What the chaser says when they touch someone playing Tag/Tig/Tiggy

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Question 1(c) asked what the chaser says when they touch someone in the basic chasing game. The question was a sub-part of a question about this game:

1 At your school, do children play a game with many players where one player has to run and try to touch another player while all the other players try to run away and not get touched?

(a) …

(b) …

(c) Is there a special word which the player who touches someone says as they touch them?

Question 1(c) produced a considerable variety of different responses, 51 in all. However, many of these were used in more specific varieties of the chasing game, such as Go Home, Stay Home, where the successful chaser says "Go home (Stay home)"; or Jail Break, where the formula "1-2-3 you're in jail" is used. These were eliminated from the analysis (they were recorded only sporadically, and there was insufficient data on any one of them to provide any useful material). Forms occurring only once were also eliminated.

Certain other variants were grouped together. In particular, variants on "Tag" were to some extent dependent on the name of the game in particular areas, and *tag, tig, tug* and *tagged* were grouped together. So too were variants on "Can't tag your master" (including, for instance *no tiggy masters*).

After this simplification of the data, we were left with the following terms. The number of schools reporting each is noted in square brackets:

You're it [50]; You're in [69]; Tag (etc) [77]; Got ya (etc) [62]; Touch [21]; Out [6]; Shame [5]; Ha ha [7]; Can't tag your master (etc) [4]; Yeah / yes [3].

Of these, only the first five were widespread, and "Touch" was much less frequent than the others. Some of the others clearly had patches of regional prominence. "Out" was recorded in six schools in Auckland, and nowhere else. "Shame" was recorded in four Auckland schools and once in Taranaki. "Ha ha" was recorded seven times, but these were spread from Auckland to Invercargill, making this of little interest. There were only four occurrences of "Can't tag your master" and its variants, spread from Northland to Wellington, so again, the form is of little interest on the basis of this data alone. (However, this particular matter was pursued during school visits, and the results are reported at the end of this discussion.) "Yeah / yes" was recorded twice in Northland and once in Christchurch, and can thus also be ignored.

Only the first four were mapped. While the results show that all four of these are found in most regions, there are clear patterns of prominence for these terms, as the map shows. The combination of both "you're in" and "you're it" is insignificant south of the Bay of Plenty and Taranaki areas. "You're it" is largely confined to the northern area. Complementing that, the various forms of "Tag" are found only very sporadically in the northern area, and become the norm in the central area of the country, from Hawkes Bay and Taranaki south as far as Christchurch. (Taranaki thus shows features of both the Northern and Central areas.) The dominant form in the south of the South Island appears to be "You're

in", although there is a considerable admixture of other forms. "Got ya" (with variants *gotcha* and *got you*) is scattered throughout, and does not show any clear evidence of regional distribution. For this reason, only *you're in, you're it* and *tag*-forms were included in the statistical analysis.

	Northern		Central		Southern	
	No.	%	No.	%	No.	%
Schools	57	38	78	52	14	9
you're it	38	76	9	18	3	6
you're in	27	39	32	46	10	14
tag	18	23	54	69	6	8

Statistical Analysis

The statistics confirmed the basic distributional facts set out above.

You're it

There is significantly more use of *you're it* in the Northern Region than in the Central Region (p-value 0.0001), or the Southern Region (p-value 0.0050).

The fact that *you're it* is significantly (p-value 0.0052) more likely in the North Island than the South Island is largely a reflection of its regionalisation in the Northern Region.

The fact that *it* is more likely in rural schools (p-value 0.0101) does not appear to be related to the uneven distribution of urban and rural schools: the p-value for Urban/Rural variation when Main Region variation is taken into account is still significant (0.0068), and so is the p-value for Urban/Rural variation when Island is taken into account (0.0033). Thus this form appears to be genuinely and significantly more common in rural schools.

You're it is also almost significantly low decile (p-value 0.0501), which is probably only a reflection of the large number of low decile schools in the Northern Region: the Decile factor was not significant when any of the other significant factors was taken into account.

Thus the most important factor for the distribution of *You're it* is the Northern Region, but it is also significantly more common in rural schools, and the Island factor is important in the absence of Main Region, as it also reflects to some extent the regionalisation.

You're in

There is just significantly more use of *you're in* in the Southern Region than in the Central Region. No other factors significantly affect the distribution of this form.

Tag

There is significantly more *tag* in the Central Region than the Northern Region (p-value 0.0001).

The fact that *tag* is more likely in Catholic schools (p-value 0.0202) may be a reflection of the high number of Catholic schools in our sample in the Central Region. The statistical investigation of the inter-relation between the factors Catholic and Main Region suggests that this is so. After the Catholic factor has been taken into account, the difference between the Northern and Central Regions is unchanged, and still thus highly significant, whereas when Main Region is taken into account, the p-value for Catholic is no longer significant

(0.0647). Thus the Central Region location is much more important for *tag* than the Catholic correlation.

Conclusion

Once again, the data supports the division of the country into three regions. *You're it* is a predominantly a Northern form, *Tag* is a Central (and to some extent Southern) form. *You're in* is more common in the Southern Region. A map of these forms follows the statistics.

