

EXECUTIVE SUMMARY

The major transport issues facing Auckland have been a significant focus of attention for Transit in the development of the 10-year state highway forecast. Auckland's transport needs are a particular priority and this is reflected in the list of projects approved and planned for Auckland.

Transit's forecasts of possible expenditure in Auckland for the next 10 years are set out in Table A1. For forecast purposes only, Transit has anticipated an indicative level of regional distribution funding. This has been used to accelerate a number of strategically significant projects within the region to an earlier than forecast period. Final allocations of regional distribution funding will be determined annually.

These forecasts of expenditure are based on a 10-year forecast of maintenance and improvements, including projects for which funding is already committed. The timeframe for the development and construction of the improvements proposed in the 10-year forecast is indicative only and is likely to change depending on the project's importance within the context of the regional land transport strategy, its national priority, the resolution of any local concerns and the actual time to complete consenting and land purchase and to ability of the construction industry to grow to match the increasing levels of expenditure.

The Auckland 10-year state highway forecast seeks to protect and preserve the existing asset, assist in addressing the problem of severe congestion in conjunction with passenger transport and travel demand management initiatives and improve road safety.

Major features of the forecast are:

Western Ring Route

- › Greenhithe Deviation, currently under construction
- › Upper Harbour Bridge Duplication, currently under construction
- › Hobsonville Deviation, for an accelerated construction start in 2007/08
- › Avondale Extension, for an accelerated construction start in 2009/10
- › Mt Roskill Extension a construction contract is expected to be awarded in July
- › Manukau Harbour Crossing for an accelerated construction start in 2009/10
- › Manukau Extension. Tendering the construction contract is underway in preparation for an award in the third quarter of 2005/06

Central Motorway Improvements

- › Central Motorway Junction (Stage 2), currently under construction
- › Harbour Bridge to City, for a accelerated construction start 2008/09
- › Newmarket Viaduct Upgrade, for a construction start in 2008/09
- › Newmarket Viaduct to Green Lane Auxiliary Lane, for a construction start in 2009/10
- › Newton Road to Western Springs Auxiliary Lane. Construction is about to commence as part of the Central Motorway Junction project.

AUCKLAND STATE HIGHWAY FORECAST

EXECUTIVE SUMMARY – continued

Northern Busway

- › Northern Busway, currently under construction
- › Esmonde Road Interchange Upgrade, currently under construction

Northern Motorway Extension

- › ALPURT Sector B2 toll road, currently under construction

Southern Motorway

- › Waiouru Interchange, currently under construction

Other motorway and state highway improvements in the 10-year forecast are:

- › Travel Demand Management on the Southern, Northern and Northwestern motorways, for an accelerated construction start in 2005/06.
- › Advanced Traffic Management System, Stage 4, for a construction start in 2007/08
- › Auckland Harbour Bridge Stormwater Upgrade
- › Northcote to Sunnynook Auxiliary Lane, for a construction start in 2005/06
- › Green Lane Interchange, in conjunction with Auckland City works, for construction start in 2005/06
- › Waterview to Rosebank 8-Laning
- › Te Atatu to Royal Road 6-Laning
- › Te Atatu Interchange Upgrade
- › Brigham Creek Extension
- › Waterview to Rosebank Westbound Bus Priority Lane, currently under construction
- › Rosebank to Waterview Eastbound Bus Priority Lane, currently under construction
- › Kirkbride Road Grade Separation
- › Schedewys Hill Deviation

Other state highway improvements in the 10-year forecast are:

- › a number of seismic retrofitting projects on key structures
- › six new passing lanes on both SH16 north of Taupaki and SH1 north of Puhoi, as well as one passing lane on SH22 north of Pukekohe, for construction in the next three years
- › six safety improvements, for development and construction in the next three years
- › George Bolt Drive Median Barrier.

KEY REGIONAL TRANSPORT ISSUES

Through Auckland's regional land transport strategy, long term council community plans, and Transit's state highway forecast, local and central government is aiming for a sustainable land transport system that meets the objectives of the New Zealand Transport Strategy (NZTS) and the Land Transport Management Act (LTMA), i.e. assisting economic development, assisting safety and personal security, improving access and mobility, protecting and promoting public health and ensuring environmental sustainability.

