Time of Use Charging Programme

Supplementary Information

Charge options: Detailed view

These slides provide a more detailed view of some of the key metrics for the three Time of Use Charging Options. The main elements are:

1
Proportion of trips charged by Local Board area

2
Estimated time savings for charged drivers

3
Projected change in morning peak travel time of major road corridors

4
Illustrative public transport corridors

The metrics, with the exception of the illustrative public transport corridors, have been generated from the *Auckland Forecasting Centre's Macro Strategic Model*.

Although Time of Use Charging is not expected to be in place until 2031, the modelling assumes the charges are in place in 2026 to help give a sense of expected impacts.

The modelling assumes that the City Rail Link and associated bus routes are in place and operating.

The results here are for the morning peak period, which in the model runs from 7.00 AM to 9.00 AM. However, in practice the charges may run between 7.00 AM and 10.00 AM, depending on the option.

This deck provides a detailed assessment of the three options being consulted on. If you would like background information on the options and the proposed scheme, please visit the **AK Have Your Say** website before reading further.

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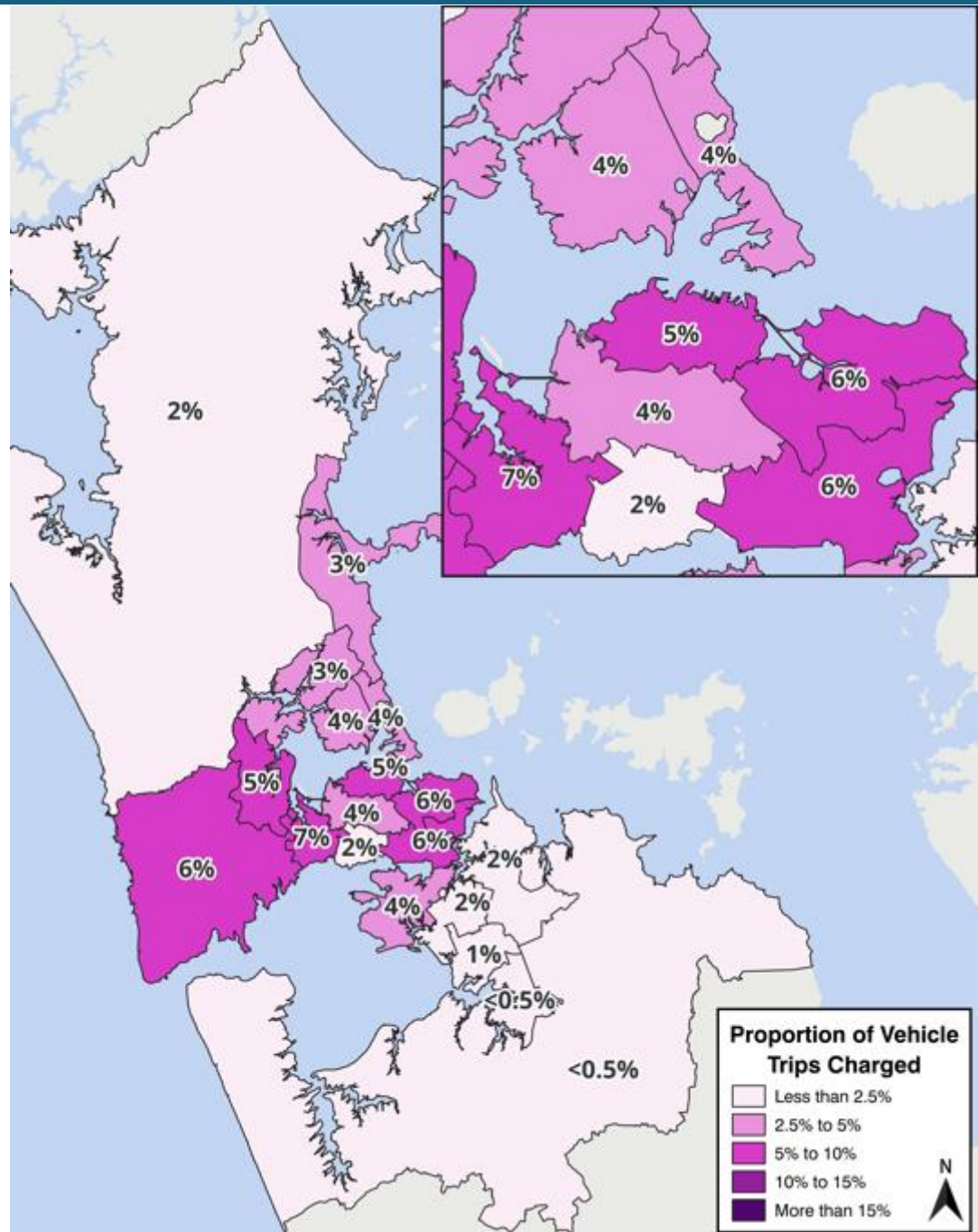
3–7	**Option A** Proportion of trips charged · Time savings for charged drivers · Morning peak corridor travel times · Public transport improvements
8–12	**Option B** Proportion of trips charged · Time savings for charged drivers · Morning peak corridor travel times · Public transport improvements
13–17	**Option C** Proportion of trips charged · Time savings for charged drivers · Morning peak corridor travel times · Public transport improvements
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How many will pay? Proportion of charged trips by Local Board Area

This map shows the estimated percentage of trips originating from each of Auckland's Local Board areas and travelling into the **Option A** cordon area, during the morning peak period.

Overall, around **3.5%** of all morning trips are expected to pay the charge for Option A.

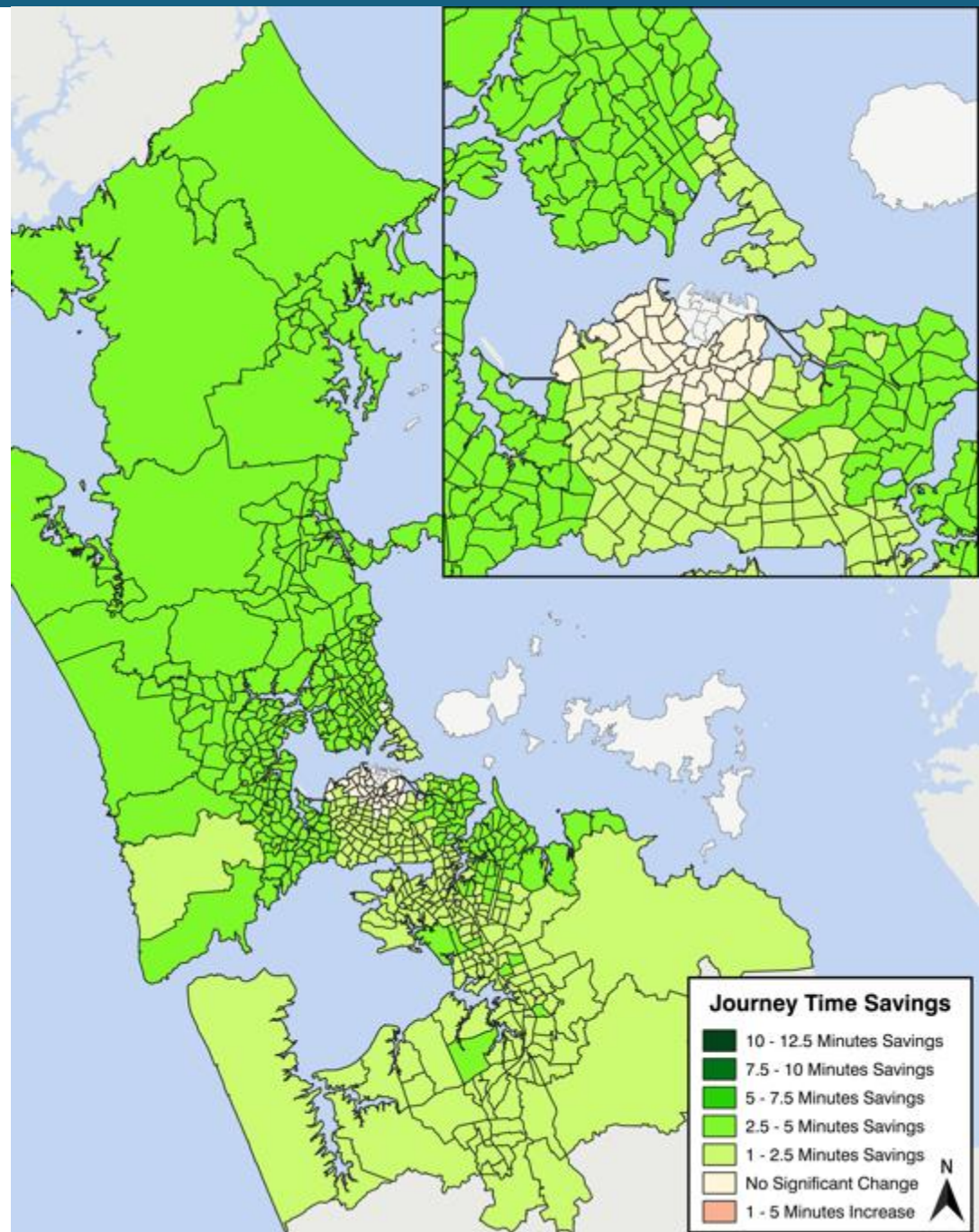
Example: *Of all morning peak vehicle journeys taken from Rodney, only 2% are forecast to travel into Option A cordon area and be charged.*



Estimated Time Savings for Charged Drivers

This map shows the time that drivers are estimated to save if travelling across the **Option A** cordon into the city centre during the morning peak period. Time savings are based on where drivers' trips start from.

