From: official information
Sent: Friday, 12 March 2021 13:23
To: [redacted]
Cc: official information
Subject: RESPONSE - LGOIMA 21065 - Proposed Development Contributions and Growth Funding Policy updates
Attachments: Graymatter Demand Conversion Factor Review.pdf

Kia Ora,

I refer to your **information request below**, Hamilton City Council is able to provide the following response.

Please see attached. Also available on the future Hamilton website.

The reduced industrial, commercial and retail transport conversion factors result in a reduction in projected transport HUEs. While this doesn't change the total cost of DC funded capex, with less projected transport HUEs, the per HUE transport charge increases. Catchments with more transport capex and more anticipated non-residential growth are more sensitive to this change. These changes increase residential charges by 1-5% while reducing non-residential charges by 5-22%.

The transport factors are based on reports that have been superseded and need to be updated. Other factors are not proposed to change as you point out and are considered to be appropriate. If you disagree please submit on that.

You have the right to seek an investigation and review by the Ombudsman of this decision. Information about how to make a complaint is available at www.ombudsman.parliament.nz or freephone 0800 802 602.

Kind Regards,

Tatiyana
Official Information Team | Legal Services & Risk
Email: officialinformation@hcc.govt.nz

Hamilton City Council
Te kaunihera o Kirikiriroa

Hamilton City Council | **Private Bag 3010** | **Hamilton 3240** | **www.hamilton.govt.nz**
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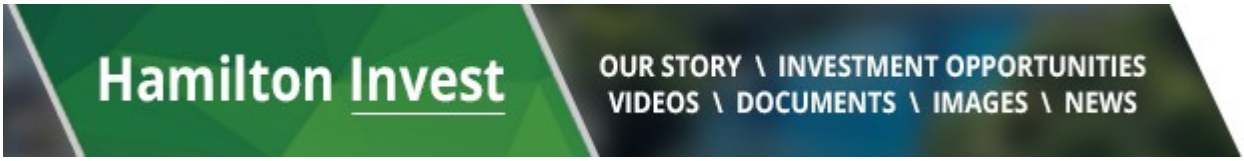


From: [redacted]
Sent: Tuesday, 23 February 2021 1:38 PM
To: growthfunding <growthfunding@hcc.govt.nz>
Cc: Greg Carstens <Greg.Carstens@hcc.govt.nz>
Subject: Re: Proposed Development Contributions and Growth Funding Policy updates

