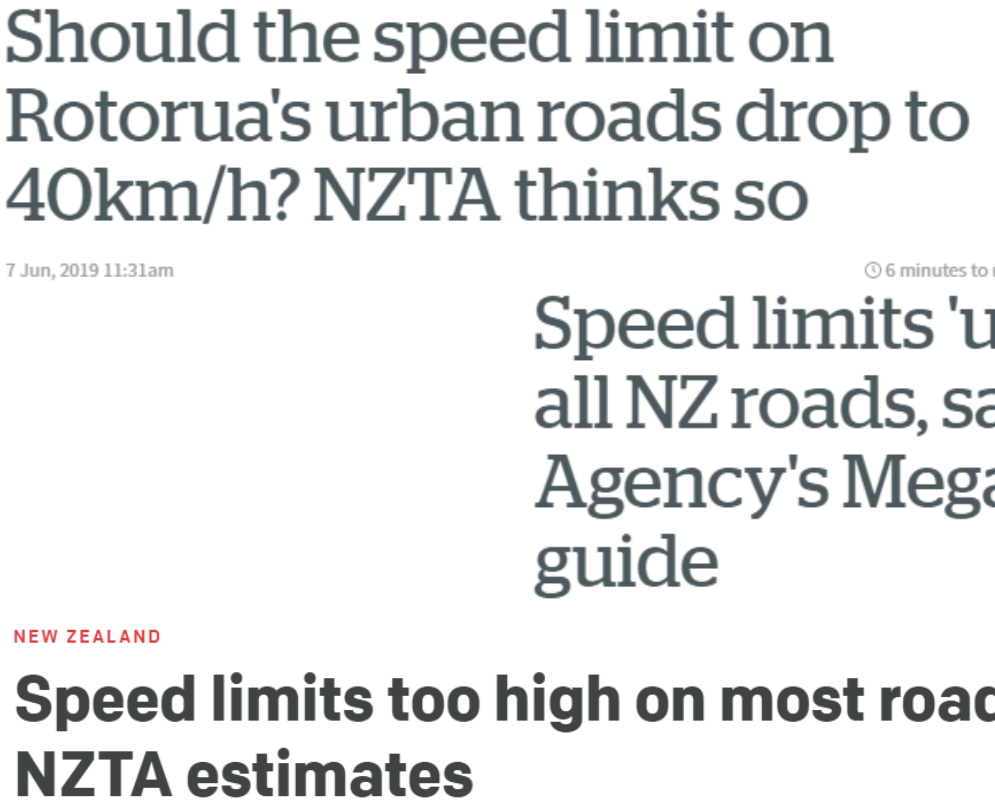
Safer Journeys Risk Assessment Tool (Mega Maps)

Haris Zia
Steve Ford
Paul Durdin
Dale Harris



Should the speed limit on Rotorua's urban roads drop to 40km/h? NZTA thinks so

7 Jun, 2019 11:31am

6 minutes to read

Speed limits 'unsafe' on nearly all NZ roads, says NZ Transport Agency's Mega Maps planning guide