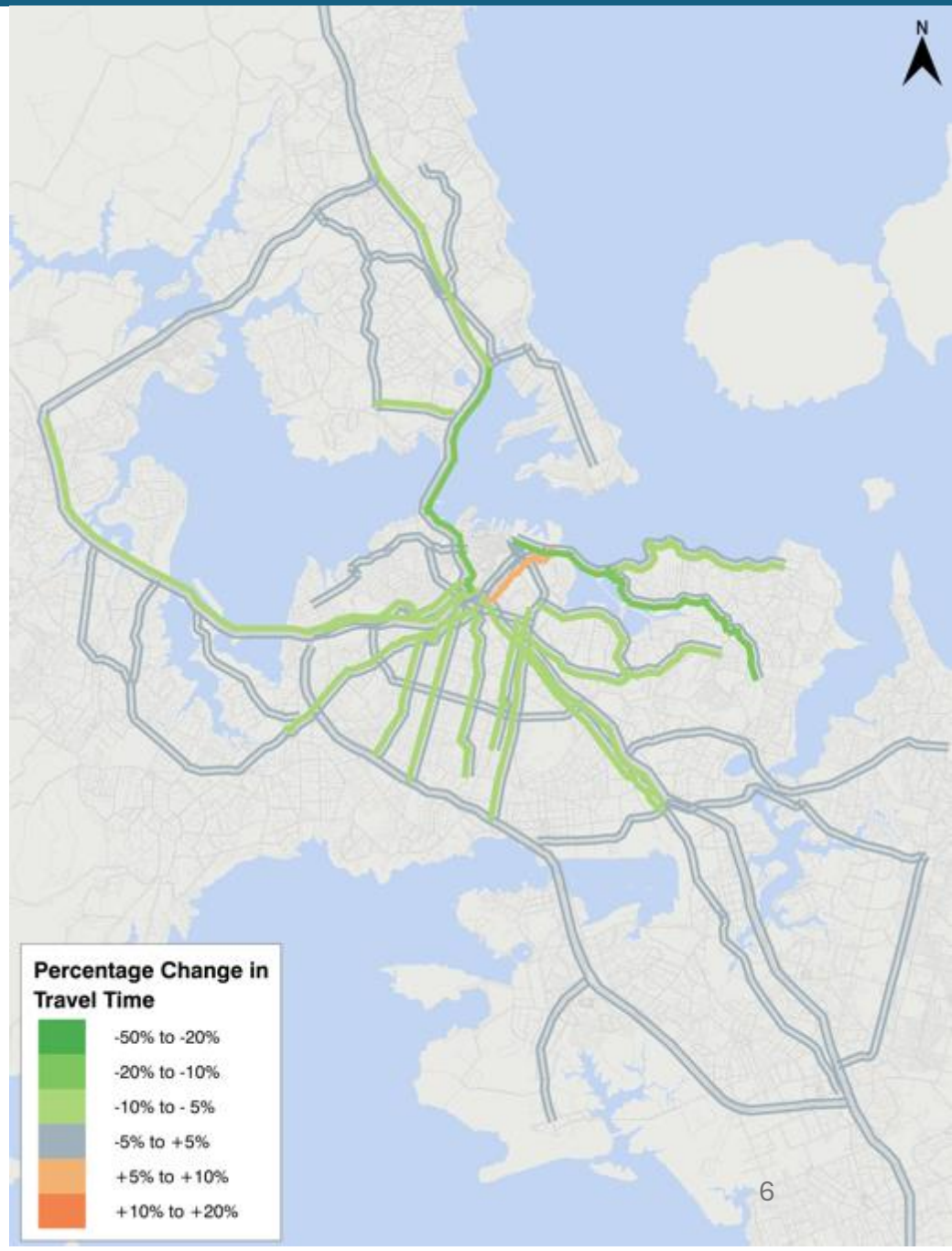
Example: *Drivers travelling from Glen Innes into the cordon area during the morning peak period are estimated to save between 2.5 and 5 minutes on their total journey time under* ***Option A****.*



Projected change in morning peak travel times on major road corridors

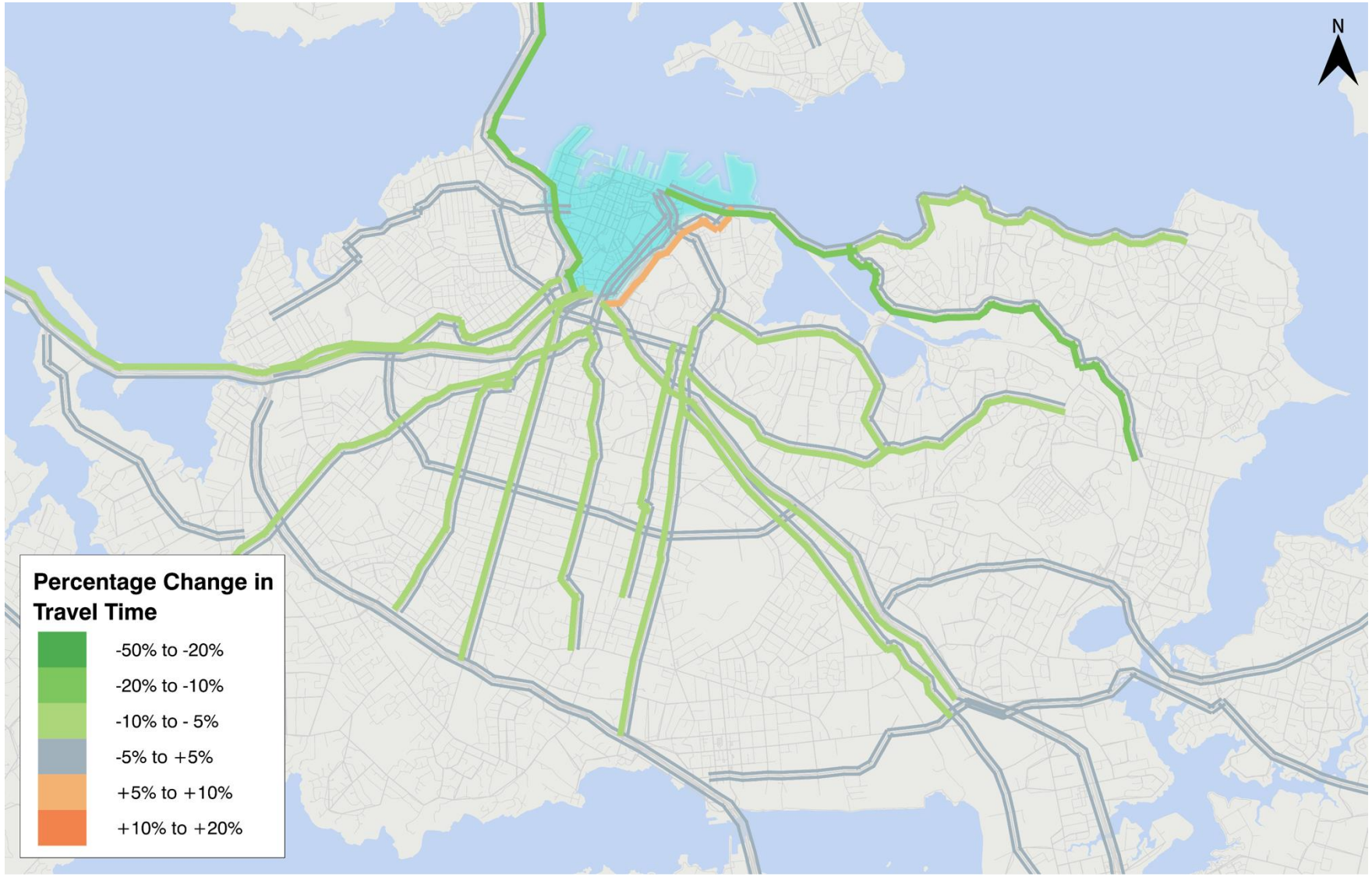
This map shows how the introduction of the **Option A** cordon will change vehicle travel times for Auckland's major road corridors during the morning peak. The map is showing the percentage change in travel time for that section of road.

- For example, trips towards the city centre via State Highway 1 over the Harbour Bridge and via Kepa Road and Tamaki Drive will be **10–20% faster** under Option A.
- The majority of other major arterials passing through central Auckland will experience moderate reductions (**5–10% time saving**).
- **All drivers travelling on these roads will experience the time savings benefits**, not just those paying the charge. Overall, around **a quarter** of all drivers who do not pay the charge are still expected to receive a faster and more reliable trip.
- **Corridors further away from the charged area are not forecast to be affected**. Trips travelling away from the city centre (the counter-peak direction) in the morning are also not expected to be affected.
- ***SH16*** *from Tamaki Drive to the Central Motorway Junction is expected to experience an* ***increase in travel time of between 5 and 10%*** *as a result of traffic diverting around the charging area.*



Projected change in morning peak travel times on major road corridors:

