From: Susan Shaw

**Sent:** Monday, 29 April 2019 5:13 PM

**To:** Donaldson, Matt

**Subject:** Key Datasets for Resilience & Climate Change - Data Improvement Plan - Suburbs

**Attachments:** Key Datasets for Resilience & Climate Change - Data Improvement Plan - Suburbs.docx; Key

Datasets for Resilience - Data Improvement Priorities - Survey Results for Suburbs - General

Response.pdf; Key Datasets for Resilience - Data Improvement Priorities - Survey Results for Suburbs -

Targeted Reviewers.pdf

Hello Matt

Hope you had a great Easter break.

The first draft of the Suburbs data improvement plan is now ready for your review – see attached.

Also attached are the original survey results, both from the initial survey with the targeted reviewers, and the second survey which was distributed more widely.

I'm keen for us to review the plan, agree what are the priority improvements with an estimated deadline and what will be future improvements, so that we can present a draft to the NZGIS4EM Committee on 14 May

We also need to provide an update on the improvements FENZ is already working on.

I'll send you an proposed date for a conference call, but happy to come to the FENZ offices if you would prefer to meet in person.

Thanks, Susan

### **Draft Suburbs Improvement Priorities**

#### **Priority Improvements**

- 1. Ensure Suburbs is easily accessible by publishing as both an Esri REST and OGC WFS service and discoverable on data.govt.nz by #.
- 2. Supply Suburbs under Creative Commons CC-BY 4 licensing by #.
- 3. Review the attribution of Suburbs to simplify the existing information and add Territorial Authority as an attribute by #.

#### **Future Improvements**

- 4. Ensure Suburbs are associated with official naming conventions.
- 5. Facilitate other agencies outside FENZ to provide feedback on preferred boundaries and naming of suburbs.
- 6. Add population count attribute to each suburb.

#### Susan Shaw Senior Resilience Advisor

E xxxxx@xxxx.xxx | DDI 04 496 9430 | Mobile 027 7776222

Wellington Office, Level 7, Radio New Zealand House, 155 The Terrace PO Box 5501, Wellington 6145, New Zealand | T 04 460 0110

W <u>www.linz.govt.nz</u> | <u>data.linz.govt.nz</u> http://www.linz.govt.nz/sites/default/files/images/email-signature-v2.png





# **Executive Summary**

Summary of actions which would provide the most value to resilience and climate change and can be progressed over the next 12 months.

	LINZ to add unallocated addresses to provide a more comprehensive national coverage by #.
	<ol> <li>LINZ to coordinate the capture of national LiDAR coverage by June 2023.</li> </ol>
	3. <b>NZTA to</b> create a combined road network closure webservice, to show the status of both State Highways and local roads by #.
	4. <b>Stats NZ</b> to provide population data using smaller boundaries than Meshblocks plus population attribution by #.
	<ol> <li>LINZ to extend attribution of parcels and combine parcels into a property boundary layer by #.</li> </ol>
	<ol> <li>LINZ to complete national coverage and assign Building Use attribute to NZ Building Outlines by #.</li> </ol>
	7. <b>FENZ</b> to publish Suburbs as an Esri REST and OGC WFS service and supply under Cre tive Commons CC-BY 4 licensing by #.
	8. <b>LINZ</b> to create a combined basemap of Topo50, Topo250 and Sentinel imagery as a webservice by #.
	9 <b>LINZ</b> to prepare to coordinate the capture and delivery of aerial photography, LiDAR and bathymetry during an emergency by June 2020.
	10. <b>LINZ</b> to identify areas with a high rate of coastal change and prioiritise more frequent updates in these areas by #.
<b>(3)</b>	11. <b>NIWA</b> to establish a template for rivers and water catchments, and collate data captured by Regional Councils and Unitary Authorities by #.
	12. <b>LINZ</b> to publish key datasets maintained by LINZ as an Esri REST service by #.
$ \bigcirc $	<ol> <li>KiwiRail to prepare data for an emergency event to show closed tracks, stations and bridges during an event by 26 June 2020.</li> </ol>



#### Suburbs

Key Dataset: NZ Localities / Suburbs

Lead Agency: Fire and Emergency New Zealand (FENZ)

Data Source: Email FENZ to request a copy of the data

dsi-support@fireandemergency.nz

Key Data Survey: 5 responses received

Key Dataset Score: August 2018 - 45% June 2019 - 41%

#### Fit for Purpose

NZ Localities / Suburbs (Suburbs) has been assessed by NZGIS4EM and the wider user community against agreed criteria, and are considered fit for purpose for resilience and climate change, in terms of:

- Complete national coverage national coverage exists for suburbs
- Adequate level of accuracy boundaries betwee suburbs are aligned with cadastral boundaries in urban areas
- Free to access Suburbs data is available free of charge
- Metadata metadata for suburbs is supplied as part of the shapefile

#### Current Status

FENZ has been working on the following data improvements identified by NZGIS4EM.

Supplying the data under Creative Commons licensing - completed/ongoing/not started

#### **#FENZ** to add progress report

Not supplying Suburbs under Creative Commons licensing is identified as a data limitation by 80% of the respondents.

