

# MEETING — AGENDA —

*Ngā Take*

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Western Bay of Plenty  
District Council

# OPERATIONS AND MONITORING COMMITTEE

*Komiti Whakahaere*

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**INFORMATION PACK**  
**Pikau Korero**  
**OP15**  
**Thursday, 25 October 2018**

## Advice to Councillors on Use of Information Packs

Council has agreed that Information Packs will be supplied with the agendas for Council and its Committees as well as Community Boards as required. Members are to present questions in writing on contents, provided these are received 48 hours prior to the meeting (i.e. by 5.00 pm on a Monday for a Thursday meeting). A copy of the questions and written replies will be made available to all Members and will be tabled at the meeting.

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Any questions received later than the 48 hour deadline will be responded to within five days with copies of both questions and answers circulated to all Members.

All questions to be **emailed** to the relevant Democracy Advisor.

In addition, should a more detailed report or presentation be required on any specific item, Councillors are invited to make an e-mail request to the Chief Executive Officer. Reports or presentations requested will be given at the first available opportunity.

Council	-	Aileen Alty
Community Committee	-	Michelle Parnell
Long Term and Annual Plan Committee	-	Michelle Parnell
Operations and Monitoring Committee	-	Aileen Alty/Louise Nind
Policy Committee	-	Michelle Parnell
Rural Committee	-	Michelle Parnell
All Community Boards	-	Aileen Alty

Please include in any emailed questions and the following references from this Information Pack;

- Title of Item – Page reference for question.



# Open Items

## Operations and Monitoring Committee No. OP15 25 October 2018 Information Pack

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	<b>Pages</b>
<b>Schedule of Contents</b>	
<b>1. Monthly Report One Network Maintenance Contract (ONMC) - September 2018</b>	4-13
Attached is the monthly Report for the One Network Maintenance Contract (ONMC) - September 2018.	
<b>2. Omokoroa to Tauranga Cycleway Update</b>	14-24
PCG Report for period ending 25 September 2018	
<b>3. Modelling the Future for Road Freight</b>	25-26
Report attached.	

## Monthly Report for the One Network Maintenance Contract (ONMC) – September 2018

### 1. Contract Overview

The local road reseal program is approximately 70% complete at this stage.

The Kaituna Rive re-diversion project requires the importation of over 70,000 tonnes of fill material to be trucked over part of the Western Bay of Plenty Council local road network. Specific roads of concern are Te Tumu, Kaituna Road, Ford Road and Maketu Road. It has been agreed that a circular one-way route will be utilised i.e. laden trucks using Te Tumu, part of Kaituna and For Roads with un-laden vehicles exiting site via Ford Road, a section of Kaituna and Maketu Roads. Before this one-way system can be fully implemented four bridge decks need to be replaced. In the interim the roads in question are being managed to ensure customer safety is maintained.

WestLink's end (2017/18) of financial year Key Result Area (KRA) score has been confirmed as "Best Practice".

### 2. Provisional Contract Expenditure to Date

#### 2.1 Council

Actual Expenditure November 2014 – August 2018	WBOPDC (\$)
Lump Sum	36,738,595.69
Additional Services	29,944,339.69
<b>Total Contract to Date</b>	<b>66,682,935.38</b>

#### 2.2 NZ Transport Agency

Actual Expenditure November 2014 – August 2018	NZTA (\$)
Lump Sum	28,807,067.16
COPTTM Level 1 Measure and Value	1,808,627.33
COPTTM Level 2 Measure and Value	3,127,709.50
Additional Services	34,564,050.78
<b>Total Contract to Date</b>	<b>68,307,454.76</b>

### 3. Operational Performance Measures

Operational Performance Measures (OPMs) reflect the day-to-day levels of service required under the ONMC. WestLink's performance is measured on a monthly basis and if a prescribed maximum compliance score is exceeded the Contractor will have money deducted from their monthly payment.

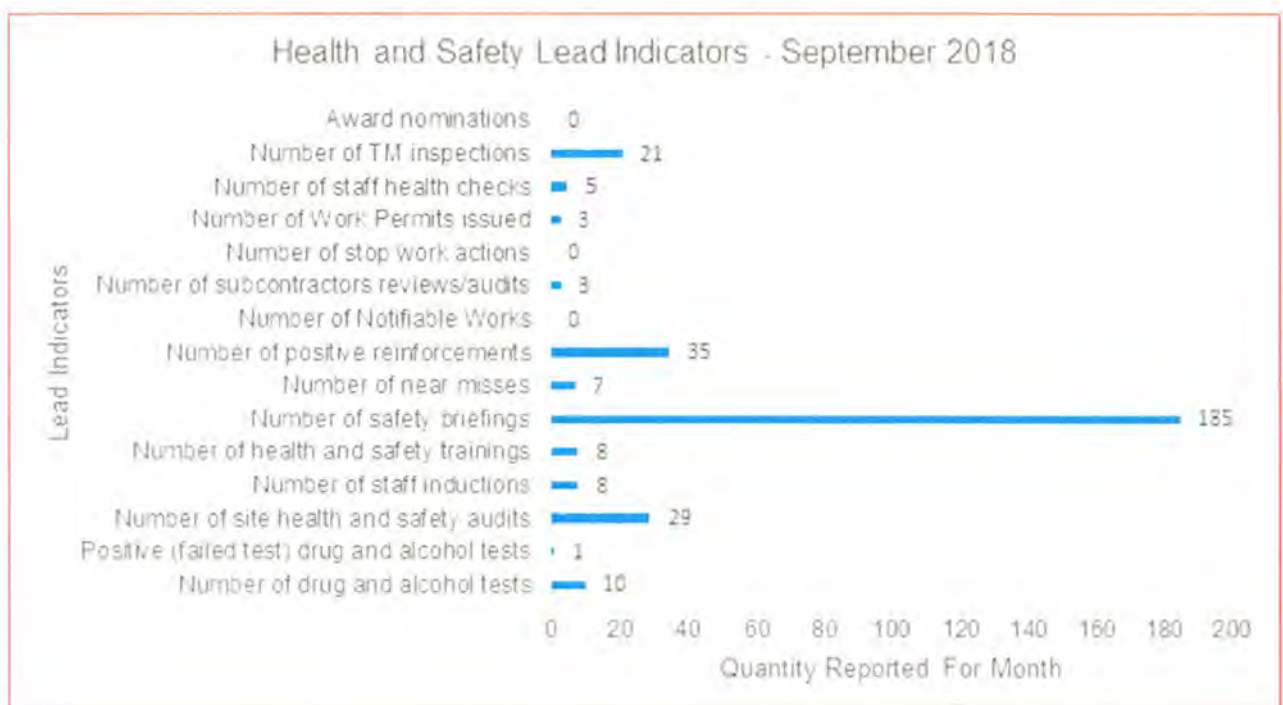
The previous eight months scores are as follows:

Principal	Maximum Score	Monthly OPM Compliance Scores							
		Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
WBoPDC	7	9.3	10.3	6.3	9.8	16.8	13.2	11.8	10.3
NZTA	21	26	20	17	7	11	18	13	14

Overall, WestLink are generally achieving reasonable OPM outcomes however there have been six proportional adjustments for Council over the last 12 months. Deductions have ranged from \$78 to \$7,758.

### 4. Health and Safety

#### 4.1 Combined Lead and Lag Indicators for State Highways and Local Roads July 2018







Note these statistics include both the State Highways and Local Road Networks.

## 5. Works Programme

The current Capital Works Programme is attached but is not fully up to date.

### 5.1 Seal Extensions

With better weather in September good progress has been made on Rowe and Kaitemako South which are now sealed.

Work has also commenced on Maniatutu, Roydon Downs, Allport Roads and Thompsons Track although we have a delay on the former with several power poles to be relocated.

Design is almost complete for Soldiers Road and landowner consultation will be carried out in October.

Council have still yet to accept WestLink's formal priced offer for the additional seal extensions. The offer provides designs for some sites that are in full compliance with Councils Development Code and other less expensive 'shape and seal' designs for sites where traffic volumes are low and safety improvement requirements are less.

### 5.2 Pavement Rehabilitations / Renewals

Work on the Pukemapu, Rangiuru and Maungarangi Roads rehabilitations and widening's has now recommenced.

The section adjacent to the Addline Transport depot on Welcome Bay Road is programmed for rehabilitation however the final design and timing will be affected by the installation of the Waiari water main.

The scope of the pavement rehabilitation on Omokoroa Road between Western Avenue and Tralee Street has been expanded to include kerb and channel and bus stops thus requiring additional design. Design is not yet finalised and construction is now not likely until the 2018/19 construction season.

The rehabilitation on Poripori Road has been designed however the proposed widening has still not been confirmed and is dependent on Minor Improvement funding from The Transport Agency. Construction could commence this year if funding was forthcoming.