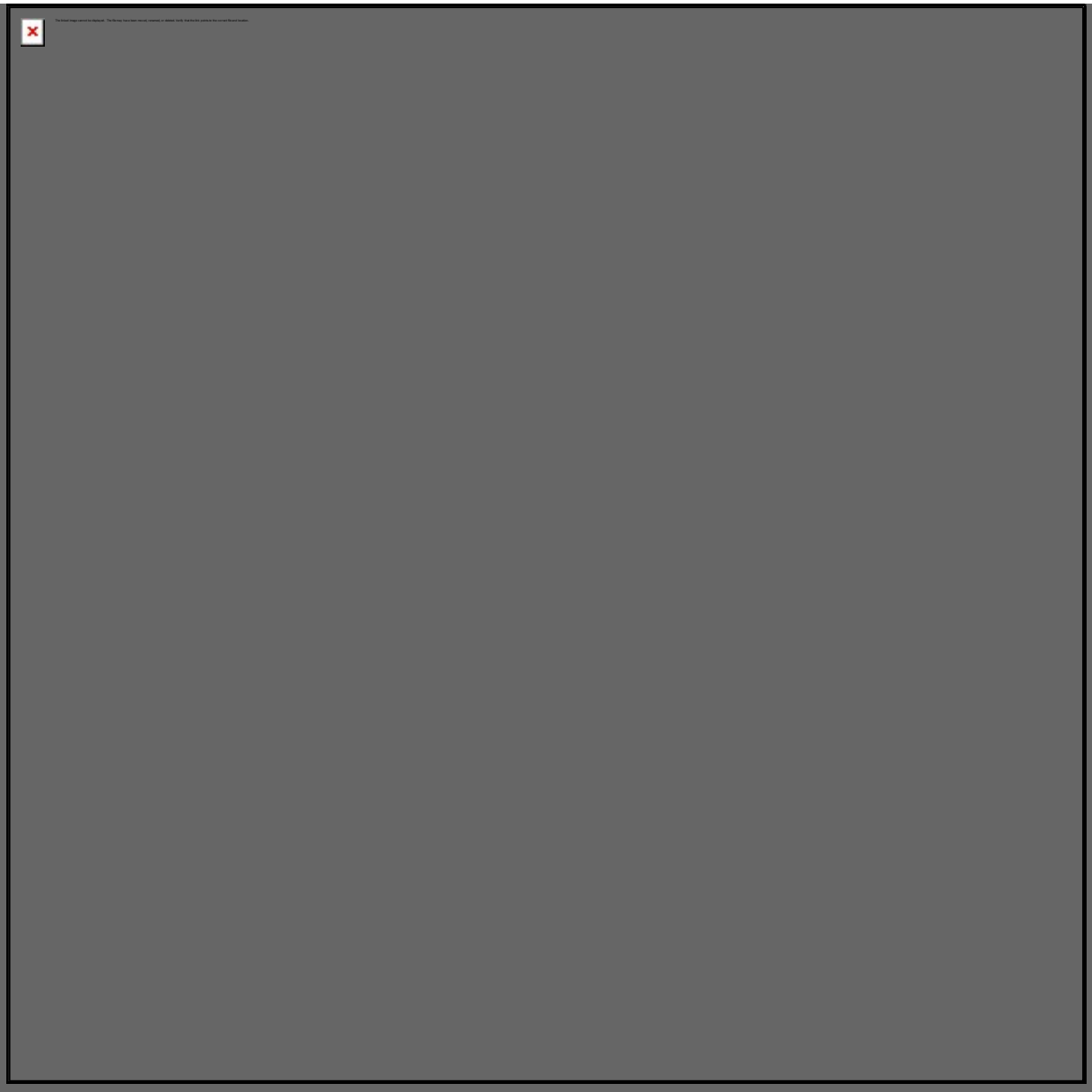
Thanks. While I am still reviewing this, I note Council is proposing to change the non-residential demand conversion factors for transport in the proposed 2021/22 DC policy, with the commercial development factor increasing from 2.0 to 2.5, whilst the factors for retail and industrial development have each been reduced.

Can you please help me better understand the basis for the proposed changes and what the impact is likely to be on the HUE estimates for the various catchments?

Also, can you please explain why the changes to the demand conversion factors have only been confined to the transport activity?

Thanks - Tony

From: Hamilton City Council <growthfunding@hcc.govt.nz>
Reply-To: "growthfunding@hcc.govt.nz" <growthfunding@hcc.govt.nz>
Date: Friday, 19 February 2021 at 4:30 PM
To: [redacted]
Subject: Proposed Development Contributions and Growth Funding Policy updates



Kia ora,

Hamilton City Council is updating its Development Contributions Policy and Growth Funding Policy alongside consultation on the city's 2021-31 Long-Term Plan.

As a person or organisation which has a particular interest in these policies, we wanted to let you know what is planned and how you can have your say on our plans.

Council will next week (25 February) consider the consultation documents with a view to a consultation period from 5 March 2021 to 7 April 2021. The applicable reports and agenda are available here: www.hamilton.govt.nz/agendas

Below is a media release we issued earlier today regarding the updates. Full consultation information will be available on a dedicated website, www.futurehamilton.co.nz from 5 March 2021 and we will update you via email as further information or updates are released.

Thank you for your time and we look forward to hearing your views. Please email us at growthfunding@hcc.govt.nz if you have any questions.

Media release: Growth funding policies readied for public consultation

A revised policy which details how the costs of growth in Hamilton are shared between ratepayers and developers will be considered by Council next week before public consultation in March and April.

Hamilton, like other high growth cities in New Zealand, faces significant challenges in providing and funding infrastructure to service growth. Charges on new residential, commercial or industrial development, known as Development Contributions (DCs) are one of the main funding tools available to the Council.

In conjunction with Council's Long-Term Plan consultation, an updated Development Contributions Policy (DC Policy) and Growth Funding Policy have been developed.

Growth costs not covered by DCs or external funding such as Waka Kotahi NZ Transport Agency subsidies become a cost to the ratepayer. The proposed DC Policy addresses the Council's costs to enable development, such as building new roads, water pipes or reserves, and identifies a share of these costs based on benefits to the wider city and benefits specific to the development.

In December Council approved the revised policies be developed for consultation and will review the consultation documents and policies at its meeting of 25 February.

There are six key changes in the revised DC Policy.