NEW ZEALAND

Speed limits too high on most roads, NZTA estimates

Wednesday, **12 June 2019**

More speed cameras, bigger fines could be down road

Thursday, **6 June 2019**

100kmh limit too high for most roads in South: NZTA

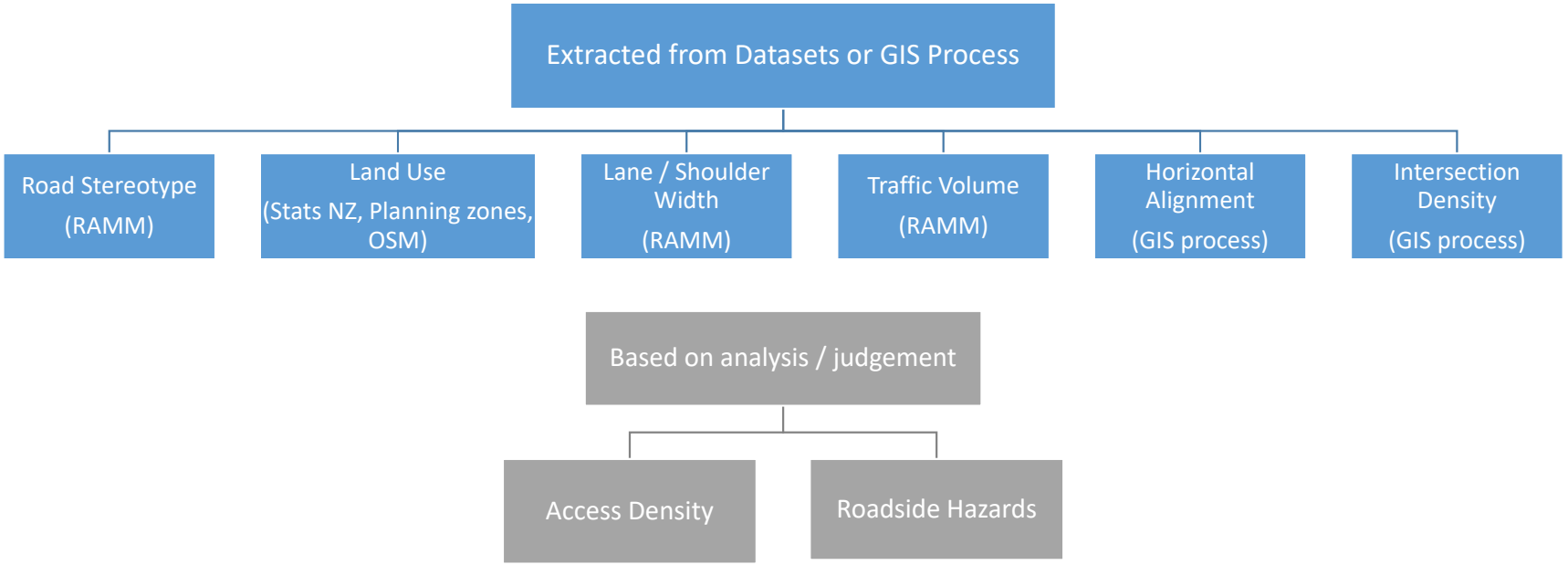
Speed Management Framework

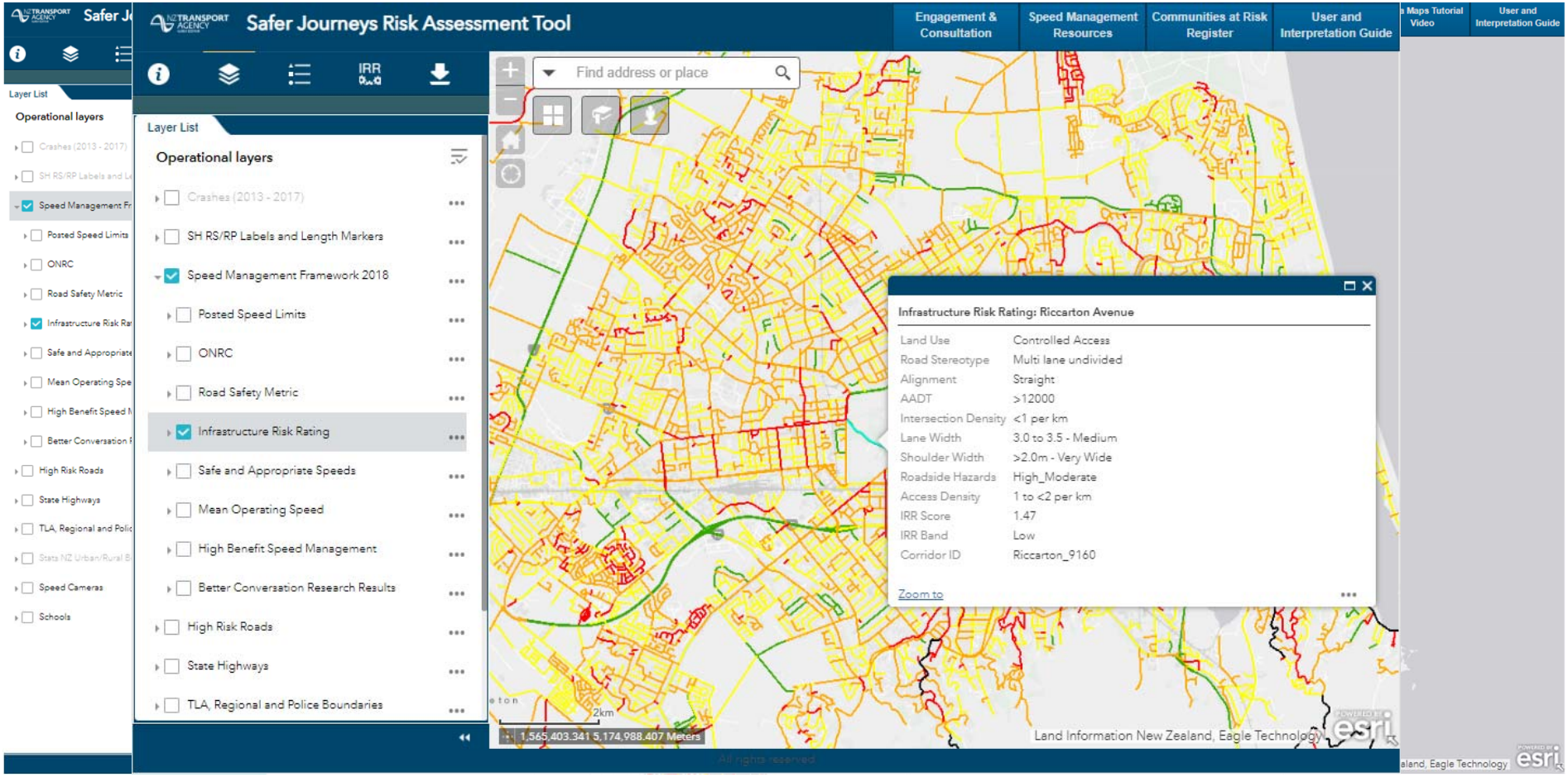
Table 2.2 Proposed Safe and Appropriate Speeds classification method – Rural Roads (incl rural towns)

Function / Feature	Road Safety Metric	Infrastructure Risk Rating	Safe and Appropriate Speed (km/h)
• **ONRC** is Class 1 • Median Divided and at least 2 lanes in each direction • No direct property access • Grade separated intersections	• Personal Risk ≤ Low–Medium; • Collective Risk ≤ Medium–High;	• **'Low'**	• **110**[7]
• **ONRC** is Class 1 – 3 • Sealed road	• Personal Risk ≤ Medium; • Collective Risk ≤ Medium–High;	• **'Low' or 'Low–Medium'**	• **100**
• **Any ONRC**	• Personal Risk ≤ Medium–High;	• **'Low' to 'Medium'**	• **80**
• **Any ONRC** • **Not in a rural town**[2] • **Sealed road**	No road safety metric used in the assessment	• **'Low' to 'High'**	• **<80**
• **Any ONRC** • **Not in a rural town**[2] • **Unsealed road**	No road safety metric used in the assessment	• **'Low' to 'High'**	• **<80**
• **ONRC** is Class 1 – 2 • **Rural town**[2]	• Personal Risk ≤ Low–Medium • Collective Risk ≤ Medium–High	• **'Low' or 'Low–Medium'**	• **80**