The following roads are being investigated, designed or priced for rehabilitation and some include widening:

- Maniatutu Road Rehabilitation and Widening
- Oropi Road realignment 4970-5180.
- Design is complete and consultation has been held for all five Te Matai Road projects but a few landowners are still to agree to land acquisition.

### 5.3 Te Puke Highway Renewals

Sheet piling has been accepted as the solution for the preventative maintenance project on the Kaituna River adjacent to Pah Road. Final approval for the design is currently sitting with BoPRC.

The other outstanding item for the SH revocation is the replacement of the culvert close to the Welcome Bay roundabout. Construction methodology is likely to be open cut which could require closing off Te Puke Highway and diverting traffic via Bell Road and Parton Road for up to a month.

### 5.4 Emergency Works

The emergency works status is shown below as at July:

<b>Contract Year 4 1st November 2017 to 31 October 2018</b>		
January 5 Event Clean Up	\$0.00	\$30,000.00
April 28 Event Clean Up	\$0.00	\$10,000.00
Queens Birthday Event Clean Up	\$15,000.00	\$150,000.00
Ohauiti Road Underslip	\$101,360.00	
Brown Road Underslip		\$323,716.00
Rocky Cutting Road Underslip	\$300,000.00	
Schreiber Road Underslip	\$30,000.00	
<b>Total Costs to date</b>		<b>\$513,716.00</b>
<b>Total Estimated Contract Year Value</b>		<b>\$960,076.00</b>
<b>Escalated Risk Cap</b>		<b>\$778,031.00</b>
<b>Claim Amount</b>		

The Table below presents the current status of slip repairs on the Local Road network.

Road	Event Date	Description	Status
Wairoa Road	2015	Underslip. Awaiting Construction	TBC
Mystery Valley Road	July 16	Underslip - Road realignment, drainage improvement and rock toe.	Complete
Lindeman Road	July 16	Underslip near end of road. Design update required to recommended option	TBC
Woodland Road	April 17	Underslip - Gabion baskets installed	Complete
Soldiers Road	April 17	Underslip. At this stage Council has decided to monitor rather than repair.	TBC
Sharp Road	April 17	Underslip - Road realignment to avoid vulnerable area	Complete
Te Puna Station Rd	April 17	Underslip - Rock embankment stabilization	Complete
Stockton Road	April 17	Underslip - Gabion baskets installed	Complete
Reid Road	April 17	Underslip. Design changed from a road realignment to a anchored retaining wall for greater resilience	2018-19
Ford Road	April 17	River scour damage at various locations. 50/50 cost share with BOPRC. Client Risk Sites	Complete
Ohauti Road	Jan 18	Underslip. Construction underway August 18	Complete
Brown Road	Jun 18	Underslip. Rock embankment fill plus drainage improvements	Complete
Rocky Cutting Road	Jun 18	Underslip. Geotechnical testing completed. Design started. MSE wall to be constructed	TBC
Schrieber Road	Jun 18	Underslip. Design to be agreed with Jim Paterson. Granular aggregate preferred option	TBC
Wainui South Road	July18	Underslip. Memo provided to Council with options to consider	TBC
Waihi Beach Road	Jun 18	Scour. Memo to be provided to Council with options to consider	TBC
Oropi Gorge Road	Various	Various underslips - Memo to be provided to Council with long term options to consider	TBC



### **5.5 Unsealed Roads – Surface Defect Index**

A total length of 9.927km (22 sections) of unsealed rating was completed during August 2018 based on road lengths provided by West Roads.

Based on the specified method of measurement, one section exceeded the KPM thresholds and will be programmed for repair.

For September 2018 a total length of 10.6kms (21 sections) of rating was completed and no sections exceeded the KPM.

Road sections that exceed the threshold will be brought back into specification within two months.

## **6. Miscellaneous**

The urban and rural line marking remark is continuing and heading westwards.

Work has continued on the Waihi Beach cycleway and the Bowentown cycleway is now complete.

The Omokoroa Road site has remained active with the Park N Ride sealed and the cycleway construction underway. Potholing for the sewer duplication line to the wastewater plant is complete and the design is to be finalised this week.

The Stewart Street upgrade is underway, with keen interest from the archaeologist in pre-1900 European artefacts being uncovered.

The Mulgan Street extension design is almost complete and construction is planned to follow the Stewart Street work.

The short section of the Omokoroa to Tauranga cycleway adjacent to Maramatanga Park on Te Puna Road is now complete.

