

# 1

# Waikato Expressway Longswamp Section

# **Background**

- Realignment of State Highway 1 in 1970s to the current alignment, including earthworks for a four-lane corridor
- Designation amended in 1997 to provide for a full interchange at Paddy/Hall roads



- Establishment of roads of national significance (RoNS)
- Two full interchanges nearby; one already built at Hampton Downs and one to be built at Te Kauwhata as part of the Rangiriri Section
- Agreement with councils on the planning and decision making for the Expressway
- Higher Expressway design requirements
- Improved requirements for environmental controls
- Central (median) wire-rope safety barrier retrofit in 2004/5









# 1

# Waikato Expressway Longswamp Section

# Expressway design guidelines

- Interchanges should ideally be separated by at least 5km
- Interchanges should only connect roads separated by one level of roading hierarchy. See table below for roads connected with the Longswamp Section

### ROADING HIERARCHY

### **National routes**

State Highway/Expressway

### **Regional arterial roads**

No roads relevant to the Longswamp Section

### **Arterial roads**

Te Kauwhata Road

### **Collector roads**

No roads relevant to the Longswamp Section

### **Scenic and tourism routes**

No roads relevant to the Longswamp Section

### **Local roads**

- Whangamarino Road
  Hall Road
  Summertime Lane
- Rodda Road Paddy Road Wayside Road Plantation Road

# Influences on road hierarchy:

- Destination
- Vehicle volumes
- Traffic mix
- Links to other roads
- Land use

- Expressway access should be controlled through formal interchanges only
- Outside and central (median) safety barriers to be installed along the length of the Expressway