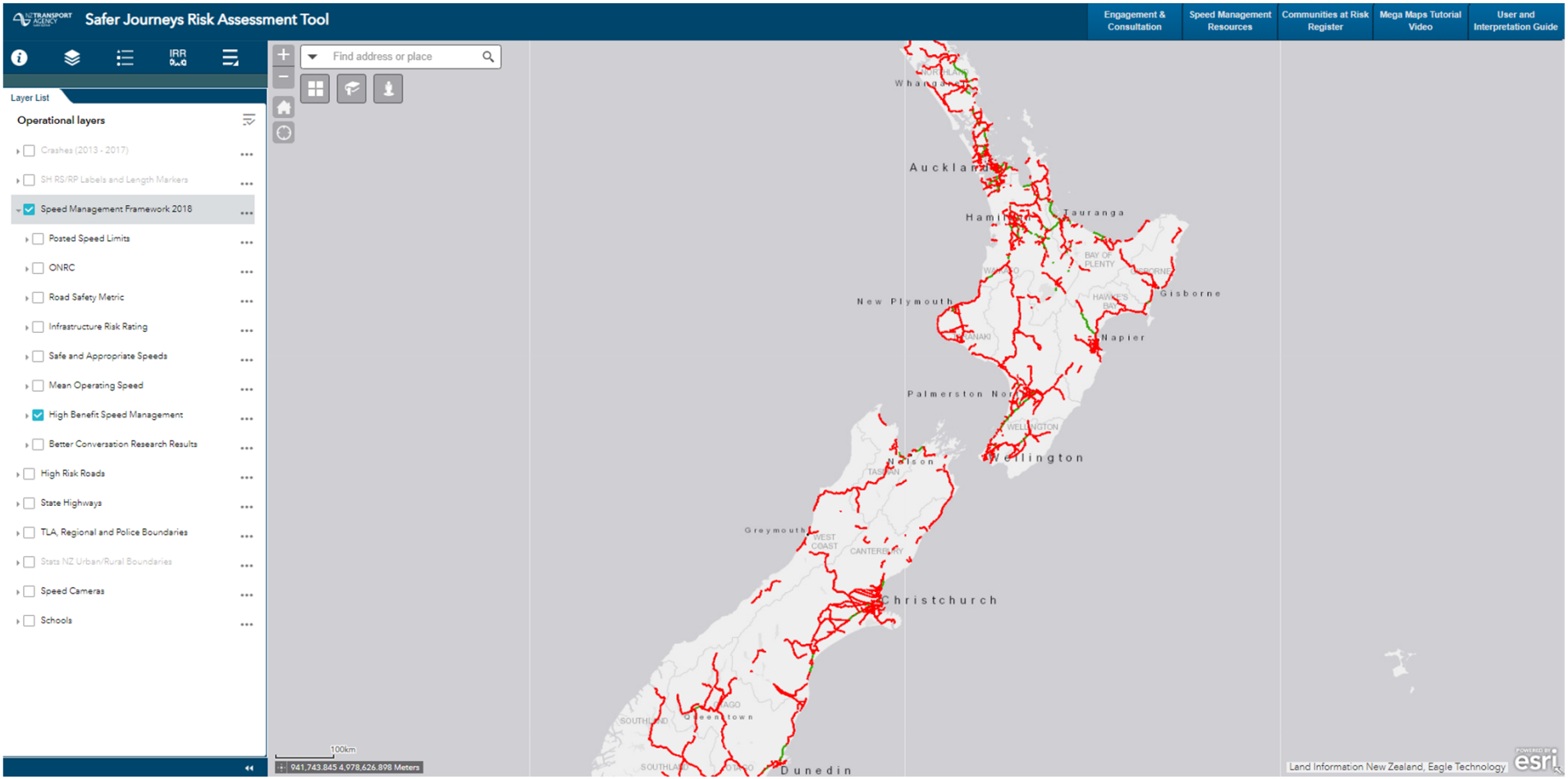
- Road stereotype
- Horizontal alignment
- Lane and shoulder width
- Land use
- Traffic volume
- Roadside hazards
- Access density; and
- Intersection density