W E Hickman  
**ONMC Maintenance Contract Manager**



Year	Category	Client	Road Name	Client Representative - Project Requester	WBPDC - Ward	Start	End	Length	Name	Status	Current Action	Project Manager/Design Engineer
16/17	Capital	NZTA	SH33						Maniatutu Rd Detour Signs	In design	Started iwi consultation	Phil Barnes
16/17	Capital	NZTA	Te Puke Highway						Green to blue sign conversion	Close out	Pavement Renewal Rep	Kathy Grant
16/17	Capital	NZTA	Te Puke Highway						Waitangi Maori threshold signs	Close out	Pavement Design	Kathy Grant
16/17	Capital	NZTA	Te Puke Highway						Wide Centreline (incl. ATP)	Close out	?	Kathy Grant
16/17	Capital	NZTA	Te Puke Highway						Eggabouts	Close out	NTE Price	Paul Anderson
16/17	Capital	NZTA	Te Puke Highway						No3 Road I to Dunlop Rd SMA	Close out	NTE for VO request	Paul Anderson
16/17	Capital	WBODPC/NZTA	Te Puke Highway	Peter Clarke					Ohineangaanga kerb and footpath &	Close out	Geotechnical Design (O	Kathy Grant
16/17	Capital	WBOPDC	Te Puke Highway	Peter Clarke					Cameron Road Culvert Upgrade	Close out	In construction. Final	Paul Anderson
16/17	Capital	WBOPDC	Te Puke Highway	Peter Clarke					No.1 Road Intersection Improvements	Close out	Waiting for VO to be	Paul Anderson
16/17	Capital	WBOPDC	Te Puke Highway	Peter Clarke					Northern Gateway - Station Road to Truck	Close out	In construction. Final	Paul Anderson
16/17	Capital	WBOPDC	Te Puke Highway	Peter Clarke					Northern Gateway 1	Close out	Design required.	Paul Anderson
16/17	Capital	WBOPDC	Te Puke Highway	Peter Clarke					Northern Gateway 2 - Stage 1 (across from	Close out	Find a Geometric Design	Paul Anderson
16/17	Capital	WBOPDC	Te Puke Highway	Peter Clarke					Northern Gateway 2 - Stage 2 (Repco bus	Close out	In construction. Final	Paul Anderson
16/17	Drainage	NZTA	029-0021						SH29 1441 Drainage	Close out	NTE for VO request	Paul Anderson
16/17	Drainage	NZTA	SH29	-	-	13503	13583	80	Cannonball Drainage	Close out	?	Anthony Stubbs
16/17	Drainage	NZTA	SH29	-	-	13503	13583	80	North Kaimai School	In design	Pricing with Sub-Contract	Anthony Stubbs
16/17	Emergency Works	NZTA	SH29A			500			Welcome Bay Underslip	Construction	Tidy up site	Paul Anderson
16/17	Rehab	NZTA	Te Puke Highway						Long swamp	Close out	Site walkover with sunn	Paul Anderson
16/17	Rehab	NZTA	Te Puke Highway						Showgrounds to Gulliver	Close out	Pavement Renewal Rep	Paul Anderson
16/17	Rehab	NZTA	Te Puke Highway						Showgrounds/Maketu Intersection	Close out	VO request for final	Paul Anderson
16/17	Rehab	NZTA	Te Puke Highway			3662	3923	261	Strang to Waitangi School	Construction	Last 5% construction	Paul Anderson
16/17	Reseals	NZTA	Te Puke Highway						Chipseal resealing Works	Close out	Resurfacing completion	Kathy Grant
16/17	Reseals	NZTA	Te Puke Highway						Pre-reseal Repairs	Close out		Kathy Grant
16/17	Reseals	NZTA							Other Resurfacing (2nd coats)	Close out	NTE for VO request	?
16/17	Resilience	NZTA	Te Puke Highway			14000			Pah Road Underslip	In design	Waiting on Client Appro	Kathy Grant
16/17	Resilience	NZTA	Te Puke Highway			16000			Rangiuru Slips and Guardrail	Close out		Kathy Grant
16/17	SCRIM	NZTA	NZTA						SCRIM Resurfacing	Close out	Periodic Treatment Just?	?
16/17	Seal Extension	WBOPDC	Belk Road	Jim Paterson					Belk Road Shape and Seal	Close out	Final VO request require	Paul Anderson
16/17	Seal Extension	WBOPDC	Junction Road	Jim Paterson		500	2640	2,140	Junction Road Seal Extension	Close out	Pavement assessment/r	Paul Anderson
16/17	Seal Extension	WBOPDC	Leyland Road	Jim Paterson					Leyland Road Shape and Seal	Close out	Final VO request require	Paul Anderson
16/17	Seal Extension	WBOPDC	Sharp Road	Jim Paterson					Sharp Road Shape and Seal	Close out	Final VO request require	Paul Anderson
16/17	TAC	NZTA	Cannonball	-	-				Asphalt Resurfacing Works	Close out	Discussion with MCM	Anthony Stubbs
16/17	TAC	NZTA	Te Puke Highway	-	-				Asphalt Resurfacing Works	In design	Finalise Report	Anthony Stubbs
17/18	??	NZTA	029-21	-	-	13270	13320	50	SH29 Boulder Stream Bridge Ride Quality Imp	In design	Design	Anthony Stubbs
17/18	Capital	NZTA	002-185			7400			Arawa Avenue Intersection Improvements	Construction		
17/18	Capital	NZTA	002-185			2300			Wilson Road Intersection Improvements	Construction		
17/18	Capital	NZTA	029 - 021			2000			Belk Road Intersection Improvements		with client	
17/18	Capital	NZTA	029-021			14700	14700	-	Petfords Bridge Upgrade	Close out		Phil Barnes
17/18	Capital	NZTA	033-017			13000	18000	5,000	Paengaroa Straights Seal Widening & WCL	Construction		Paul Anderson
17/18	Capital	WBOPDC	Omokoroa Rd	Jim Paterson	Kaimai Ward	0	1943	1,943	Omokoroa Rd SH2 to Railway	Construction	Client approval	Bryan Crean
17/18	Cyclepath	WBOPDC	Borell / Te Puna Road widening	Gary Allis	Kaimai Ward	-	-		Borell / Te Puna Road widening of	Scoping	Offer of Service	Andre Van de Vlugt
17/18	Cyclepath	WBOPDC	Borell Snodgrass Road to	Gary Allis	Kaimai Ward	-	-		Borell Snodgrass Road to Newham Road	Construction	Construction	Andre Van de Vlugt
17/18	Cyclepath	WBOPDC	Lochhead Road to existing	Gary Allis	Kaimai Ward	-	-		Lochhead Road to existing footpath	Design	Update 02/02/18:	Devon Croll
17/18	Cyclepath	WBOPDC	Newham Road section	Gary Allis	Kaimai Ward	-	-		Newham Road section	Design	Design Offer Sent to Client	Andre Van de Vlugt
17/18	Cyclepath	WBOPDC	Plummers Point Road parts 1 &	Gary Allis	Kaimai Ward				Plummers Point Road parts 1 & 2	Scoping	Update 02/02/18: Giver	Devon Croll
17/18	Cyclepath	WBOPDC	Snodgrass Road Newnham to	Gary Allis	Kaimai Ward	-	-	112	Snodgrass Road (Newham Rd to Lindock	Design	WL to seek alternative p	Andre Van de Vlugt
17/18	Cyclepath	WBOPDC	Te Puna Station Road	Gary Allis	Kaimai Ward	260	1560	1,300	Te Puna Station Road Cycleway	Design	Update 02/02/18: Agree	Devon Croll
17/18	Cyclepath	WBOPDC	Wairoa Bridge - SH2 -	Gary Allis					Wairoa Bridge - SH2 - Carmichael Road	Scoping	Design and Geometrics	Andre Van de Vlugt
17/18	Drainage	NZTA	002-185		Maketu-Te Puke Ward	2449	NA	35	Wilson Road Culvert - 675 mm diameter	Design		Brent Kilford
17/18	Drainage	NZTA	036-0013	-	-	10800	10998	198	Low Point Sag Curve	In design	Consult with WBPDC an	Anthony Stubbs
17/18	Drainage	NZTA	Matapihi						Matapihi underpass drainage improvements	Close out	Close out	Andre Van de Vlugt
17/18	Drainage	NZTA	SH29						Various	In design	Pavement assessment/r	Becky Phelps
17/18	Drainage	WBOPDC	Bell Road	Jim Paterson	Te Puke	1470	1470	-	Bell Road Box Culvert Replacement	Construction	Power easement	Bryan Crean
17/18	Drainage	WBOPDC	Rea Road		katiatki	-	-	-	Drainage Improvements	Scope	Design once priority wo	Andre Van de Vlugt
17/18	Emergency Reinstatement	NZTA	SH36 Oropi Road Gorge			6000			SH36 Oropi Road Gorge Underslip	Construction	Constuction	Paul Willey
17/18	Emergency Reinstatement	WBOPDC	Ford Road Dropout	Jim Paterson		1000			Ford Road Dropout	Close out	Client Instruction	Phil Barnes
17/18	Emergency Reinstatement	WBOPDC	Lindemann Road	Jim Paterson	Kaitikati - Waihi Beach Wa	3200	3600	400	Lindemann Road	In design	Survey	Brent Kilford
17/18	Emergency Reinstatement	WBOPDC	Mystery Valley Road	Jim Paterson	Maketu-Te Puke Ward	2100	2200	100	Mystery Valley Road	In design	Final design review, pri	Brent Kilford
17/18	Emergency Reinstatement	WBOPDC	Reid Road	Jim Paterson	Maketu-Te Puke Ward	2170	2300	130	Reid Road Realignment	In design	Pricing	Brent Kilford
17/18	Emergency Reinstatement	WBOPDC	Sharp Road	Jim Paterson		2000			Sharp Road	Close out	?	Phil Barnes
17/18	Emergency Reinstatement	WBOPDC	Soldiers Road	Jim Paterson	Kaimai Ward				Soldiers Road	In design		Phil Barnes