The number of hoops to jump through to access the data was ridiculous

The time, cost and effort involved per person/agency to obtain access from FENZ is an issue.

Supplying the data in multiple formats for download - completed/ongoing/not started

#### **#FENZ** to add progress report

The format for supplying Suburbs data is identified as a data limitation by 50% of the respondents. It is acceptable for 25% and 25% don't know.

Not sure what formats are available, we receive a shapefile, accessed via dropbox



#### Limited number of formats and proprietary

No means to download and update in a crisis

Supplying the data as both an Esri REST service and OGC Web Feature Service completed/ongoing/not started

#### **#FENZ** to add progress report

Not publishing Suburbs data as a service is identified as a data limitation by 67% of the respondents. 33% don't know.

Limitations could be avoided by the availability of the data as a service

Simplifying the attribution - completed/ongoing/not started

#### #FENZ to add progress report

The current attribution of Suburbs data is identified as acceptable by 50% of the respondents. 25% report the attribution as a data limitation and 25% don't know.

There are a lot of attributes, with limited metadata as to how best use them. I appear to need to use at least three fields to correctly define boundaries.

It is FENZ's view of the world

Adding Territorial Council attribute to enable the easy filtering of data for both download and webservice - completed/ongoing/not started

#FENZ to add progress report

Publishing Suburbs on data.govt.nz - completed/ongoing/not started

#FENZ to add progress repo t

If the data gets opened up, then this should be a given

#### Data Improvements

Data improvements identified by NZGIS4EM, which are not currently planned by FENZ:

Remove lakes, and maintain as a separate lakes dataset

Is not considered important by any of the respondents, particularly when compared to the outstanding issues FENZ is working on. 20% rate it as slightly important and 80% as not at all important.

As an EQC user, lakes are not an issue as I would only want to use locality to report on information at a level that is understandable

#### Additional Data Improvements

Acceptable update programme – suburbs are updated quarterly



Quarterly updates were originally identified by FENZ as being acceptable. 33% of respondents report the update programme as a data limitation and 67% don't know.

Update programme is unclear

Requesting changes to improve/correct Suburbs boundaries is a nightmare. A process needs to be implemented to allow users to assist with improving the integrity of this data.

As a Council employee, I want to have the ability to provide constructive input regarding Suburbs, so that the dataset can be on benefit to a wide variety of users

#### National source of truth

50% of respondents identify Suburbs as the national source of truth. 25% report a data limitation and 25% don't know.

As it is the ONLY available suburb like dataset and has been accepted in use for decades, and used for the 111 system

#### Ready to respond to an event

100% of respondents reported not knowing if Suburbs is ready to respond to an event.

No - as there is a license agreement and no means to download and update in a crisis

#### Population attribute

Two respondents requested suburbs to be attributed with the population count.

Assigning populations for suburbs would be good to have, but the license agreement restricts this

Populations for suburbs would be good to have, but the licence agreement restricts this

#### Standardisation

Two respondents identified the need to improve suburbs by standardising the data to improve addressing, and provided multiple examples to demonstrate the importance of this improvement. Standardisation could be achieved by aligning the suburbs with official and inuse place names, and putting in place a process to enable external agencies to suggest boundary and naming improvements.

Suburb are an extremely important component of addressing and need to be standardised (singing from the same songsheet for NZ'ders, for the NZ data ecosystem) - so that mail can be delivered, so that a census can be run, so that social surveys can be delivered, so that services are provided to the right communities, so that data can be provided accurately at the neighbourhood level (reflecting whats happening on the ground) - standardisation is key, less duplication and a clear maintenance approach -alignment with the gazetted place names and historical place names (includes official/in use relationship maintained)

I have asked about creating additional Suburbs but have not received any feedback. As an example, I wanted to know if "Waimea West" could be created as a new definition, rather than "Brightwater" becoming "Redwood Valley". "Ruby Bay Bypass" has created a bit of a headache, with Suburbs crossing back and forth across the State Highway. I documented that Mapua/Ruby Bay/Tasman should



stay on the seaward side of The Coastal Highway, and Upper Moutere/Mahana should stay of the inland side of The Coastal Highway, but this has fallen on deaf ears!!

It was concerning that this dataset became the authoritative, without any notification to Local Authorities. We stumbled across the change when I was asked why Quail Valley Road had three (3) location descriptions. On contacting LINZ, I was told that they had adopted Suburbs and updated all road centreline and address point data accordingly - thanks for the heads-up, not.

Suburbs aren't standard. Maybe we should at least formalise whose version of suburbs we use. Then a data user could say, this is the street address, its NZ Post suburb is AAAA, its Fire Service suburb is AAAA too but its Google suburb is BBBB

#### **Survey Summary**

Unfortunately, the original score for Suburbs has been reduced as the update programme, which had been identified as acceptable with quarterly updates, is not seen as fit for purpose by the respondents. Associated with this is frustration about the seeming inability to influence the FENZ update process with suggested feedback and the lack of association with official naming conventions.

Publishing Suburbs as an Esri REST and OGC WFS service would be the easiest way to ensure the data is widely available in multiple formats, including additional download formats.