Social housing providers and charitable trusts providing social houses would be exempted from DC charges under the proposals. To continue supporting a more vibrant CBD, the report recommends extending the current scheme remitting 66% of the DC charges in the CBD for three more years and introducing a total remission of DC charges for CBD buildings six or more storeys high.

The report also recommends non-residential DCs are capped, based on a square-metre rate, for total contributions towards water, wastewater and transport activities, and correspondingly for stormwater on a site area basis.

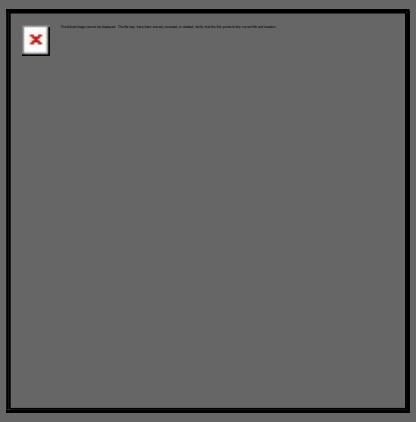
It is proposed to start charging residential developments for a portion of the cost of community infrastructure, and the final proposal is to introduce a phased transition to any increase in residential DCs in some areas of the city.

The proposal is to split any increases evenly across a three-year period, allowing developers more time to plan for the additional costs and provide the opportunity to accelerate development to take advantage of a reduced charge.

Council will also consider a revised Growth Funding Policy. This policy directs Council's decision-making for growth projects and associated infrastructure where those projects are not aligned with, or budgeted in, Council's Long-Term Plan.

The GF Policy ensures decision-making supports affordability and doesn't negatively impact the Long-Term Plan or Council's long-term financial sustainability. It also aligns Council's decisions with the purpose of local government.

Extensive public consultation on the policies, and the Council's Long-Term Plan, is planned to run from March 5 to April 7, 2021.



Hamilton City Council
Private Bag 3010,
Hamilton, 3240, New Zealand

10 March 2021

Greg Carstens
Hamilton City Council
Private Bag 3010
Hamilton 3240

Gray Matter Ltd
2 Alfred Street
PO Box 14178
Hamilton, 3252
Tel: 07 853 8997

14_378

Dear Greg

HCC DEVELOPMENT CONTRIBUTIONS POLICY – REVIEW OF TRANSPORT DEMAND CONVERSION FACTORS

1. Introduction and Purpose

Schedule 5 of the Hamilton City Council (HCC) Development Contributions Policy 2019/20 (DC Policy) sets out the demand conversion factors for commercial and industrial activities.

Gray Matter has been engaged to update DC Policy transport conversion factors, and provide appropriate supporting information to justify any new or altered conversion factors. The purpose of this report is to recommend transport conversion factors for use in HCC's DC model which will generally apply across applicable developments. Data for this report which informs these recommendations is not intended for direct application to specific applications for remission of development contributions.

2. Summary of Recommendations

Based on our review of published trip generation rates, we recommend the following transport conversion factors are applied to the DC model.

Type of Development	Proposed Update
	Vehicle trips
Commercial (non-retail)	17.4
Commercial (retail) ≤ 4,000m2 GFA	25
Commercial (retail) 4,001 to 10,000m2 GFA	11 to 25
Commercial (retail) > 10,000m2 GFA	11
Industrial (per 100m2 of GFA)	6.2

Table 1: Recommended Conversion Factors

3. Background

3.1. 2019/2020 DC Policy Conversion Factors

The following figure presents the current DC Policy conversion factors.

Note 6 - Transport HUEs

HUEs for commercial and industrial transport are calculated on the average daily number of vehicle trips in relation to the ten trips per day assumed to be produced a typical household. These numbers are based on the Transfund 209 and 210 reports as well as two surveys commissioned by Council in 2008 in industrial areas of the city.

Table 7 – Transport HUEs (per 100m² of non-residential GFA)

Type of development	Vehicle trips	Number of HUEs
Residential (per household unit)	10	1
Commercial (non-retail)	20	2
Commercial (retail) ≤ 1,000m² GFA	35	3.5
Commercial (retail) 1,001 to 3,000m² GFA	35 to 20	3.5 to 2
Commercial (retail) 3,001 to 6,000m² GFA	20 to 15	2 to 1.5
Commercial (retail) 6,001 to 10,000m² GFA	15 to 12	1.5 to 1.2
Commercial (retail) > 10,000m² GFA	12	1.2
Industrial (per 100m² of GFA)	9	0.9

Figure 1: 2019/2020 DC Policy Conversion Factors and Note

3.2. District Plan vs DC Policy

The District Plan (Volume 2, Appendix 15-3 Integrated Transport Assessment Requirements – Tables) provides guidance on trip generation rates to assist with determining whether an Integrated Transport Assessment is required. This guidance is provided to assist with the assessment of transport effects and is based on 85%ile trip generation rates to ensure that the effects of peak activity are considered. The trip rates have been converted to gross floor area and rounded to assist with screening of proposed developments.