Year	Category	Client	Road Name	Client Representative - Project Requester	WBOPDC - Ward	Start	End	Length	Name	Status	Current Action	Project Manager/Design Engineer
17/18	Emergency Reinstatement	WBOPDC	Stockton Road	Jim Paterson	Maketu				Stockton Road	In design		Phil Barnes
17/18	Emergency Reinstatement	WBOPDC	Te Puna Station Road	Jim Paterson	Kaimai Ward	100			Te Puna Station Road	Close out	NTE	Phil Barnes
17/18	Emergency Reinstatement	WBOPDC	Woodland Road	Jim Paterson	Katikati	4000			Woodland Road	Close out		Phil Barnes
17/18	Environmental Renewals	NZTA	Harbour Link						Harbour Link Enviropods	Scoping	Proposal to be	?
17/18	Environmental Renewals	NZTA	Harbour Link						Harbour Link Stormfilters	In design	Investment Report,	Kathy Grant
17/18	Environmental Renewals	NZTA	TEL						TEL Enviropods	Scoping	NTE	?
17/18	Footpath	WBOPDC	398 Pukehina Parade	Stuart	Paengaroa	-	-	-	398 Pukehina Parade Footpath	In design	Design with Jack	Andre Van de Vlugt
17/18	Minor Efficiency	NZTA	002-151						Hewlett's Road Bus Lanes	Close out		Bryan Crean
17/18	Minor Efficiency	NZTA	002-164						TEL 110 kph signage	Close out		Bryan Crean
17/18	Minor Improvements	WBOPDC	Beach Road Cycle		Katikati				Beach Road Cycleway	Scoping	Offer of Service	Andre Van de Vlugt
17/18	Minor Improvements	WBOPDC	Corner improvements - Beach Road/Little Waihi Road - Maketu			0	100	100	Little Waihi Road	Scoping	Offer of Service	Andre Van de Vlugt
17/18	Minor Improvements	WBOPDC	Fairview Road		Katikati	250	400		Fairview Road Kerbing	Offer with Client		Bryan Crean
17/18	Minor Improvements	WBOPDC	Henry Road		Katikati	0			Henry Road Widening	Scope		Andre Van de Vlugt
17/18	Minor Improvements	WBOPDC	Maramarua Reserve Pukehina Parade						Maramarua Reserve Pukehina Parade Car Park	Close out	Design Offer Sent to Client	Andre Van de Vlugt
17/18	Minor Improvements	WBOPDC	Pukakura Rd		Katikati				Pukakura Rd - Roadside Drainage	Complete	Geometric Design	Phil Barnes
17/18	Minor Improvements	WBOPDC	Stewart Street		Katikati	0	110		Stewart Street Widening	Design	In Geometric Design and	Andre Van de Vlugt
17/18	Minor Improvements	WBOPDC	Wilson Road, Waihi Beach		Waihi Beach	300			Hotel Pedestrian Refuge and Footpath	Close out	Physical works complete	Andre Van de Vlugt
17/18	Peak Roughness	NZTA	002-0100	-	-	10020	10075	55	Tuapiro Bridge Ride Quality Impr	Close out	NTSC	Anthony Stubbs
17/18	Peak Roughness	NZTA	002-0116	-	-	6300	6440	140	Te Manaia Stream Bridge Ride Quality	Construction	NTSC	Anthony Stubbs
17/18	Peak Roughness	NZTA	002-0130	-	-	3980	4070	90	Apata Rail Bridge Ride Quality Impr	Close out	?	Anthony Stubbs
17/18	Peak Roughness	NZTA	002-0130	-	-	5540	5620	80	Flying mile to Esdaile Ride Quality Improvement	Construction	NTSC	Anthony Stubbs
17/18	Peak Roughness	NZTA	002-0185	-	-	11300	11345	45	Pongakawa Stream Bridge Ride Quality Impr	Construction	NTSC	Anthony Stubbs
17/18	Peak Roughness	NZTA	002-0185	-	-	7300	7420	120	Punene Stream Bridge Ride Quality Improvement	Construction	NTSC	Anthony Stubbs
17/18	Peak Roughness	NZTA	036-0013	-	-	13000		20	TECT Park Culvert Smoothing	Close out	?	Anthony Stubbs
17/18	Rehab	NZTA	002-0130	-	-	2470	2770	300	Apata South Intersection	Construction	Constuction	Anthony Stubbs
17/18	Rehab	NZTA	002-0146	-	-	178	500	322	Wairoa Bridge to Taniwha Place	In design	Design	Anthony Stubbs
17/18	Rehab	NZTA	002-0146/01.75	-	-	1746	2059	313	End Divided to Top of Hill (Bethlehem)	Scoping	Cancelled	Paul Anderson
17/18	Rehab	NZTA	002-0151-I-CO29	-	-	2	194	192	KOBRONR1 to Fish Stream	Scoping	Devon C to deliver	Devon Croll
17/18	Rehab	NZTA	029-0021	-	-	20415	20520	105	Hanga Road South	In design	Internal Review, NTE an	Anthony Stubbs
17/18	Rehab	NZTA	029-0021	-	-	19920	20370	300	Hanga Road	ON HOLD	Mointor Water Cut Over	Paul Anderson
17/18	Rehab	NZTA	029-0021	-	-	8700	9220	520	South of McLarens	Close out	Close Out	Anthony Stubbs
17/18	Rehab	NZTA	029-0021	-	-	18200	18400	200	Tuakopai West Uphill P Lane	Close out	Close Out	Anthony Stubbs
17/18	Rehab	NZTA	033-017	-	-	13404	13576	172	Paengaroa Straight Rehab	Construction	Pricing	Paul Anderson
17/18	Rehab	NZTA	036-0013	-	-	15390	15565	175	Mangorewa Gorge	Construction	NTSC	Anthony Stubbs
17/18	Rehab	WBOPDC	Boucher Ave	Jim Paterson	Maketu-Te Puke Ward	903	953	50	Boucher Ave	Scoping	Brief received from dave	Brent Kilford
17/18	Rehab	WBOPDC	Maungarangi Road	Maketu	Maketu	0	900	900	Maungarangi Rd Rehab + Improvements	Construction		Paul Anderson
17/18	Rehab	WBOPDC	No4 Rd	Jim Paterson	Maketu-Te Puke Ward	100	820	720	No4 Rd 1	In design	Kevin getting additional	Brent Kilford
17/18	Rehab	WBOPDC	No4 Rd	Jim Paterson	Maketu-Te Puke Ward	1260	1440	180	No4 Rd 2	In design	Survey will be done at	Brent Kilford
17/18	Rehab	WBOPDC	Omokoroa Rd		Kaimai	3430	3603	173	Omokoroa Rd McKenna to Tralee	Scoping	Email proposing	Devon Croll
17/18	Rehab	WBOPDC	Omokoroa Rd	Jim Paterson	Omokoroa	2467	3430	963	Omokoroa Rd Western Ave to McKenna Urban	In design	update 02/02/18: Met with	Devon Croll
17/18	Rehab	WBOPDC	Oropi Road	Jim Paterson	Kaimai Ward	4970	5180	210	Oropi Road Realignment	Scoping	Scope Send via Email. A	Dave McDougal
17/18	Rehab	WBOPDC	Poripori	Jim Paterson	Kaimai Ward	20	1440	1,420	Poripori Road Rehab + Improvements	In design	Stephen to redesign wid	Brent Kilford
17/18	Rehab	WBOPDC	Pukemapu Rd	Jim Paterson	Kaimai	495	1200	705	Pukemapu Rd Rehab + Improvements	In design	Submission of offer to c	Brent Kilford
17/18	Rehab	WBOPDC	Rangiuru Road	Jim Paterson	Maketu-Te Puke Ward	3970	4230	260	Rangiuru Rd Rehab + widening	In design	Submission of offer to c	Brent Kilford
17/18	Rehab	WBOPDC	Tainui Rd	Jim Paterson	Paengaroa	0	626	626	Tainui Rd Rehab + Widening	Close out		Anthony Stubbs
17/18	Rehab	WBOPDC	Te Matai Road	Jim Paterson	Maketu - Te Puke Ward	10827	11610	783	Te Matai Road Rehab + Widening 1	In design	HNZ	Brent Kilford
17/18	Rehab	WBOPDC	Te Matai Road	Jim Paterson	Maketu - Te Puke Ward	12327	13433	1,106	Te Matai Road Rehab + Widening 2	In design	HNZ	Brent Kilford
17/18	Rehab	WBOPDC	Te Matai Road	Jim Paterson	Maketu - Te Puke Ward	13865	15076	1,211	Te Matai Road Rehab + Widening 3	In design	Geometrics	Brent Kilford
17/18	Rehab	WBOPDC	Te Matai Road	Jim Paterson	Maketu - Te Puke Ward	16103	18350	2,247	Te Matai Road Rehab + Widening 4	In design	Geometrics	Brent Kilford
17/18	Rehab	WBOPDC	Te Matai Road	Jim Paterson	Maketu - Te Puke Ward	19903	20800	897	Te Matai Road Rehab + Widening 5	In design	Geometrics	Brent Kilford
17/18	Rehab	WBOPDC	Welcome Bay Rd	Kamai	Kaimai Ward	5310	5881	571	Welcome Bay Rd Water Lane to Waitao Reha	Close Out	Built?	Paul Anderson
17/18	Rehab	WBOPDC	Welcome Bay Rd	Jim Paterson	Kaimai Ward	1994	3400	1,406	Welcome Bay Rd Rehab + Improvements	In design	Pricing, NTE, NTC	Brent Kilford
17/18	Rehab and Widening	WBOPDC	Maniatutu Road	Jim Paterson	Maketu-Te Puke Ward	5820	6320	5,280	Maniatutu Rd Seal Widening and Rehab	Scoping	Offer of service, land ow	Brent Kilford
17/18	Reseals	NZTA	NZTA					36,830	SH Reseals	Construction	Pavement Design	Becky Phelps
17/18	Reseals	WBOPDC	WBOPDC	Jim Paterson					LR Reseals	Construction	Pavement Design	Dave McDougal
17/18	Resilience	NZTA	029-021			5300	5400	100	Ruahihi Rock Bluff	In design	geometric design; iwi er	Phil Barnes
17/18	Resilience	NZTA	033-017			1060	1065	5	Taheke Ravine	Close out	Construction to	Paul Anderson
17/18	SCRIM Treatments	NZTA	NZTA					?	SCRIM	In design	Could be included in	Becky Phelps
17/18	Seal Extension	WBOPDC	Billing Road			1248	2331	1,083	Billing Road Shape and Seal	Close out	Construction	Andre Van de Vlugt
17/18	Seal Extension	WBOPDC	Maniatutu Road	Jim Paterson	Maketu-Te Puke Ward	12686	16100	3,414	Maniatutu Rd Seal Extension	In design	iwi consultation, submit	Brent Kilford
17/18	Seal Extension	WBOPDC	Matakana		Kaimai	2490	4150	1,660	Matakana Seal Extension	Construction		Paul Anderson