Option A Close Up



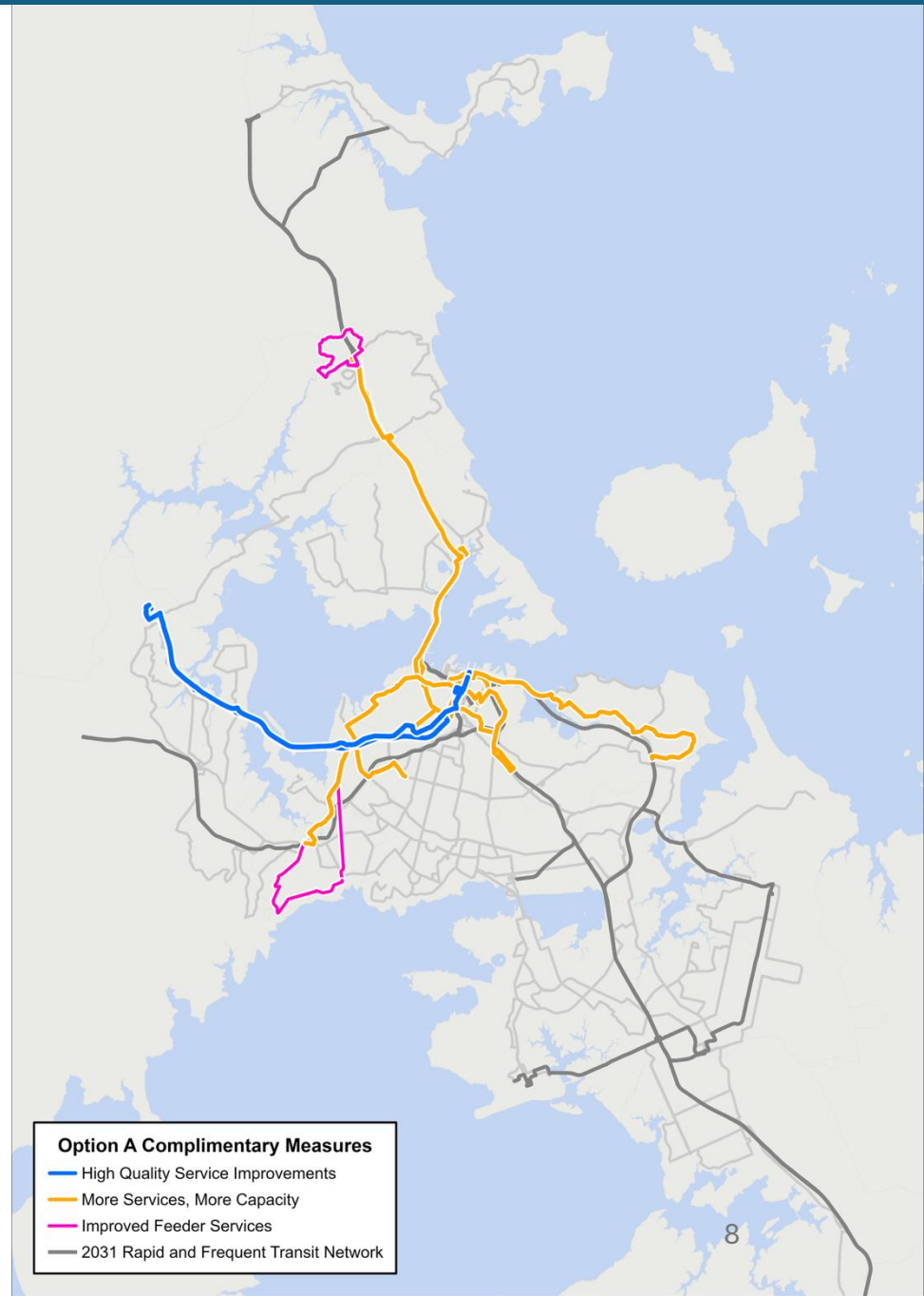
Illustrative Public Transport Improvements

Additional public transport services are planned for each option to provide greater capacity and more opportunities for people to change how they travel.

- The extent of any additional services will depend on the **revenue available** from each option after direct project costs have been covered.
- Initial public transport priorities associated with each option are identified in the **supporting project map**.

Option A is currently forecast to provide **limited net revenue**. As a result, additional public transport improvements would likely be focused on providing additional capacity on routes that may become crowded due to the increase in public transport patronage.

- Final decisions on additional public transport services for each option will need to be agreed by **Council and the Minister of Transport**.

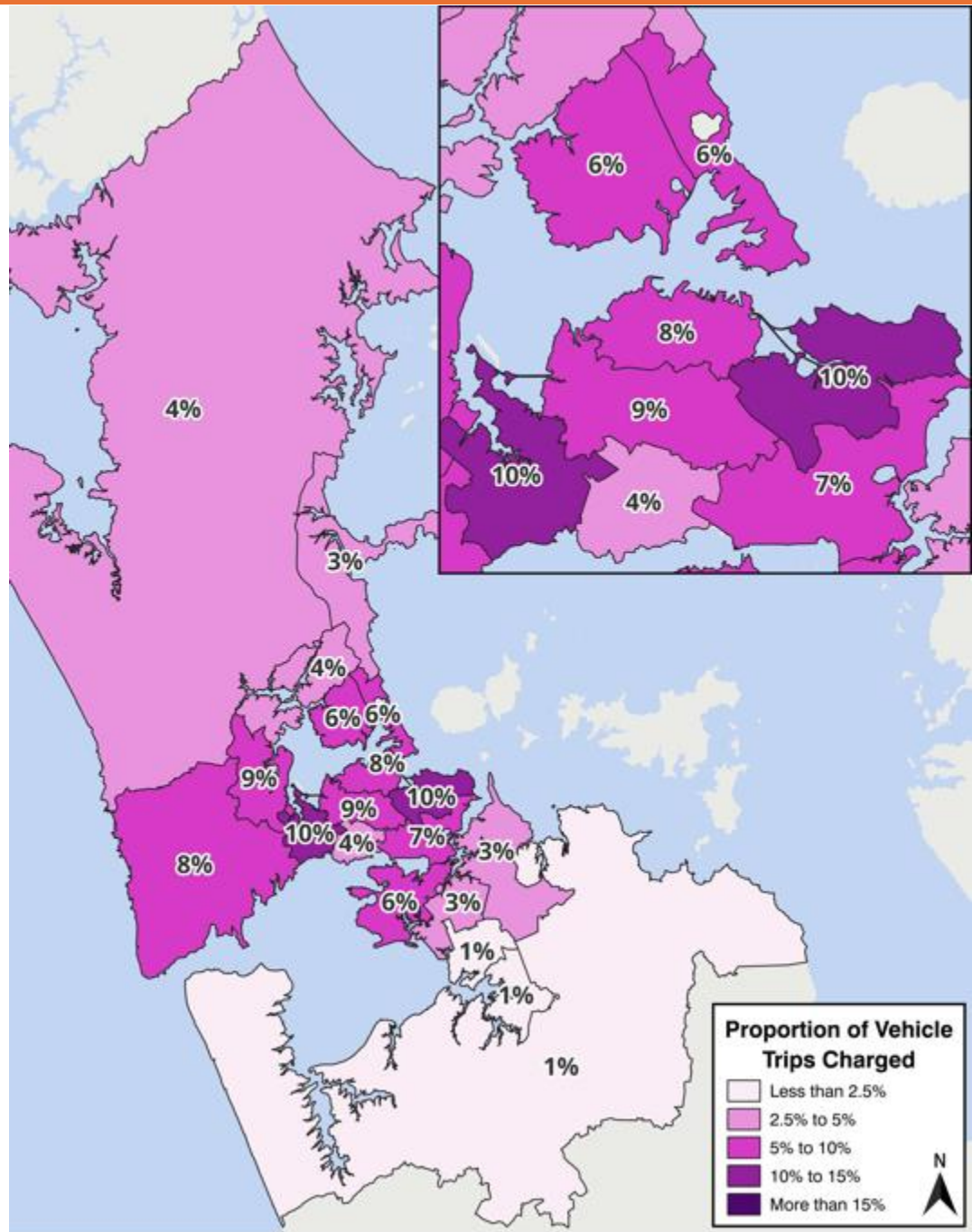


How many will pay? Proportion of charged trips by Local Board Area

This map shows the estimated percentage of vehicle trips originating from each of Auckland's Local Board Areas and travelling into the **Option B** cordon area, during the morning peak period.

Overall, around **5.5%** of Auckland's morning peak period vehicle trips are expected to pay the charge under Option B.

Example: *Of all the morning peak vehicle journeys taken from the Orakei local board area, 10% are forecast to travel into Option B cordon area and be charged.*

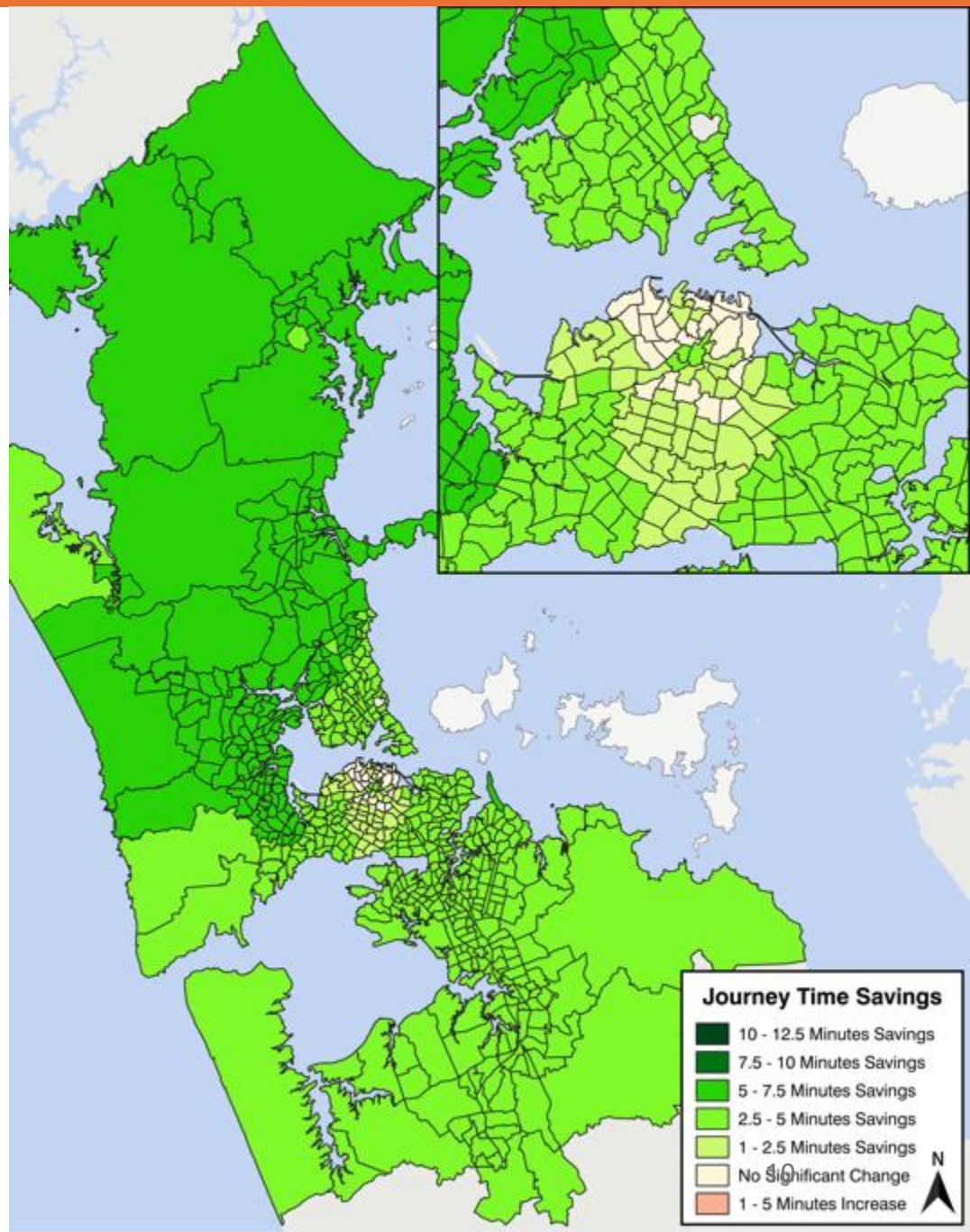


Estimated Time Savings for Charged Drivers

This map shows the estimated time that drivers will save if they are travelling across the **Option B** cordon into the city centre or city fringe during the morning peak period. Time savings are based on where drivers' trips start from.