Can't Tag Your Master aka Butcher

From the scraps of information supplied in the original questionnaire, we suspected that there was regional variation in the name given to the process of forbidding someone just touched in the chasing game from immediately touching back the person who touched them. Accordingly, one of the questions which we asked during school visits was this:
If you are playing a game that involves chasing and touching, or hiding and finding, like go Home Stay Home, do you have rules about not being able to get the person who just got you straight away before they've had a chance to get away? What do you call this?
Can't tag your master was the most common response, from 16 of the 33 schools visited. However, only 3 of these were in the South Island, and one of those was from a school where there are many outsiders. This was the normal response from Auckland to Picton.
North of Auckland, the normal form was *Can't tig your master*, and this was also reported in two Northern Region schools south of Auckland. This coincides with the area where the game is called *Tiggy*, and the action is frequently called *tig.* A further variant in this area is *No tiggy master*, from 4 schools.
Between them, these forms cover the North Island.
In the South Island, the normal term is *Butcher*. This was reported from all South Island schools except two, and by no North Island schools.
Alternatively, some South Island schools (and one North Island school) reported *No tag back(s)*, or in Southland – Otago, *No tig back(s).*
There were also three scattered reports of *No returns* in this context.
The sporadic reports we had of these terms in the original questionnaire are consistent with the patterns noted here.
It thus seems that this data is very strongly divided between the Islands, with *butcher* in the South Island and *Can't t_g your master* in the North Island. There is also further evidence of the *tiggy*-dominated Northern Region here, in the use of *tig* rather than *tag*, or other forms using *tiggy*.
A map of the reports from the visits is found after the statistics.

Statistics for 1c, What you say when you touch someone

1c by Decile

Analysis Of GEE Parameter Estimates – Empirical 95% Confidence Limits

parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.		.
item	in1c	0.1800	0.3753	-0.5556	0.9157	0.4797	0.6314
item	it1c	0.0010	0.3874	-0.7583	0.7604	0.0027	0.9979
item	tag1	-0.3670	0.3837	-1.1190	0.3850	-.9565	0.3388
decile*item	in1c	-0.0592	0.0593	-0.1755	0.0571	-.9978	0.3184
decile*item	it1c	-0.1237	0.0632	-0.2475	0.0001	-1.959	0.0501
decile*item	tag1	0.0777	0.0599	-0.0398	0.1951	1.2964	0.1948
scale	0.9999	.					

1c by Main Region

Analysis Of GEE Parameter Estimates – Empirical 95% Confidence Limits

Parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.		
item	in1c	0.9163	0.5916	-0.2432	2.0758	1.5488	0.1214
item	it1c	-1.2993	0.6513	-2.5759	-0.0227	-1.995	0.0461
item	tag1	-0.2877	0.5401	-1.3462	0.7708	-.5327	0.5943
item*region1	in1c,1	-1.0217	0.6484	-2.2924	0.2491	-1.576	0.1151
item*region1	in1c,2	-1.2792	0.6348	-2.5234	-0.0350	-2.015	**0.0439**
item*region1	in1c,3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*region1	it1c,1	1.9924	0.7094	0.6021	3.3827	2.8088	**0.0050**
item*region1	it1c,2	-0.7376	0.7415	-2.1909	0.7157	-.9947	0.3199
item*region1	it1c,3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*region1	tag1,1	-0.4855	0.6106	-1.6823	0.7113	-.7951	0.4266
item*region1	tag1,2	1.0986	0.5932	-0.0640	2.2612	1.8521	0.0640
item*region1	tag1,3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Scale	1.0000	.	.	.	.		

CONTRAST Statement Results

Contrast	DF	ChiSquare	Pr>Chi	Type
1 -2 for in1c	1	0.5380	0.4633	LR
1 -2 for it1c	1	46.1466	**0.0001**	LR
1 -2 for tag1c	1	19.1629	**0.0001**	LR

1c by Sub-Region

Analysis Of Initial Parameter Estimates

parameter		DF	Estimate	Std Err	ChiSquare	Pr>Chi
intercept		0	0.0000	0.0000	.	.
item	in1c	1	0.9163	0.5916	2.3988	0.1214
item	it1c	1	-1.2993	0.6513	3.9792	0.0461
item	tag1	1	-0.2877	0.5401	0.2838	0.5943
item*region2	in1c,1	1	-0.2231	1.0488	0.0453	0.8315
item*region2	in1c,2	1	-1.6094	1.0488	2.3548	0.1249
item*region2	in1c,3	1	0.4055	0.8165	0.2466	0.6195
item*region2	in1c,4	1	-2.1203	0.7528	7.9333	**0.0049**
item*region2	in1c,5	1	0.6931	0.9747	0.5057	0.4770
item*region2	in1c,6	1	-1.8971	0.7610	6.2142	**0.0127**
item*region2	in1c,7	1	-2.1691	0.9964	4.7386	**0.0295**
item*region2	in1c,8	1	-2.5257	1.2450	4.1157	**0.0425**
item*region2	in1c,9	1	-0.9163	0.7565	1.4672	0.2258
item*region2	in1c,10	1	-1.7636	0.9090	3.7646	0.0523
item*region2	in1c,11	0	0.0000	0.0000	.	.
item*region2	it1c,1	1	2.9087	1.2745	5.2090	**0.0225**
item*region2	it1c,2	1	1.2993	1.0445	1.5475	0.2135
item*region2	it1c,3	1	1.4046	0.7971	3.1054	0.0780
item*region2	it1c,4	1	2.5033	0.8006	9.7772	**0.0018**
item*region2	it1c,5	1	-23.0660	56399.0803	0.0000	0.9997
item*region2	it1c,6	1	-1.7452	1.2132	2.0694	0.1503
item*region2	it1c,7	1	0.6061	0.9614	0.3975	0.5284
item*region2	it1c,8	1	0.6061	1.0836	0.3129	0.5759
item*region2	it1c,9	1	-1.5339	1.2178	1.5865	0.2078
item*region2	it1c,10	1	-0.0870	1.0243	0.0072	0.9323
item*region2	it1c,11	0	0.0000	0.0000	.	.
item*region2	tag1,1	1	-0.4055	1.0206	0.1578	0.6912
item*region2	tag1,2	1	-24.0776	79760.3442	0.0000	0.9998
item*region2	tag1,3	1	-0.2513	0.7196	0.1220	0.7269
item*region2	tag1,4	1	-0.3483	0.6794	0.2628	0.6082
item*region2	tag1,5	1	1.8971	0.9443	4.0363	**0.0445**
item*region2	tag1,6	1	1.7918	0.7728	5.3756	0.0204
item*region2	tag1,7	1	0.5108	0.8612	0.3518	0.5531
item*region2	tag1,8	1	0.9808	1.0206	0.9235	0.3365
item*region2	tag1,9	1	1.2432	0.7540	2.7182	0.0992
item*region2	tag1,10	1	-0.5596	0.8763	0.4078	0.5231
item*region2	tag1,11	0	0.0000	0.0000	.	.
scale	0	1.00	0.0000	.	.	