Year	Category	Client	Road Name	Client Representative - Project Requester	WBPDC - Ward	Start	End	Length	Name	Status	Current Action	Project Manager/Design Engineer
17/18	Seal Extension	WBOPDC	Mulgan Street		Kaikati				Mulgan Street Seal Extension	Scoping	Waiting Client Approval	Andre Van de Vlugt
17/18	Seal Extension	WBOPDC	Rowe Rd	Jim Paterson	Kaimai Ward	3691	4130	439	Rowe Rd Seal Extension	Construction	NTC has been sent to Sv	Brent Kilford
17/18	Seal Extension	WBOPDC	Soldiers Rd	Jim Paterson	Kaimai Ward	2050	4735	2,685	Soldiers Rd Seal Extension	In design	Confirm Design Alignme	Brent Kilford
17/18	Seal Extension	WBOPDC	Thompsons Track	Jim Paterson	Kaitikati - Waihi Beach Wa	2792	3660	868	Thompsons Track seal extension	In design	NTE and NTC	Brent Kilford
17/18	Seal Extension	WBOPDC	Tirohanga Rd			0	1610	1,610	Tirohanga Rd Shape and Seal	In design	NTE for VO request	Paul Anderson
17/18	Seal Extension	WBOPDC	Wright Road	Jim Paterson	Kaikati	6286	8465	2,179	Wright Rd Seal Extension	Construction	Internal Review	Anthony Stubbs
17/18	Smooth	WBOPDC	Johnson Road	Jim Paterson	Paengaroa	120	270	150	Johnson Road	In design	Geometric - Re Survey	Anthony Stubbs
17/18	Smooth	WBOPDC	Old Coach Rd	Jim Paterson	Maketu-Te Puke Ward	4860	5070	210	Old Coach Rd Smoothing 1	Scoping	Design brief to Tom	Brent Kilford
17/18	Smooth	WBOPDC	Old Coach Rd	Jim Paterson	Maketu-Te Puke Ward	5920	6100	180	Old Coach Rd Smoothing 2	Scoping	Design brief to Tom	Brent Kilford
17/18	Smooth	WBOPDC	Rangiuru Road	Jim Paterson	Maketu-Te Puke Ward	6441	7038	597	Rangiuru Rd Smoothing	Scoping	Survey completed	Brent Kilford
17/18	Smooth + MIP	WBOPDC	Black Road	Jim Paterson	Paengaroa	820	1400	230	Black Rd Smoothing + Improvements	Close out	Built - to close	Brent Kilford
17/18	Structures	NZTA	NZTA						Guardrail replacements	Scoping		?
17/18	TAC	NZTA	002-0116	-	-	2525	3575	1,050	Kaitikati Township	In design	Issue NTE and NTSC	Anthony Stubbs
17/18	TAC	NZTA	002-0151	-	-	6330	6390	60	Totara St int	Construction		Anthony Stubbs
17/18	TAC	NZTA	002-0154-W-CO29	-	-	0	109	1,240	Elizabeth Street Roundabout	Close out	Constuction	Anthony Stubbs
17/18	TAC	NZTA	002-0157	-	-	1430	1490	60	Flyover Aerodrome	Construction	Issued NTSC	Anthony Stubbs
17/18	TAC	NZTA	002-116	-	-	4220	4280	60	Wharawhara Road Intersection	Construction	?	Anthony Stubbs
17/18	TAC	NZTA	029-0019	-	-	839	900	1,240	Cambridge Road Intersection	Close out	Issued NTSC	Anthony Stubbs
17/18	TAC	NZTA	029-0021	-	-	1833	2950	1,117	Redwood to Omanawa	In design	NTE and NTC	Anthony Stubbs
17/18	TAC	NZTA	029A-0000	-	-	6910	8000	3,290	Hairini RAB Resurfacing	In design	Issue NTSC	Anthony Stubbs
17/18	TAC	NZTA	036-0013	-	-	14760	14870	110	Te Matai Rd SCRIM	Close out	?	Anthony Stubbs
17/18	TAC	NZTA	NZTA						Principal Risk Asphalt Repairs and TAC Treat	Construction	NTSC	Anthony Stubbs
17/18	TAC	NZTA	SH29			0	0	60	SH29A and SH29 SCRIM apporach	Construction	Construction	Paul Anderson
17/18	TAC	NZTA	SH29 and SH29A	-	-			60	SH29A and SH29 SCRIM apporach	Construction	As Builds	Paul Anderson
17/18	TAC	NZTA	SH36 Steep Downhill to Tri Beam			15602	15690	88	Steep Downhill to Tri Beam	Design	Internal Review	Chelsea Oliver
17/18	TAC	NZTA	SH36 Tri Beam to Boundary			15720	15800	80	Tri Beam to Boundary	Design	Internal Review	Chelsea Oliver
17/18	Traffic Services	NZTA	NZTA						ATP Removal & Replacement	Design	Internal Review	Chelsea Oliver
17/18	Traffic Services	NZTA	SH36	Jim Paterson	Kaimai Ward				Pyes Pa School Parking upgrade	Close out	Built - to close	Brent Kilford
18/19	Cyclepath	WBOPDC	Maketu Road	Jim Paterson	Maketu	-	-	2,000	Maketu Road Cycle Path	Design	PAUL TO BRIEF Design a	Andre Van de Vlugt
18/19	Drainage	NZTA	002-0100			29		6	Old Tauranga Culvert	Scoping		?
18/19	Drainage	NZTA	002-0116			5730		18	Hotsprings Culvert	Scoping	Drainage Design Report	?
18/19	Drainage	NZTA	002-0130			2031	2240	209	Turner Road Drainage Imp	Scoping		?
18/19	Drainage	NZTA	29A-0008			1748		36	Mystery Culvert?	Scoping		?
18/19	Rehab	NZTA	002-0116			3227	3570	343	Kaikati Woolworths Recon	Scoping		Becky Phelps
18/19	Rehab	NZTA	002-0116			7205	8055	850	Lund Rd to For a Liza		Waiting on Client	
18/19	Rehab	NZTA	002-0116	-	-	3180	3438	258	Kaitikati Township	Design	Commence Design	Anthony Stubbs
18/19	Rehab	NZTA	002-0130	-	-	1952	2300	348	Turner Road Int	Design	Begin Design	Anthony Stubbs
18/19	Rehab	NZTA	002-151-I-C029	-	-	5698	6156	458	StartOldDivided to Tasman Quay	Scoping	Asset Management to B	Anthony Stubbs
18/19	Rehab	NZTA	002-151-I-C029	-	-	2800	3088	288	Takitimu Dr - Eliza St to Ped #2	Scoping	Asset Management to B	Anthony Stubbs
18/19	Rehab	NZTA	002-151-I-C029	-	-	2	1107	1,105	Takitimu Dr - Koromiko St	Scoping	Asset Management to B	Anthony Stubbs
18/19	Rehab	NZTA	002-185			6800	7050	250	Left Hand Curve RHS	Scoping		Paul Anderson
18/19	Rehab	NZTA	036-0013	-	-	10800	10998	198	Low Point Sag Curve	Scoping	Begin Design	Anthony Stubbs
18/19	Rehab	NZTA	036-0013	-	-	13620	14035	415	TECT Park to Ngawaro Int	Scoping	Begin Design	Anthony Stubbs
18/19	Rehab	NZTA	2/185	-	-	8720	891	241	BP Service Station	In design	Begin Design	Anthony Stubbs
18/19	Rehab	WBOPDC	McPhail Rd	Jim Paterson	Kaimai Ward	0	1473	1,473	McPhail Rd		Need to organise survey	Brent Kilford
18/19	Rehab	WBOPDC	Te Puke Highway	Jim Paterson	Maketu-Te Puke Ward	2285	2580	295	Te Puke Highway - Papamoa Hall Rehab		Asset Management to	Brent Kilford
18/19	Rehab	WBOPDC	Wright Rd	Jim Paterson	Kaitikati - Waihi Beach Wa	1711	2100	389	Wright Road Rehab & widening	Construction	NTC has been sent to Sv	Brent Kilford
18/19	Reseals	NZTA	NZTA					52,850	SH Reseals	Scoping	?	Becky Phelps
18/19	Reseals	WBOPDC	WBOPDC	Jim Paterson	-	NA	NA	NA	LR Reseals	?	Client Approval	Dave McDougal
18/19	Seal Extension	WBOPDC	Allport Rd	Jim Paterson	Paengaroa	6106	7180	1,074	Allport Rd Seal Extension	In design	Public Consultation and	Brent Kilford
18/19	Seal Extension	WBOPDC	Kaitemako Rd South	Jim Paterson	Kaimai Ward	0	350	350	Kaitemako Rd South shape and seal	In design	NTE	Brent Kilford
18/19	Seal Extension	WBOPDC	Mountain Rd	Jim Paterson	Kaimai Ward	4283	6800	2,517	Mountain Rd seal extension	In design	Geometric Design with C	Brent Kilford
18/19	Seal Extension	WBOPDC	Pongakawa Bush		Maketu	8006	9400	1,394	Pongakawa Bush seal extension		NTE	
18/19	Seal Extension	WBOPDC	Rangiuru Rd		Maketu	11425	12301	876	Rangiuru Rd shape and seal		Pavement Renewal Report	
18/19	Seal Extension	WBOPDC	Reid Rd	Jim Paterson	Maketu-Te Puke Ward	3532	4986	1,454	Reid Rd seal extension	In design	Survey completed. Geor	Brent Kilford
18/19	Seal Extension	WBOPDC	Roydon Downs Rd	Jim Paterson	Paengaroa	4047	6835	2,788	Roydon Downs Rd Seal Extension	In design	Iwi engagement and pul	Brent Kilford
18/19	Seal Extension	WBOPDC	Taumata Rd	Jim Paterson	Kaimai Ward	2251	3002	751	Taumata Rd Shape and Seal	Close out	Built - to close	Brent Kilford
18/19	Seal Extension	WBOPDC	Valley View Rd	Jim Paterson	Kaimai Ward	114	599	485	Valley View Rd seal extension	Design	Geometric Design with B	Brent Kilford
18/19	Seal Extension	WBOPDC	Waerenga Rd		Maketu	0	1390	1,390	Waerenga Rd seal extension		NTE for VO request	
18/19	Seal Extension	WBOPDC	Waipa Rd		Kamai	0	405	405	Waipa Rd shape and seal		Split job and update estimates	
18/19	Seal Extension	WBOPDC	Williams Rd North		Kaimai	1166	2325	1,159	Williams Rd North seal extension			



