#### CTOC Traffic Management Industry Forum July 2018





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Emergency Procedures

Toilets



Phones <u>Please switch off or to vibrate</u>



Time	Presenter	ltem
10am	Craig Halkett	Introduction and housekeeping
10:05am	Simon Harty	CTOC Update
10:10am	Jason Diaper	My Worksites update
10:45 am	Simon Hodges	Local Operating Procedures Update
10:55am	Luke Murphy	Universal Diagrams Update
11:05am		Break
11:15am	Craig Morris	Safety statistics and observed trends at worksites
11:30am	Chris Keith-Gillon, Craig Halkett & Craig Morris	Lessons learnt from recent worksites
11:50am	Luke Johnstone	Future of TMP processing system
12:10pm	Dave Duff	TM Focus Christchurch
12:15pm	Craig Halkett	Question time
At the conclusion of the formal session we invite all attendees to join us for a light lunch		



#### **CTOC Update**

#### Simon Harty – CTOC Manager



#### MyWorksites

#### Christchurch Launch Update

#### July 2018

Jason Diaper Project Manager – My Worksites





#### Agenda

#### Update 15 Minutes

#### **Q + A 30 mins**





# Background

- Canterbury Earthquakes
- Canterbury SDI Programme (LINZ)
  - Share information
  - Promote collaboration
  - Better use of spatial information
- Initiatives
  - Canterbury Maps
  - Forward Works Viewer
  - TMP4Chch
  - MyWorksites





## Benefits

- CAR/WAP and TMP's processed in single system
- User friendly, streamlined application process
- Comments and supporting documents recorded
- Easier access to your organisations applications
- Easier to collaborate with other organisations & system users
- Better visibility of network impacts
- Flexible National system





#### Christchurch Launch

- Scheduled for mid-late August 2018
- Submitica & TMP4CHCH will not accept new applications
- 24 Months of CAR/WAP data will transfer to MyWorksites
- TMP's viewable in TMP4CHCH for 12 months
- Open Data: Applications visible to other users
- Updates, Videos, FAQ's:

www.ccc.govt.nz/myworksites





### Industry Feedback + Q&A

- Commercial sensitivity of application information
- Alternative application channels
- Threshold for entering low impact work
- Forward Works Viewer
- News and Updates TMP4CHCH
- Q&A





#### CTOC Local Operating Procedures(LOPs)

#### Simon Hodges - CTOC TMC



# Purpose of the 2018 LOPs Update

- Intended to be update previous LOPs to match the current environment
- Incorporate any updates in policy and procedure
- Assimilate any bulletins that have been released to reduce burden on industry to look through previous document releases.
- Provide clear guidance on expectations for contractors when operating within the CTOC network boundaries



### Focus change in LOPs update



LOP CHAPTERS

#### More Chapters

- More links to guidance materials
- Glossary of terms
- Clarification for industry of CTOC expectations

- Submitting Traffic Management Plans (TMPs)
- Reduction of Network Capacity
- 3. Contacting CTOC TTM Team
- Works impacting signalised intersections
- Side Road Signage
- Speed Management
- Cone Mounted directional signs
- 8. Temporary Barrier Systems
- 9. Traffic Impact Assessments
- 10. Mitigation Measures when Network Impact Unavoidable
- 11. Peak Traffic Hours
- 12. Site Accessing
  - Mobile Variable Message Signs (mVMS)
- 14. Cyclist Impacts
- 15. Level 2 low speed (2LS) roads.
- TTM impacting on bus services
- 17. Use of Truck Mounted Attenuators(TMAs) and Arrow boards within the CTOC network
- 18. Allowance for an L2/3NP STMS to install Shoulder closures on a Level 2 Speed Limit under 65km/hr
- 19. Inspection activities on L2 roads
- 20. Low Volume Low-Risk Roads
- Road Closures
- 22. Public Notification requirements
- 23. Pedestrian management
- 24. Tail pilot use
- 25. Use of Works End signage
- 26. Use of Supplementary Distance Plates for lane closures
- 27. Use of Supplementary "Speed Ahead" signage
- 28. Work that impacts on stakeholders as a result of creating noise
- 29. Engineering Design of Temporary Transport Facilities
- 30. Glossary



# Key Changes in LOPs Update

- Inclusion of interim positions into LOPS (Bulletins)
- Processing Time frames are now clearly defined
- Clarification of CTOC processes and interactions to provide consistency
- VMS Best practice document to supplement LOPs
- New Chapter relating to public notification requirements
- New process and time frames for road closures associated with events (finalised and online)
- Review of road closures for road works underway (possible change in scoring vs road usage)
- Use of Works End signage will be required on all roads over 65Km/hr, optional under 65km/hr
- Lane Shift and Lane Drop supplementary plates will be required on all roads over 65 km/hr, optional under 65 km/hr
- T144 TSL ahead signs will be required on all roads over 65km/hr, optional under 65 km/hr
- New Chapter relating to works that impact stakeholders by creating noise
- New Chapter relating to Engineering Design of Temporary Transport Facilities (Temporary Roading alignments)