1c by Island

Analysis Of GEE Parameter Estimates – Empirical 95% Confidence Limits

parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	in1c	-0.2469	0.2669	-0.7700	0.2763	-.9248	0.3551
item	it1c	-1.4307	0.3356	-2.0886	-0.7729	-4.263	0.0000
item	tag1	0.1759	0.2659	-0.3453	0.6971	0.6614	0.5083
item*island	in1c,1	0.1392	0.3382	-0.5236	0.8021	0.4117	0.6806
item*island	in1c,2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*island	it1c,1	1.1053	0.3960	0.3292	1.8814	2.7913	**0.0052**
item*island	it1c,2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*island	tag1,1	-0.1544	0.3372	-0.8154	0.5066	-.4578	0.6471
item*island	tag1,2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	1.0000	.	.	.	.		

1c by Catholic

Analysis Of GEE Parameter Estimates – Empirical 95% Confidence Limits

parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	in1c	-0.7885	0.5394	-1.8456	0.2687	-1.462	0.1438
item	it1c	-0.5108	0.5164	-1.5229	0.5013	-.9892	0.3226
item	tag1	1.4663	0.6405	0.2110	2.7217	2.2893	0.0221
item*catholic	in1c,1	0.6815	0.5670	-0.4299	1.7929	1.2018	0.2294
item*catholic	in1c,2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*catholic	it1c,1	-0.1709	0.5485	-1.2460	0.9042	-.3115	0.7554
item*catholic	it1c,2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*catholic	tag1,1	-1.5427	0.6640	-2.8440	-0.2414	-2.324	**0.0202**
item*catholic	tag1,2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	1.0000	.	.	.	.		

1c by Urban/Rural

Analysis Of GEE Parameter Estimates – Empirical 95% Confidence Limits

parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	in1c	-0.1018	0.2607	-0.6128	0.4092	-.3904	0.6962
item	it1c	-1.2637	0.3141	-1.8793	-0.6481	-4.023	0.0001
item	tag1	0.1699	0.2613	-0.3423	0.6821	0.6502	0.5156
item*urb_rur	in1c,1	-0.0848	0.3390	-0.7491	0.5795	-.2502	0.8024
item*urb_rur	in1c,2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	it1c,1	0.9828	0.3822	0.2336	1.7319	2.5712	**0.0101**
item*urb_rur	it1c,2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	tag1,1	-0.1699	0.3388	-0.8340	0.4942	-.5014	0.6161
item*urb_rur	tag1,2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	1.0000	.	.	.	.		

1c by Catholic and Main Region, Model 2 (no sig. figs. Model 1)

Analysis Of GEE Parameter Estimates – Empirical 95% Confidence Limits

parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	in1c	0.6820	0.8752	-1.0333	2.3972	0.7792	0.4358
item	it1c	-0.2397	0.8903	-1.9846	1.5053	-.2692	0.7878
item	tag1	1.2148	0.9267	-0.6015	3.0310	1.3109	0.1899
item*catholic	in1c, 1	0.5220	0.5767	-0.6083	1.6523	0.9052	0.3654
item*catholic	in1c, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*catholic	it1c, 1	-0.9643	0.5994	-2.1391	0.2105	-1.609	0.1077
item*catholic	it1c, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*catholic	tag1, 1	-1.3689	0.7411	-2.8214	0.0836	-1.847	0.0647
item*catholic	tag1, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*region1	in1c, 1	-1.3114	0.7118	-2.7066	0.0837	-1.842	0.0654
item*region1	in1c, 2	-1.5222	0.7026	-2.8992	-0.1451	-2.167	**0.0303**
item*region1	in1c, 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*region1	it1c, 1	1.8954	0.7188	0.4865	3.3043	2.6368	**0.0084**
item*region1	it1c, 2	-1.0178	0.7762	-2.5391	0.5036	-1.311	0.1898
item*region1	it1c, 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*region1	tag1, 1	-0.7895	0.6313	-2.0269	0.4479	-1.250	0.2111
item*region1	tag1, 2	0.7837	0.6119	-0.4156	1.9830	1.2808	0.2003
item*region1	tag1, 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	1.0035	.	.	.	.	.	

1c by Urban/Rural and Main Region, Model 1

Analysis Of Initial Parameter Estimates

parameter		DF	Estimate	Std Err	ChiSquare	Pr>Chi
intercept	0	0.00	0.0000	.	.	
item	in1c	1	-0.0000	1.0000	0.0000	1.0000
item	it1c	1	-24.3652	1.0866	502.8472	0.0001
item	tag1	1	-24.3654	0.8232	876.0509	0.0001
item*urb_rur	in1c, 1	1	1.3863	1.2748	1.1827	0.2768
item*urb_rur	in1c, 2	0	0.0000	0.0000	.	.
item*urb_rur	it1c, 1	1	23.5179	0.8393	785.1825	**0.0001**
item*urb_rur	it1c, 2	0	0.0000	0.0000	.	.
item*urb_rur	tag1, 1	1	24.7708	0.5109	2350.9262	**0.0001**
item*urb_rur	tag1, 2	0	0.0000	0.0000	.	.
item*region1	in1c, 1	1	0.6931	1.1019	0.3957	0.5293
item*region1	in1c, 2	1	-0.6061	1.0624	0.3255	0.5683
item*region1	in1c, 3	0	0.0000	0.0000	.	.
item*region1	it1c, 1	1	24.4605	1.1711	436.2458	**0.0001**
item*region1	it1c, 2	1	21.5926	0.8058	718.0092	**0.0001**
item*region1	it1c, 3	0	0.0000	0.0000	.	.
item*region1	tag1, 1	1	23.6722	0.9444	628.2552	**0.0001**