Year	Category	Client	Road Name	Client Representative - Project Requester	WBPDC - Ward	Start	End	Length	Name	Status	Current Action	Project Manager/Design Engineer
18/19	TAC	NZTA	NZTA					12,740	SH TAC		?	

# PCG Report

<b>Project</b>	Omokoroa to Tauranga Cycleway
<b>Report For</b>	PCG
<b>Report Period</b>	Ending 25/09/2018

## SECTION 1

### OMOKOROA BOAT RAMP TO TINOPAI RESERVE

1. Section completed.

## SECTION 2

### TINOPAI RESERVE TO LYNLEY PARK

1. Section completed.

## SECTION 3

### LYNLEY PARK TO ECMT RAILWAY

1. WBOPDC to resubmit archaeological authority application.
2. WBOPDC to determine appropriate solution for crossing over fish pass/stilling basin (e.g. single span bridge, elevated boardwalk, culverts).
3. Existing street network to be utilised until this section is completed.

## SECTION 4

### ECMT RAILWAY TO BRIDGE 1

1. Williamson Earthworks commenced path construction on 24/09.
2. Chaytor awaiting receipt of Permit to Enter prior to installing fencing.

## SECTION 5

### BRIDGE 1

1. WBOPDC awaiting receipt of detailed design from KiwiRail for the reinstatement of cutting to western side of Bridge 1.

## SECTION 6A + 6B

### BRIDGE 1 TO PATS LANE

1. Williamson Earthworks to commence construction in October.



**SECTION 6C****PATS LANE TO HUHARUA RESERVE**

1. Fotheringham Contractors to install flat rack for water crossing within next fortnight.
2. Williamson Earthworks to commence construction in October.

**SECTION 6D****COMMUTER ROUTE VIA WAGSTAFF'S**

1. WBOPDC to discuss public access with Wagstaffs.
2. Fotheringham Contractors have benched cycleway alignment.

**SECTION 7****HUHARUA RESERVE**

1. WBOPDC to construct extension of concrete path to flat rack bridge.

**SECTION 8A + 8B****HUHARUA RESERVE TO JESS ROAD**

1. Currently on-road experience.

**SECTION 9A****PLUMMERS POINT ROAD TO JESS ROAD WETLAND ENTRANCE**

1. Currently on-road experience.

**SECTION 9B****JESS ROAD WETLAND ENTRANCE TO BRIDGE 2**

1. Construction completed.

**SECTION 9C****BRIDGE 2**

1. Bridge construction completed.

**SECTION 9D****BRIDGE 2 TO BRIDGE 3**

1. Chaytor awaiting receipt of Permit to Enter prior to installing fencing.
2. Williamson Earthworks awaiting completion of fencing prior to constructing path.

**SECTION 10****BRIDGE 3**

1. Bridge construction completed.
2. HEB yet to achieve practical completion (some documentation yet to be received).
3. WBOPDC awaiting receipt of protective screen and approach design from Tiaki.

**SECTION 11****NEWNHAM PAPER ROAD**

1. Construction completed.
2. Chaytor awaiting receipt of Permit to Enter prior to installing fencing.
3. WBOPDC investigating carpark at start of Newnham Paper Road.

**SECTION 12A****NEWNHAM ROAD**

1. Currently on-road experience.

**SECTION 12B****NEWNHAM ROAD TO LINDOCH AVE**

1. WestLink to seek alternative pricing and submit to WBOPDC.
2. Not critical to achieve completion prior to June 2018.

**SECTION 13****SNODGRASS ROAD**

1. Construction completed.

**SECTION 14****BORELL ROAD**

1. Currently on-road experience.
2. WBOPDC investigating alternative route down Waikaraka Drive.

**SECTION 15A****TE PUNA ROAD**

1. Construction of section in front of Maramatanga Park completed.

**SECTION 15B****TE PUNA/LOCHHEAD ROAD INTERSECTION IMPROVEMENTS**

1. Archaeological authority application potentially required.
2. Not critical to achieve completion prior to June 2018.



**SECTION 16****LOCHHEAD ROAD**

1. Currently on-road experience.
2. WBOPDC to confirm if WestLink to progress archaeological authority application.

**SECTION 17 + 18 + 19****LOCHHEAD PAPER ROAD TO TEIHANA CYCLEWAY CROSSING**

1. WBOPDC awaiting receipt of signed contract from A&R Earthmovers.
2. Construction progressing well.
3. BOPRC resource consent for culvert on downstream side of railway to be applied for retrospectively.
4. WBOPDC investigating possibility of acquiring additional land for recreational purposes.

**SECTION 20****TEIHANA CYCLEWAY CROSSING**

1. Fotheringhame Contractors to install flat rack for drain crossing within next month.
2. WBOPDC/RCP currently procuring boardwalk.
3. WBOPDC awaiting receipt of protective screen design from Tiaki.

**SECTION 21 + 22****TE PUNA STATION ROAD**

1. WestLink to progress design of sewer main concrete cap.
2. WestLink to confirm extents of localised scour protection and retaining.
3. WestLink to progress design of cycleway and carpark based on Pukewhanake redevelopment.

**SECTION 23****UNDER SH2 TO WAIROA CYCLEWAY BRIDGE**

1. No longer required.

**SECTION 24****CLIP-ON CYCLEWAY BRIDGE**

1. WBOPDC to confirm scope based on receipt of tender pricing.
2. WBOPDC to update and reissue cultural monitoring agreement.
3. WBOPDC to arrange meeting with Wairoa hapu to discuss cultural mitigation measures.
4. Beca submitted building consent application (29/08).
5. Beca to issue procurement documentation on GETs.

**SECTION 25****WAIROA SH BRIDGE TO CARMICHAEL  
ROAD SH2 WORKS**

1. WestLink currently investigating additional queries raised by Wairoa hapu.
2. RCP/Beca/WestLink/TCC to meet with NZTA to discuss impact of proposed 80km/h speed limit on current design.
3. WestLink to meet with neighbours following above meeting taking place.

**APPENDIX A – OMOKOROA TO TAURANGA CYCLEWAY TIMELINE**



# Omokoroa to Tauranga Cycleway Programme Timeline

Updated 25 September 2018

Overview of cycleway sections identifying programme, level of service and status.

Section	Phase	Programme									
		Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
<b>1a Omokoroa Boat Ramp to Cooney Reserve</b> Existing trail satisfactory. On-road section on Esplanade. The Point Project (WBOPDC planning process) will assess the impact of cyclists at the end of the route and whether additional infrastructure is required - e.g. ebike chargers, bike racks, dedicated parking.	Update responsibility WBOPDC Design Completed Consent(s) Completed Procurement Completed Construction Completed										
<b>1b Cooney Reserve to Tinopal Reserve</b> Construction of timber boardwalk upgrade completed 22 June 2018.	Update responsibility WBOPDC Design Completed Consent(s) Completed Procurement Completed Construction Completed										
<b>2 Tinopal Reserve to Lynley Park</b> 300m of 2.5m wide timber boardwalk with balance in recycled concrete. Completed in June 2017 with Ministerial opening.	Update responsibility WBOPDC Design Completed Consent(s) Completed Procurement Completed Construction Completed										
<b>3 Lynley Park to ECMT Railway</b> Heritage NZ returned archaeological authority application 28/06. WBOPDC to resubmit application. Design required for crossing over fish pass/stilling basin. To be completed as variation to existing contract. Existing street network to be utilised until construction completed.	Update responsibility WBOPDC Design Additional design required Consent(s) HNz authority to be resubmitted Procurement Not yet commenced Construction Not yet commenced										
<b>4 ECMT Railway to Bridge 1</b> Carriageway and trail sub-base already constructed. Williamson Earthworks engaged as variation to existing contract. Construction commenced 24/09.	Update responsibility WBOPDC Design Completed Consent(s) Completed Procurement Completed Construction Underway										
<b>5 Bridge 1</b> New 40m bridge adjacent to existing railway bridge. Construction completed 1 June 2018.	Update responsibility RCP Design Completed Consent(s) Completed Procurement Completed Construction Completed										
<b>6a Bridge 1 to Pats Lane</b> Cycle trail to be constructed along existing KiwiRail embankment in recycled concrete. Resource consent granted 21/08 (sections 6a-6c combined). Williamson Earthworks engaged as variation to existing contract.	Update responsibility WBOPDC Design Completed Consent(s) Completed Procurement Completed Construction Not yet commenced										