- Under **Option B**, time savings would be experienced across the City, with journeys originating from **north and west Auckland** benefiting from time savings of **up to 7.5 minutes**.
- People travelling from **south and east Auckland** are anticipated to experience **2.5–5 minute** time savings.
- Journeys originating in the **central isthmus** would experience savings of **up to 2.5 minutes**, although very short trips may not experience any change.

Example: *Drivers travelling from Henderson-Massey into the cordon area, during the morning peak period are estimated to save between 5 and 7.5 minutes on their total journey time under* ***Option B****.*



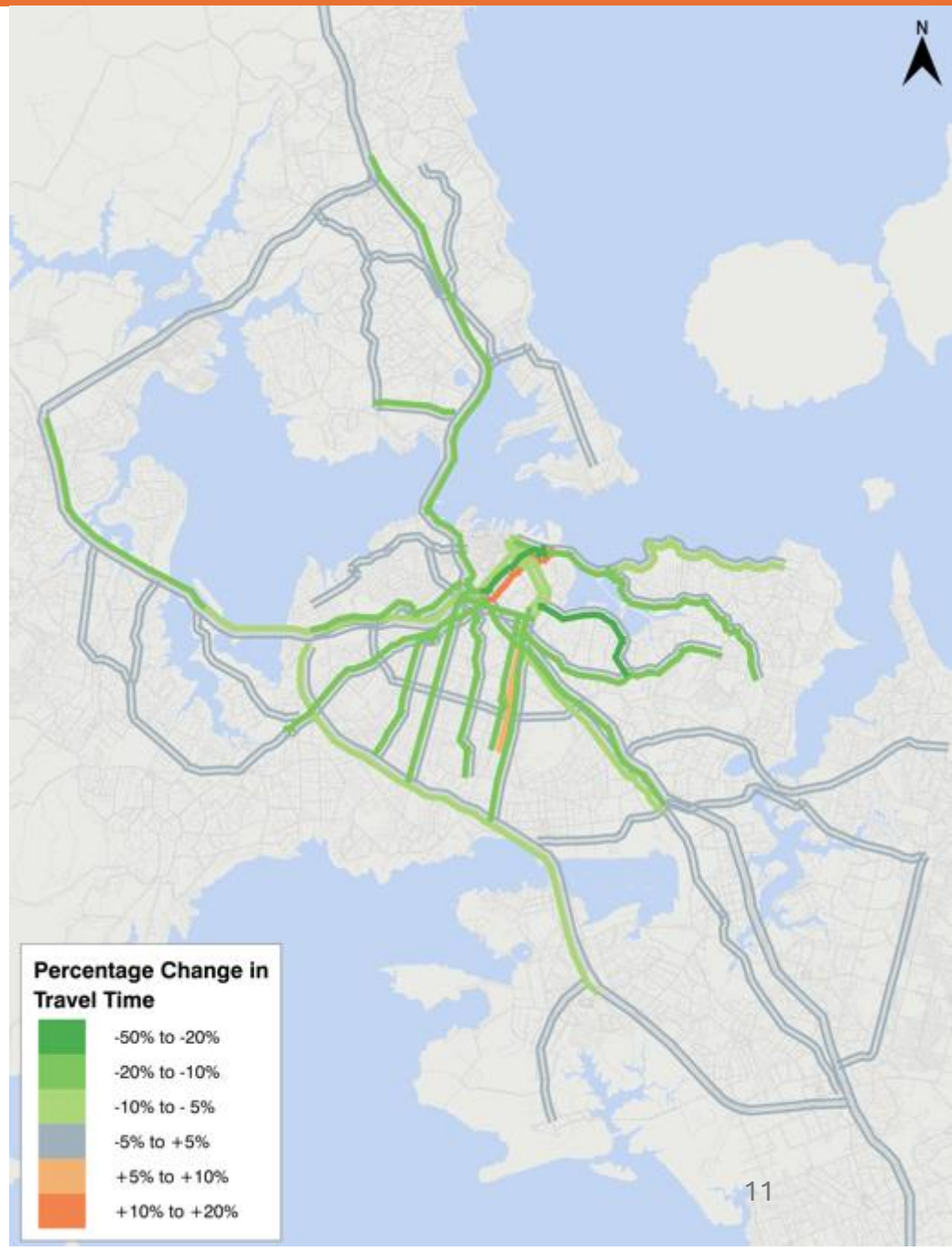
Projected change in morning peak travel times on major road corridors

This map shows how the introduction of the **Option B** cordon will change vehicle travel times for Auckland's major road corridors during the morning peak.

Compared to Option A:

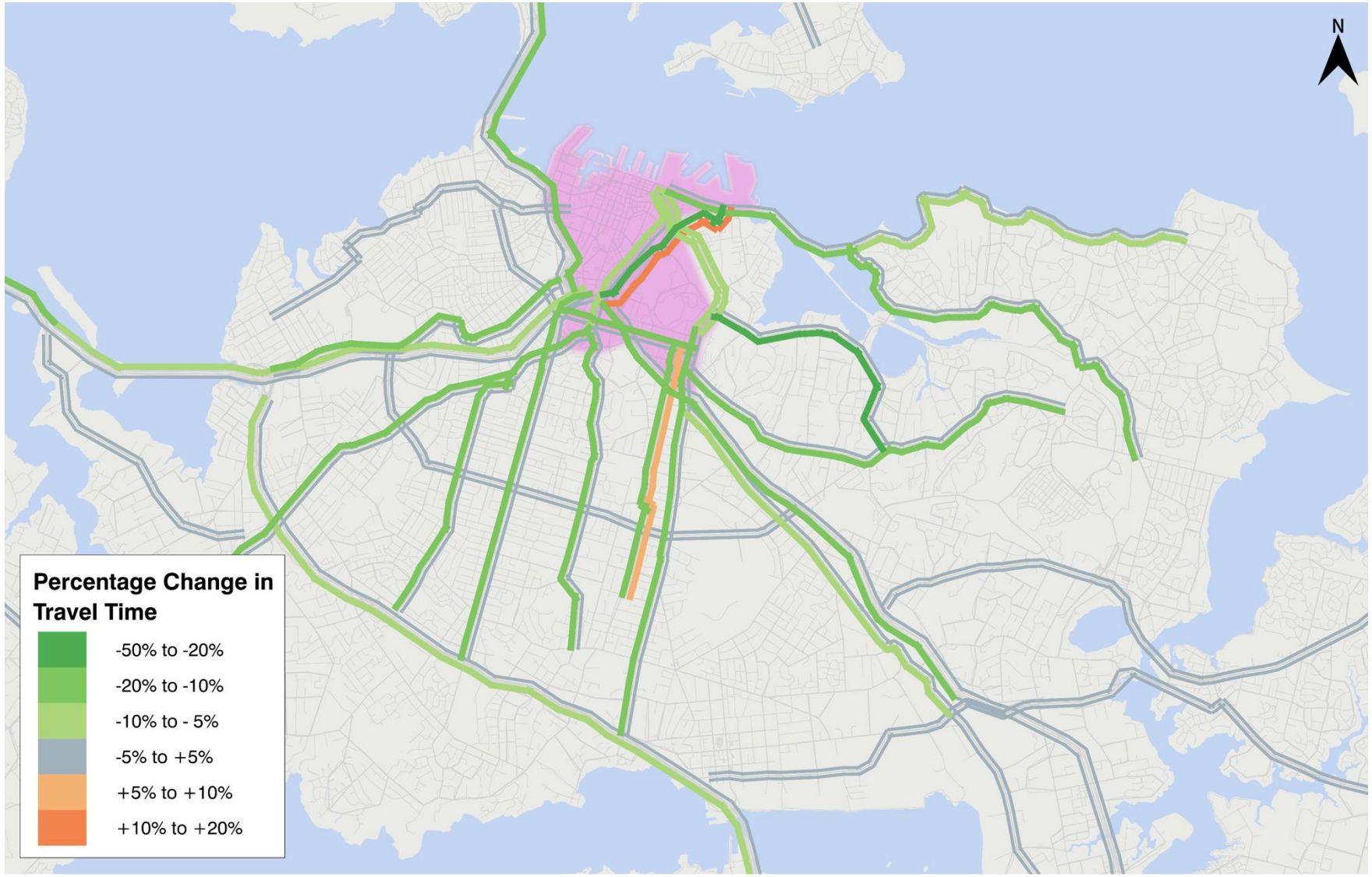
- time savings are **larger**, with many of the roads into central Auckland experiencing savings of between **10–20%**.
- savings extend **more widely** around the network, for example travel on State Highway 20 through the Waterview Tunnel is expected to be slightly faster.
- **Corridors further away** from the charged area are not forecast to be affected. Trips travelling away from the city centre (the counter-peak direction) in the morning are also not expected to be affected.
- Due to the redistribution of trips around the road network, **State Highway 16** between Tamaki Drive and the Central Motorway Junction and Gillies Avenue are expected to see slower trips.

