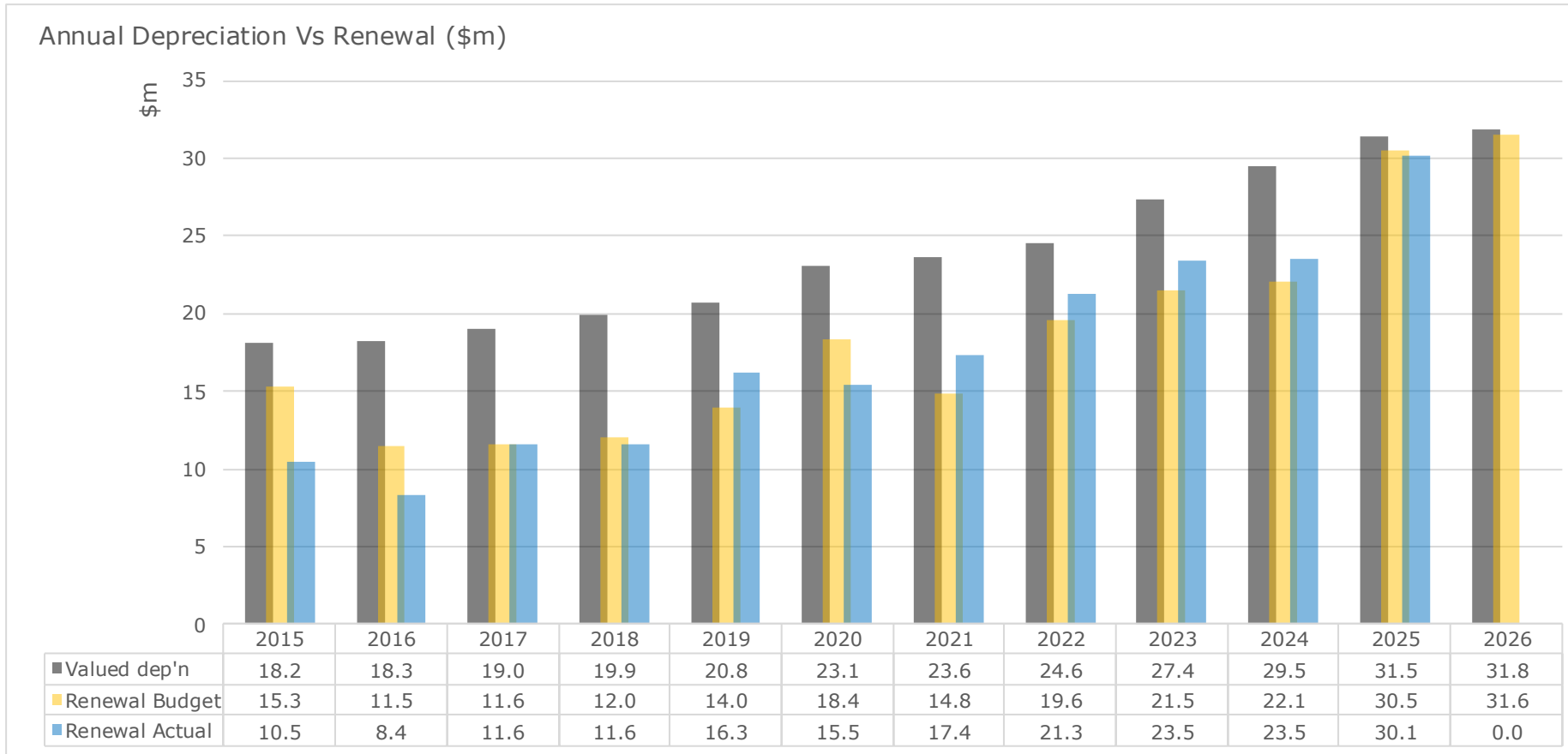
- 31% of kerb and channel is over 60 years (life of between 60-100 years) and 12% of the network is in poor to very poor condition
- 23% of Dunedin's asphalt footpaths are now at the end of their asset life (life of 25-30 years)
- 18% of footpaths are rated poor or very poor condition
- 43% of road culverts are over 70 years (asset life is 80 years)
- There is no major bridge/structure replacement planned in the next 10 years as long as these assets are suitably maintained