item*region1	tag1, 2	1	25.3870	0.7256	1223.9918	**0.0001**
item*region1	tag1, 3	0	0.0000	0.0000	.	.
item*urb_rur*region1	in1c 1, 1	1	-2.6055	1.4006	3.4607	0.0628
item*urb_rur*region1	in1c 1, 2	1	-0.9808	1.3619	0.5187	0.4714
item*urb_rur*region1	in1c 1, 3	0	0.0000	0.0000	.	.
item*urb_rur*region1	in1c 2, 1	0	0.0000	0.0000	.	.
item*urb_rur*region1	in1c 2, 2	0	0.0000	0.0000	.	.
item*urb_rur*region1	in1c 2, 3	0	0.0000	0.0000	.	.
item*urb_rur*region1	it1c 1, 1	1	-22.3968	1.0283	474.4061	**0.0001**
item*urb_rur*region1	it1c 1, 2	0	-22.2959	0.0000	.	.
item*urb_rur*region1	it1c 1, 3	0	0.0000	0.0000	.	.
item*urb_rur*region1	it1c 2, 1	0	0.0000	0.0000	.	.
item*urb_rur*region1	it1c 2, 2	0	0.0000	0.0000	.	.
item*urb_rur*region1	it1c 2, 3	0	0.0000	0.0000	.	.
item*urb_rur*region1	tag1 1, 1	1	-24.8579	0.7797	1016.5336	**0.0001**
item*urb_rur*region1	tag1 1, 2	0	-25.1735	0.0000	.	.
item*urb_rur*region1	tag1 1, 3	0	0.0000	0.0000	.	.
item*urb_rur*region1	tag1 2, 1	0	0.0000	0.0000	.	.
item*urb_rur*region1	tag1 2, 2	0	0.0000	0.0000	.	.
item*urb_rur*region1	tag1 2, 3	0	0.0000	0.0000	.	.
scale	0	1.00	0.0000	.	.	

Ic by Urban/Rural in Northern Region only

Analysis Of GEE Parameter Estimates – Empirical 95% Confidence Limits

parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	in1c	0.6931	0.4629	-0.2141	1.6004	1.4974	0.1343
item	it1c	0.0953	0.4369	-0.7611	0.9517	0.2181	0.8273
item	tag1	-0.6931	0.4629	-1.6004	0.2141	-1.497	0.1343
item*urb_rur	in1c, 1	-1.2192	0.5802	-2.3565	-0.0820	-2.101	**0.0356**
item*urb_rur	in1c, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	it1c, 1	1.1211	0.5941	-0.0433	2.2855	1.8871	0.0592
item*urb_rur	it1c, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	tag1, 1	-0.0870	0.5889	-1.2413	1.0673	-.1477	0.8825
item*urb_rur	tag1, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	1.0000	.	.	.	.	.	

1c by Urban/Rural in Central Region only

Analysis Of GEE Parameter Estimates – Empirical 95% Confidence Limits

parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	in1c	-0.6061	0.3589	-1.3095	0.0972	-1.689	0.0912
item	it1c	-2.7726	0.7289	-4.2011	-1.3440	-3.804	0.0001
item	tag1	1.0217	0.3887	0.2598	1.7835	2.6282	0.0086
item*urb_rur	in1c, 1	0.4055	0.4794	-0.5341	1.3450	0.8458	0.3977

item*urb_rur	in1c, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	it1c, 1	1.2220	0.8393	-0.4230	2.8670	1.4560	0.1454
item*urb_rur	it1c, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	tag1, 1	-0.4026	0.5109	-1.4039	0.5987	-.7881	0.4307
item*urb_rur	tag1, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	1.0000	.	.	.	.	.	

1c by Urban/Rural in Southern Region only

Analysis Of Initial Parameter Estimates

parameter		DF	Estimate	Std Err	ChiSquare	Pr>Chi
intercept	0	0.0000	0.0000	.	.	
item	in1c	1	-0.0000	1.0000	0.0000	1.0000
item	it1c	1	-26.3653	0.6901	1459.7721	0.0001
item	tag1	1	-26.3653	0.6455	1668.3145	0.0001
item*urb_rur	in1c, 1	1	1.3863	1.2748	1.1827	0.2768
item*urb_rur	in1c, 2	0	0.0000	0.0000	.	.
item*urb_rur	it1c, 1	0	25.5180	0.0000	.	.
item*urb_rur	it1c, 2	0	0.0000	0.0000	.	.
item*urb_rur	tag1, 1	0	26.7708	0.0000	.	.
item*urb_rur	tag1, 2	0	0.0000	0.0000	.	.
scale	0	1.0000	0.0000	.	.	