All drivers travelling on these roads will experience the time savings benefits, not just those paying the charge. Overall, around **a third** of all drivers who do not pay the charge are still expected to experience a faster and more reliable trip.



Projected change in morning peak travel times on major road corridors:

Option B Close Up



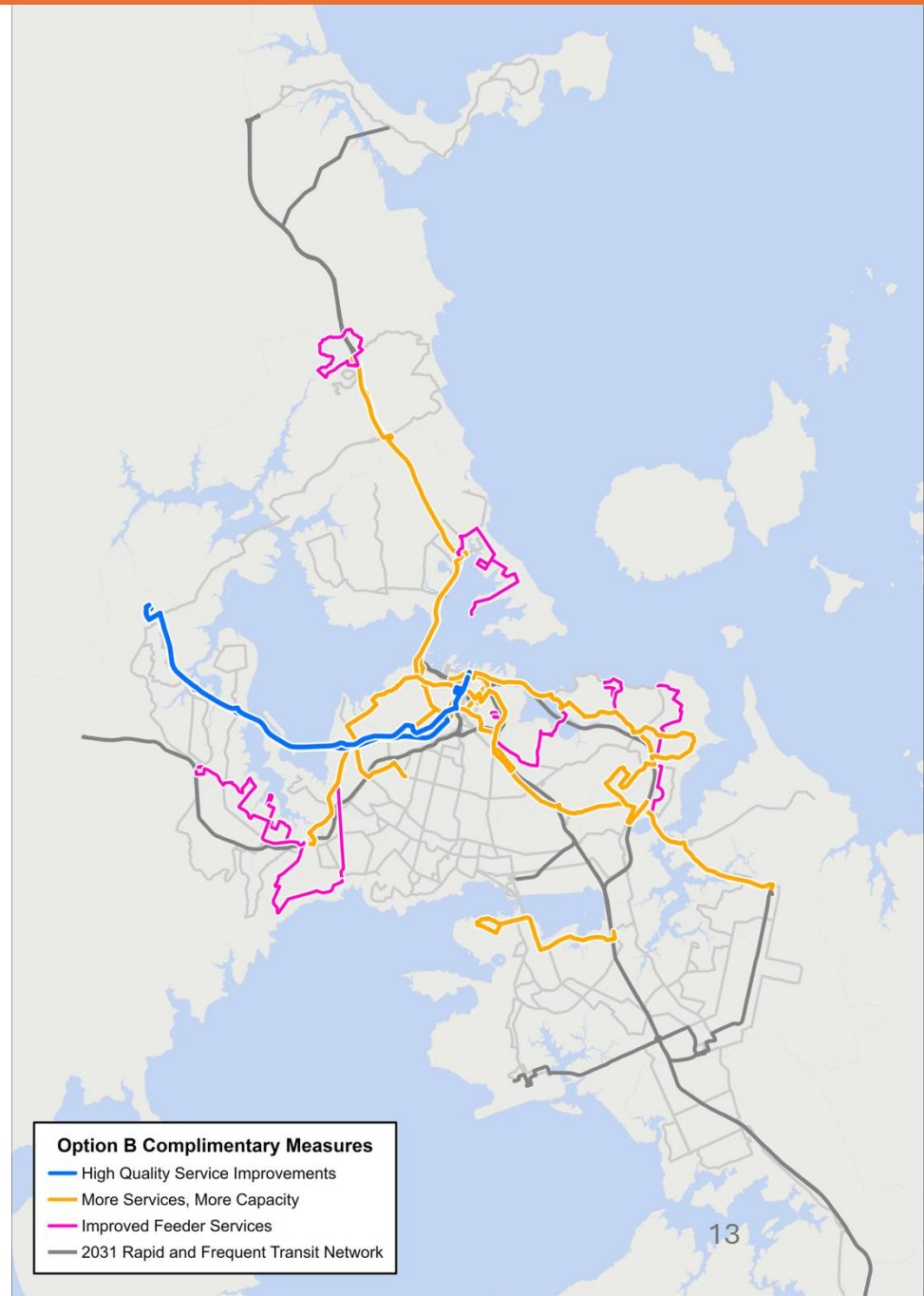
Illustrative Public Transport Improvements

Additional public transport services are planned for each option to provide greater capacity and more opportunities for people to change how they travel.

- The extent of any additional services will depend on the **revenue available** from each option after direct project costs have been covered.
- Initial public transport priorities associated with each option are identified in the **supporting project map**.

Option B is currently forecast to provide **modest net revenue**. As a result, additional public transport improvements would likely be focused on providing additional capacity on routes that may become crowded due to the increase in public transport patronage.

- Some improved services to provide more competitive alternatives for charged trips may also be possible with Option B.
- Final decisions on additional public transport services for each option will need to be agreed by **Council and the Minister of Transport**.

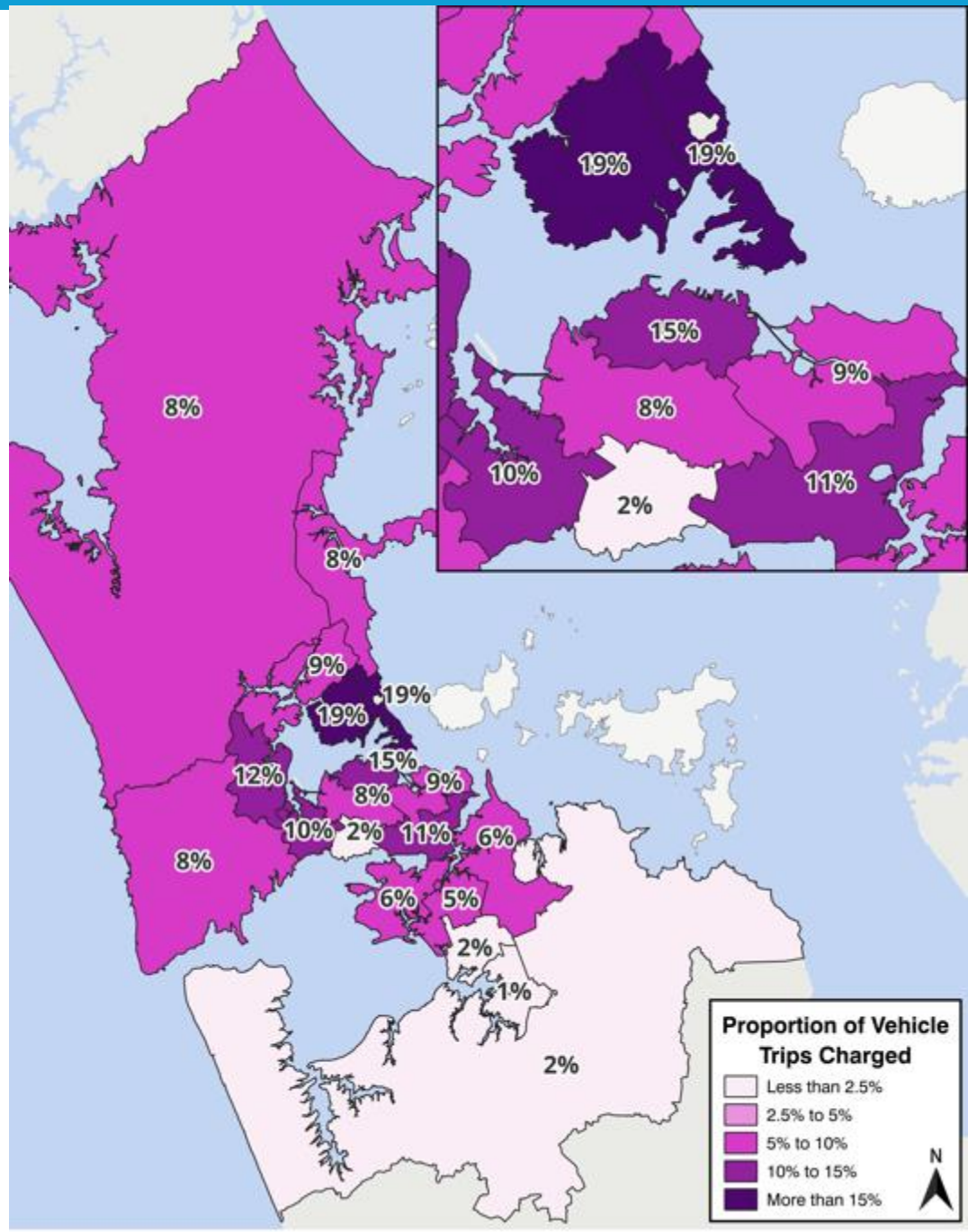


How many will pay? Proportion of charged trips by Local Board Area

This map shows the estimated percentage of vehicle trips originating from each of Auckland's Local Board Areas and travelling into the **Option C** charged area, during the morning peak period.

Overall, around **8.5%** of morning peak vehicle trips are expected to pay the charge under Option C.