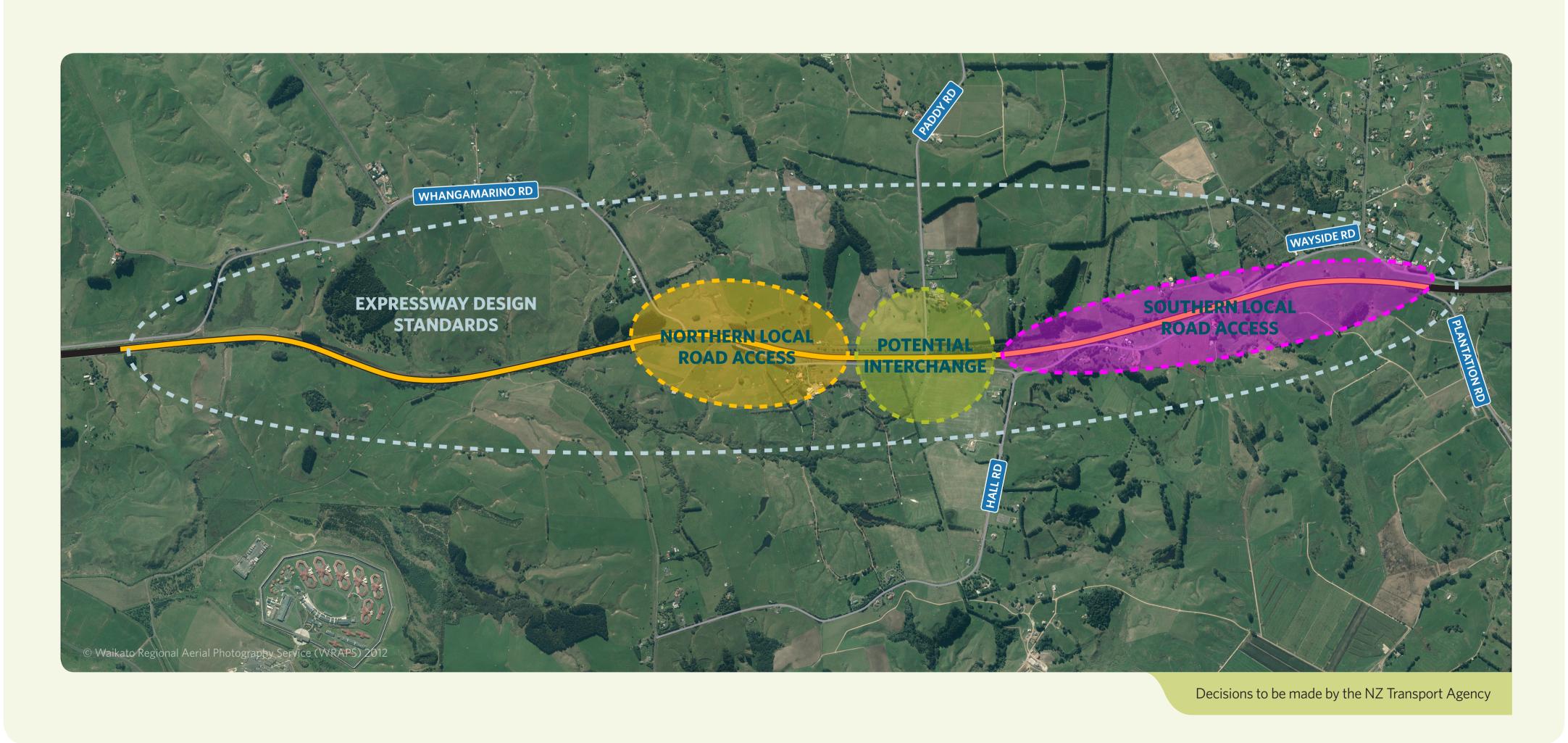
# Waikato Expressway Longswamp Section

# This phase of the project includes:

- Investigating the need for an interchange at Paddy/Hall roads and alternative local road access, now that there are (or will be) full interchanges at Hampton Downs and Te Kauwhata
- Identifying the need for additional land
- Seeking any necessary designation changes and resource consents
- Detailed design
- Preparation of construction documentation to go to a contractor

# Need for an interchange and alternative local road access

- To investigate the need for an interchange at Paddy/Hall roads and alternative local road access, the project has been divided into the following three decision areas:
  - 1. Potential interchange at Paddy/Hall roads
  - 2. Northern local road access
  - 3. Southern local road access