The DC Policy is based on 50%ile trip generation rates for the purposes of averaging the cost of infrastructure through development contributions.

The different trip generation rates in the District Plan and DC Policy are provided for specific purposes and should not be used except for that specific purpose.

3.3. Trip Generation Surveys

The transport conversion factors in the 2019/20 Policy were based on the Transfund Research Reports 209 and 210 published in 2001. These reports have been superseded by the NZ Transport Agency Research Report 453[1] which was published in 2011.

The Trips Database Bureau (TDB) formed following the commission of two research reports by Transfund (Research Reports 209 and 210). These reports formed the basis of the TDB database and since 2002 the database has been added to and updated with new survey information. The TDB database was last issued in 2018.

[1] https://www.nzta.govt.nz/resources/research/reports/453/

The TDB has now been integrated into TRICS[2], a UK based system for trip generation surveys and analysis. Due to COVID-19 their programme of surveys was put on hold in March 2019. In our view the TDB database from 2018 represents the best data set for comparison of rates to inform review of Council's DC Policy.

For the purposes of this assessment, we have relied on the TDB rates as they are most recent source of published trip rates for New Zealand.

4. Review of Commercial Conversion Factors

4.1. Trip Generation Rates – Retail

The TDB provides site specific trip generation and parking information. A summary of the relevant retail trip generation rates is provided below. The trip generation rates shown in Table 2 are the 50th%ile rates included in the TDB spreadsheet for the retail land use group category.

The current DC Policy provides five different bands for retail activities. The analysis and discussion in Research Report 453 is based on three bands and we have adopted those bands in our assessment.

Commercial (Retail) Land Use Activity	Sample Size	50%ile Daily Trip Rate (veh/day/100sq.m GFA)
≤ 4,000m2 GFA	54	74
4,001 to 10,000m2 GFA	13	47
> 10,000m2 GFA	5	24

Table 2: Summary for retail commercial activities

We have excluded service stations from the data summarised in Table 2 as this activity type can have a relatively low GFA and high trip generation rate when compared to other types of retail activities. The twenty service station sites included in the TDB spreadsheet have an average 231m^2 GFA (ranging from 110m^2 to 490m^2) generating an average of 449 veh/day/100m^2 GFA.

4.2. Trip Generation Rates – Non-Retail

The TDB includes 15 sites for office activities. However, only four of the sites surveyed daily trip generation. The surveyed daily trip generation rates are summarised in the table below.

Activity	GFA (sq.m)	Surveyed Daily Trips (veh/day)	Daily Trip Rate (veh/day/100sq.m GFA)
Office	120	24	20.0
Office	4,032	1,255	31.1
Office	8,384	1,049	12.5
Office	6,855	1,009	14.7
50%ile Trip Rate			**17.4**

Table 3: Summary for non-retail commercial (office) activities

The 50%ile trip rate from the surveys of office activities is 17.4veh/100sq.m GFA. Based on Table 3, we recommend a rate of 17.4veh/100sq.m GFA be adopted.

4.3. Application of Primary, Pass-by and Diverted Trips

The Institute of Transport Engineers (ITE) Trip Generation Handbook, 3rd Edition discusses the effect that a development has on trip types to the site.

Not all traffic entering or exiting a development is necessarily new traffic added to the transport network. The amount of new traffic depends on the purpose and route of the trip. For example, retail-oriented developments such as shopping centres, restaurants and service stations are often located adjacent to busy streets in order to attract motorists already on the transport network for a different purpose. These developments attract a

[2] http://www.trics.org/

portion of their trips from traffic already passing the development on the way from an origin (e.g. home) to an ultimate destination (e.g. work). These “pass-by” trips do not add new traffic to the transport network.

Trips generated by a development can be separated into pass-by and non pass-by (including primary and diverted) trips. Pass-by trips are made as an intermediate stop on the way to the ultimate destination while a diverted trip adds trips to adjacent streets instead of streets used for the primary route. Figure 2 shows examples of primary, pass-by and diverted trips.

