The SCIRT Alliance Model and Recovery of Christchurch's Earthquake Damaged Bridges.

Jonathan Creelman
Graduate Bridge Engineer: Opus Consultants
The SCIRT Alliance Model

• Born in May 2011, The SCIRT Alliance has the Daunting Task of rebuilding over $2 billion worth of Christchurch’s Earthquake damaged horizontal infrastructure.

• Horizontal Infrastructure is “street-level civic infrastructure” consisting of three waters, roads, bridges and retaining walls

• The Alliance model was adopted to deal with the complexity of “performing surgery” to damaged infrastructure within a living city and “encourage innovative solutions and value for money decision making”. Participants are driven by a team pain gain philosophy where profits and losses are shared.

• December 2016: Due date for completion
The SCIRT Alliance Model

**Owner Participants**
- Christchurch City Council
- CERA (Canterbury Earthquake Recovery Authority)
- NZ Transport Agency

**Integrated Services Team (IST)**
- Design and specify repair works
- Construction monitoring
- Sharing of “lessons learnt and innovations”

**Non-owner Participants**
- Fletcher
- Fulton Hogan
- City Care
- MacDow
- Downer

**Activities**
- Owner of Infrastructure
- Funding
- Scope of works
- Minimum level of service
- Rebuild damaged infrastructure
- As-built information
- Safety, cost, quality, programme reporting
- Rebuild damaged infrastructure
- ECI
- Minimum level of service

**Other Activities**
- Safety, cost, quality, programme reporting
- Rebuild damaged infrastructure
- ECI
- Minimum level of service
SCIRT: Bridge Recovery

- Construction value of bridging detailed design completed to date approximately $25 million

- Total bridging component of recovery works likely to be less than $50 million or 2% of overall recovery cost

- Construction value of single large wastewater catchment repair = $25+ million

- Comparatively low value but high profile
Bridge Recovery: Colombo St Bridge
Colombo St Bridge: Damage
Colombo St Bridge: Construction
SCIRT Alliance Model: Conclusion

• The task of the SCIRT Alliance is to restore Christchurch’s earthquake damaged horizontal infrastructure to pre-earthquake levels of service.

• SCIRT Alliance framework facilitates co-ordination of works, sharing of knowledge and pushing innovation.

• The challenge from here is using the SCIRT “tool” to complete the rebuild works by December 2016.

• If successful it will be a benchmark for managing disaster recovery projects.
SCIRT Alliance Model: Conclusion

Thank you