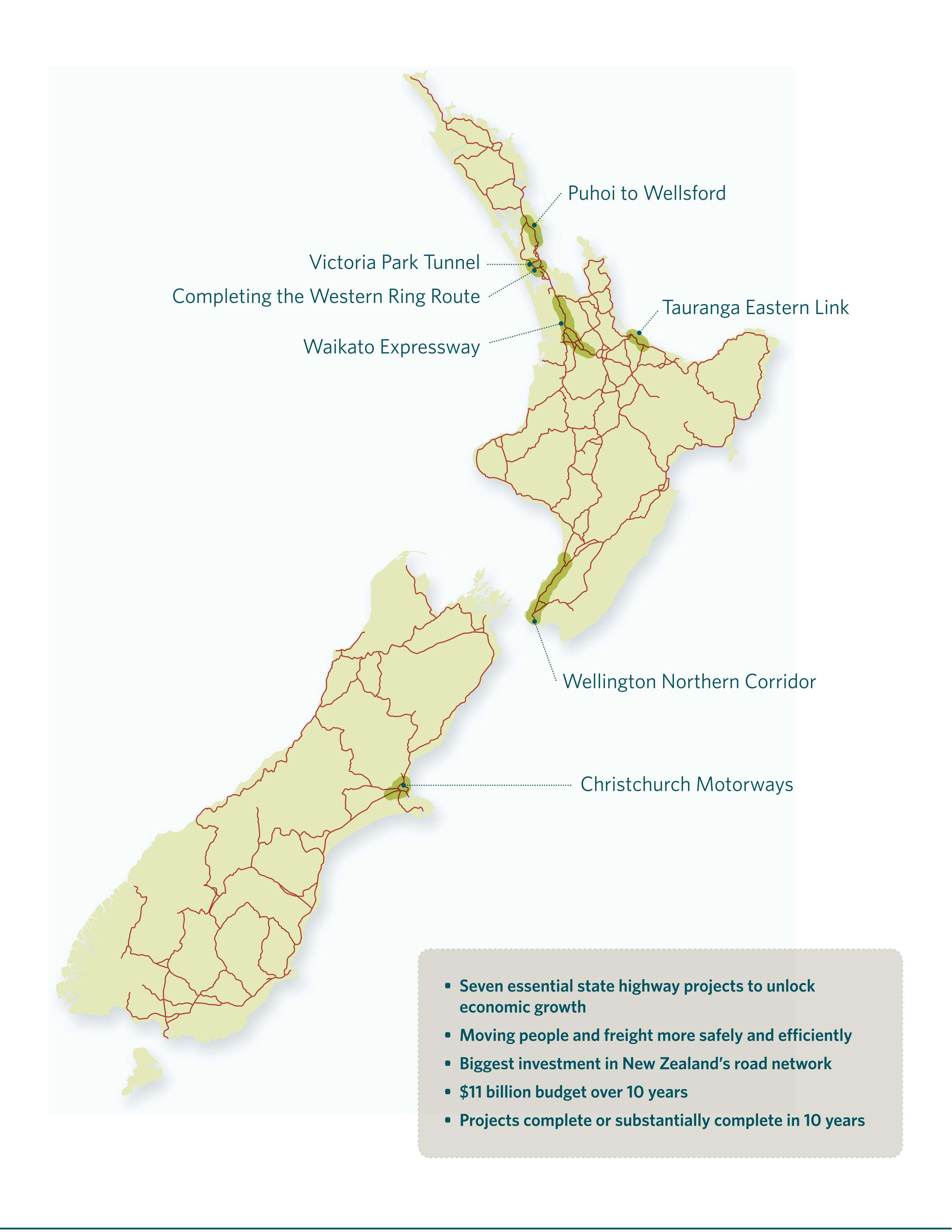
### **Feedback**

- The NZ Transport Agency is seeking your feedback to input into the interchange and alternative local road access investigations
- There are feedback forms available for you to fill out today and drop in the feedback box, or you can return them via post
- Feedback closes Wednesday 12 February 2014

### **Timeframes**

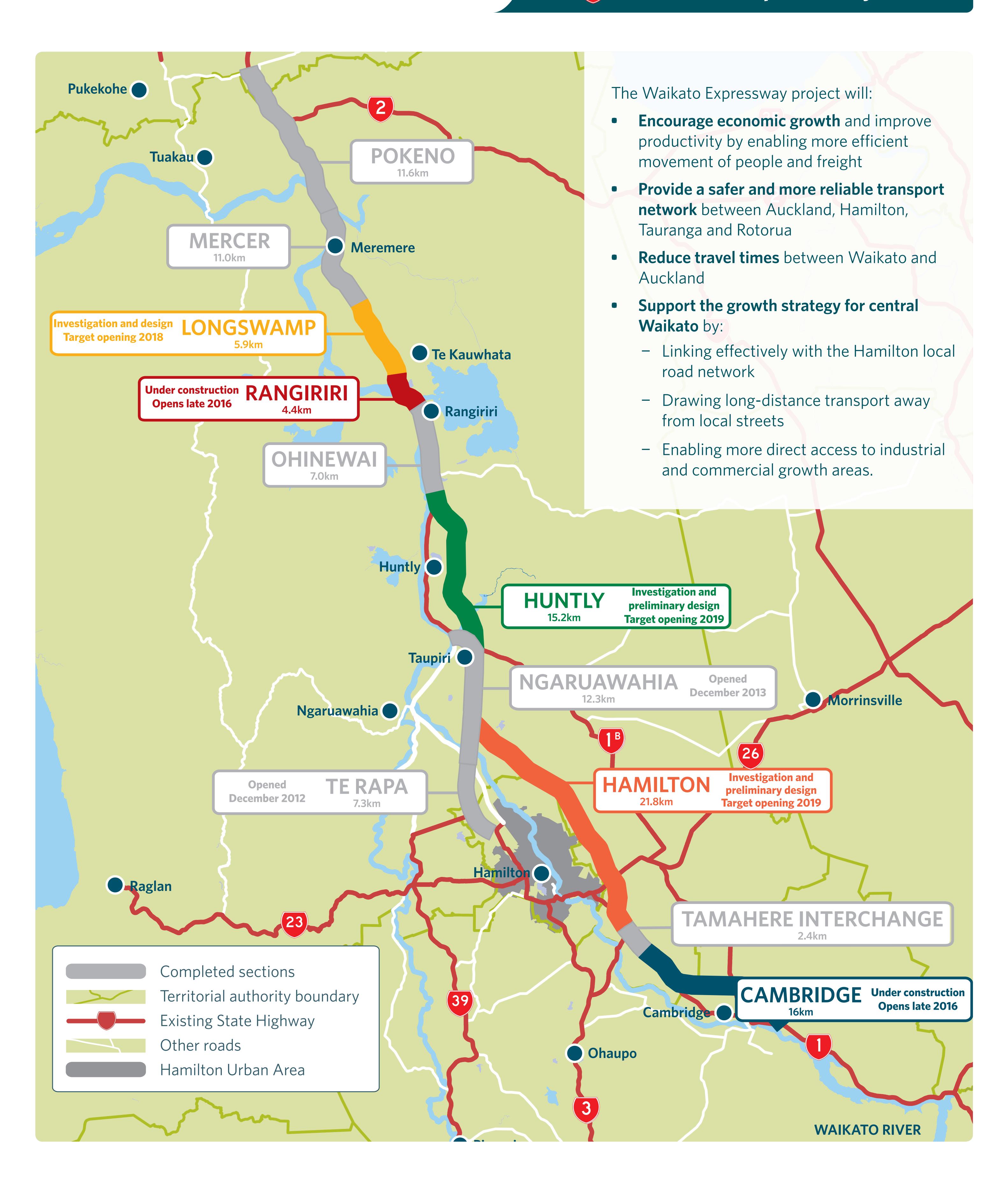
WHEN	WHATS HAPPENING
Oct 2013	Start of current phase
29 Jan 2014	Public information day 1
Late Feb 2014	Interchange and alignment options report
Mid 2014	Scheme assessment report addendum
Mid 2014	Public information day 2
Early 2015	Notice of Requirement and resource consent applications
Mid 2015	Draft construction drawings
Early 2016	Tender documents
2018	Target construction completion date