#### Effective date of LOPs Update

- 1 September 2018 for new TMP submissions
- All TMPs entered into mY Worksites will need to incorporate any updates and changes
- Released to the industry and available online by the end of this week



#### Questions ?





#### Universal Traffic Management Diagrams (UTMDs)

Luke Murphy - CTOC TMC



#### **Overview and Background**

- Approx. 50+ service agreements/generic TMPs
- Inconsistencies between contractor approvals
- Large number of organisations using old SCIRT (SC) diagrams
- Time saving and quality improvements
- Started middle of 2016 industry advised via TMP4CHCH
- Industry working group created



#### What's Included

- Approx. 170 static and semi-static diagrams
  - SC = 103 diagrams including mobile closures
  - Covers more road environments/scenarios
- Guidance Document Clarifying:
  - Diagrams restriction types
  - Merging of plans
  - UTMD key
  - And more...
- Basic layout list





#### Future Developments/Improvements

- Mobile closures currently in development
- Possible future development:
  - Inspections
  - Maintenance specific diagrams e.g. line marking
- Updates, minor improvements and fix's yearly?

We need the industries feedback to help us improve the diagrams. Examples: errors, ambiguity fixes, spelling mistakes...

Email: tmc@tfc.govt.nz or luke.murphy@tfc.govt.nz



#### How to Use

Watermark diagrams with name and logo as shown below:



Submit with the guidance document and a proforma

Contractors are expected to have an updated (LOPs V5) service agreements/generic TMPs in myWorksites by **31**<sup>st</sup> **October 2018** – One month after LOPs V5



MODFIFYING DIAGRAMS =





#### Working Group

A quick thanks to:

- Kevin Westeneng
- Keith Smith
- Todd McQueen
- Satvir Singh
- Shaun Maxwell



Also anyone else that may have contributed along the way



#### **Major Cycle Routes**





#### Issues







#### **Request for Assistance**

- Form a industry working group (8 6 people including CTOC)
- Create a best practice for various scenarios update to Cycle best practice.

Want to be involved?

Email: <a href="mailto:tmc@tfc.govt.nz">tmc@tfc.govt.nz</a> or <a href="mailto:luke.murphy@tfc.govt.nz">luke.murphy@tfc.govt.nz</a>

Make contact by COB 3<sup>rd</sup> August 2018 (next Friday)



#### Questions





#### **BREAK TIME**

• 10 Min to stretch your legs





# Safety statistics and observed trends at worksites

#### Craig Morris – CTOC Senior STMS



- 42 Accidents reported to CTOC between 1 January and 11 July 2018
- 72.5 % of incidents were attributed to 'driver actions'











- Weather conditions were not recorded as a significant contributor to incidents
- 52.4% of accidents occurred at 'Daybreak' or 'Dusk'
- Planning issues were recorded as a factor in 80% of incidents
- Incorrect implementation of traffic management methodologies were present in 20% of incidents
- 28.3% of incident forms contained blank fields of information



- Are all accidents/incidents being reported?
- Looking to the future, CTOC will be looking to provide more informative trends from the information gathered
- BUT we need the information to be able to do this!
- Incident forms are here to help analyse not punish STMSs



#### **Pedestrian Access at worksites**






















# Statistics from worksite observations of pedestrian facilities

- 33% of sites had unacceptable pedestrian facilities
- The score when undertaking an audit for unacceptable pedestrian facilities is 10, per section of road where provisions are required
- In a recent workplace accident a company was convicted and fined \$506,300 and had to pay \$118,000 in reparations to a victims family for failing to separate pedestrians from mobile plant, which resulted in a fatality.

# \$506,300 + \$118,000 = **\$624,300**



## Safe Cyclist facilities at worksites

















# Statistics from worksite observations of cyclist facilities

- 38% of worksites had unacceptable cyclist facilities
- Unattended sites account for 62% of that
- Inadequate for Cyclists Audit SCR is 10
- Fine for failure to separate/delineate safely?
- Increasing number of complaints
- One particular complaint was over 200 pages long and was very detailed



# Excess TTM equipment left onsite after works are completed































## 9 Months of equipment collected





### Equipment requiring collection over the past 9 months

- Average of 16 CSR's per week regarding left over TTM equipment
- Over 672 CSRs in 9 Months
- On Average 9 CSRS per week were able to be forwarded to TTM companies to collect
- On average 7 CSRS were unable to be allocated to a company resulting in the stockpile of equipment
- Significant cost to industry and your individual business for collection of or loss of equipment