Providing Suburbs as a service under a Creative Commons licence would then ensure the Suburbs data is both easy to access and reuse. Implementing these two improvements is where FENZ could provide valuable improvements and remove the current convoluted process to access the Suburbs data, which requires a signed licence agreement.

Improving the attribution of Suburbs would also be beneficial in terms of simplifying the attribution, associating a suburb with the relevant Territorial Authority and, ideally, assigning population counts to each suburb.

Removing lakes from the data is not considered to be a priority.

#### **Priority Improvements**

- Ensure Suburbs is easily accessible by publishing as both an Esri REST and OGC WFS service and discoverable on data.govt.nz by #.
- Supply Suburbs under Creative Commons CC-BY 4 licensing by #.
- 3. Review the attribution of Suburbs to simplify the existing information and add Territorial Authority as an attribute by #.

#### **Future Improvements**

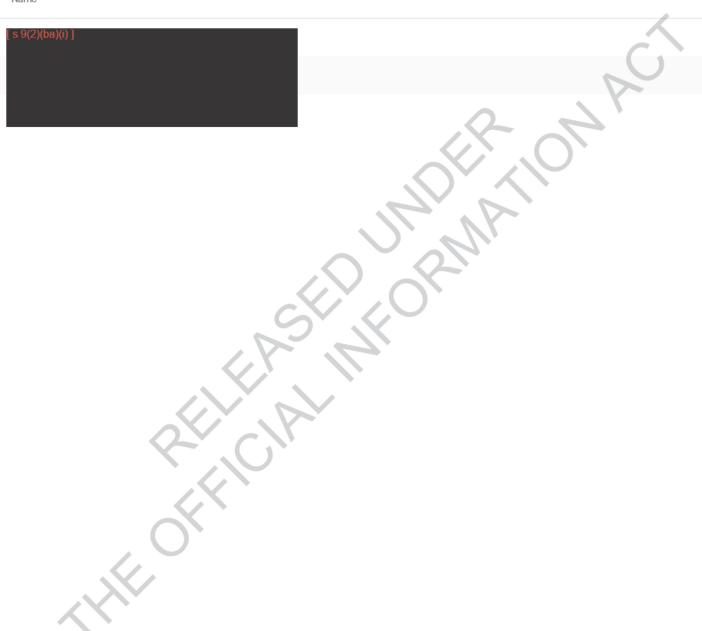
- 4. Ensure Suburbs are associated with official naming conventions.
- 5. Facilitate other agencies outside FENZ to provide feedback on preferred boundaries and naming of suburbs.
- 6. Add population count attribute to each suburb.

# **Default Report**

Key Datasets for Resilience - Suburbs Data Improvement Priorities February 25, 2019 5:51 PM NZDT

Q2 - Name

Name



# Q3 - Organisation

Organisation

**Tasman District Council** 

EQC

StatsNZ

# Q4 - The role of your organisation



#	Field	Choice Count	
1	Local Government Authority	33.33%	1
2	Central Government Agency	33.33%	1
3	Civil Defence Emergency Management Group	0.00%	0
4	Academic Research	0.00%	0
5	Consultancy	0.00%	0
6	Other	33.33%	1
			3

Showing rows 1 to 7 of 7

Q4\_9\_TEXT - Other

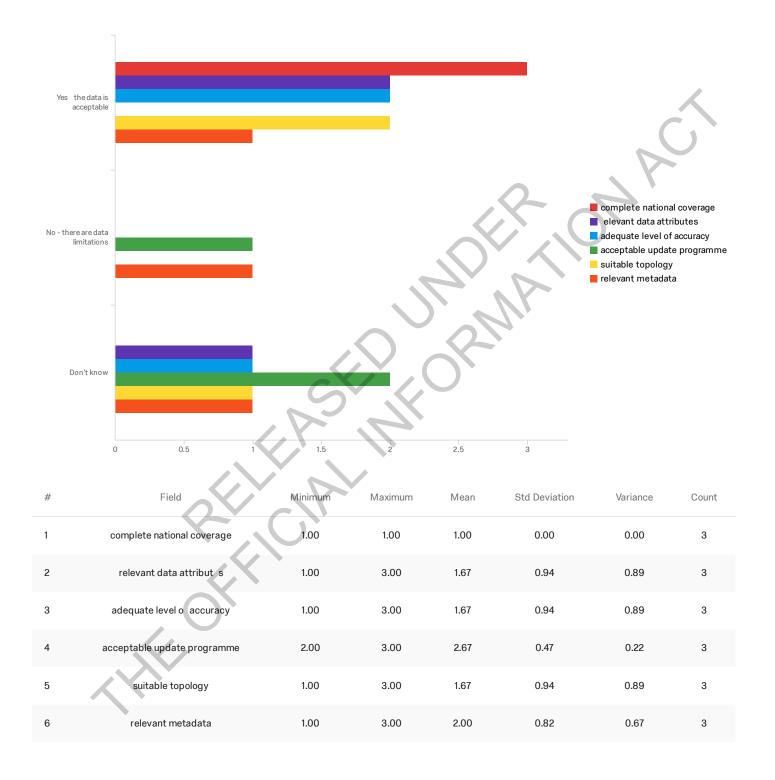
Other

New Zealand Crown entity



# Q5#1 - Is this data acceptable for emergency management? Learn more about the NZ

#### Localities / Suburbs da... - .



#	Field	Yes - the data is acceptable	No - there are data limitations	Don't know	Total
1	complete national coverage	100.00% 3	0.00% <b>0</b>	0.00% 0	3