Streamlined IRR using Existing Datasets



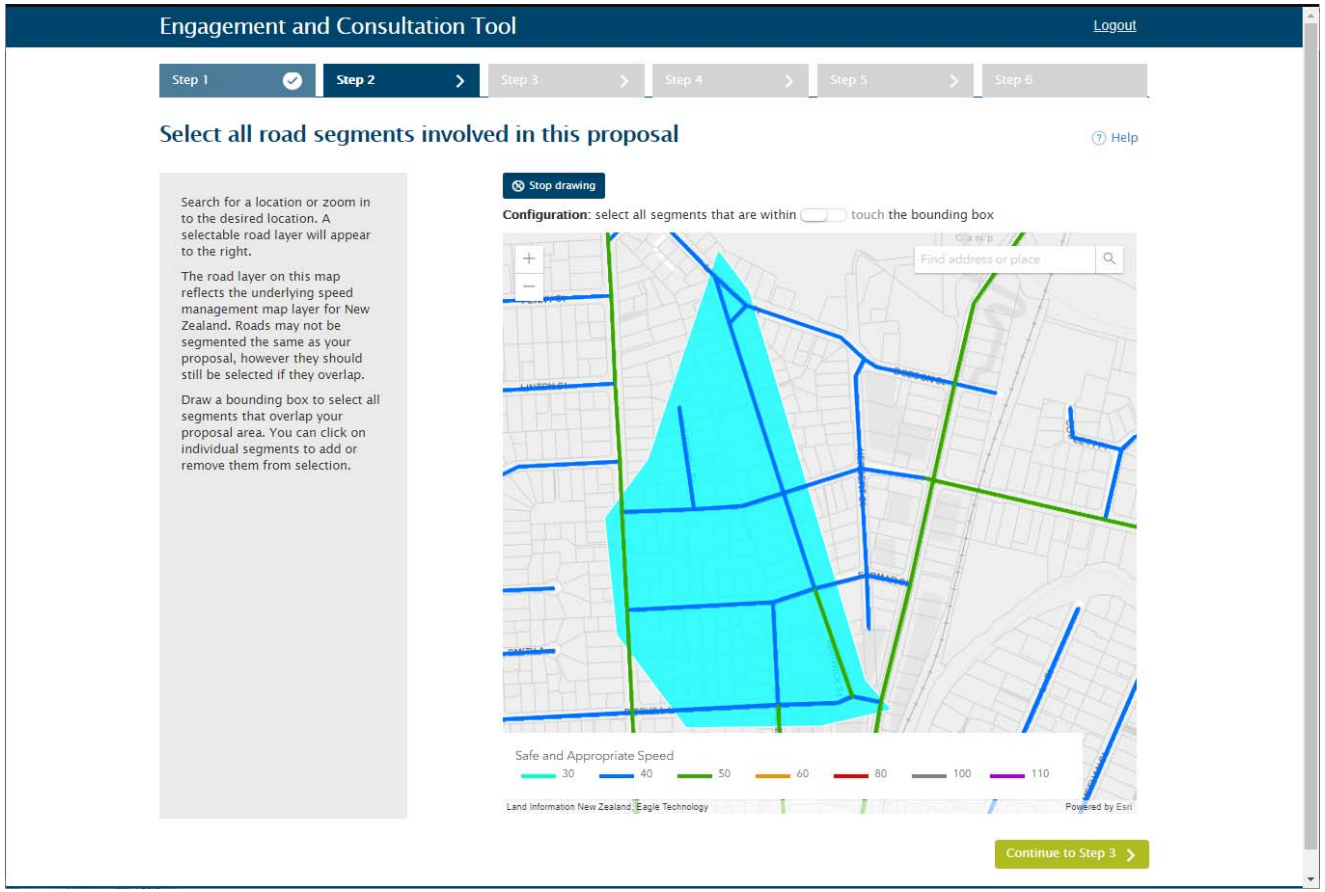

Safer Journeys Risk Assessment Tool
Engagement & Consultation
Speed Management Resources
Communities at Risk Register
User and Interpretation Guide
Maps Tutorial Video
User and Interpretation Guide
Find address or place
Layer List
Operational layers
Crashes (2013 - 2017)
SH RS/RP Labels and Length Markers
Speed Management Framework 2018
Posted Speed Limits
ONRC
Road Safety Metric
Infrastructure Risk Rating
Safe and Appropriate Speeds
Mean Operating Speed
High Benefit Speed Management
Better Conversation Research Results
High Risk Roads
State Highways
TLA, Regional and Police Boundaries
Infrastructure Risk Rating: Riccarton Avenue
Land Use Controlled Access
Road Stereotype Multi lane undivided
Alignment Straight
AADT >12000
Intersection Density <1 per km
Lane Width 3.0 to 3.5 - Medium
Shoulder Width >2.0m - Very Wide
Roadside Hazards High_Moderate
Access Density 1 to <2 per km
IRR Score 1.47
IRR Band Low
Corridor ID Riccarton_9160
Zoom to
2km
1,565,403.341 5,174,988.407 Meters
Land Information New Zealand, Eagle Technology
esri