To achieve a sustainable land transport system we need to consider both land use and transport trends/behaviour. In this respect regional and local growth strategies (or emerging views where strategies have not been written) and planning documents are critical to supporting regional land transport strategies.

In meeting the objectives of the NZTS and LTMA the key regional transport issues for Auckland include:

- › congestion – traffic growth in Auckland is continuing at around two to four percent per year driven by population growth and the relatively cheap cost of travel. This is causing increased congestion particularly for peak period commuter trips and freight. Key 'hot points' are on the motorway system, around the Central Motorway Junction and major arterial routes. Trips from the North Shore, Manukau, or West Auckland into central Auckland in the peak periods are regularly taking 30-40 minutes longer than during off-peak periods. The cost of this congestion has been estimated at about \$1 billion per year
- › road safety
- › land use development – a continuing increase in intensification and green field developments is resulting in increasing demand for travel in the region, with a resulting increase in pressure on the strategic roading system.

TRANSIT'S CONTRIBUTION TO TRANSPORT ISSUES

Economic growth, and resulting increases in traffic demand, means the state highway network in Auckland will require substantial upgrading within the next 10 to 20 years. The motorway network in Auckland needs to be upgraded and extended to relieve congestion and support the Auckland Growth

Strategy. Much of the network experiences severe congestion. This will ease only with a combination of the completion of critical motorway links including the Western Ring Route, completion of the Northern Busway, passenger transport improvements and travel demand management. Improved traffic management is also critically important to efficiently and effectively use the existing network.

The motorway network must serve public transport as well as commercial and private vehicles. Congestion on the motorway network is already compromising the effectiveness of public transport services, the efficiency of commercial vehicle operations and access and mobility for private motor vehicles.

Maintenance is becoming increasingly difficult to undertake because of congestion on the motorway network and the need to maintain the capacity of motorway links throughout the day.

To complement improvements to the motorway network, improvements are also required to the local road arterial system to provide a comprehensive road network as part of an efficient land transport system in Auckland.

The location of possible Auckland projects in the 10-year forecast is shown in Figure A. The expected cost and possible timeframe for the development and construction of these activities is indicated in Table A2.

The timeframe for the development and construction of the improvements proposed in the 10-year forecast is indicative only, and is likely to change depending on the use of additional funding from central government (known as 'regional distribution funding') to advance activities. While Transit anticipates it will have further expenditure from regional distribution funding this is yet to be determined. Indicative construction start dates are based on expected levels of funding if 50 percent of regional distribution funding for Auckland were allocated to state highways, spread evenly over 10 years.

Large improvement projects (with construction costs of more than \$3M) have been scheduled for 10 years and small and medium-sized projects (with construction costs of less than \$3M) have been scheduled for three years.

Efficient and Safe Transport Corridors

Transit's strategy for Auckland is to:

- › implement travel demand management in Auckland
- › complete the Western Ring Route
- › upgrade the central motorway network including Central Motorway Junction
- › construct the Northern Busway and bus shoulder lanes on congested sections of motorway
- › extend the Northern Motorway to Puhoi (ALPURT)
- › investigate and possibly protect the alignment for an additional Waitemata Harbour Crossing
- › improve traffic management by means of active and integrated traffic management systems.
- › investigating the use of tolling to advance projects and to manage demand.

Travel Demand Management

The highest priority in the region and for Transit nationally is the investigation and implementation of Travel Demand Management (TDM) in Auckland. TDM is a combination of activities that together seek to manage travel behaviour including travel plans, traveller information systems, and traffic management techniques such as ramp metering. The Land Transport Management Act 2003 signals the need for TDM as an integral component of a sustainable approach to land transport. Transit endorses this principle and proposes to actively participate in an investigation of opportunities for TDM.

An initial activity, recently completed, has been Rimu Road ramp-metering. This activity is already helping the Southwestern Motorway traffic to run more smoothly during peak traffic periods. Investigation of TDM on the Southern Motorway is progressing while similar investigations are underway for the Northwestern and Northern motorways.

Tolling will be considered for implementation on construction projects as a TDM approach. All tolling will be implemented through the Toll Systems Project.

Western Ring Route

The Western Ring Route is proposed as an alternative motorway route to the Northern and Southern motorways through the Auckland isthmus and is a key regional priority.