#	Field	Yes - the data is acceptable	No - there are data limitations	Don't know	Total
2	relevant data attributes	66.67% <b>2</b>	0.00% <b>0</b>	33.33% 1	3
3	adequate level of accuracy	66.67% <b>2</b>	0.00% <b>0</b>	33.33% 1	3
4	acceptable update programme	0 00% 0	% 1	66 67%	
5	suitable topology	66.67% <b>2</b>	0.00% <b>0</b>	33.33% 1	3
6	relevant metadata	33.33% <b>1</b>	33.33% 1	33.33% 1	3

# Q5#2 - Is this data acceptable for emergency management? Learn more about the NZ

Localities / Suburbs da
complete national coverage - Please tell us about any data limitations
Please tell us about any data limitations
The data appears to have national coverage, but has limitations as to how "Suburbs" have been defined
relevant attribution - Please tell us about any data limitations
Please tell us about any data limitations
There are a lot of attributes, with limited metadata as to how best use them. Within Tasman DC I appear to need to use at least three (3) fields to correct define boundaries
population numbers would be nice
adequate level of accuracy - Please tell us about any data limitations
Please tell us about any data limitations
Suburbs data appears to align to cadastre, but may require tweaking to better define local interpretations
accepted at face value
acceptable update programme Please tell us about any data limitations
Please tell us about any data limitations
Requesting changes to improve/corre 't Suburbs boundaries is a nightmare. A process needs to be implemented to allow users to assist with improving the integrity of this data.
update programme unclear but we do get approx. 4 updates per year
suitable topology - Please tell us about any data limitations
Please tell us about any data limitations

It appears to be complete

relevant metadata - Please tell us about any data limitations

Please tell us about any data limitations



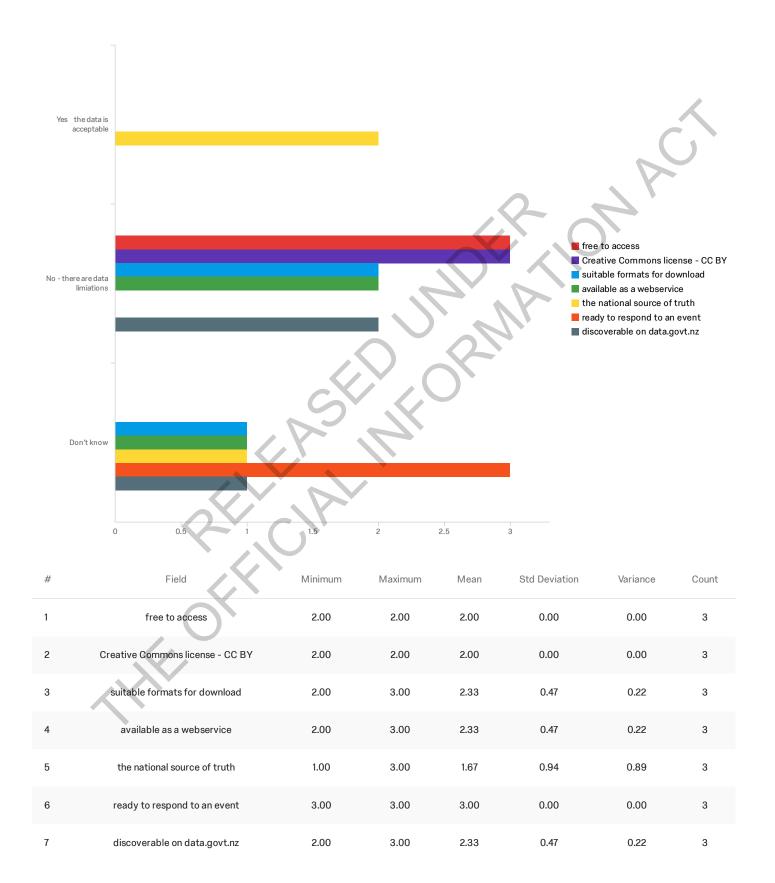
#### Q6 - Please provide additional comments below, if required.

Please provide additional comments below, if required.

I have asked about creating additional Suburbs, but have not received any feedback. As an example, I wanted to know if "Waimea West" could be created as a new definition, rather than "Brightwater" becoming "Redwood Valley". "Ruby Bay Bypass" has created a bit of a headache, with Suburbs crossing back and forth across the State Highway. I documented that Mapua/Ruby Bay/Tasman should stay on the seaward side of The Coastal Highway, and Upper Moutere/Mahana should stay of the inland side of The Coastal Highway, but this has fallen on deaf ears!! It was concerning that this dataset became the authoritative, without any notification to Local Authorities. We stumbled across the change when I was asked why Quail Valley Road had three (3) location descriptions. On contacting LINZ, I was told that they had adopted Surburbs and updated all road centreline and address point data accordingly - thanks for the heads-up, not.

