# NELSON ROAD – EVOLVING TO MEET OUR CHANGING TRANSPORT NEEDS

We are looking into future changes to Nelson Road to support Box Hill's evolving transport needs as it develops into Melbourne's second CBD. Box Hill's commercial precinct is growing, as are the number of dwellings (with new apartment complexes), and public and active transport infrastructure – with upgrades for the Box Hill train station, tram route 109 and the new Box Hill Suburban Rail Loop (SRL) train station.

Nelson Road is an important corridor providing connection and access to the Health and Education precincts as well as providing an important north-south active transport corridor.

### Vision for Box Hill

*Box Hill is the pre-eminent urban centre for Melbourne's east. The centre supports a regionally significant focus for health, education and employment serviced by a major public transport hub. It provides a diverse and growing range of business, retail, entertainment, community and living opportunities.*

*An interconnected network of complementary and distinctive, accessible and vibrant neighbourhoods respond to the diverse community's desire for sustainable, engaging, safe, caring and healthy places. Future change in Box Hill will deliver a people-friendly environment with open and welcoming public spaces for all.*

- Box Hill Metropolitan Activity Centre to 2036 Draft Structure Plan

The *Box Hill MAC Integrated Transport Strategy*, *Whitehorse Integrated Transport Strategy*, *Cycling Strategy*, and *Box Hill Structure Plan* all recognise and identify the importance of active transport, as well as community safety, accessibility and amenity. Nelson Road is a 'primary walking and cycling north-south route' (Box Hill MAC ITS). It is identified by the Department of Transport and Planning (DTP) as a Strategic Cycling Corridor, and part of an Easy Ride (low stress) Cycling Route through the municipality. Nelson Road also provides connection and access to:

- Box Hill Hospital, Epworth Eastern Hospital and a range of medical suites and services
- Box Hill Institute
- residential and hotel developments
- Box Hill train station, the new Box Hill SRL train station, tram route 109, local bus routes, Box Hill Central shopping centre, and the city centre located to the south
- open spaces (including Box Hill Gardens and Hagenauer Reserve via Hagenauer Walkway to the north).

The Nelson Road corridor study recently investigated pedestrian and cyclist safety between Whitehorse Road and Severn Street and identified potential improvements outlined in this document.




NELSON RD / ARNOLD ST INTERSECTION



NELSON RD LOOKING NORTH TOWARDS WHITEHORSE RD

## Community insights



Community feedback during development of the Box Hill MAC ITS[1] indicated that:

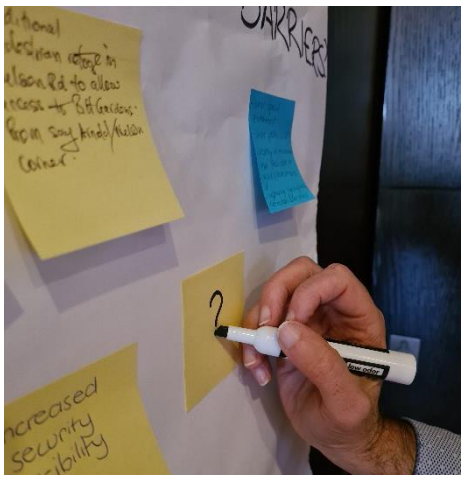
- *89% support prioritised walking infrastructure*
- *74% support a decrease in the speed limit to 40 kilometres per hour where there is a mix of pedestrians and cyclists*
- *75% support increasing footpath widths and public space to allow for more outdoor dining, seating, planting and places to meet others, even if it means removing some on-street car parking.*

A Place Experience (PX) Assessment[2] identified the community's highest and lowest rated attributes. The research found that improvements for Nelson Road should focus on:

- Priority 1 – Ease of walking around (including crossing the street, moving between destinations)
- Priority 2 – Maintenance of public spaces and street furniture
- Priority 3 – Interesting things to look at (people, shops, views etc.)