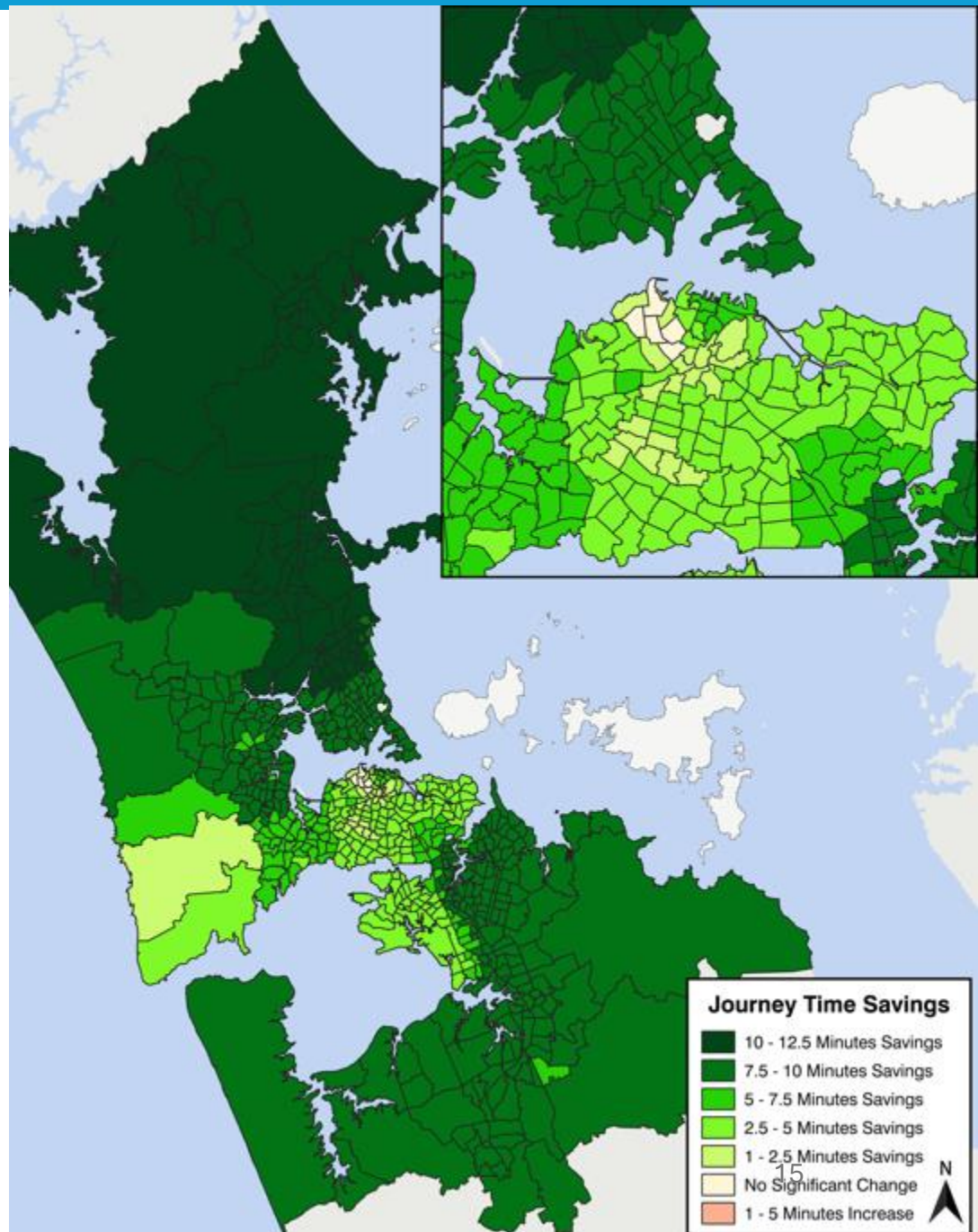
Example: *Of all the morning peak vehicle journeys taken from the Whau local board area, 10% are forecast to travel into Option C area and be charged.*



Estimated Time Savings for Charged Drivers

This map shows the estimated time that drivers will save if they are travelling into the **Option C** charged area during the morning peak period. Time savings are based on where drivers' trips start from.

- Option C provides **larger time savings** than the other two options, with longer trips using the motorways receiving the biggest savings. For example:
  - trips from Howick, Flatbush and Franklin would experience savings of between **7.5 and 10 minutes**
  - trips from the northern North Shore and Hibiscus coast would experience savings of between **10 and 12.5 minutes**
- Meanwhile, **shorter trips** from the central isthmus and Māngere area would experience savings of between **2.5 and 5 minutes**.



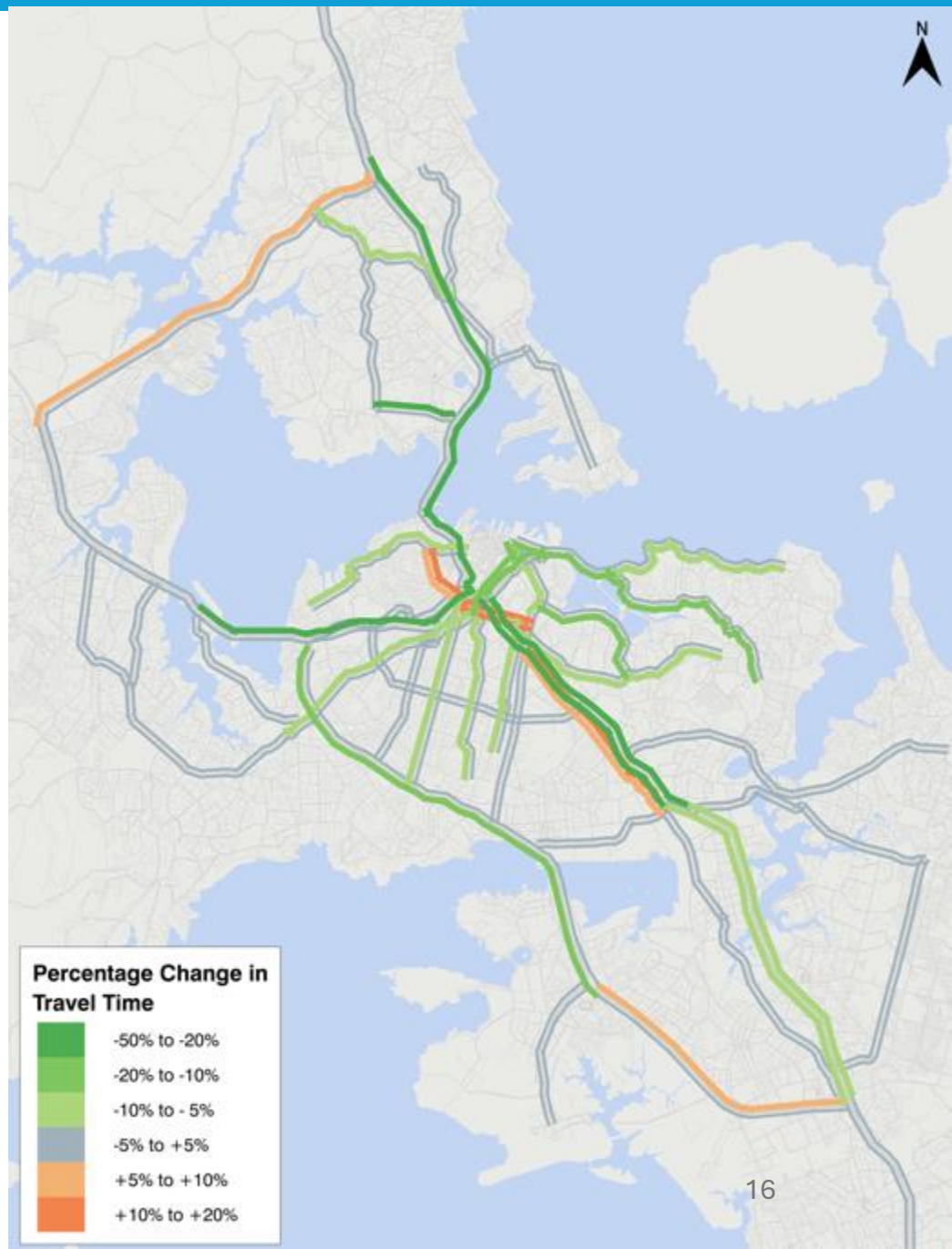
Projected change in morning peak travel times on major road corridors

This map shows how the introduction of **Option C** will change vehicle travel times for Auckland's major road corridors during the morning peak.

- Compared to Options A and B, time savings are **larger**, with many of the roads into central Auckland experiencing savings of between **20% and 50%**.
- **All drivers travelling on these roads** will experience the time savings benefits, not just those paying the charge.

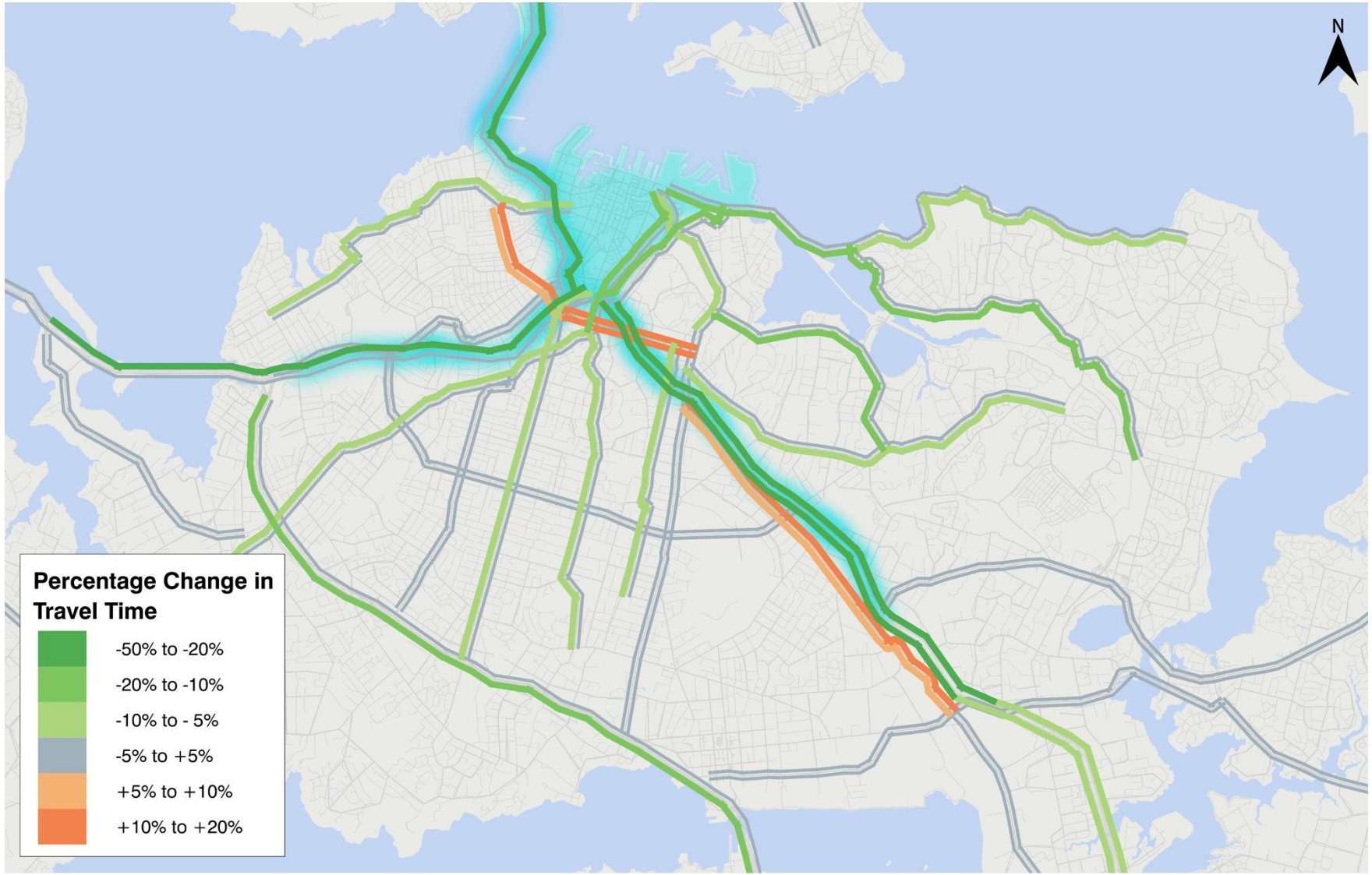
However, with Option C there is a **greater redistribution of traffic** around the road network, so a few more roads are expected to experience delays. For example, Kyber Pass Road, Great South Road and some sections of the Western Ring Route are forecast to experience delays.