New sections of motorway required to complete the Western Ring Route include:

- › SH18: Upper Harbour Motorway comprising
 - » Greenhithe Deviation
 - » Upper Harbour Bridge Duplication
 - » Hobsonville Deviation
- › SH20: Mt Roskill and Avondale Extensions of the Southwestern Motorway
- › SH20: Manukau Harbour Bridge Duplication
- › SH20: Manukau Extension of the Southwestern Motorway to provide a connection to the Southern Motorway.

Construction is progressing on the Greenhithe Deviation and Upper Harbour Bridge Duplication. The Mt Roskill extension construction contract is expected to be awarded in July, and the Manukau Extension design and construct contract is out to tender. Through the consultation process the regional commitment to the Western Ring Route was determined and to address this, the Hobsonville Deviation, and Avondale Extension projects were accelerated in the forecast. To achieve these revised timescales an ambitious co-ordinated approach will be required from all involved parties. A designation has been confirmed and property purchase is well advanced for the Hobsonville Deviation.

In the case of the Avondale Extension, Transit is currently undertaking a study to determine the package of transportation projects required in the corridor. This package is likely to include roading, public transport and consideration of travel demand management measures.

The corridor study includes reviewing capacity across the Manukau Harbour Bridge on the Southwestern Motorway. It is envisaged that the existing bridge may need to be duplicated to provide eight lanes and that

the approaches may need to be widened to six lanes to avoid a bottleneck on this critical section of the proposed Western Ring Route. As part of this scheme, a new interchange at Gloucester Park connecting to Neilson Street, Onehunga could be constructed.

Central Motorway Improvements

Several improvements are proposed to the central motorway network. These include:

- › SH1: Central Motorway Junction Upgrade
- › SH1: Harbour Bridge to City (St Mary's Bay and Victoria Park) Widening
- › SH1: Newmarket Viaduct Widening and Upgrade
- › SH1: Newmarket Viaduct to Greenlane Auxiliary Lane
- › SH16: Newton Road to Western Springs Auxiliary Lane.

Stage 1 of the Central Motorway Junction upgrade, comprising an auxiliary lane from the Symonds Street on-ramp to the Gillies Avenue off-ramp, has been recently completed and construction is well progressed on Stage 2. Stage 2 comprises:

- › extending the southbound auxiliary lane back from Symonds Street to Hobson Street
- › adding ramp connections between the Northern and Northwestern motorways and between the Northern Motorway and Grafton Gully (to the port)
- › relocating the Nelson Street off-ramp from a right-hand diverge to a standard left-hand diverge.

To gain the full benefits of the Central Motorway Junction upgrades, improvements are also required to the adjacent sections of motorway. On the Southern and Northwestern motorways, auxiliary lanes are required from the Central Motorway Junction to the Greenlane and Western Springs interchanges to ensure that traffic can discharge freely from the Central Motorway Junction without creating bottlenecks. The extension of the auxiliary lane to the Green Lane Interchange requires widening of the Newmarket Viaduct southbound bridge and possibly its replacement.

It is also necessary to widen the Southern Motorway through Victoria Park to six lanes and through St Mary's Bay to 10 lanes (incorporating use of the northbound shoulder lane in the afternoon peak period). Several options have been investigated and consulted on. Transit's preferred option is to construct a northbound tunnel through Victoria Park and convert the existing viaduct into a southbound only facility. Transit is currently in discussions with Auckland City Council, North Shore City Council and the Auckland Regional Council with regards to this option. This project will enable the full benefits of the central motorway network improvements to be realised.

While this is currently at an early stage of development we have set an ambitious target for construction. This will require all parties to be committed to the success of this project.

Northern Busway & Esmonde Road Interchange

Construction of the Northern Busway has commenced. This project is a critical component of the Auckland RLTS to improve passenger transport services between North Shore and the Auckland isthmus and to fully use the existing capacity of the Auckland Harbour Bridge. The busway comprises a separate two-way carriageway for buses and high-occupancy vehicles (HOVs) between the Constellation Drive and Esmonde Road interchanges and a one-way southbound carriageway from the Esmonde Road to the Onewa Road interchange with a series of bus stations along the busway and at Albany.