1c by Urban/Rural and Main Region, Model 2

Analysis Of GEE Parameter Estimates

parameter		Est.	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	in1c	1.0241	0.6699	-0.2889	2.3371	1.5287	0.1263
item	it1c	-2.3140	0.7332	-3.7510	-0.8770	-3.156	0.0016
item	tag1	-0.2723	0.5881	-1.4250	0.8804	-.4630	0.6434
item*region1	in1c, 1	-1.0037	0.6575	-2.2924	0.2851	-1.526	0.1269
item*region1	in1c, 2	-1.3286	0.6531	-2.6087	-0.0486	-2.034	**0.0419**
item*region1	in1c, 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*region1	it1c, 1	2.3309	0.7234	0.9130	3.7488	3.2221	**0.0013**
item*region1	it1c, 2	-0.4902	0.7449	-1.9501	0.9698	-.6580	0.5105
item*region1	it1c, 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*region1	tag1, 1	-0.4647	0.6114	-1.6631	0.7337	-.7600	0.4473
item*region1	tag1, 2	1.0769	0.5983	-0.0957	2.2495	1.7999	0.0719
item*region1	tag1, 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	in1c, 1	-0.1468	0.3517	-0.8362	0.5425	-.4175	0.6763
item*urb_rur	in1c, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	it1c, 1	1.2603	0.4659	0.3472	2.1734	2.7052	**0.0068**
item*urb_rur	it1c, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	tag1, 1	-0.0162	0.3616	-0.7248	0.6925	-.0447	0.9643
item*urb_rur	tag1, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	0.9995	.	.	.	.	.	

CONTRAST Statement Results

Contrast	DF	ChiSquare	Pr>Chi	Type
1 –2 for it1c	1	44.6072	**0.0001**	LR

1c by Urban/Rural and Island, Model 2 (No sig. figs. Model 1)

Analysis Of GEE Parameter Estimates

parameter		Est.	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	in1c	-0.1732	0.3473	-0.8539	0.5076	-.4985	0.6181
item	it1c	-2.1972	0.4378	-3.0553	-1.3390	-5.018	0.0000
item	tag1	0.2677	0.3537	-0.4256	0.9610	0.7568	0.4492
item*island	in1c, 1	0.1059	0.3462	-0.5726	0.7844	0.3059	0.7597
item*island	in1c, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*island	it1c, 1	1.2384	0.4052	0.4443	2.0326	3.0564	**0.0022**
item*island	it1c, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*island	tag1, 1	-0.1432	0.3464	-0.8222	0.5357	-.4135	0.6792
item*island	tag1, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	in1c, 1	-0.0764	0.3391	-0.7410	0.5881	-.2254	0.8217
item*urb_rur	in1c, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	it1c, 1	1.1491	0.3908	0.3831	1.9150	2.9404	**0.0033**
item*urb_rur	it1c, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	tag1, 1	-0.1828	0.3406	-0.8505	0.4848	-.5367	0.5915
item*urb_rur	tag1, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	0.9962	.	.	.	.	.	

1c by Urban/Rural and Decile, Model 2 (no sig. figs. Model 1)

Analysis Of GEE Parameter Estimates

parameter		Est.	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	.
item	in1c	0.4484	0.4581	-0.4494	1.3462	0.9789	0.3276
item	it1c	-0.6865	0.4788	-1.6249	0.2519	-1.434	0.1516
item	tag1	-0.2244	0.4754	-1.1561	0.7074	-.4719	0.6370
decile*item	in1c	-0.0861	0.0605	-0.2047	0.0326	-1.422	0.1550
decile*item	it1c	-0.0933	0.0648	-0.2204	0.0338	-1.439	0.3183
decile*item	tag1	0.0617	0.0618	-0.0595	0.1829	0.9979	0.1501
item*urb_rur	in1c, 1	-0.1838	0.3458	-0.8616	0.4939	-.5316	0.5950
item*urb_rur	in1c, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	it1c, 1	0.8931	0.3870	0.1347	1.6515	2.3080	**0.0210**
item*urb_rur	it1c, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*urb_rur	tag1, 1	-0.1006	0.3470	-0.7807	0.5795	-.2899	0.7719
item*urb_rur	tag1, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	1.0014	.	.	.	.	.	

1c by Main Region and Island, Model 2 (no sig. figs. Model 1)

Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	in1c	0.9163	0.5916	-0.2432	2.0758	1.5488	0.1214
item	it1c	-1.2993	0.6513	-2.5759	-0.0227	-1.995	0.0461
item	tag1	-0.2877	0.5401	-1.3462	0.7708	-.5327	0.5943
item*region1	in1c, 1	-1.5886	0.7982	-3.1531	-0.0242	-1.990	**0.0466**
item*region1	in1c, 2	-1.5404	0.6726	-2.8587	-0.2222	-2.290	**0.0220**
item*region1	in1c, 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*region1	it1c, 1	4.0429	1.2985	1.4978	6.5880	3.1134	**0.0018**
item*region1	it1c, 2	-0.1766	0.7601	-1.6665	1.3132	-.2324	0.8163
item*region1	it1c, 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*region1	tag1, 1	-1.7325	0.8183	-3.3363	-0.1288	-2.117	**0.0342**
item*region1	tag1, 2	0.6162	0.6223	-0.6034	1.8358	0.9902	0.3221
item*region1	tag1, 3	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*island	in1c, 1	0.5670	0.4656	-0.3455	1.4795	1.2178	0.2233
item*island	in1c, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*island	it1c, 1	-2.0505	1.0877	-4.1822	0.0813	-1.885	0.0594
item*island	it1c, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*island	tag1, 1	1.2470	0.5447	0.1794	2.3146	2.2894	**0.0221**
item*island	tag1, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	1.0000	.	.	.	.	.	

