

# Queensland Betterment Programs

Queensland leads the nation in building resilience in its communities through betterment programs.

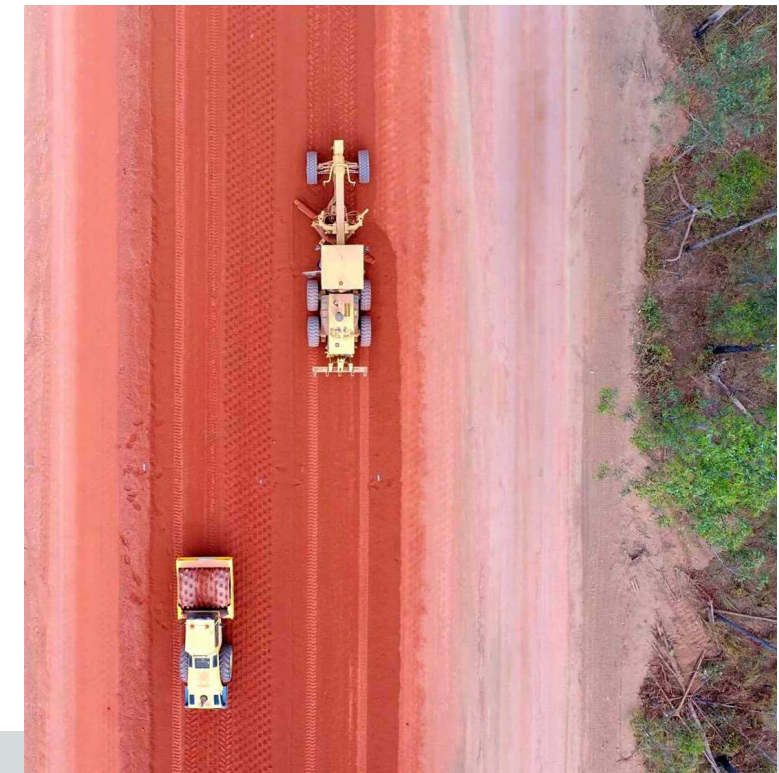
Queensland's experience with betterment funds shows that an upfront investment in rebuilding impacted assets to be more resilient saves money for all levels of government in future disasters.

Since the first betterment fund was established in 2013, more than 480 projects across Queensland – valued at more than \$240 million – have been approved, helping to create stronger, more resilient Queensland communities.

Of the **420 betterment projects** completed to date, **334 projects** have been subsequently impacted a total of **683 times** across **33 events**

**85 per cent** of those impacted suffered no damage, or only minor superficial damage

From a **\$110 million investment**, there is **\$250 million in avoided reconstruction costs\***



## What is betterment?

Betterment allows local governments and state agencies to rebuild essential public assets to a more resilient standard to help them withstand the impacts of future natural disasters.

Examples include improvements to vital infrastructure such as roads, bridges and floodways. These can vary from stabilisation of low-lying roads to reduce erosion and scouring, upgrades to drainage structures to increase capacity or replacing gravel with reinforced concrete to improve resilience.

The first betterment fund was established by the Queensland Reconstruction Authority in 2013 following Severe Tropical Cyclone Oswald. The \$80 million program delivered 232 projects across 35 local government areas.

The second betterment fund was created in 2015 following Severe Tropical Cyclone Marcia. The \$20 million program saw 58 projects delivered across eight local government areas.

In 2017, following Severe Tropical Cyclone Debbie, the third betterment program was set up. The \$41.85 million program delivered 83 projects across 22 local government areas.

The fourth betterment program was announced in 2019 after the North and Far North Queensland Monsoon Trough. The \$102 million program saw 107 projects approved for delivery across 35 local government areas. It was also the first time that state-owned assets were eligible for betterment funding, meaning assistance was available to improve the resilience of state roads.

## Working together to improve resilience

Betterment is a great example of all levels of government working together to improve the resilience of Queensland communities.

Through the various betterment programs, local governments have been empowered to assess, plan and implement disaster resilience at a grass-roots level, enabling work to begin as soon as possible following a natural disaster, helping to mitigate the impact on their local communities.

Queensland's betterment programs have been jointly funded by the Commonwealth and Queensland governments under Category D of the Disaster Recovery Funding Arrangements (DRFA) and prior to November 2018, the Natural Disaster Relief and Recovery Arrangements (NDRRA).

## Reducing the cost of natural disasters

A key test for betterment projects is whether they leave infrastructure and communities less vulnerable to the impacts of natural disasters.

As at July 2021, 334 projects have been subsequently impacted by natural disasters. In total, there have been 683 impacts to betterment sites from 33 events, with 85 per cent suffering no damage or only minor or superficial damage.

In some cases, assets have been subsequently impacted multiple times, including, for example, Aurukun Access Road, which has been subsequently impacted eight times.

Of the betterment projects that have been re-impacted, an investment of \$110 million has generated approximately more than \$250 million\* in savings or avoided costs, which is a great outcome for all levels of government, as well as Australian taxpayers.

It is worth noting that some of the re-impacted projects completed since 2017 or 2019 have already highlighted the benefits of betterment. Given the number of natural disasters that impact Queensland each year, the avoided costs are expected to continue to increase.