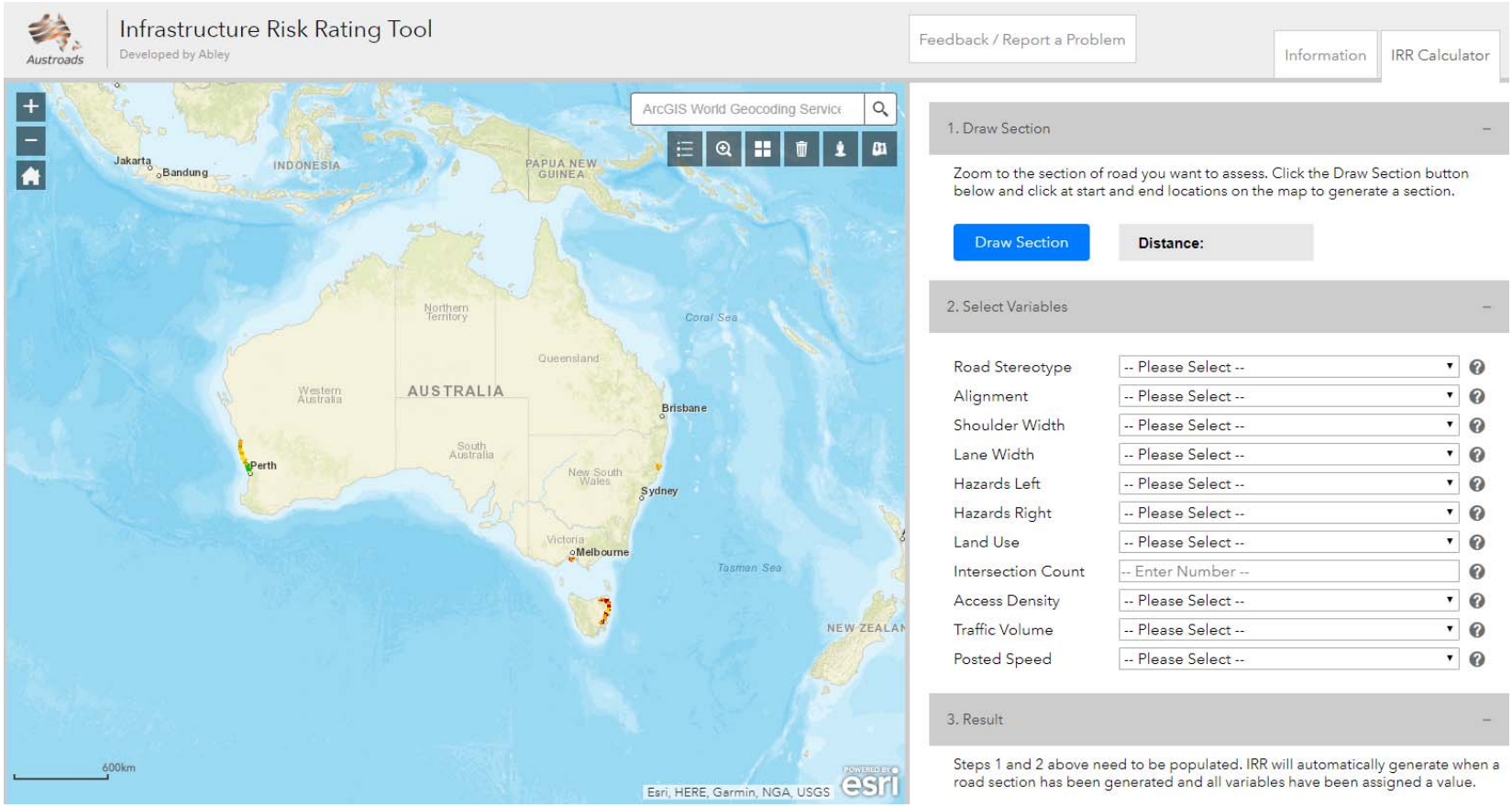
ableY



Mega Maps / March 2020

Tonkin + Taylor


Engagement and Consultation Tool
Logout
Step 1
Step 2
Step 3
Step 4
Step 5
Step 6
Select all road segments involved in this proposal
Help
Search for a location or zoom in to the desired location. A selectable road layer will appear to the right.
The road layer on this map reflects the underlying speed management map layer for New Zealand. Roads may not be segmented the same as your proposal, however they should still be selected if they overlap.
Draw a bounding box to select all segments that overlap your proposal area. You can click on individual segments to add or remove them from selection.
Stop drawing
Configuration: select all segments that are within touch the bounding box
Find address or place
Safe and Appropriate Speed
30
40
50
60
80
100
110
Land Information New Zealand, Eagle Technology
Powered by Esri
Continue to Step 3


Austroads
Infrastructure Risk Rating Tool
Developed by Abley
Feedback / Report a Problem
Information
IRR Calculator
ArcGIS World Geocoding Servic
Jakarta
Bandung
INDONESIA
PAPUA NEW GUINEA
Northern Territory
Coral Sea
Queensland
Western Australia
AUSTRALIA
Brisbane
South Australia
Perth
New South Wales
Sydney
Victoria
Melbourne
Tasman Sea
NEW ZEALAN
600km
Esri, HERE, Garmin, NGA, USGS
esri
1. Draw Section
Zoom to the section of road you want to assess. Click the Draw Section button below and click at start and end locations on the map to generate a section.
Draw Section
Distance:
2. Select Variables
Road Stereotype
Alignment
Shoulder Width
Lane Width
Hazards Left
Hazards Right
Land Use
Intersection Count
Access Density
Traffic Volume
Posted Speed
-- Please Select --
-- Enter Number --
3. Result
Steps 1 and 2 above need to be populated. IRR will automatically generate when a road section has been generated and all variables have been assigned a value.

Implementing speed management treatments on the highest raking 10% of roads (~10,000 km) is expected to prevent more than 245 people from being killed or seriously injured annually

"Mega Maps was already an excellent tool for quickly visualising our network hierarchy and high-level network assessment data… Mega Maps gives Council the ability to review and communicate the details of complex data analysis and Safe and Appropriate Speed outputs instantly. Recommendations then being taken forward into the Speed Limit Reviews can be seen at an individual road, township or District level with a few clicks." (Andy Bartlett, Asset Engineer, Central Otago District Council)

ably

Road safety innovation:

- development of new and innovative risk assessment technique, resulting in the assessment of over 95,000 km of public road
- first one-stop platform to provide RCAs access to key road risk layers
- transforms and standardises the speed limit consultation and engagement process
- led to the adoption of IRR as an Australasian benchmark for road risk assessment for speed management