CONTRAST Statement Results

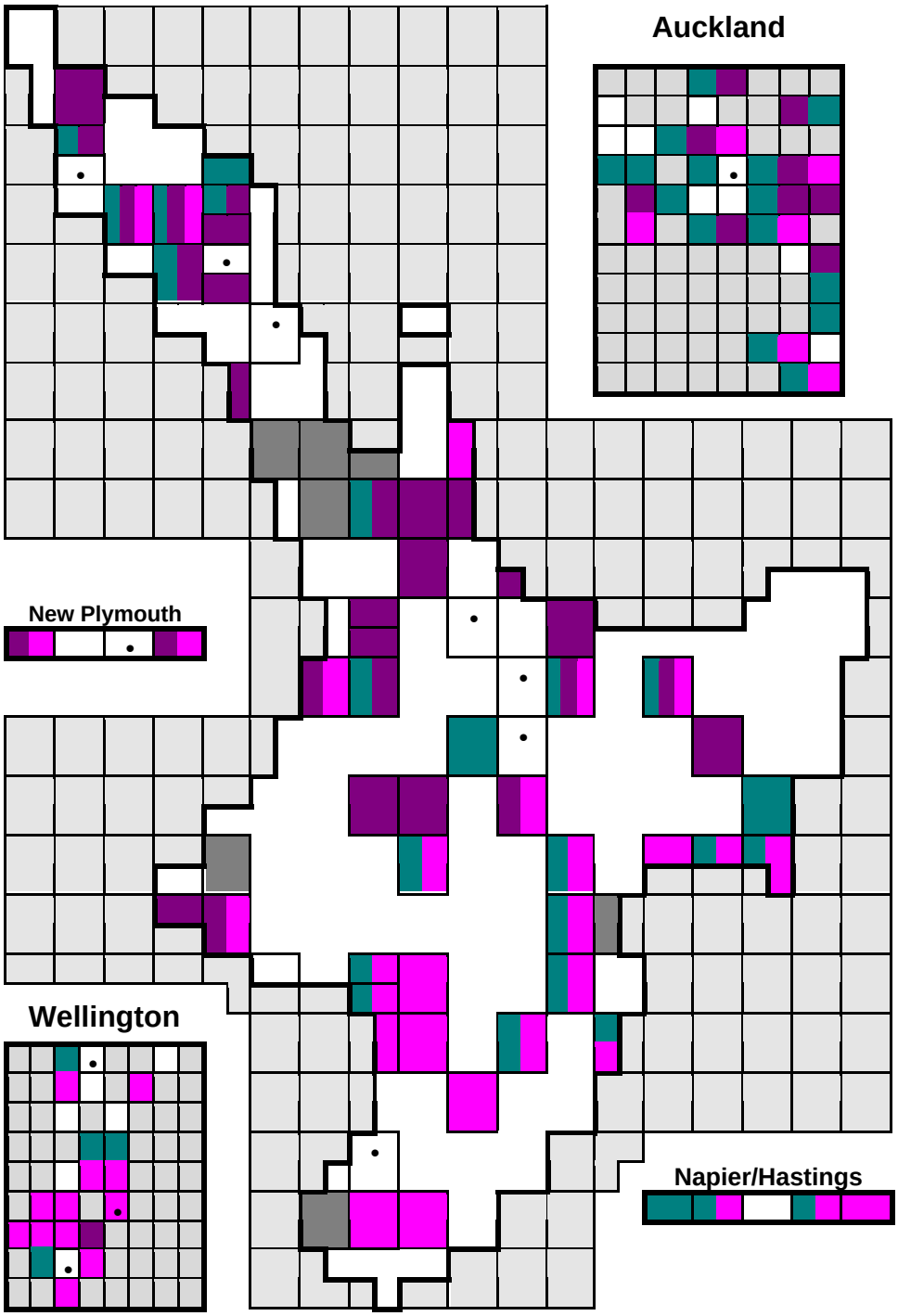
Contrast	DF	ChiSquare	Pr>Chi	Type
1 –2 for in1c	1	0.0126	0.9107	LR
1 –2 for it1c	1	43.7559	**0.0001**	LR
1 –2 for tag1c	1	24.3289	**0.0001**	LR

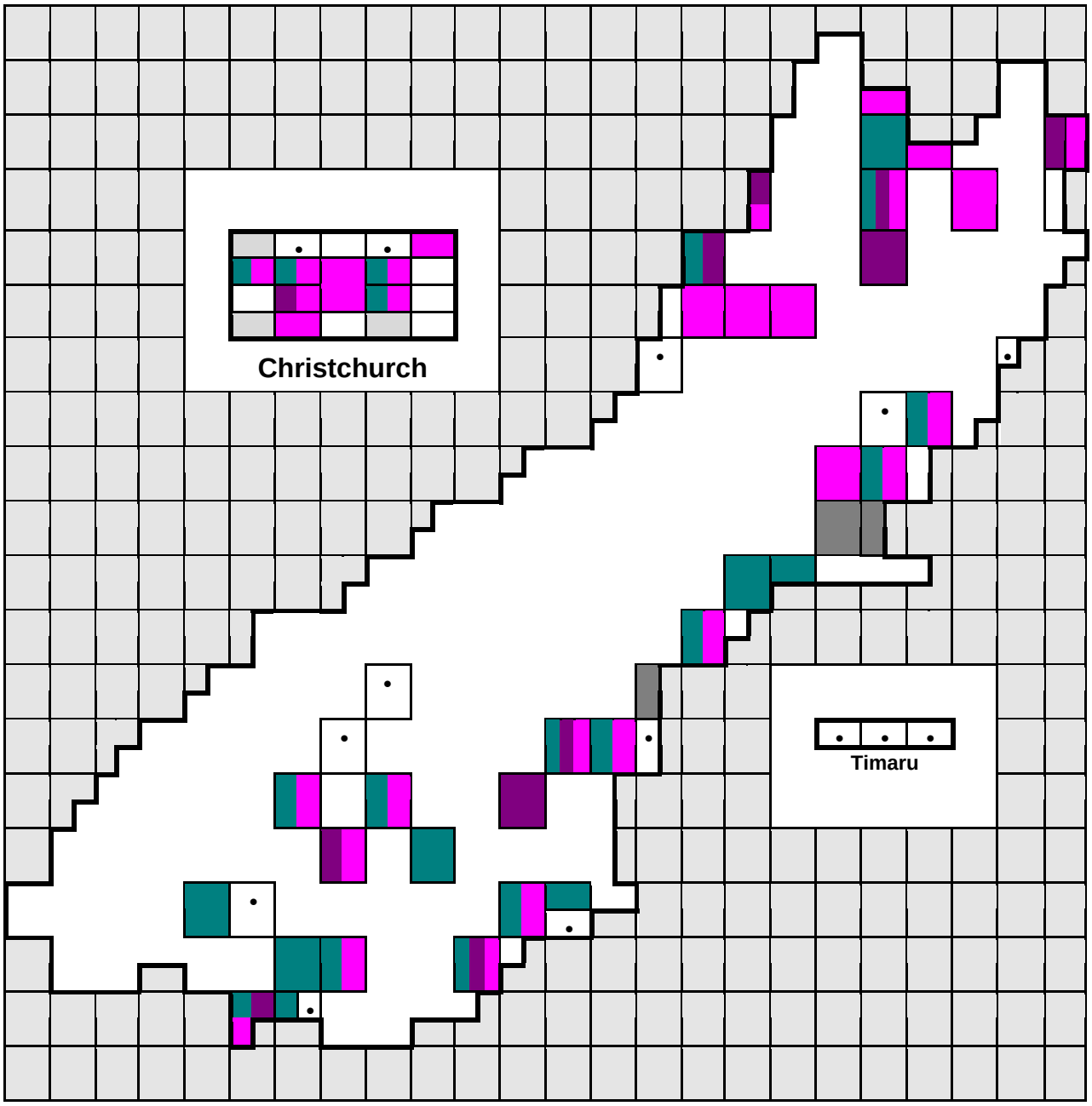
1c by Decile and Island, Model 2 (no sig. figs. Model 1)