In conjunction with the busway the Esmonde Road Interchange is being upgraded. The scheme makes provision for north-facing ramps and an east-to-west connection between Takapuna and Northcote. These movements are not accommodated by the existing interchange. Construction on this project began early 2004 and is progressing well.

Other Motorway Improvements

Other improvements that are proposed for the Auckland motorway network, including George Bolt Memorial Drive, are:

- › SH1: Northern Motorway

- » Upper Harbour Highway Interchange – Greville Road Interchange Northbound Bus Priority lane
- » Northcote to Sunnynook Auxiliary Lane
- » Stafford to Esmonde Bus Priority Lane
- » Auckland Harbour Bridge Stormwater Upgrade
- » (Southern)/Northern Motorway Lighting Retrofits.
- › SH16: Northwestern Motorway
 - » Waterview to Rosebank Eight-laning
 - » Waterview to Rosebank Westbound Bus Priority Lane
 - » Rosebank to Waterview Eastbound Bus Priority Lane
 - » Rosebank Off-ramp to Patiki On-ramp Bus Priority Lane
 - » Whau Bridge to Patiki Rd Off-ramp Citybound Bus Priority Lane
 - » Te Atatu North On-Ramp to Whau Bridge Citybound Bus Priority Lane
 - » Te Atatu Road Interchange Off-ramp Upgrade
 - » Te Atatu to Royal Road Six-laning
 - » Lincoln Rd Off-ramp to On-ramp City-bound Bus Priority Lane
 - » Lincoln Rd Westbound Off-ramp Bus Priority Lane
 - » Whau Bridge to Patiki Rd Off-ramp City-bound Bus Priority Lane
 - » Rosebank Off-ramp to Patiki On-ramp Bus Priority Lane
 - » Northwestern Motorway Lighting Retrofits.
- › SH1: Southern Motorway
 - » Green Lane Interchange Upgrade
 - » Ellerslie/Panmure to Main Highway Auxiliary Lane Extension
 - » Ellerslie Southbound Off-ramp Left-Turn Slip Lane
 - » Waiouru Connection Interchange
 - » Papakura Southbound Off-ramp Intersection Safety Improvement

- » Southern/(Northern) Motorway Lighting Retrofits.
- › SH20:
 - » Roscommon Rd/Wiri Station Rd Intersection Upgrade
 - » Queenstown Roundabout.
- › SH20A:
 - » George Bolt Memorial Drive Median Barrier
 - » Kirkbride Grade Separation.

The forecast includes other possible projects but they are dependent on progress with other projects and the regional distribution funding. They include the development and construction of some passing lanes and further bus priority lanes, particularly on the Northwestern Motorway, to enable buses to bypass motorway congestion.

The Northwestern Motorway needs widening to six lanes from Te Atatu Road to Royal Road and ultimately to Hobsonville Road. In addition, improvements are required to the Te Atatu Road interchange off-ramps and the associated local road networks to relieve congestion on these ramps.

Transit proposes to extend the Northwestern Motorway from Hobsonville Road to Brigham Creek Road. Ultimately, the Northwestern Motorway will also need to be extended beyond Brigham Creek Road including a bypass of Kumeu.

It is proposed to upgrade the Green Lane Interchange to improve the flow of traffic by adding a westbound lane to the south and west sides of the rotary to enable westbound traffic going to the motorway to queue without disrupting the flow of through traffic. The scheme also includes an additional eastbound lane between Great South Road and the interchange.

It is proposed to extend the existing northbound auxiliary lane south of the Green Lane Interchange back to the Ellerslie/Panmure Interchange northbound on-ramp to ease peak period congestion on this section of motorway.

A new interchange is being constructed at Waiouru to serve the East Tamaki industrial area. Transit, in conjunction with Manukau City Council, will build

this project in two stages by initially constructing a new Waiouru Interchange south of the Tamaki River to serve East Tamaki with minor modifications to the Otahuhu Interchange. Connecting auxiliary lanes between Otahuhu and Waiouru interchanges will be provided at the same time. A major upgrade of the Otahuhu Interchange will be undertaken as a subsequent stage of development.

Northern Motorway Extension

Transit completed an extension of the Northern Motorway from Albany to Orewa in 1999 including a temporary link for light vehicles back onto SH1 in Orewa. Heavy vehicles are currently required to use the old SH1 route north of Silverdale to avoid the link road, which passes through a residential area of Orewa.