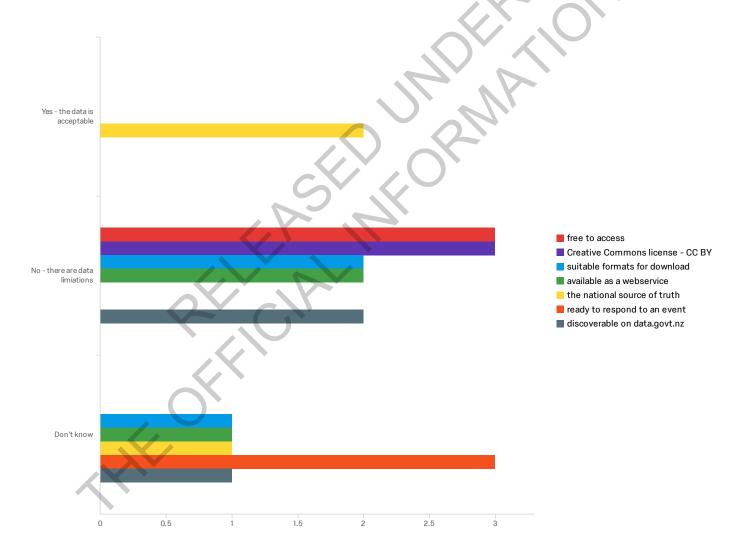
Do note Stats NZ is not heavily involved in EM

Q7#1 - Is data access acceptable for emergency management? In your opinion, for the work you do in emerg... - .



#	Field	Yes - the data is acceptable	No - there are data limiations	Don't know	Total
1	free to access	0.00% <b>0</b>	100.00% 3	0.00% 0	3
2	Creative Commons license - CC BY	0.00% <b>0</b>	100.00% 3	0.00% 0	3
	suitable formats for download	0 00% <b>0</b>	66 67%	% 1	
4	available as a webservice	0.00% <b>0</b>	66.67% <b>2</b>	33.33% 1	3
5	the national source of truth	66.67% <b>2</b>	0.00% <b>0</b>	33.33% <b>1</b>	3
6	ready to respond to an event	0.00% <b>0</b>	0.00% <b>0</b>	100.00% 3	3
7	discoverable on data.govt.nz	0.00% <b>0</b>	66.67% <b>2</b>	33.33% 1	3





Q7#2 - Is data access acceptable for emergency management? In your opinion, for the

work you do in emerg... - .

Creative Commons License - Please tell us about any data limitations

Please tell us about any data limitations

The number of hoops to jump through was rediculous

limitations could be avoided by the availability of the data as a service

time, cost. effort involved per person/agency to obtain access from NZF

multiple formats for download - Please tell us about any data limitations

Please tell us about any data limitations

Not sure what formats are avialble, we just received a Shape file.

limitations could be avoided by the availability of the data as a service

limited number of formats and proprietary

available as a webservice - Please tell us about any data limitations

Please tell us about any data limitations

This could be another option for making the data mor readily available.

limitations could be avoided by the availability of the data as a service

its accessed from dropbox

the national source of truth - Please tell us about any data limitations

Please tell us about any data limitations

Not sure exactly what this is asking, but at present it is FENZ's view of the world.

as its the ONLY available suburb like dataset and has been accepted in use for decades, and used for the 111 system

ready to respond to an event - Please tell us about any data limitations

If the above were resolved, this could be covered. In saying that, different organisations may have different views on how they would want to work with it.

discoverable on data.govt.nz - Please tell us about any data limitations

Please tell us about any data limitations

If it gets oppend up, then this should be a given.

No but there is a suburbs dataset (Porirua City Council)

# Q8 - Please provide additional comments below, if required.

Please provide additional comments below, if required.

Suburbs could be an option for creating evacuation areas, but these can be quite dynamic, dependant on the event and area of coverage.

No - as there is a licence agreement and no means to download and update in a crisis



Q50#1 - Help prioritise the suggested improvements for emergency management Fire and Emergency New Zeal... - How important is this improvement?



Showing rows 1 to 6 of 6

Q51 - Why are the improvements important? If you can share a strong user story, it will be used to help prioritise the improvement. To help write a user story, try completing this sentence, As a , I want , so that .

Why are the improvements important? If you can share a strong user story,...

As a Council employee, I want to have the ability to provide constructive input regarding Suburbs, so that the dataset can be on benefit to a w de variety of users. I added a number of examples on the first page - didn't realise this is where they should go. Hopefully you can extract them as necessary. I have email exchanges with dsi-support@fireandemergency.nz, if interested.

As an EQC user, lakes are not an issue as I would only want to use locality to report on information at a level that is inderstandable for customers and people within the business

- populations for suburbs would be good to have, but the licence agreement restricts this - suburbs a e an extremely important component of addressing and need to be standardised (singing from the same songsheet for NZ'ders, for the NZ d ta ecosystem) - so that mail can be delivered, so that a census can be run, so that social surveys can be delivered, so that services are provided of the right communities, so that data can be provided accurately at the neighbourhood level (reflecting whats happening on the ground) - standardisation is k y less duplication and a clear maintenance approach -alignment with the gazetted palcenames and historical placenames (includes official/in use relationship maintained)

Q11 - What's missing? Are there any data improvements which have not been identified above, which are important for your work in emergency management?