# 1) Waikato Expressway



# Decisions required to be made by the NZ Transport Agency for which we are seeking your feedback

# Potential interchange at Paddy/Hall roads

### **Advantages**

- Eliminates the need for southern local access roads (Decision 3)
- Reduced trip length for local users

### Disadvantages

- Compromises interchange spacing and strategic connections of Expressway
- Large designation footprint needed
- Very low traffic demand
- Unsuitable vehicles (ie farm machinery) are forced to use the Expressway



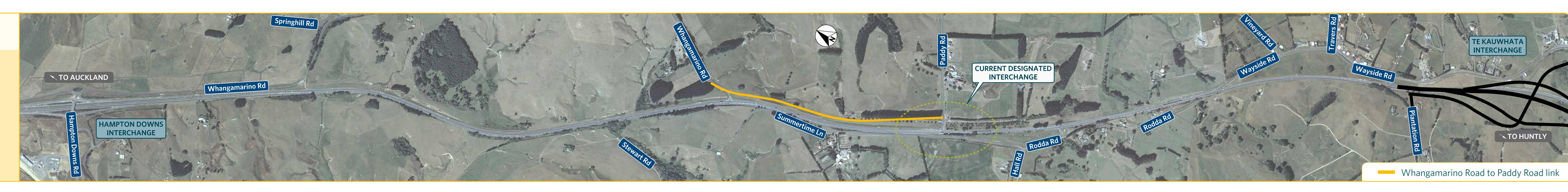
# Northern local road access

### **Advantages**

- Improved northern access for local roads if no interchange is provided
- Safe access to the Expressway at Hampton Downs

### Disadvantages

- May not be economically justifiable
- Additional stormwater management required for sealed area
- Increased travel time to access Te Kauwhata



# Southern local road access

Option 3A: Construct a new road between Paddy Road and Wayside Road, with one bridge from the new road to Rodda Road (location to be determined - 3 options)