# Meeting lifecycle renewals

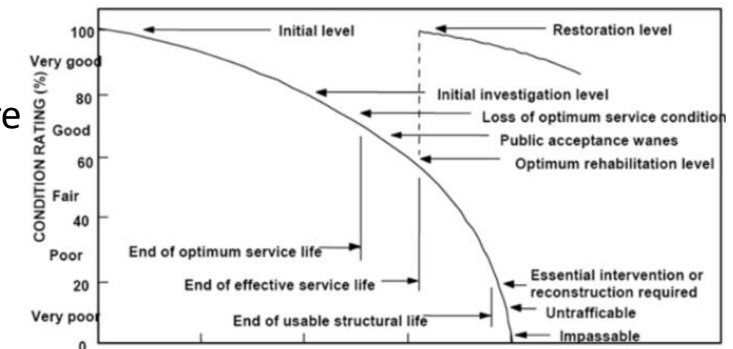
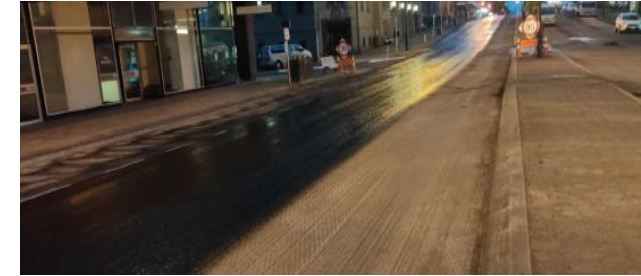
- Historic renewals not meeting annual depreciation





# How the themes impact what we do

- **Aging infrastructure:** Meeting AMP and Level of Service (LoS) derived renewal targets. Prioritised work programmes based on current asset condition.
- **Growth / changing demands:** These changes need to be met with infrastructure solutions to support that growth. Developing detailed Low Cost, Low Risk (LCLR) and Future Development Strategy (FDS) programmes to address level of service gaps across our network.
- **Resilience:** Building resilient transport networks often requires investment in alternative routes or investment in existing routes to ensure they are less susceptible to weather events, or sea level rise – both are costly. Continue to target Crown Resilience Funds for small scale works.
- **Zero carbon:** Alternative forms of transport are an expectation of the community. Funding that expectation is a challenge within a regularly constrained road corridor that has historically prioritised motor vehicle movement and parking.
- **Asset Management:** Building capability and succession within the Transport Team to ensure assets are maintained and renewed at appropriate intervals.





# Transport AMP Problems

•**Problem 1: Theme: Safety/Liveability** *"Not using local knowledge to address safety issues can lead to reactionary responses and constrained funding to address them."*

•**Problem 2: Theme: City design/specifications, planning and infrastructure condition (resilience)** *"Planning, funding policies and design are not keeping pace with aspirational change leading to conflicting priorities."*

•**Problem 3: Theme: Livability/growth/adaptability (modal shift)** *"Historical investment strategies have led to transport outcomes focused on vehicles."*

•**Problem 4: Theme: Conflicting modes/changing priorities/changing user demand (safety)/ LoS / Public understanding** *"Lack of understanding of the response to transport outcomes leads to a suboptimal work programme."*

•**Problem 1: Safety.** *"Increased investment is required to provide meaningful results to the community and reduce deaths and serious injuries across the network."*

•**Problem 2: Resilience.** *"Balancing day-to-day network requirements with long-term resilience improvements is challenging due to competing priorities and limited funding."*

•**Problem 3: Growth.** *"Connecting the transport network, including new developments, is often focussed on vehicles and does not consider other transport needs."*





# How the challenges impact what we do

- Economic Productivity:
  - Economic productivity is a driver in the GPS 2024, and continuing to support a solid thriving export sector in the Otago/Southland area will be an ongoing focus in the next 10 years in a way that meets our Zero Carbon goals.
- Safety:
  - Crash numbers involving deaths and serious injury have not reduced significantly, and in NZTA's audit of DCC in 2023, it was noted DSI was the highest since 2019.
  - Vulnerable users are overrepresented in crash statistics (24% of Dunedin's DSI's involve pedestrians).
  - Co-funding for safety initiatives through the low-cost low risk work programme has been withdrawn by NZTA so the decision will need to be made as to whether this programme will continue or not. If it continues, it will need to be at 100% local share for at least the next 3 years.





# What we plan to do

- Focuses on good asset management principles, stewardship of the existing asset and replacing it at the end of its life and condition to meet community expectations and to ensure future generations are not burdened with costs resulting from deferred capital renewals.
- The planned expenditure over the next 10 years focuses on taking opportunities to build new assets when the co-funding environment is more favorable.
- Planned expenditure over the next 30 years recognises growth, the need to provide transport choices for the community, and the need to support freight growth particularly in the forestry sector.