Showing rows 1 to 3 of 3

#### Q12 - Please tell us more about any additional data improvements

Please tell us more about any additional data improvements

There probably are, but I can't think of any as I'm responding to this survey.

- populations for suburbs would be good to have, but the licence agreement restricts this - suburbs are an extremely important component of addressing and need to be standardised (singing from the same songsheet for NZ'ders, for the NZ data ecosystem) - so that mail can be delivered, so that a census can be run, so that social surveys can be delivered, so that services are provided to the right communities, so that data can be provided accurately at the neighbourhood level (reflecting whats happening on the ground) - standardisation is key, less duplication and a clear maintenance approach -alignment with the gazetted palcenames and historical placenames (includes official/in use relationship maintained)

#### **End of Report**

# **Default Report**

Key Datasets for Resilience - Suburbs Data Improvement Priorities
April 5, 2019 4:33 PM NZDT

Q2 - Name

Name

Alan Keegan

CDEM / GIS Collective

# Q3 - Organisation

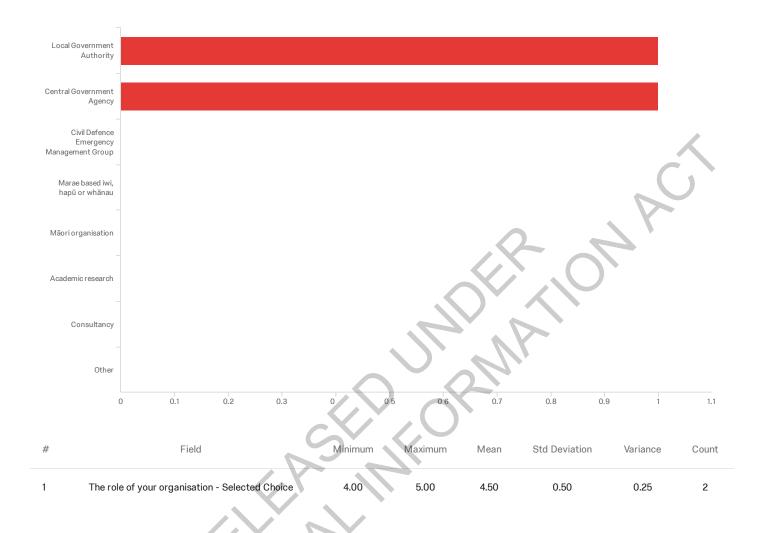
Organisation

New Zealand Transport Agency

Hawke's Bay Regional Council



# Q4 - The role of your organisation



#	Field	Choice Count
1	Local Government Authority	50.00% 1
2	Central Government Agency	50.00% <b>1</b>
3	Civil Defence Emergency Management Group	0.00% 0
4	Marae based iwi hapū or whānau	0.00% 0
5	Māori organisation	0.00% 0
6	Academic research	0.00% 0
7	Consultancy	0.00% 0
8	Other	0.00% 0