Analysis Of GEE Parameter Estimates – Empirical Standard Error Estimates
Empirical 95% Confidence Limits

parameter		Estimate	Std Err	Lower	Upper	Z	Pr>|Z|
intercept	0.0000	.	.	.	.	.	
item	in1c	0.1211	0.4729	-0.8058	1.0481	0.2561	0.7978
item	it1c	-0.8543	0.5308	-1.8945	0.1860	-1.610	0.1075
item	tag1	-0.3144	0.4789	-1.2530	0.6242	-.6565	0.5115
decile*item	in1c	-0.0565	0.0606	-0.1753	0.0623	-.9328	0.3509
decile*item	it1c	-0.0905	0.0648	-0.2174	0.0365	-1.397	0.1624
decile*item	tag1	0.0753	0.0612	-0.0447	0.1953	1.2305	0.2185
item*island	in1c, 1	0.0702	0.3472	-0.6103	0.7507	0.2021	0.8398
item*island	in1c, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*island	it1c, 1	1.0029	0.4040	0.2110	1.7948	2.4823	**0.0131**
item*island	it1c, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
item*island	tag1, 1	-0.0631	0.3456	-0.7405	0.6143	-.1825	0.8552
item*island	tag1, 2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
scale	0.9995	.	.	.	.	.	