During the Nelson Road corridor study, two workshops were held with key stakeholders and community representatives on issues along the corridor and considerations for potential designs. It was recognised that types and needs for walking and cycling trips along Nelson Road were quite varied, and proposed improvements should take into account:

- range of walking abilities, needs and demographics
- range of bicycle riders' experience and competencies
- pedestrian and cyclist volumes will continue to grow with future growth and development.
- range of walking or riding trips to key destinations:
  - Residents and local employees to public transport stops (train, tram, bus)
  - Residents and local employees to Box Hill city centre
  - Hospital staff and patients to hospitals and medical suites
  - Other employers and commuters
  - Students and staff to Box Hill Institute
  - Parks and recreation.



## Design Principles

Design principles take into consideration community feedback and directions from Council strategic documents. They seek to:

- improve safety and access for people walking and cycling, including people with a range of walking abilities
- increase safety by encouraging lower traffic speeds and reduced through traffic
- enable incremental infrastructure changes to align with other projects in Box Hill
- align with Box Hill strategic objectives.

1. City of Whitehorse, 2020, *Box Hill MAC Integrated Transport Strategy*
2. Placescore, 2019, *Box Hill Metropolitan Activity Centre Town Centre Community Insights Report*

## Proposed design

It is important that changes on Nelson Road can be staged in coordination and alignment with other transport changes in Box Hill. Key aspects of the proposed design include:



Walking improvements, taking into consideration current high numbers of people walking along Nelson Road (with increasing pedestrian movements with new/ expanding developments planned along and near Nelson Road). People walking along Nelson Road exhibit a broad range of abilities and needs, including fit able-bodied people, people with prams, elderly, ill, infirm or disabled (who may require use of mobility aids). The design incorporates:

- A median to enable people to stage their crossing (shorter crossing distance per movement and crossing one traffic direction at a time). The median may feature planter boxes during early phases which provides a low-cost opportunity to trial – and adapt if required – before planting trees in cut-outs in a latter phase
- Wider footpaths which will provide additional space for people walking along Nelson Rd. This increases pedestrian amenity by creating greater space for pedestrians (who often already walk on the grass) and also reduces trip hazards at edge of footpath and grass. The current grass nature strip would be paved, with garden areas added for trees and plants
- Zebra crossings to provide priority crossing opportunities at key locations:
  - Two new midblock crossings (+ existing crossing near gardens / hospital)
  - New crossings at Arnold St and Thames St intersections
- Separate spaces for people walking and those riding would be maintained (bicycle lanes provided in latter phases)



Cycling safety and amenity improvements phased over time while allowing coordination with other works surrounding/adjacent to the corridor, including:

- Sharrows
- Cycle link through Box Hill gardens
- Separated bicycle lanes.



Improved safety and amenity for all road users by:

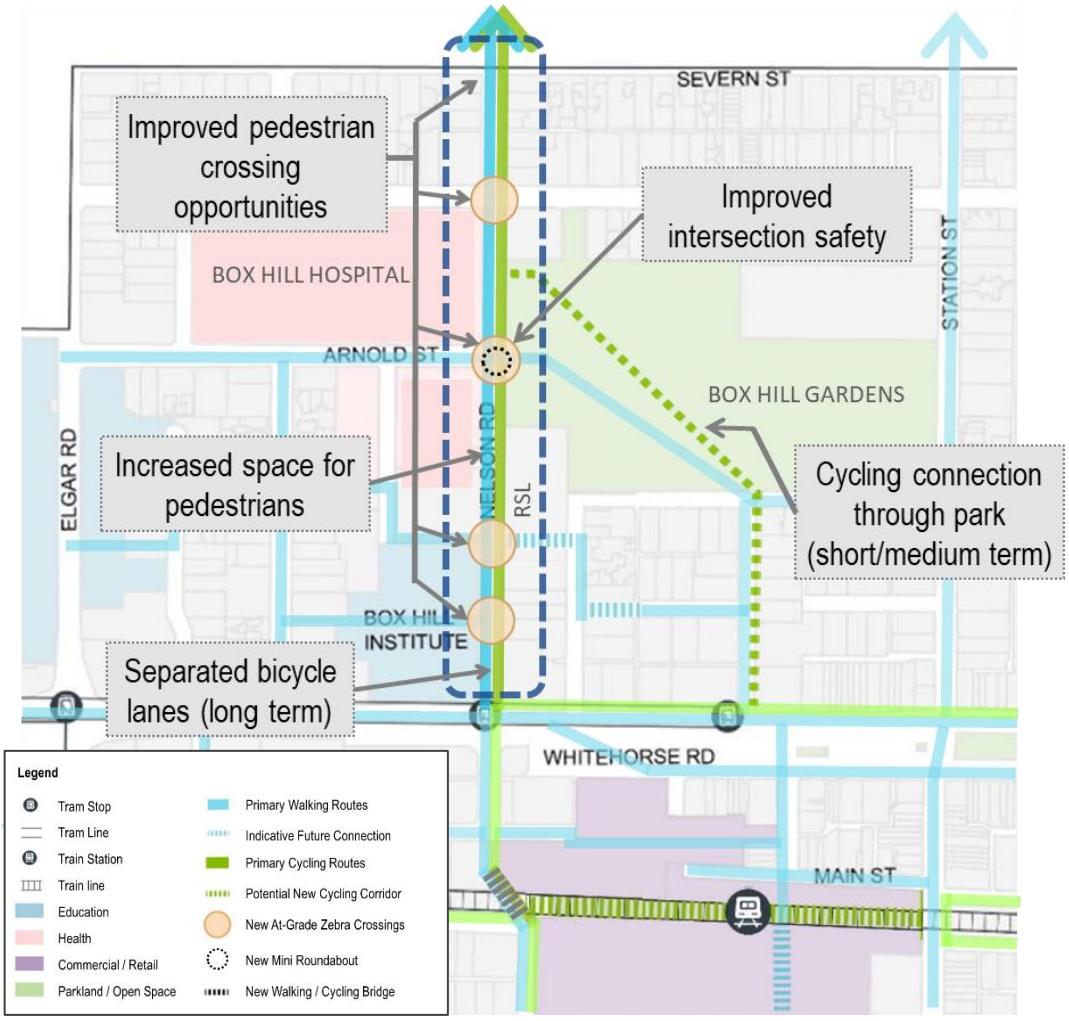
- Encouraging lower vehicle speeds (reduced width of traffic lanes, enclosed avenue environment supported by median planting, consider speed limit reduction)
- Increasing environmental comfort through provision of additional planting / trees
- Safer intersection operation at Arnold Street through roundabout with zebra crossings (a mountable dome will accommodate buses & ambulances).
- Retaining on-street parking in early phases.

Nelson Road design objectives:

- pedestrian safety & amenity
- cyclist safety & amenity
- lower speed environment
- increased planting / tree canopy
- streetscape improvements
- maintain vehicle access
- support Box Hill strategic objectives
- staged implementation

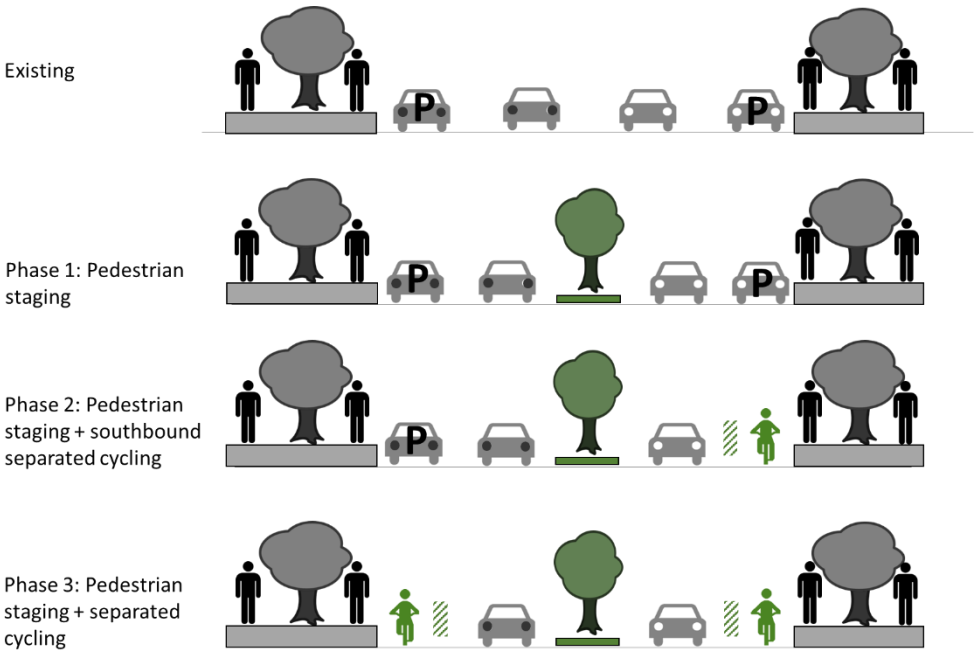
There are trade-offs to balance the needs of everyone travelling along and to Nelson Road. The proposed design was considered to have the greatest alignment with most objectives, while minimising the impact to on-street parking in the short- to medium-term. While the final phase results in loss of on-street parking, the phased implementation enables opportunities for increased off-street parking to be accommodated as part of adjacent and nearby developments [3].