Data relating to pass-by and non pass-by trips is limited as the survey information in the ITE handbook focuses on shopping centres and retail activities in the United States. There is no information for non-retail (office/commercial) or industrial land uses. We are not aware of a comparable dataset for New Zealand.

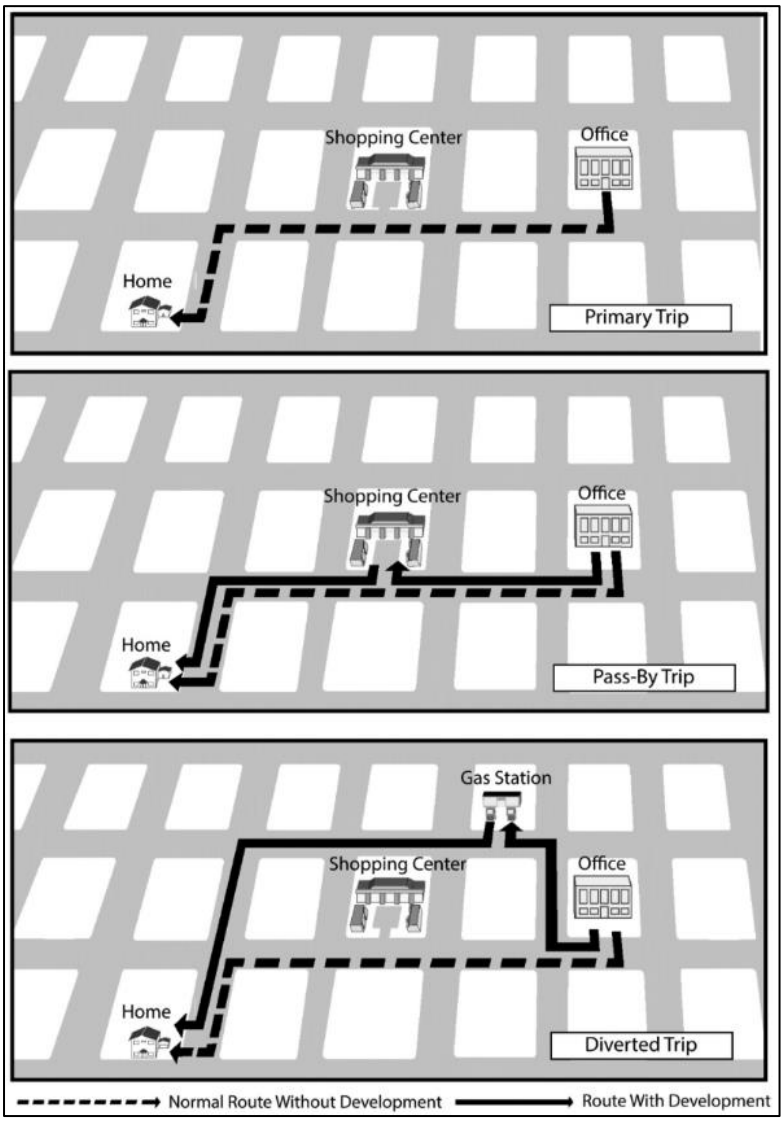


Figure 2: Primary, Pass-by and Diverted Trips (ITE Trip Generation Handbook, 3rd Edition, Figure 10.1)

The summary in Table 4 shows that larger scale developments are more likely to attract more non pass-by trips than smaller developments, indicating that larger scale retail developments are more likely to be the destination for a trip. For example, a large Pak’n Save is more likely to be a destination trip, compared to the small neighbourhood shopping centre which is passed on regular trip to/from home. Therefore, higher pass-by reductions are applicable to smaller retail activities.

Commercial (Retail) Land Use Activity	Pass-by trip	Non Pass-by trip	Breakdown of Non Pass-by Trips	
	A	B [B = 100% - A]	Diverted, C	Primary, D [D = B - C]
≤ 4,000m2 GFA	46%	54%	22%	32%
4,001 to 10,000m2 GFA	37%	63%	32%	31%
> 10,000m2 GFA	27%	73%	28%	45%

Table 4: Summary of Primary, Pass-by and Diverted Rates for Retail Trips

4.4. Commercial (Retail) Recommendation

We recommend that the 50%ile trip generation rates for retail activities are reduced by the appropriate pass-by rates from Table 4. Diverted trips are trips already on network and there may be a case to remove these trips from the rates used to inform development contributions.