This project has been advanced for construction through the use of tolling to generate additional revenue. Transit has recently commenced construction on the further extension of the Northern Motorway from Orewa to Puhoi. The Order in Council to toll was approved under the provisions of the Land Transport Management Act in April 2005. Part of the package of works will include the construction of improvements to address amenity issues with access to Orewa's business area, and also access across SH1 into the Silverdale retail and business centres.

The management and administration for tolling is treated separately as part of the Toll Systems Project.

Waitemata Harbour Crossing

In accordance with the Auckland Regional Land Transport Strategy, Transit has undertaken some preliminary investigations of a new Waitemata Harbour Crossing in the vicinity of the existing Auckland Harbour Bridge and reported back to key stakeholders. Transit has been requested by the Auckland Regional Land Transport Committee to establish a steering group to undertake the next stage. No prioritisation has been made of this activity in the 10-year forecast.

Traffic Management

Active traffic management systems are used to improve normal traffic flows and manage the effects of incidents. Following the successful implementation of

earlier stages of an active traffic management system on the northern and central sections of the motorway network, provision has been made in the 10-year forecast to extend the system over the whole of the motorway network. The ATMS IV project has been scoped to:

- ▶ enhance the monitoring and management of the strategic network by expansion of ITS equipment across the Auckland area
- ▶ target the addition of ITS components to major projects to ensure 'managed motorway' capability
- ▶ use ITS to better manage the traffic impacts associated with major construction
- ▶ provide a capability to assist ALPURT B2 toll system.

Road Safety

Transit plans to continue removing 'out of context' sections of state highway, roadside hazards, increase passing opportunities in line with the goal of providing passing opportunities at five-kilometre intervals, provide a network of stock truck effluent disposal facilities and to provide and improve walking and cycling facilities.

Rural Highways

Puhoi to Wellsford

Transit is proposing to undertake a strategic study to determine how SH1 will be upgraded. This will include consideration of four-laning to Warkworth and then to Wellsford with bypasses of both towns. These are long-term projects. In the meantime some improvements are required to the alignment of the existing two-lane highway. Rural projects on SH1 from just north of Wellsford to Puhoi that have been included in the 10-year forecast or are currently under construction are:

- ▶ SH1: Windy Ridge Northbound Passing Lane Extension, north of Puhoi
- ▶ SH1: Mangawhai Rd Southbound Passing Lane, north of Wellsford
- ▶ SH1: Te Hana Rail Overbridge Northbound Passing Lane, north of Wellsford

- › SH1: Hoteo River Southbound Passing Lane, south of Wellsford
- › SH1: Waitaraire Southbound Passing Lane, north of Warkworth
- › SH1: Sheepworld Southbound Passing Lane, north of Warkworth
- › SH1: Toovey Rd Southbound Passing Lane, south of Warkworth
- › SH1: Schedewys Hill Deviation, north of Puhoi.

Kumeu to Wellsford

In due course SH16 between Kumeu and Wellsford will need upgrading as traffic volumes increase with the anticipated growth at Huapai, Kumeu, Helensville and Parakai. SH16 also provides an alternative route to SH1 south of Wellsford in congested holiday periods.

It is envisaged that improvements to SH16 will include seal widening, the provision of passing lanes, intersection upgrades and minor realignments. It is also envisaged that, eventually, there will need to be a bypass of Kumeu.

Provision has been made for the following improvements in the 10-year forecast:

- › SH16: Old Railway Road Eastbound Passing Lane, south of Kumeu
- › SH16: Taupaki Rd/Old North Rd Intersection Upgrade, south of Kumeu
- › SH16: Kumeu No. 2 Bridge Westbound Passing Lane, north of Kumeu
- › SH16: Joyce Adams Southbound Passing Lane, north of Kumeu
- › SH16: Woodhill Park Rd Northbound Passing Lane, north of Waimauku
- › SH16: Woodhill Park Rd Southbound Passing Lane, north of Waimauku
- › SH16: Waitangi Bridge to Basil Orr Road Seal Widening, north of Kaukapakapa
- › SH16: Wharehine Rd Realignment & Northbound Passing Lane, south of Wellsford.