- **Overall**, under Option C around **a third** of drivers would not pay the charge but would still receive a faster, more reliable trip. However, because of the redistribution of traffic with this option, around **14%** of drivers would receive a slower, less reliable trip.



Projected change in morning peak travel times on major road corridors:

Option C Close Up



Illustrative Public Transport Improvements

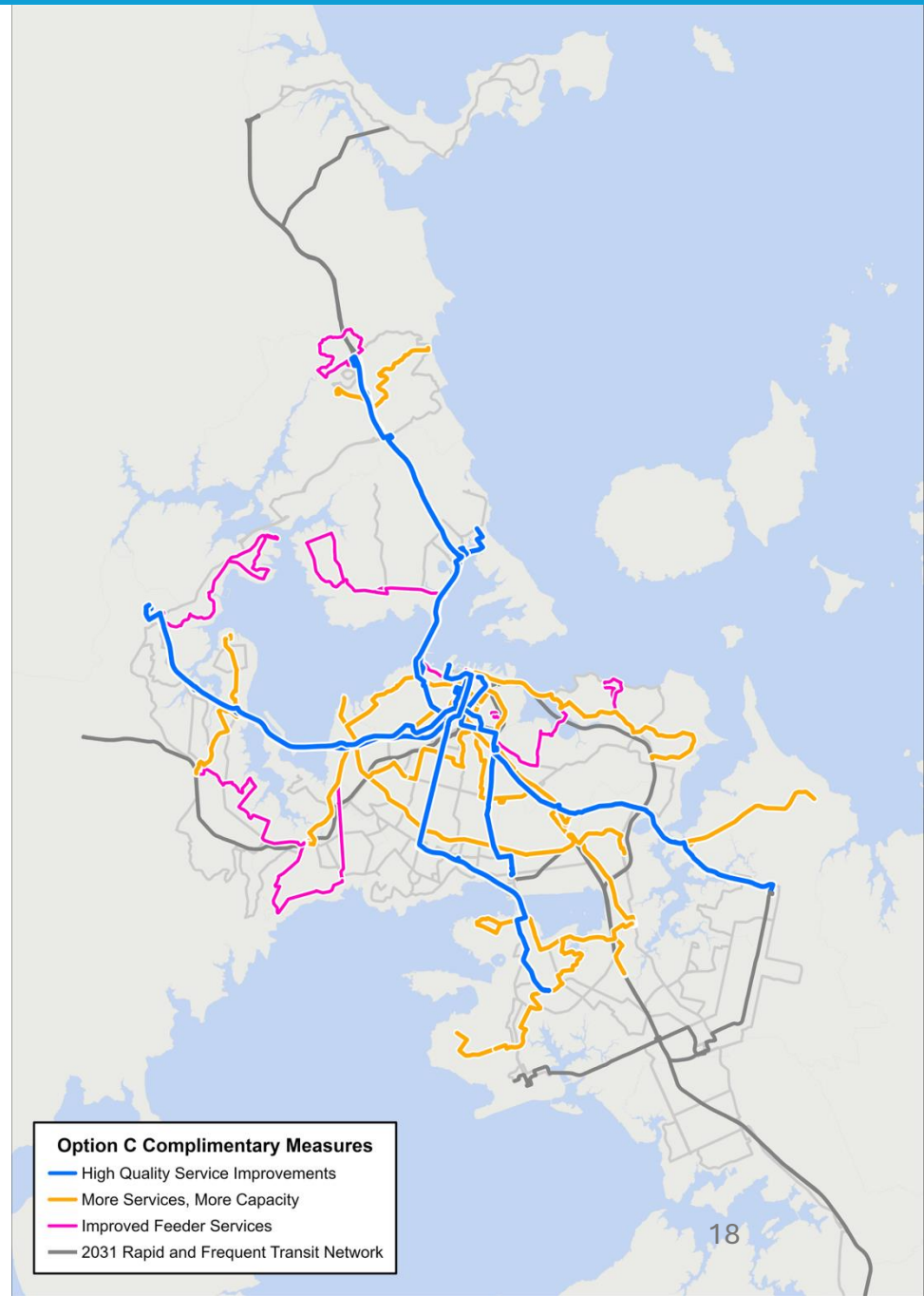
Additional public transport services are planned for each option to provide greater capacity and more opportunities for people to change how they travel.

- The extent of any additional services will depend on the **revenue available** from each option after direct project costs have been covered.
- Initial public transport priorities associated with each option are identified in the **supporting project map**.

Option C is forecast to provide **significant net revenue**. As a result, under this option additional public transport services could be provided to:

- add capacity on routes that may become crowded due to the increase in public transport patronage
- provide more competitive alternatives for charged trips
- generally enhance the public transport network, with improvements to rapid transit bus routes paralleling the central motorways

- Under Option C, there would also likely be enough revenue to bring forward other public transport or roading infrastructure projects, but these would be identified in further work.
- Final decisions on additional public transport services for each option will need to be agreed by **Council and the Minister of Transport**.

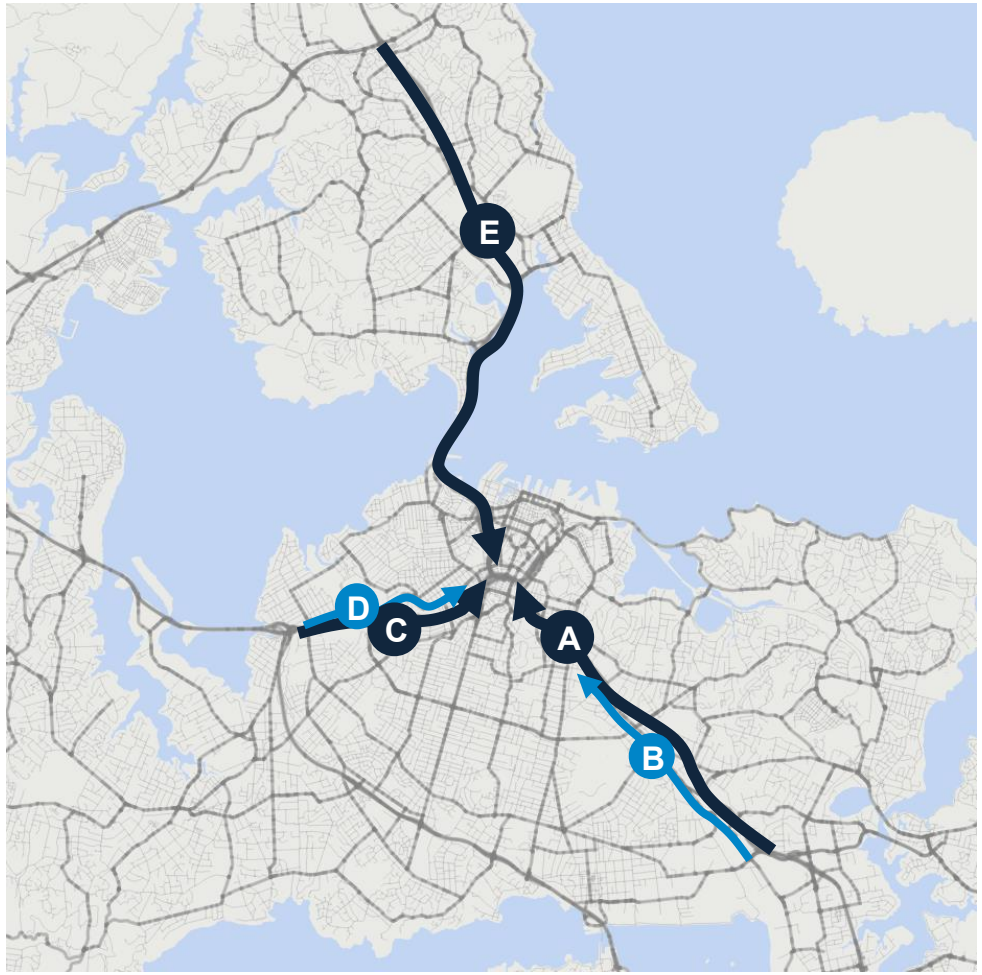


Projected change in travel times along specific routes

The table shows the change in travel time compared to the travel time without the charge option.