3. See Action 14.4 of Box Hill MAC Integrated Transport Strategy




SOURCE: ADAPTED FROM BOX HILL MAC INTEGRATED TRANSPORT STRATEGY (2020)

PROPOSED NELSON ROAD IMPROVEMENTS & BOX HILL WALKING AND CYCLING CONTEXT

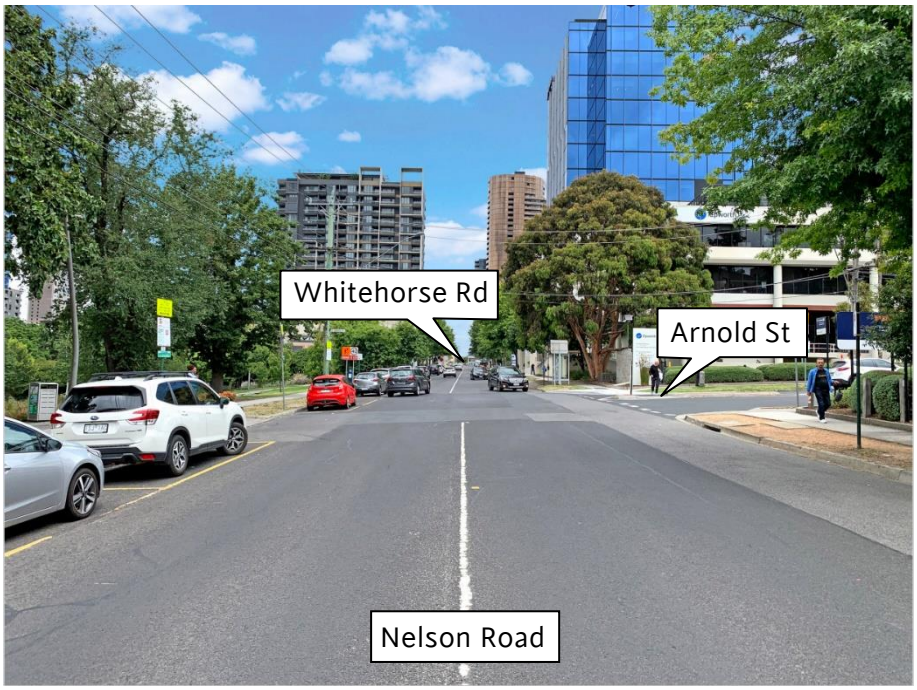



PHASES OF PROPOSED DESIGN

## Visualisations

### Nelson Road at Arnold Street intersection looking towards Whitehorse Road

*Existing Conditions*




*Phase 2A*



- Wider footpaths
- Painted median
- Roundabout at intersection
- Zebra crossings
- Bicycle lane with sharrows through intersection

*Phase 3*



- Wider footpaths
- Painted median
- Roundabout at intersection
- Zebra crossings
- Separated bicycle lane; sharrows through intersection

## Visualisations

### Nelson Road near RSL looking towards Whitehorse Road

*Existing Conditions*




*Phase 1*

- Wider footpaths
- Painted median with planters
- Zebra crossing
- Sharrows



*Phase 3*

- Wider footpaths
- Painted median with tree planting
- Zebra crossing
- Separated bicycle lanes






## Visualisations

### Nelson Road at Thames Street intersection looking towards Whitehorse Road

*Existing Conditions*



*Phase 3*

- Zebra crossings at roundabout
- Separated bicycle lanes; sharrows through intersection