## Other benefits

Not only has betterment achieved substantial cost savings through more resilient infrastructure, it has also improved the lives of those living in impacted communities. Roads, bridges and other infrastructure are able to withstand weather events, and return to functionality much sooner in the immediate aftermath of a disaster.

Further, the avoided costs figure is based on estimated reconstruction costs only and does not include the many intangible benefits associated with having more resilient infrastructure.

This can include social, economic, and environmental benefits such as more connected communities, continuity of telecommunications, road networks and other essential services, increased consumer confidence and business activity, and reduced impacts on the environment (for example, erosion and run off into creek beds and other waterways). If these intangible benefits were included the total avoided cost figure would be much higher.

\*Avoided costs are estimates only, based on data provided by councils on impacts or likely impacts, and calculated on eligible reconstruction costs under Category B of the DRFA/NDRRA at the time of project approval.

Information is current as at September 2021.



## 2020–21 Betterment Fund

**A \$20 million Betterment Fund has been established to rebuild essential public infrastructure damaged in the 2020–21 disaster season to a more resilient standard.**

**The fund is available in the 47 local government areas that were activated for DRFA Category B Reconstruction of Essential Public Assets (REPA) assistance in the 2020–21 season.**

**Queensland communities were hit by 11 natural disaster events in 2020–21 including bushfires, hailstorms, cyclones and flooding. Nine of these events resulted in damage to essential public assets.**

**Local governments and state agencies impacted by these disasters are eligible to apply for the Betterment Fund.**

**The fund is the first to be delivered in Australia under the new DRFA Efficiencies Framework and is being jointly funded by the Australian and Queensland governments. It is being administered by the Queensland Reconstruction Authority.**

**For more information, go to [www.qra.qld.gov.au/betterment2021](http://www.qra.qld.gov.au/betterment2021).**

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# Betterment in action

## Gayndah Mundubbera Road North Burnett Regional Council

- Gayndah Mundubbera Road is an essential freight and transport link for the North Burnett region, connecting the highly productive agricultural towns of Gayndah and Mundubbera.
- The road was damaged in 2011 and rebuilt only to be re-damaged in 2013.
- Betterment funding from 2013 was used to increase the resilience of the two-kilometre section of road adjacent to the Burnett River that was washed out, relocating it uphill by 11 metres.
- New stormwater drainage works (including concrete-lined channels, culverts and scour protection) were also completed, improving functionality of the entire Gayndah-Mundubbera Road.
- The road has since been impacted by four natural disaster events (one in 2015, one in 2016 and two in 2017) and has remained functional with only minor expenditure required to clean up and remove debris.



**Restoration: \$6,785,707**

**Betterment: \$1,308,863**

**Avoided cost over four events: \$27,142,828**

## Villis Bridge Scenic Rim Regional Council

- Villis Bridge is located on Niebling Road and is the only access road for approximately 12 properties.
- High velocity flooding in the 2013 Severe Tropical Cyclone Oswald event tore the bridge from its foundation and washed it downstream.
- Niebling Road was closed for up to three weeks following the event and an alternative route through private property was established to provide access to residents, primary producers and freighting services.
- The betterment project constructed a new, safer concrete Villis Bridge, as well as stream bank protection for 30 metres either side of the bridge to increase the resilience of the bridge.
- It has since been impacted by four natural disaster events (one in 2017, two in 2020 and one in 2021) and has remained undamaged and functional throughout.



**Restoration: \$1,597,077**

**Betterment: \$232,845**

**Avoided cost over four events: \$6,388,307**

## Aurukun Access Road Aurukun Shire Council

- Aurukun Access Road was a gravel road that provides the only road link to and from the Aurukun community.
- The road was damaged in 2010, 2011, 2012 and 2013.
- Betterment funding from 2013 was used to bitumen-seal a 10-kilometre section of the road that was particularly vulnerable to flood damage.
- It has since withstood the impacts of eight separate natural disaster events, making it the most frequently impacted completed betterment project to date, remaining functional with only very minor damage.
- In addition, \$1.2 million of betterment funding from 2019 was used to infill scoured sections of the road and stabilise the shoulders and embankments (this has not yet been impacted by subsequent events).



**Restoration: \$873,002**


**Betterment: \$1,092,406**


**Avoided cost over eight events: \$6,726,214**


## Inverdon Bridge Whitsunday Regional Council

- The original Inverdon Bridge was a low-level timber structure across the Don River at Bowen. It was originally built in 1940 and suffered deterioration over many years.
- Although the bridge underwent major repairs between 2008 and 2010, it was severely damaged in 2017 by Severe Tropical Cyclone Debbie and required demolition.
- The betterment project saw the construction of a new concrete bridge across the Don River.
- The works increased the resilience of Inverdon Road by reducing the risk of overtopping by floodwaters and providing a structure that can withstand greater debris loading.
- It has since been twice impacted by natural disaster events in 2020 and 2021 and has remained undamaged.



**Restoration: \$5,298,051**

**Betterment: \$837,385**

**Avoided cost over two events: \$10,596,102**