# Field Choice
Count

Showing rows 1 to 9 of 9

2

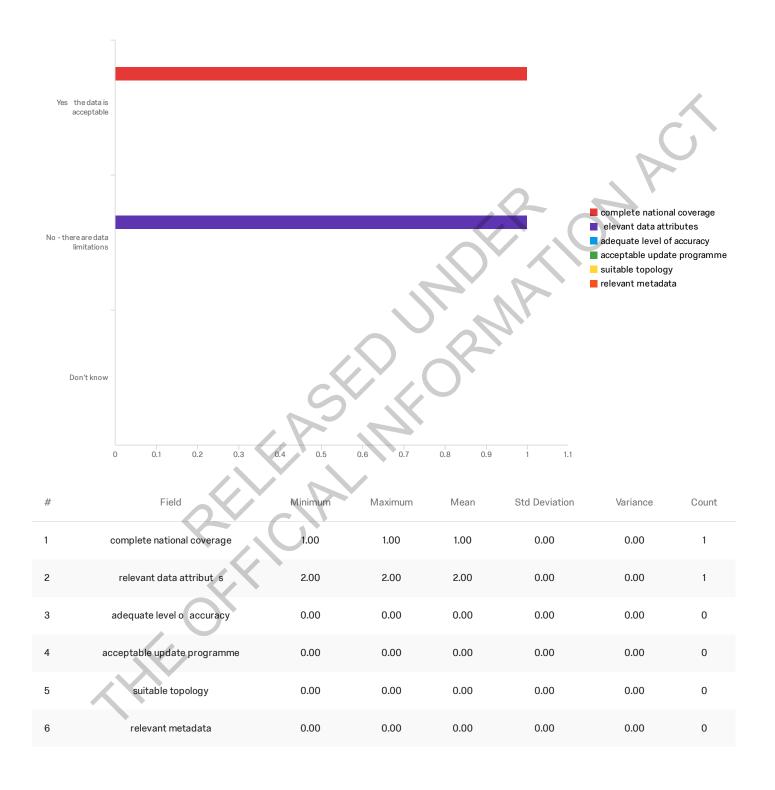
Q4\_9\_TEXT - Other

Other



Q5#1 - Is this data acceptable for emergency management? Learn more about the NZ

#### Localities / Suburbs da... - .



#	Field	Yes - the data is acceptable	No - there are data limitations	Don't know	Total
2	relevant data attributes	0.00% <b>0</b>	100.00% <b>1</b>	0.00% 0	1
3	adequate level of accuracy	0.00% <b>0</b>	0.00% <b>0</b>	0.00% 0	0
4	acceptable update programme	0 00% <b>0</b>	0 00% 0	0 00% 0	0
5	suitable topology	0.00% <b>0</b>	0.00% 0	0.00% 0	0
6	relevant metadata	0.00% <b>0</b>	0.00% 0	0.00% 0	0
		Showing rows 1:			

# Localities / Suburbs da... - . complete national coverage - Please tell us about any data limitations Please tell us about any data limitations relevant attribution - Please tell us about any data limitations Please tell us about any data limitations adequate level of accuracy - Please tell us about any data limitations Please tell us about any data limitations acceptable update programme - Please tell us about any data limitations Please tell us about any data limitat ons suitable topology - Please tell us about any data limitations Please tell us about any data limitations

Q5#2 - Is this data acceptable for emergency management? Learn more about the NZ

free of charge - Please tell us about any data limitations

WIDGET\_ERROR.ERROR



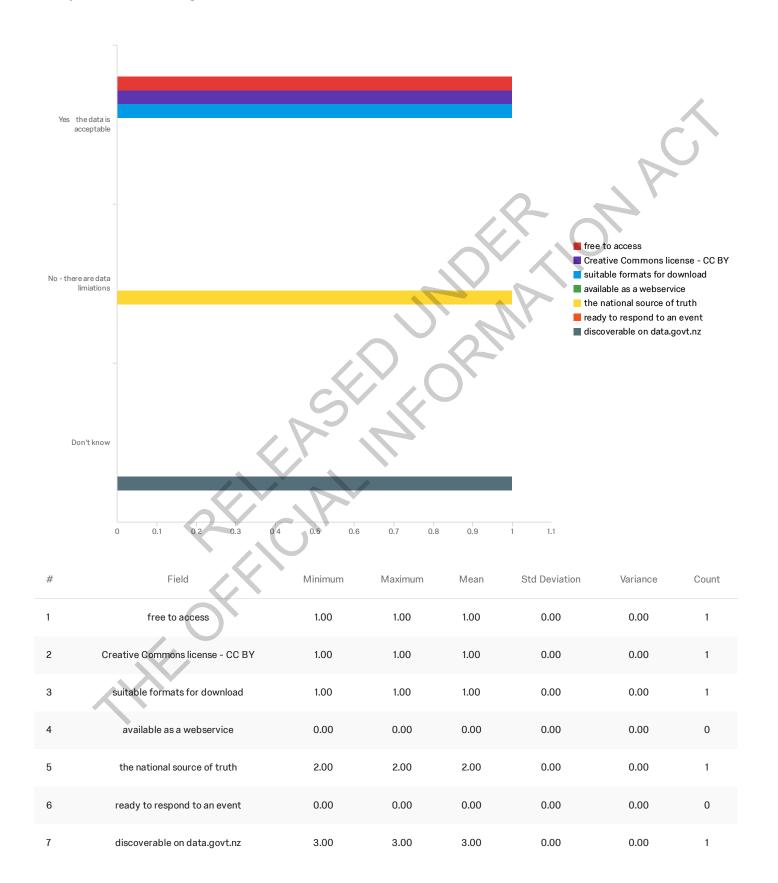
# Q6 - Please provide additional comments below, if required.

Please provide additional comments below, if required.

Suburbs aren't standard. Maybe we should at least formalise whose version of suburbs we use. Then a data user could say, This is the street address, its NZ Post suburb is AAAA, its Fire Service suburb is AAAA too but its Google suburb is BBBB

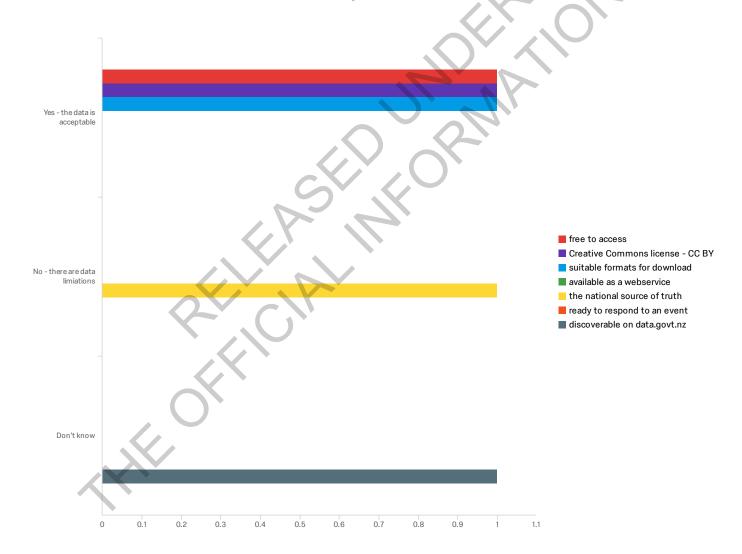


Q7#1 - Is data access acceptable for emergency management? In your opinion, for the work you do in emerg... - .