Section	Phase	Programme									
		Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
<b>6b Pats Lane</b> Archaeological authority granted 25/07. Resource consent granted 21/08 (sections 6a-6c combined). Williamson Earthworks engaged as variation to existing contract.	<b>Update responsibility</b> WBOPDC <b>Design</b> Completed <b>Consent(s)</b> Resource Consent granted HNZ authority granted <b>Procurement</b> Completed <b>Construction</b> Not yet commenced										
<b>6c Pats Lane to Huharua Reserve</b> Same methodology as section 1b. Stream crossing required - WBOPDC procuring single span structure. WBOPDC to ensure compliance with existing consent.	<b>Update responsibility</b> WBOPDC <b>Design</b> Not required <b>Consent(s)</b> Existing resource consent in place <b>Procurement</b> Completed <b>Construction</b> Prefabrication underway (stream crossing) Not yet commenced (path)										
<b>6d Commuter Route via Wagstaffs</b> Wagstaffs subdivision consent approved. Can be completed following June 2018, depending on the completion of Pats Lane. Topographical survey carried out 1 March 2018 to confirm route alignment. Section currently on hold due to funding shortfall.	<b>Update responsibility</b> WBOPDC <b>Design</b> Not yet commenced <b>Consent(s)</b> Not yet commenced <b>Procurement</b> Not yet commenced <b>Construction</b> Not yet commenced										
<b>7 Huharua Reserve</b> Trail (concrete path) exists within the park. Signage to be installed.	<b>Update responsibility</b> WBOPDC <b>Design</b> Not required <b>Consent(s)</b> Not required <b>Procurement</b> Not required <b>Construction</b> Not required										
<b>8a Plummers Point Road (to Rail Corridor)</b> WBOPDC confirmed section to be entirely on-road. Archaeological authority granted 04/07 for future off-road option.	<b>Update responsibility</b> WestLink <b>Design</b> Not required <b>Consent(s)</b> Completed <b>Procurement</b> Not required <b>Construction</b> Not required										
<b>8b Plummers Point Road (from Rail Corridor)</b> WBOPDC confirmed section to be entirely on-road. Archaeological authority granted 04/07 for future off-road option.	<b>Update responsibility</b> WestLink <b>Design</b> Not required <b>Consent(s)</b> Completed <b>Procurement</b> Not required <b>Construction</b> Not required										
<b>9a Plummers Point Road to Jess Road Wetland Entrance</b> To be on-road experience.	<b>Update responsibility</b> WBOPDC <b>Design</b> Not required <b>Consent(s)</b> Not required <b>Procurement</b> Not required <b>Construction</b> Not required										
<b>9b Jess Road Wetland Entrance to Bridge 2</b> WBOPDC in discussions with DoC around agreement for cycleway within Wetland. Recycled concrete to be laid on existing track. Williamson Earthworks engaged as variation to existing contract.	<b>Update responsibility</b> WBOPDC <b>Design</b> Not required <b>Consent(s)</b> Not required <b>Procurement</b> Completed <b>Construction</b> Completed										

Section	Phase	Programme									
		Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
<b>9c Bridge 2</b> Jess Road Wetland Bridge, Existing 20m bridge adjacent to existing railway bridge removed and replaced. Construction completed 26 February 2018.	<b>Update responsibility</b> RCP <b>Design</b> Completed <b>Consent(s)</b> Completed <b>Procurement</b> Completed <b>Construction</b> Completed										
<b>9d Bridge 2 to Bridge 3</b> Fence required between rail tracks and cycleway. KiwiRail Permit to Enter required prior to commencing construction (fence and path). Williamson Earthworks engaged as variation to existing contract.	<b>Update responsibility</b> WBOPDC <b>Design</b> Completed <b>Consent(s)</b> Completed <b>Procurement</b> Completed <b>Construction</b> Not yet commenced										
<b>10 Bridge 3</b> New 80m bridge adjacent to existing railway bridge. Construction completed 6 August 2018.	<b>Update responsibility</b> RCP <b>Design</b> Completed <b>Consent(s)</b> Completed <b>Procurement</b> Completed <b>Construction</b> Completed										
<b>11 Newnham Paper Road</b> Fence required between rail tracks and cycleway (only on bridge approach). Construction completed. WBOPDC to commence orchard planting this winter.	<b>Update responsibility</b> WBOPDC <b>Design</b> Completed <b>Consent(s)</b> HNZ authority issued <b>Procurement</b> Completed <b>Construction</b> Completed										
<b>12a Newnham Road</b> To be on-road experience.	<b>Update responsibility</b> WBOPDC <b>Design</b> Not required <b>Consent(s)</b> Not required <b>Procurement</b> Not required <b>Construction</b> Not required										
<b>12b Newnham Road to Lindoch Ave</b> Off-road 2.5m wide path. WestLink currently updating pricing. Not critical to achieve completion prior to June 2018.	<b>Update responsibility</b> WBOPDC <b>Design</b> Completed <b>Consent(s)</b> Not required <b>Procurement</b> Not required <b>Construction</b> Not required										
<b>13 Snodgrass Road</b> WestLink completed construction.	<b>Update responsibility</b> WestLink <b>Design</b> Completed <b>Consent(s)</b> Completed <b>Procurement</b> Completed <b>Construction</b> Completed										
<b>14 Borell Road</b> WBOPDC confirmed existing footpath to be utilised. Archaeological authority granted 04/07 for future off-road option. WestLink to proceed with do-minimum option (prune shelterbelts, signage to prevent parking on footpath).	<b>Update responsibility</b> WestLink <b>Design</b> Completed <b>Consent(s)</b> Completed <b>Procurement</b> Not required <b>Construction</b> Not yet commenced										
<b>15a Te Puna Road</b> WestLink design completed. Archaeological authority granted 04/07 for future off-road option. WestLink completed construction of cycleway against Maramatanga Park.	<b>Update responsibility</b> WestLink <b>Design</b> Completed <b>Consent(s)</b> Completed <b>Procurement</b> Completed <b>Construction</b> Completed										



Section	Phase	Programme									
		Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
<b>15b Te Puna/Lochhead Road Intersection Improvements</b> WBOPDC to confirm scope based on pricing received from WestLink for roundabout. Not required to be completed for this project - separate budget. HN2 application potentially required.	<b>Update responsibility</b> WestLink <b>Design</b> WestLink <b>Consent(s)</b> HN2 authority may be required <b>Procurement</b> Not required <b>Construction</b> Not required										
<b>16 Lochhead Road</b> WBOPDC confirmed section to be entirely on-road. WBOPDC agreed for WestLink to place archaeological authority application for future off-road option on hold due to number of archaeologically significant sites.	<b>Update responsibility</b> WestLink <b>Design</b> Not required <b>Consent(s)</b> HN2 authority placed on hold <b>Procurement</b> Not required <b>Construction</b> Not required										
<b>17 Lochhead Paper Road to Wairoa River Paper Road</b> Designed, includes cycle trail and bridle way, planting and fencing. Will require 6x culvert crossings, 1x bridge. WBOPDC investigating possibility of acquiring further land for recreational purposes. WBOPDC awaiting receipt of signed contract. Construction underway.	<b>Update responsibility</b> WBOPDC <b>Design</b> Completed <b>Consent(s)</b> Completed <b>Procurement</b> Completed <b>Construction</b> Underway										
<b>18 Wairoa River Paper Road to Esplanade</b> Land acquisition agreed, design complete. WBOPDC awaiting receipt of signed contract. Construction underway.	<b>Update responsibility</b> WBOPDC <b>Design</b> Completed <b>Consent(s)</b> Completed <b>Procurement</b> Completed <b>Construction</b> Underway										
<b>19 Wairoa River Esplanade to Teihana Cycleway Crossing</b> WBOPDC awaiting receipt of signed contract. Construction underway.	<b>Update responsibility</b> WBOPDC <b>Design</b> Completed <b>Consent(s)</b> Completed <b>Procurement</b> Completed <b>Construction</b> Underway										
<b>20 Teihana Cycleway Crossing</b> Tiaki completed geotechnical investigations. Culvert installed. BOPRC resource consent to be applied for retrospectively. Building consent potentially required. KiwiRail approvals potentially required. WBOPDC proceeding with route under ECMT Bridge 62.	<b>Update responsibility</b> RCP <b>Design</b> Not yet commenced <b>Consent(s)</b> WBOPDC RC approved BOPRC RC potentially required Permit to Enter required <b>Procurement</b> Potentially to be re-tendered <b>Construction</b> Not yet commenced										
<b>21 Te Puna Station Road North of Waipuna Hospice</b> WestLink chipseal design and cost estimate received 20/06. Will use TECT funding for this section. Road realignment potentially required. Archaeological authority application accepted 04/07.	<b>Update responsibility</b> WestLink <b>Design</b> Underway <b>Consent(s)</b> RC potentially required HN2 authority issued <b>Procurement</b> Not yet commenced <b>Construction</b> Not yet commenced										
<b>22 Te Puna Station Road Waipuna Hospice to SH2 Bridge</b> WestLink chipseal design and cost estimate received 20/06. Will use TECT funding for this section. Road realignment potentially required. Archaeological authority application accepted 04/07.	<b>Update responsibility</b> WestLink <b>Design</b> Underway <b>Consent(s)</b> RC potentially required HN2 authority issued <b>Procurement</b> Not yet commenced <b>Construction</b> Not yet commenced										