## Lessons Learnt from a recent Mill and Mix Site

Craig Morris - CTOC Senior STMS Chris Keith-Gillon – CTOC RTO Team Craig Halkett – CTOC TMC



### Lessons Learnt from a recent Mill and Mix Site 1





- Unacceptable Potholing
- 150mm deep subsidence in live lane (cars were bottoming out)





SITE 1







SITE 1

### Lessons Learnt from a recent Mill and Mix Site 2

- Transition between new seal and milled surface not acceptable
- 50-80mm lip for traffic to traverse









- Unacceptable surface condition (Pot holes)
- Service lids left raised and unmarked

#### SITE 2





- Loose material (millings)used to ramp edge of new surface failed to remain in place and was dislodged by accelerating vehicles
- Dislodged material migrated to cycle lanes creating an issue for cyclists



## Areas for improvement

- More regular site checks are required in adverse weather conditions
- Greater attention needs to be placed on the 'condition' of the road
- There needs to be clear paths for escalation to TTM managers or PM if the site condition changes
- Ramping between milled surface and new seal needs to be fit for purpose (more durable and resilient)
- Cycle lanes and Pedestrians access during all phases of the project need to be included in planning and deployed to make sure vulnerable road users are catered for.
- STMSs checking unattended sites need to make sure they escalate issues and communicate that condition's on site have changed when the road condition deteriorates



## Other factors to consider

- Cyclist facilities must be safe and accessible (provide ramps, remove loose metal)
- Pedestrian access needs to be clearly defined
- Agree the plan and stick to it prior work commencement
- Discuss and agree if there are methodology changes or change in the work scope
- Debrief after sections of work are completed
- These are not isolated instances during inclement weather and seasonal changes.



### Lessons Learnt for Sewer Connection Durham St /Moorhouse Ave

- The TMP was approved to reduce capacity on Durham St for 3 days over a weekend and the Monday following.
- Works resulted in a significant impact
  - 1.4KM tail back que on Durham St
  - □ 20-40 minutes travel time to get from Bealey Ave to Moorhouse Ave
  - □ Clearance took some time once the best way forward was in place.
  - □ Signage changed enhanced VMS messages



# Conflicting signage

#### Before:



VMS and Static signs gave road users conflicting messages



# Conflicting signage





 Consistent messaging through site provided better messaging and less confusion for road users



# Out takes from internal / external lessons learnt

- Closer following of the TMP approval process (Project level discussion(PLD) queries, reporting back to the TIM Group, confirming whole of CTOC endorsement).
- Careful assessment and mitigation around high risk operations.
- Traffic Impact Assessment check/peer review to be carefully considered, particularly after late change in program of works to not conflict with CHCH marathon on Queen's Birthday weekend
- Contractor undertaking works needs to check the TMP detail. They may have picked up "no work on Monday" wording in the TMP
- Optimisation details should have been included in the TMP and provide clear contingency plans
- Direct conversations between TMP Designer / TTM Contractor and RTO during TMP planning phase, and prior to deployment (refer CTOC LOPs).
- More direct conversations between CTOC teams, increase in internal communications to make sure nothing is missed.
- RTO team review Accepted TMP (subject to resourcing)



# Details of tree felling operation

- A Stop Go Operation was approved for works to be undertaken on a Level 2 road during the day (alternating flow MTC)
- Manual traffic control was deployed contrary to accepted TMP and Stop Stop operation undertaken
- A significant impact resulted as the volume of traffic was in excess of what the Stop Stop operation could handle.
- 25 -60 minute delays were observed
- Significant delays to bus services
- Numerous customer complaints
- There were delays in reopening the road once works were completed



## Out takes from lessons learnt

- Poor planning between customer and TTM provider led to lack of understanding of job constraints.
- Accepted TMP methodology was not implemented, major change made onsite without consultation with CTOC TMC
- Monitoring of impact insufficient, STMS was unaware of the extent of traffic queuing and delays
- Communication to RTO/CTOC was insufficient
- The traffic impact assessment that was undertaken did not match the methodology used and therefore was unable to predict the actual impact that resulted from the works.



## Future of TMP processing system

#### Luke Johnstone – Double O Consulting





#### Dave Duff – Total TTM Limited





#### **Reasons for starting group?**

- Have a place where tm providers can discuss any industry issues
- Have a system where we can forward feedback, ideas or requests
- Show a unified front but also approach innovations in a unified way
- Have an outlet where frustrations may be channelled through representatives, rather than getting personal





#### Who Should Participate?

- Traffic management owners/operator
- Management staff from TM providers
- Contractors that do their own traffic management
- Please only 1 representative from each company





#### What if I can't come?

• All concerns can be passed through the manager representing your company

#### How do we interface with local controlling bodies?

• Representatives from the group will meet with RCA representatives each month or every other month





### **Questions?**







# THANK YOU for joining us!