Map for Q1c: *You're in, You're it, Tag*



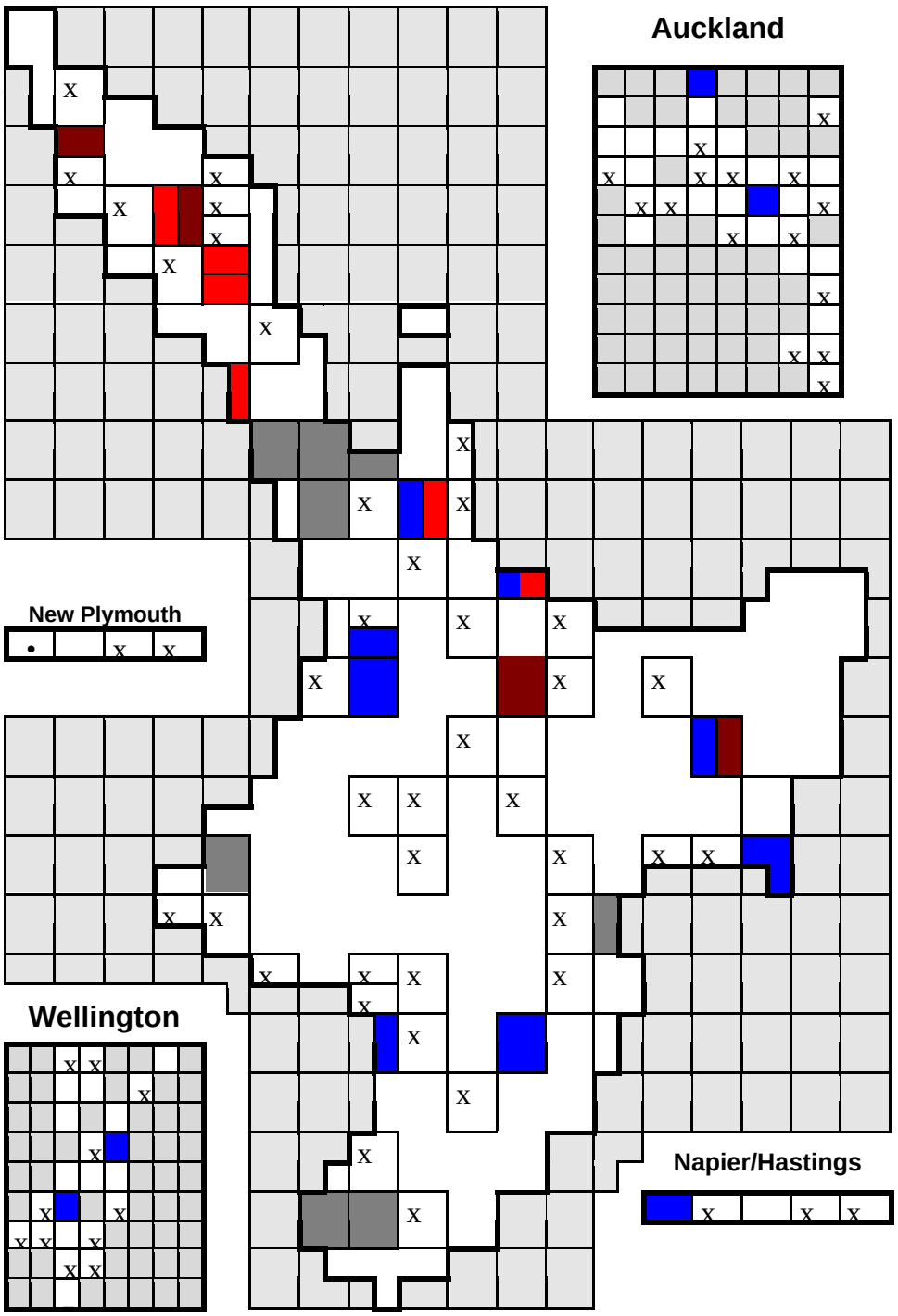


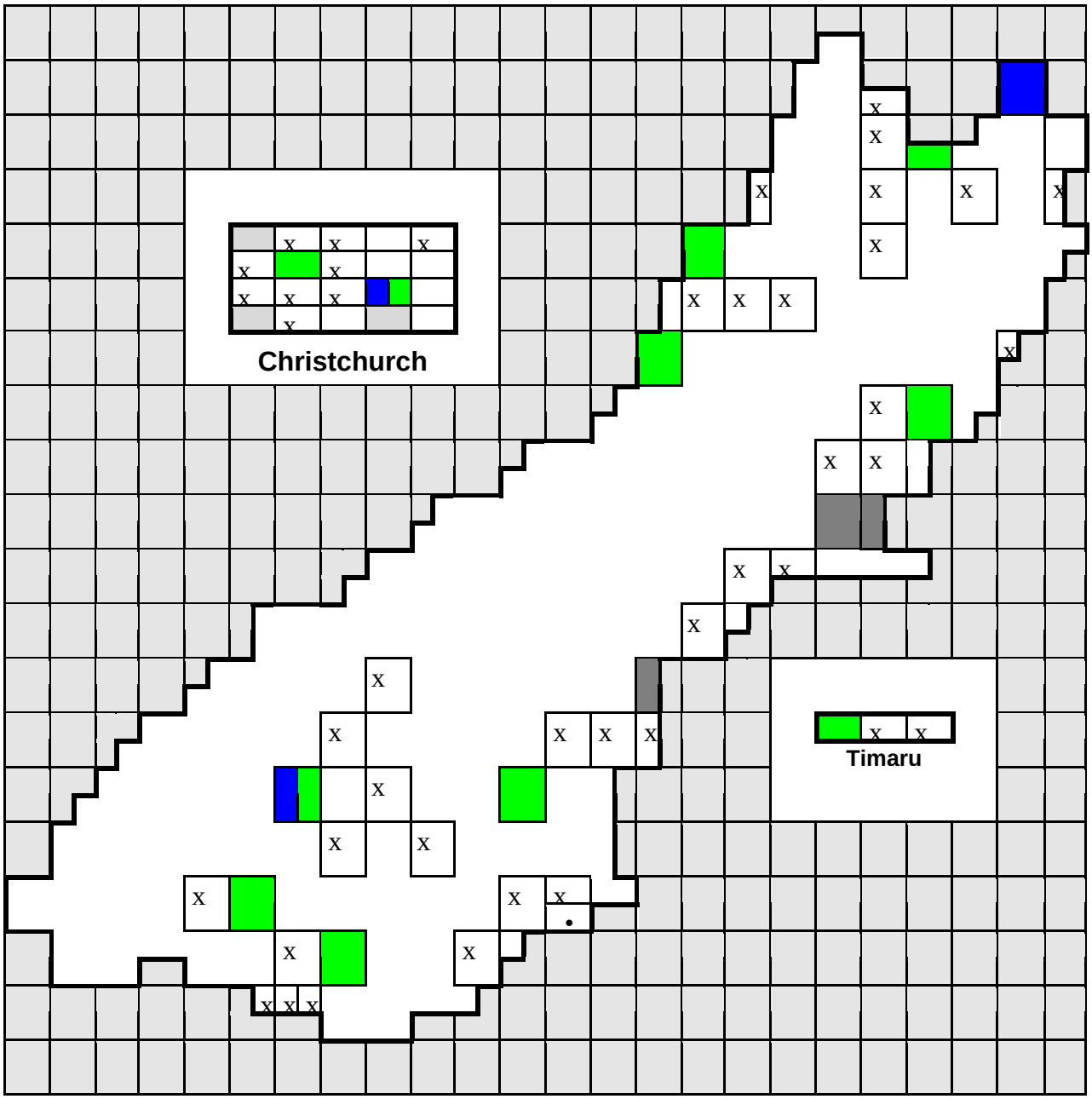
Key

The insets are not to scale, nor all on the same scale. In principal, each box represents one school in both urban and rural areas, but because of the small scale, in Auckland and Wellington, it was necessary to shade an adjacent empty box when a school reported more than one form.

- you're in
- you're it
- tag
- See urban map insert
- No relevant data/none of these

Map 2: Terms to outlaw touching back the person who just touched you (school visits)





Key
Note that the insets are not to scale, nor all on the same scale for practical reasons. Each box represents one school in both urban and rural areas.

	Can't tag your master		See urban map insert
	no tiggy master	x/•	school not visited/no relevant response
	butcher		Can't tig your master