Section	Phase	Programme									
		Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19
<b>23 Under SH2 to Wairoa Cycleway Bridge</b> Not required for clip-on bridge(s).	<b>Update responsibility</b> WBOPDC <b>Design</b> Not required <b>Consent(s)</b> Not required <b>Procurement</b> Not required <b>Construction</b> Not required										
<b>24 Clip-On Cycleway Bridge</b> Programme based on non-notified consent. Geotechnical drilling completed. Detailed design completed. WBOPDC and BOPRC resource consents granted. Beca to issue procurement documentation on GETs. Building Consent lodged 29/08.	<b>Update responsibility</b> WBOPDC <b>Design</b> Completed <b>Consent(s)</b> RCs granted BC required <b>Procurement</b> Underway <b>Construction</b> Not yet commenced										
<b>25 Wairoa SH Bridge to Carmichael Road SH2 Works</b> WestLink investigating cycleway up SH2 to Carmichael Road and Taniwha Place. Requires Wairoa Marae buy in. Archaeological authority granted. Timeframes to be confirmed, likely to coincide with clip-on bridge construction. NZTA considering 80km/h speed limit.	<b>Update responsibility</b> WestLink <b>Design</b> Underway <b>Consent(s)</b> HNz authority granted RC potentially required <b>Procurement</b> Direct engagement <b>Construction</b> Not yet commenced										





## MODELLING THE FUTURE FOR ROAD FREIGHT

Research has developed models to explore how economic activity, in particular inter-regional trade, may affect future demand for freight transport and road space.

The project's purpose was to develop an experimental or pilot system dynamics model of traffic flows along the main road routes within the Auckland-Hamilton-Tauranga triangle.

The question being explored was whether such a model could be useful in understanding how increases in economic activity, particularly freight flows, affect the demand for road space and in reverse, how road space affects travel times.

To this end, the research team, comprising members from Infometrics Consulting Ltd, Future Impact Ltd and Transport Futures Consulting Ltd, designed and constructed three models:

- two simple Bayesian vector autoregressive models to forecast economic activity and freight flows within the Auckland-Hamilton-Tauranga region
- a high-level system dynamics model for simulating freight flows along the main roads in the region.

### DEVELOPING THE SYSTEM DYNAMICS MODEL

The research team chose to develop a system dynamics model for the main task of the project (to model freight flows) because of its ability to simulate processes such as traffic flows, including delays, congestion and capacity constraints.

System dynamics models are scenario or simulation models, rather than forecasting models, with their main use being to provide insight and understanding into how the real world works. They can be used to ask 'what if' questions around the scenario they are modelling, which in the context of the project, would include questions around future freight growth and infrastructure planning.



The team first used the two Bayesian models to forecast economic and freight growth in the region. The models showed that inter-regional freight flows within the Auckland-Hamilton-Tauranga triangle might grow by around 60% by 2025 (from 2012 levels). At this rate, the rate of growth of inter-regional trade was forecast to exceed each region's individual GDP growth rate.

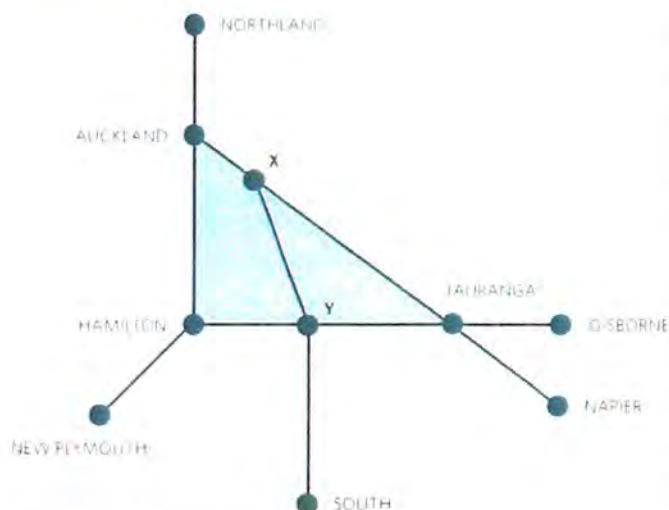
The team then used the system dynamics model to map this forecast growth in freight on to the three main road routes in the Auckland-Hamilton-Tauranga triangle.

The diagram below shows the six routes the researchers were specifically interested in:

- Auckland to X (AX), where X is the intersection between SH2 and SH27
- X to Y (XY), along SH27
- X to Tauranga (XT), along SH2 via Waihi
- Auckland to Hamilton (AH), along SH1 and the Waikato Expressway
- Hamilton to Y (HY), along SH1, where Y is a general representation of various intersections in the area, 27 and 29, 1 and 29, 1 and 5, 5 and 28, 1 and 28, and 28 and 29
- Y to Tauranga (YT), along SH29

The area covered by the system dynamics model is represented in the figure by the blue triangle.

### Route schematic



### WHAT THE MODEL SHOWED

The model showed that, in the absence of road improvements, this level of growth would cause travel times for southbound traffic to increase by around 5 to 10 minutes. On the SH1-SH29 route, however, the increase at peak time was likely to be almost 30 minutes.

For northbound journeys, the largest increase would be on the SH2 route, where the maximum difference would be over an hour.

The team also used the model to explore a selection of scenarios involving road improvements along the Waikato Expressway and Kaimai Range, more use of very large trucks and a constraint on driver working hours (this latter scenario doubled as a scenario for shifting more freight movements onto rail).

These scenarios suggest that road improvements will be crucial for dealing with the likely growth in freight. However, if the improvements induce traffic to move onto the upgraded routes, from parts of the network that have not been upgraded, the initial benefits could be negated.

The scenarios also showed that substituting rail for road freight movements would have virtually no effect on mean travel times on the road network, although the research team queried whether the scenario they had tested was 'ambitious enough'. Likewise, shifting freight onto longer and heavier trucks would reduce the number of trucks on the road, but would have a 'negligible' effect on congestion. This was due to the predominance of small vehicles on the road network, and the longer length of bigger trucks, which reduced the road space available to other vehicles.

Overall, the research team concluded the project had demonstrated that a system dynamics modelling approach could be used to model traffic flows, congestion and ways to ease congestion, at a high level.

'We would, however, recommend that if the model is ultimately to be applied to more real world questions, priority should go to testing the robustness of the model to a wider range of traffic patterns and input assumptions,' the team states in the research report.

They also caution that the model developed in the research was specific to its location and would not be 'immediately applicable to other areas. There was scope, however, to adapt the modelling system to other areas, following further data gathering and testing.'

In their report, the research team suggest some areas for further research to improve the model's usability and robustness, and to explore whether there is value in developing a 'larger, more sophisticated' system dynamics model.

The team concludes, 'As it stands the model is designed to look at high-level congestion resulting from increased traffic - all the time, not on particular days or during specific time periods. It is in effect a model of pressure on road space and how this pressure might be alleviated through different types of intervention such as more road space, re-assignment of routes and changes in the mix of vehicle types. Perhaps other issues are more important and undoubtedly there will be questions related to the movement of freight that are not capable of being analysed with this model. The model is complementary to other models such as the Waikato regional transport model, which has strengths in other areas, such as route assignment for example. Both should be used to investigate overlapping issues.'

*System dynamics investigation of freight flows, economic development and network performance*, NZ Transport Agency research report 629

Available online at [www.nzta.govt.nz/resources/research/reports/629](http://www.nzta.govt.nz/resources/research/reports/629)