



FROM REBUILDS TO ROYAL VISITS - Embracing the Forward Works Viewer in Christchurch

After the Christchurch 2011 earthquakes, much of the city's infrastructure was damaged beyond repair, with areas in the CBD requiring a complete rebuild. At times there were over 120 different crews working on the roads, and the scale and pace of the rebuild, particularly in the central city, meant that a high level of forward works planning and coordination was necessary.

Developed with input from various government and rebuild agencies, the NFWV was built with the aim of creating a single, integrated view of the forward works footprint. It allowed multiple agencies working on the Christchurch Rebuild to coordinate works efficiently, supporting up to \$40bn of capital renewals, repairs and recovery.

The Forward Works Viewer Project was reviewed as part of the Canterbury SDI Programme Benefits Realisation Assessment* which found that in its first 14 months of use, \$13.3m of quantifiable benefits were generated, as well as reducing average journey times for the public and increasing the overall efficiency of the central city rebuild.



\$13.3m
quantifiable
benefits in
14 months



Helped sequence
projects on key
routes to enable a
smooth Royal visit



Avoided a health &
safety incident by
identifying a clash
between the marathon
route & demolition of a
building

Quantifiable benefits of using the NFWV during the rebuild included:

- The pace of CBD rebuild was not compromised by limitations of Traffic Management Plan (TMP) approvals;
- Improved efficiency of street width restrictions and closure planning;
- Internal cost savings due to less rework of TMPs and reduced project management costs for coordinating agencies;
- Reduction in average journey time;
- Identification of opportunities for shared roading works, traffic management and trenching, resulting in cost savings and time efficiencies.

Qualitative benefits included informed communications to the public regarding congestion, road closures and project updates. This led to less negative publicity, and a more satisfied community. It also reduced business disruption due to owners being able to plan ahead.

* Canterbury SDI Programme Benefits Realisation Assessment by ConsultingWhere, June 2015





Royal visits and event planning

The National Forward Works Viewer (NFWV) was utilised as one of the central planning tools to coordinate and optimise the transport network for the Royal visits to Christchurch in 2014 and 2015, which significantly reduced disruption to road users and the physical rebuild. It was not considered protocol to route the royal party through roadworks and so planning began months in advance to sequence projects so that work was complete on the key routes of the royal tour by the time it happened. Since then, The NFWV has continued to be used by Christchurch City Council (CCC) as a staple in their planning toolkit.

"Without the Forward Works Viewer, we simply would not have been able to plan the Royal tour routes without impacting on scheduled work"

RYAN COONEY, MANAGER, CTOC



Prince William & Kate arrive in Christchurch.
Photo / Govgeneralnz Instagram

The events team at CCC use it regularly to plan and approve the 350 event applications they get each year. The Christchurch City Marathon is held during peak road maintenance season, so the route is loaded into the FWV as soon as the date is confirmed, and it allows for any road maintenance to be scheduled around the marathon. When the 2015 marathon first returned to the central city after the earthquake, the event was input into the FWV. A clash was immediately identified – the route was due to go directly past the demolition of the Christchurch Central Police Station, scheduled for the same date and time. As this posed a huge safety risk, the team were able to speak to the Project Manager for the demolition, who managed to reschedule it for the afternoon when no one would be running past!

CTOC (Christchurch Transport Operations Centre) encourage resequencing of works to make the most use of time and space – for example if two street segments are being closed through the delivery of two projects, work is sequenced such that these closures happen at the same time. This creates efficiencies by reducing the duration of impacts on the travelling public. Programmes and projects are encouraged to be loaded into the FWV as soon as they're known about, and can then receive pre-approval prior to submission of the statutory corridor access and traffic management applications. This reduces risk and enables money to be saved due to less revision of TMPs and reduced liaison. Furthermore, traffic planners are able to better distribute the vehicle flows in throughout the CBD to decrease journey time during road works using the impacts registered within the FWV.

Whilst all of this undoubtedly saves money and time for the council and contractors, by far the biggest benefit is to that of the public. Experiencing a functioning city with less traffic disruption and improved sequencing of road works is something that yields significant economic benefits to road users and businesses.