Drury to Waiuku

SH22 will eventually need to be four-laned between Drury and the turn-off to Glenbrook and Waiuku. At this stage, however, no provision has been made for this activity in the 10-year forecast. In the meantime, minor safety improvements will be undertaken on the existing highway including provision of traffic signals at the Drury Interchange on and off ramp intersections to upgrade the Glenbrook Road intersection and for a passing lane near Wesley College.

Route Security

Route security will be improved by strengthening several bridges to meet current earthquake standards.

Walking and Cycling

The SH18 Upper Harbour Drive to Greenhithe Bridge, south of Greenhithe cycleway project has been included in the three-year plan. Cycleways are also being considered for the remainder of SH18 as part of the SH18 Corridor Study, and by the ALPURT Northern Gateway Alliance for SH1 north of Orewa.

MAINTENANCE and OPERATIONS

In addition to undertaking maintenance improvements to meet current and future levels of service, Transit proposes to:

- › resurface 50 kilometres and reconstruct two kilometres of multilane urban motorway in 2005/06
- › improve ride quality and route security by remedial works on the Royal Road slip sites
- › optimise the implementation of existing detour route plans and road user information on the motorway network to minimise the disruption from incidents
- › monitor and manage the provisions of skid resistance on the network surfacing and to further improve safety by the application of high-skid-resistance surfacings at targeted motorway ramps, bends and intersections
- › further extend the graffiti removal and protection programme

- › optimise and further define the level of service for landscaping in Auckland
- › continue to refine maintenance practices and procedures to minimise the amount of maintenance to reduce noise and travel disruption both during the day and night
- › further develop communication plans to advise major stakeholders and road users of planned maintenance works
- › continue trials of more cost effective and durable noise-reducing surfaces
- › to trial a maintenance regime for cleaning porous asphalt and road side swales that will reduce vehicle generated pollutants and improve environmental sustainability.

Traffic operations are undertaken within an integrated traffic management partnership between Auckland's four cities and Transit. Transit manages operations through the Traffic Management Unit (TMU) and proposes to:

- › provide increased technological, operational expertise and advocacy on the arterial and motorway network in Auckland to optimise traffic management
- › support and apply Travel Demand Management measures
- › enhance the seamless, integrated 24 hours per day seven days a week coverage from the ATTOMS Traffic Management Centre
- › continue to upgrade operational traffic management equipment and systems.

Table A1

Forecasts of Expenditure on Maintenance and Improvements

Auckland Region

	05/06 (\$M)	06/07 (\$M)	07/08 (\$M)	08/09 (\$M)	09/10 (\$M)	10/11 (\$M)	11/12 (\$M)	12/13 (\$M)	13/14 (\$M)	14/15 (\$M)	Total (\$M)
Maintenance											
Structural	29.8	31.0	33.5	35.0	36.5	38.1	39.8	41.6	43.4	45.4	374.0
Corridor	16.2	16.8	18.2	19.0	19.8	20.7	21.6	22.6	23.6	24.6	203.2
Professional Services	11.2	11.6	12.5	13.1	13.7	14.3	14.9	15.6	16.3	17.0	140.2
Property Management	4.3	4.5	4.8	5.0	5.3	5.5	5.7	6.0	6.3	6.5	53.8
Preventive Maintenance	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	2.8
Emergency Works	0.0	3.4	3.6	3.8	4.0	4.1	4.3	4.5	4.7	4.9	37.3
Sub-total	61.6	67.5	72.9	76.1	79.5	83.0	86.7	90.6	94.6	98.8	811.4
Improvements											
Minor Safety Projects	4.5	4.8	5.1	5.4	5.6	5.9	6.1	6.4	6.7	7.0	57.3
Committed Projects	182.3	192.6	172.1	126.0	74.4	27.7	-	-	-	-	775.0
New Projects	111.2	119.5	69.9	58.3	119.7	251.9	309.3	302.5	289.8	163.5	1795.7
Property Purchase	31.7	32.9	34.2	35.5	36.8	38.2	39.6	41.2	42.6	44.2	376.8
Walking & Cycling	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.0
Sub-total	329.7	349.9	281.5	225.2	236.5	323.7	355.1	350.1	339.2	214.8	3005.8
Total	391.3	417.4	354.4	301.4	316.1	406.7	441.9	440.7	433.8	313.5	3817.1

Note: regional distribution funding for state highways forecast to be \$870M over 10 years