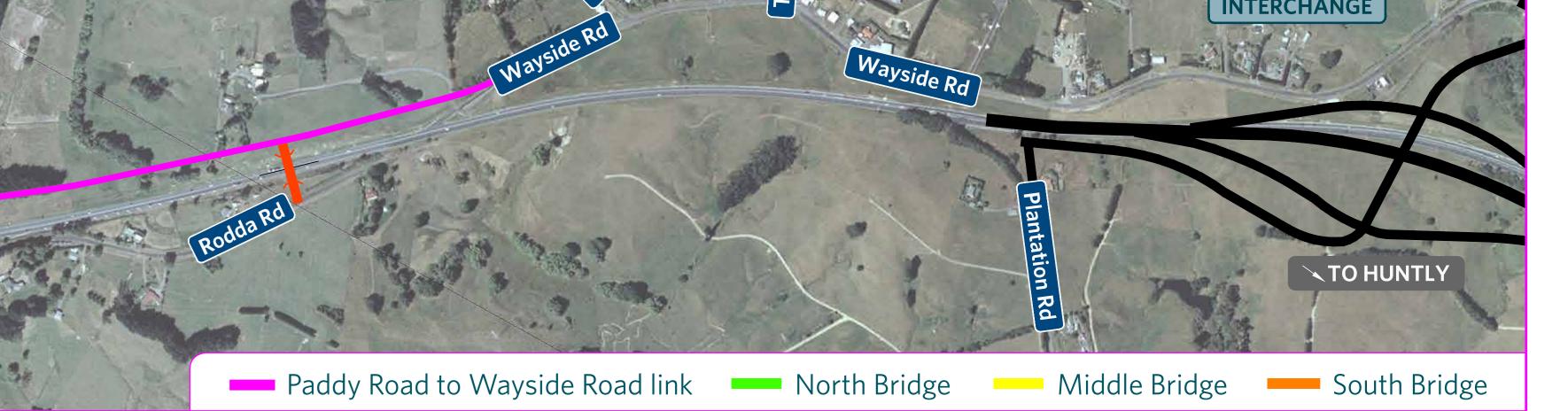
### Advantages

- Only requires a local road on one side of the Expressway
- Improved southern access for local roads if no interchange is provided

## Disadvantages

- Geotechnical complications with the Hall
- Difficult topography
- Large amount of imported fill required





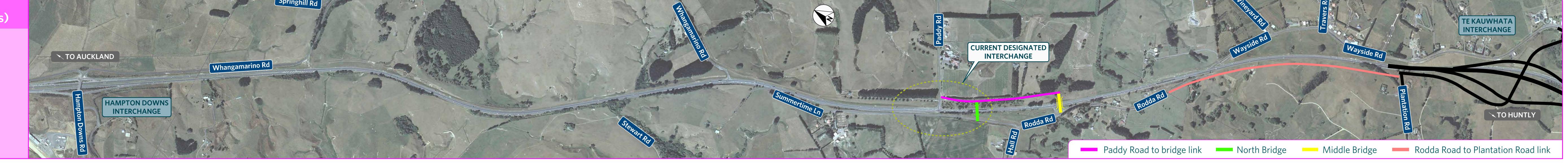
# Construct a new road between Rodda Road and Plantation Road, with one

## **Advantages**

- North bridge option avoids geotechnical complications (Hall Rd slip)
- More suitable topography
- Potential reduction in length of new local road required
- Makes use of Crown owned land at the southern end

### Disadvantages

- May impact on previously unaffected dwellings (Rodda Rd to Plantation Rd)
- Requires construction of local roads on both sides of the Expressway



### **Option 3C:** New roads from Whangamarino Road to Paddy Road and Rodda Road to Plantation Road, without a bridge across the Expressway

### **Advantages**

- Avoids the need for a new bridge
- Avoids geotechnical complications (Hall Rd slip)
- Cheaper option if the northern local road access is provided (Decision 2)

### Disadvantages

- Long travel time for local traffic travelling in the opposite direction to the new local road
- May impact on previously unaffected dwellings (Rodda Rd to Plantation Rd link)



### Option 3D: New roads from Paddy Road to Wayside Road and Rodda Road to Plantation Road only, without a bridge across the Expressway

## **Advantages**

Avoids the need for a new bridge

### Disadvantages

- Long travel time for Paddy Rd traffic if northern local road access is not provided and for north bound Hall Rd traffic
- May impact on previously unaffected dwellings (Rodda Rd to Plantation Rd)
- Geotechnical complications (Hall Rd slip)
- Large amount of imported fill required
- Difficult topography (Paddy to Wayside Rd)