For example, *without* the option, travel time on the Southern Motorway between the South Eastern Highway and Central Motorway Junction would be 23 minutes. With **Option A** the trip would be 2 minutes shorter, while with **Option C** the trips would be 10 minutes shorter.

	Route	From	To	Travel time without the charge option	Change in travel time with option		
					A: City Centre Cordon	B: City Fringe Cordon	C: Core Motorways and City Centre
A	**SH1 Southern Mwy**	SE Highway	CMJ	*23*	**-2**	**-4**	**-10**
B	**Great South Rd**	SE Highway	Broadway	*17*	**-1**	**-2**	**+1**
C	**SH16 NW Mwy**	Rosebank	CMJ	*20*	**-1**	**-1**	**-7**
D	**Great N Rd**	Pt. Chev Rd	Ponsonby Rd	*12*	**-1**	**-1**	**0**
E	**SH1 Northern Mwy**	SH18	CMJ	*31*	**-3**	**-4**	**-9**



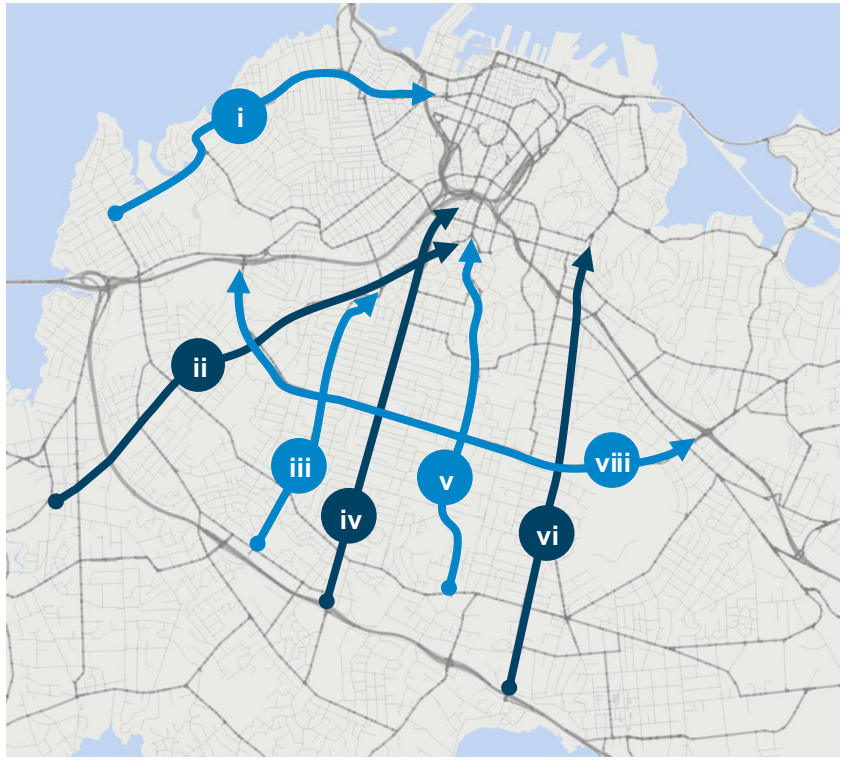
Projected change in travel times along specific routes: Orakei

	Route	From	To	Travel time without the charge option	Change in travel time with option		
					A: City Centre Cordon	B: City Fringe Cordon	C: Core Motorways and City Centre
i	**Remuera Rd**	College Rd	Broadway	*18*	**-1**	**-2**	**-1**
ii	**Ayr Rd / Shore Rd / Upland Rd**	Remuera Rd	Parnell Rd	*12*	**-1**	**-3**	**-2**
iii	**Ngapipi Rd / Kepa Rd / Kohimarama Rd**	St. Heliers Bay Rd	Tamaki Dr	*13*	**-1**	**-2**	**-1**
iv	**Tamaki Dr**	Vale Rd	Tangihua St	*18*	**-2**	**-3**	**-3**



Projected change in travel times along specific routes: Albert-Eden

	Route	From	To	Travel time without the charge option	City Centre Cordon	City Fringe Cordon	Core Motorways and City Centre
i	**Meola Rd / W End Rd / Jervois Rd / College Hill / Victoria St**	Point Chevalier Rd	Wellesley St	*11*	**0**	**0**	**-1**
ii	**New North Rd**	Great N Rd	Symonds St	*26*	**-2**	**-4**	**-2**
iii	**Sandringham Rd**	Stoddard Rd	Great N Rd	*10*	**-1**	**-2**	**-1**
iv	**Dominion Rd**	SH20	CMJ	*16*	**-1**	**-2**	**-1**
v	**Mt Eden Rd**	Mt Albert Rd	Symonds St	*12*	**-1**	**-1**	**-1**
vi	**Queenstown Rd / Manukau Rd / Broadway**	SH20	Khyber Pass Rd	*18*	**-1**	**-2**	**-1**
vii	**St Lukes Rd / Balmoral Rd / Greenlane**	SH16 NW Mwy	SH1 S Mwy	*21*	**-1**	**-1**	**-1**
		SH1 S Mwy	SH16 NW Mwy	*19*	**0**	**+1**	**+1**



Route	From	To	Travel time without the charge option	A: City Centre Cordon	B: City Fringe Cordon	C: Core motorways and City Centre
SH1 Southern Mwy	SE Highway	CMJ	*23*	**-2**	**-4**	**-10**
Great South Rd	SE Highway	Broadway	*17*	**-1**	**-2**	**+1**
SH16 NW Mwy	Rosebank	CMJ	*20*	**-1**	**-1**	**-7**
Great N Rd	Pt. Chev Rd	Ponsonby Rd	*12*	**-1**	**-1**	**0**
SH1 Northern Mwy	SH18	CMJ	*31*	**-3**	**-4**	**-9**
SH16 from/to port	CMJ	Quay St	*8*	**0**	**-3**	**-1**
SH20 (SH16-SH20A)	SH20A	SH16	*12*	**0**	**-1**	**-1**
Remuera Rd	College Rd	Broadway	*18*	**-1**	**-2**	**-1**
Symonds St	New North Rd	Beach Rd	*9*	**0**	**-1**	**-1**
Ayr Rd / Shore Rd / Upland Rd	Remuera Rd	Parnell Rd	*12*	**-1**	**-3**	**-2**
Ngapipi Rd / Kepa Rd / Kohimarama Rd	St. Heliers Bay Rd	Tamaki Dr	*13*	**-1**	**-2**	**-1**
Tamaki Dr	Vale Rd	Tangihua St	*18*	**-2**	**-3**	**-3**
Meola Rd / W End Rd / Jervois Rd / College Hill / Victoria St	Point Chev Rd	Wellesley St	*11*	**0**	**0**	**-1**
Khyber Pass Rd / Newton Rd / Ponsonby Rd	Jervois Rd	Broadway	*12*	**0**	**-1**	**+1**
New North Rd	Great N Rd	Symonds St	*26*	**-2**	**-4**	**-2**
Sandringham Rd	Stoddard Rd	Great N Rd	*10*	**-1**	**-2**	**-1**
Dominion Rd	SH20	CMJ	*16*	**-1**	**-2**	**-1**
Mt Eden Rd	Mt Albert Rd	Symonds St	*12*	**-1**	**-1**	**-1**
Queenstown Rd / Manukau Rd / Broadway	SH20	Khyber Pass Rd	*18*	**-1**	**-2**	**-1**
St Lukes Rd / Balmoral Rd / Greenlane	SH16 NW Mwy	SH1 S Mwy	*21*	**-1**	**-1**	**-1**
	SH1 S Mwy	SH16 NW Mwy	*19*	**0**	**+1**	**+1**
Albany Hwy - Wairau Rd - Fred Thomas Dr	SH18	Esmonde Rd	*20*	**0**	**0**	**-1**
SEHwy(SH1) / Ti Rakau Dr	Te Irirangi Dr	SH1 S Hwy	*22*	**0**	**0**	**0**
Pakuranga Rd - Ellerslie Panmure Hwy	Ridge Rd / Botany Rd	SH1 S Hwy	*29*	**-1**	**-1**	**-1**
Lincoln Rd - Great N Rd (SH16 to Avondale)	SH16 NW Mwy	St Judes St	*27*	**-1**	**-1**	**-1**

Morning peak statistics – absolute and percentage change

AM peak statistics	Option A	Option B	Option C
Vehicles that pay a time-of-use charge (Percentage of total regional trips)	**20,500** **3.4%**	**32,500** **5.5%**	**49,500** **8.4%**
Number of vehicle trips (across the region) Change in no. of vehicle trips (Percentage change)	**598,300** **-3,500** **-0.6%**	**593,900** **-7,900** **-1.3%**	**592,100** **-9,700** **-1.6%**
No. of public transport passengers Change in no. public transport passengers (Percentage change)	**89,600** **+2,600** **+3.0%**	**91,500** **+4,500** **+5.2%**	**92,200** **+5,200** **+5.9%**
Average regional vehicle trip speeds Increase in vehicle trip speeds – averaged across the region (Percentage change)	**36.3** **+0.7** **+2.0%**	**36.8** **+1.2** **+3.5%**	**37.3** **+1.7** **+4.8%**
Number of kilometres driven in congested conditions *(across the region)* Reduction in number of kilometres driven in congested conditions (across the region) (Percentage change)	**1,387,600** **-30,200** **-2%**	**1,376,400** **-41,400** **-3%**	**1,254,800** **-163,000** **-11%**
Number of kilometres driven in congested conditions *(isthmus & lower North Shore)* Reduction in number of kilometres driven in congested conditions (*isthmus and lower North Shore*) (Percentage change)	**610,700** **-28,100** **-4%**	**602,200** **-36,500** **-6%**	**458,000** **-180,700** **-28%**
Average time savings for charged trips	**2.5 mins**	**4 mins**	**7 mins**
Uncharged car trips *(% of total regional trips)*	**577,800** **97%**	**561,400** **95%**	**542,600** **92%**