

vehicle dimensions & mass

Bridge improvement programme for HPMV routes - the next phase

Back in our November newsletter, we wrote about new high productivity motor vehicle (HPMV) routes that are proposed for investment. We're pleased to say that a new phase of the VDM implementation is underway, with NZTA regions and local authorities looking at bridges on these routes.

This new phase will involve:

- a comprehensive review of:
 - the HPMV capacity of bridges
 - strengthening options
 - route upgrade options (full or partial HPMV upgrade)
 - route economics
- the development of a programme for the strengthening of bridges on the end-to-end HPMV routes that regions have identified.

The NZTA will offer technical guidance to councils on their assessment of local road bridges.

Activities will be led by NZTA Project Management Services Managers working closely with the National Office Structures

Team who will provide the oversight to ensure national consistency (one of the main requests during industry consultation on HPMVs) in the bridge assessment. The NZTA expects to have a good understanding of the strengthening programme for all bridges on these routes by early 2013.

Concurrent with the bridge improvement programme are the discussions NZTA regional Planning and Investment teams will have with local authorities. In many cases, it is likely that the HPMV routes will comprise state highway and local road components and will require coordination between the NZTA (for state highways) and one or more local authorities for project implementation.

These routes will be included in each region's Regional Land Transport Programme as a proposed package of improvement activities, for inclusion in the 2012-15 National Land Transport Programme (NLTP). Many of the HPMV routes for investment are already carrying large volumes of heavy vehicles so any pavement deterioration will be minimal. This work on HPMV routes will need to be prioritised and will compete for investment against other projects in the NLTP.

The bridge improvement programme will begin with priority routes in the region bounded by Auckland, Hamilton and Tauranga. The methodology used in those regions will be conducted as a pilot and then applied to the remainder of the country.

It doesn't need to cost a lot!

Innovative thinking to allow heavier vehicles to cross a bridge can sometimes be achieved without too much expense.

As part of the bridge improvement programme for HPMVs, a review of the capacity on the 1951 Petone Overbridge (on-ramp) on SH2 in Wellington identified that the outer beam was a weak element to this structure. The installation of delineator posts along the edge line of the cycleway ensures that all heavy vehicles can cross the structure centrally, which then allows full HPMV capacity.

NZTA Principal Asset Manager Dave Robinson says this is an effective low-cost improvement providing a significant benefit.



New generation HPMVs deliver freight productivity

New HPMV trucks in the forestry industry are maximising the benefits from the introduction of the VDM Rule and are becoming a common feature on our roads.

An example is the heavier and longer new breed of trucks shown below. These can carry up to 62 tonnes at a length of close to 24 metres. The new super-B-trains sport 40 wheels, 11 axles and trailers equipped with ABS/EBS braking. One of these trucks moves processed wood products from Whirinaki Mill to the Napier Port while the other carries logs from central North Island forests. Further trucks are likely to be ordered.

These trucks are more environmentally friendly, with a reduction on overall fuel use, but it must be stated that they are largely route-specific vehicles when carrying loads greater than 44 tonnes. These trucks do not have general access on the road network. Before these trucks were built, a number of tests and approvals were sought from the NZTA to confirm they can fit the roads and turn at intersections and roundabouts along the route. Final approval was given after on-road tests by the NZTA.

The logging truck (below) can carry 12m logs on the front trailer and logs of up to 8.1m on the rear. The truck also complies with the 'swept path' Performance Based Standards requirements, ensuring it uses no more road width than a normal truck. It also has an on-road off-road tyre inflation system to ensure maximum traction. This unit has some efficiency gains but any gain must be balanced against the risk of overloading.



Similar features and benefits are to be gained with the new Pan Pac rig running between Whirinaki Mill and the Port of Napier. While this truck delivers 50 percent greater loads and will reduce the number of journeys, it is also much quieter on the road thanks to its air bag suspension and not having engine brakes. This is especially appreciated by residents living near heavy truck routes. By the end of 2012, the same freight movement will be achieved with half of the current fleet.

Getting these trucks to work under the new VDM Rule is a great example of the NZTA and the road transport industry working together.



For more information

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Visit the HPMV webpage at: www.nzta.govt.nz/HPMV

HPMV route maps

Many operators have been asking for more maps to indicate where they can travel on the state highway network. It's taken some time but we're pleased to provide you with maps of HPMV routes that have been approved from applications we've received so far. They indicate the weight that has been approved. They are on our website: www.nzta.govt.nz/hpmv. We're also working on a new set of guidance maps that will indicate full and limited HPMV travel based on common vehicle types.

Permitting manual for HPMVs

We'd like to thank all of you who have recently provided comments on the draft HPMV permitting manual. This manual provides a statement of current policy, standards, processes and procedures for the permitting of HPMVs. It also provides nationally consistent information and advice for compliance and auditing. One good thing that comes from making this manual available as a draft is that our stakeholders challenge our thinking, with the aim of reaching common ground. We're now reviewing your feedback and hope to have the final version available from April onwards.

New permitting form

Our new HPMV application form has been in use for a few months now. Based on user feedback, we will make some tweaks to improve it some more. This will be completed and ready for use by Monday 2 April. After this time, the NZTA will only accept HPMV applications from operators using this new form.