#	Field	Yes - the data is acceptable	No - there are data limiations	Don't know	Total
1	free to access	100.00% 1	0.00% 0	0.00% 0	1
2	Creative Commons license - CC BY	100.00% 1	0.00% 0	0.00% 0	1
	suitable formats for download	100 00% 1	0 00% 0	0 00% 0	1
4	available as a webservice	0.00% 0	0.00% 0	0.00% 0	0
5	the national source of truth	0.00% 0	100.00% 1	0.00% 0	1
6	ready to respond to an event	0.00% 0	0.00% 0	0.00% 0	0
7	discoverable on data.govt.nz	0.00% 0	0.00% 0	100.00% 1	1



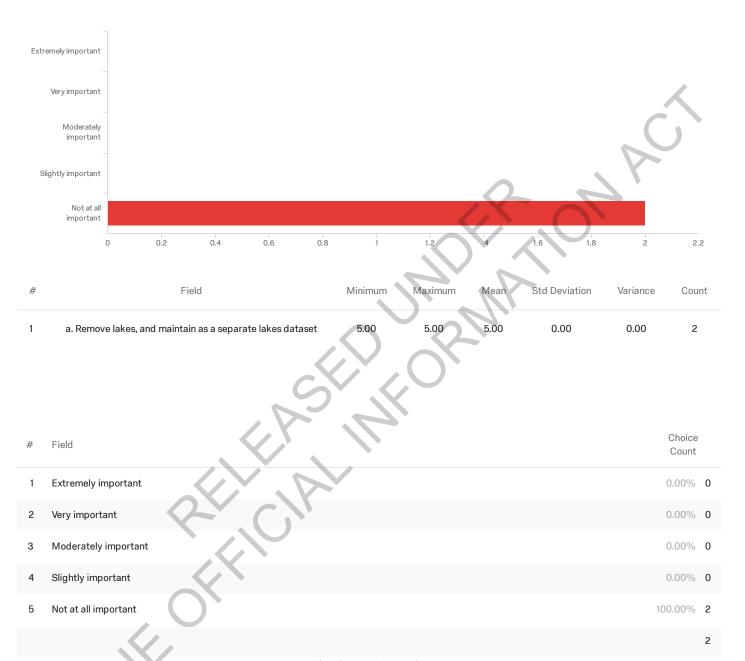


Q7#2 - Is data access acceptable for emergency management? In your opinion, for the
work you do in emerg
Creative Commons License - Please tell us about any data limitations
Please tell us about any data limitations
multiple formats for download - Please tell us about any data limitations
Please tell us about any data limitations
available as a webservice - Please tell us about any data limitations
Please tell us about any data limitations
the national source of truth - Please tell us about any data limitations
Please tell us about any data limitat ons
ready to respond to an event Please tell us about any data limitations  Please tell us about any data limitations
discoverable on data.govt.nz - Please tell us about any data limitations
Please tell us about any data limitations

REFERENCE OF THE OFFICIAL WAY OF THE OFFICIAL



Q50#1 - Help prioritise the suggested improvements for emergency management Fire and Emergency New Zeal... - How important is this improvement?



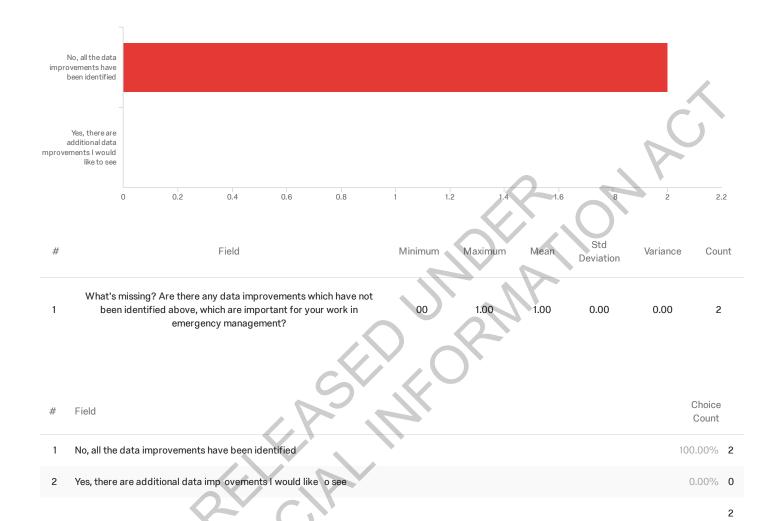
Showing rows 1 to 6 of 6

Q51 - Why are the improvements important? If you can share a strong user story, it will be used to help prioritise the improvement. To help write a user story, try completing this sentence, As a, I want, so that.

Why are the improvements important? If you can share a strong user story,...



Q11 - What's missing? Are there any data improvements which have not been identified above, which are important for your work in emergency management?



Showing rows 1 to 3 of 3

# **End of Report**