Challenges Addressed	
Aging infrastructure	✓
Growth / changing demands	✓
Economic growth	✓
Zero carbon	✓
Public Health / Environmental	✓





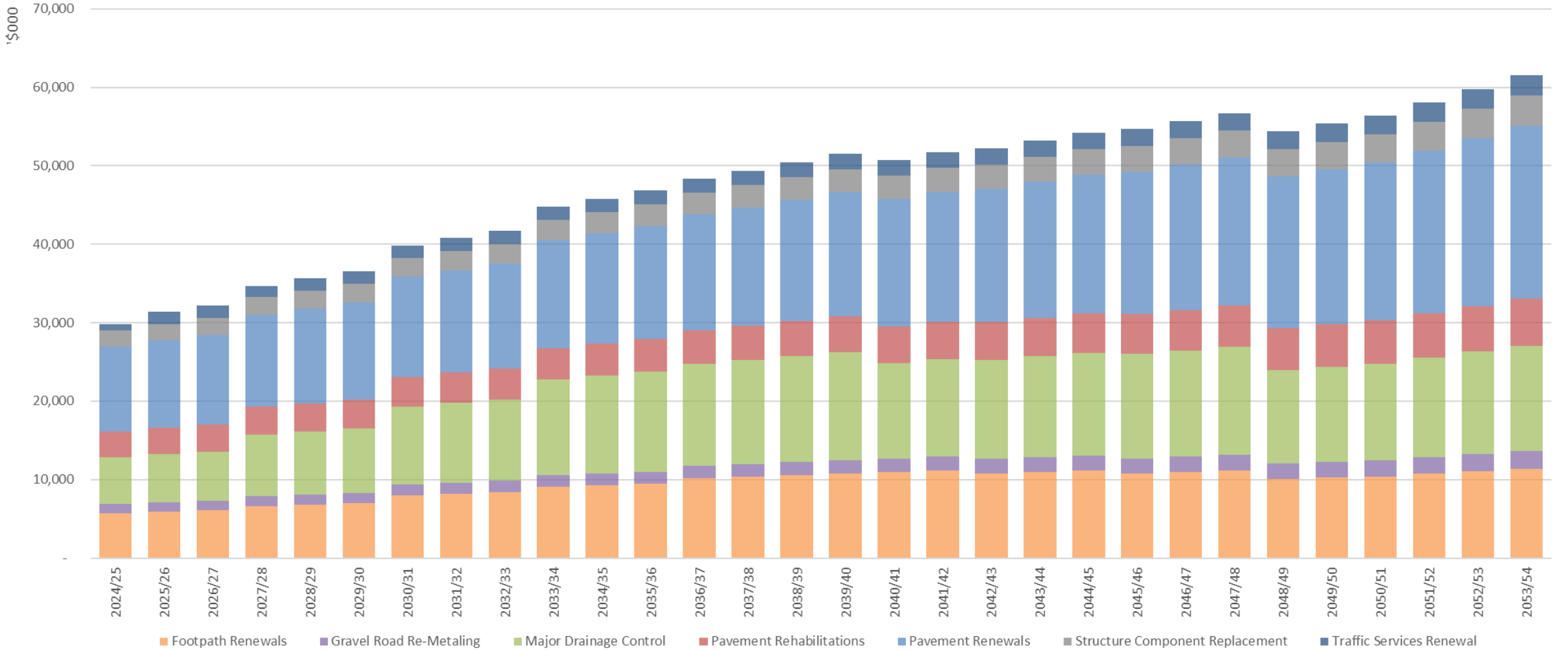
# What we plan to do

- Investing in capital renewals will provide a fit for purpose and resilient network for our community while addressing historic underinvestment.
- Providing safety interventions through the LCLR programme will address some safety and network gap challenges to make active modes more attractive which will contribute to our Zero Carbon goals.
- Extension of the Peninsula Cycleway and Ōtepoti Pathways Programme will provide a sustained investment in cycleways, contributing to our Zero carbon goals.
- Delivering bus priority and network improvements will contribute to Public Transport patronage.
- Delivery of the central city parking management strategy will contribute to the retail sector in the CBD
- Completing Shaping Future Dunedin projects will provide more capacity in the system for the road freight industry, contributing to economic productivity.

Challenges Addressed	
Aging infrastructure	✓
Growth / changing demands	✓
Resilience	✓
Zero carbon	✓
Regulatory, Services Delivery	✓
Public Health / Environmental	✓



### 30 Renewal Budget





# Questions?