The following table presents the published 50th%ile trip generation rate from the TDB and then applies reductions to remove pass-by trips and diverted trips to give the number of primary trips associated with that land use activity.

The resulting primary trip rates shows a sliding scale of decreasing trip rate with increasing GFA which is consistent with the findings of Research Report 453. The current policy provides the conversion factor as a range for the intermediate bands.

This approach could be maintained with a conversion factor of 11-25veh/day/100sq.m GFA used for retail developments of 4,001 to 10,000sq.m GFA. Alternatively, the 50%ile rate of 15 veh/day/100sq.m GFA could be used. Using the range avoids problems associated with significant step change in rate for developments close to 4,000 and 10,000sq.m GFA.

Commercial (Retail) Land Use Activity	TDB trip generation (veh/day/ 100sq.m GFA)	Pass-by trip factor	Pass-by trips (veh/day/ 100sq.m GFA)	Diverted trip factor	Pass-by trips (veh/day/ 100sq.m GFA)	Primary trips (veh/day/ 100sq.m GFA)	Recommended Conversion Factor (vehicle trips)
	A	B	C = A x B	D	E = A x D	F = A – C - E	
≤ 4,000m2 GFA	74	46%	34	22%	16	25	**25**
4,001 to 10,000m2 GFA	47	37%	17	32%	15	15	**11 to 25**
>10,000m2 GFA	24	28%	6	28%	7	11	**11**

Table 5: Recommended Conversion Factors for Commercial (Retail) Activities

5. Review of Industrial Conversion Factors

A summary of the industrial trip generation rates is provided below, with more detail provided in Appendix A. Based on TDB surveys, the 50th %ile trip generation rate for industrial activities is 6.2veh/day/100sq.m GFA.

Industrial Activity	Daily count sample size	50th Percentile (veh/day/100sq.m GFA)
Commercial	1	3.0
Contractor	0	-
Industrial Park	3	11.1
Manufacturing	4	17.7
Manufacturing & Commercial	0	-
Storage	5	2.5
Storage & Office & Electrician	0	-
Transport	0	-
Vehicle Testing Station	2	5.1

Industrial Activity	Daily count sample size	50th Percentile (veh/day/100sq.m GFA)
All	**15**	**6.2**

Table 6: Summary of Industrial Trip Generation (sites with no data only reported hourly trip rates)

The District Plan Rule 25.14.4.3e)i) specifies the peak hour trip generation rate that triggers the need for an Integrated Transport Assessment (ITA) in the Te Rapa North Industrial area (defined as 'Area A' on District Plan, Volume 2, Appendix 15, Figure 15.8). The following table demonstrates conversion of this peak hour rate to a daily trip rate taking into account typical rates to convert from gross developable area to gross floor area. The daily trip rates of 5.7-6.1trips/day100sq.m GFA are consistent with the 50%ile rates from the TDB.

	Working	Value
Gross Developable Area to Gross Floor Area		
Gross Developable Area (ha)	1ha = 10,000sq.m	10,000sq.m
Net Developable Area = 70% of gross developable area	10,000sq.m x 70%	7,000sq.m
Gross Floor Area = 30% of net developable area	7,000sq.m x 30%	2,450sq.m GFA
Convert to "/100sq.m GFA"	2,450sq.m GFA / 100sq.m GFA	24.5
Morning Peak Hour to Daily		
District Plan Trigger = 14.1 trips/ha/morning peak hour	14.1 trips/ha/morning peak hour / 24.5	0.57trips/hr/100sq.m GFA
Convert from hourly to daily, assuming a 10% peak hour	0.57trips/hr/100sq.m GFA / 10%	**5.7trips/day/100sq.m GFA**
Afternoon Peak to Daily		
District Plan Trigger = 15 trips/ha/morning peak hour	15 trips/ha/morning peak hour / 24.5	0.61trips/hr/100sq.m GFA
Convert from hourly to daily, assuming a 10% peak hour	0.61trips/hr/100sq.m GFA / 10%	**6.1trips/day/100sq.m GFA**

Table 7: Conversion of Industrial Peak Hour Rate to Daily Trip Rate

The recommended conversion factor is based on the 50th%ile rate from surveys for industrial activities in the TDB database. Given the small sample size for each of the individual activity types it is not considered appropriate to provide a trip rate/conversion factor for each type of activity. This is in line with the current DC Policy.

Based on our experience on a range of DC assessments and applications for remission, we consider the 6.2veh/day/100sq.m GFA from Table 6 to reasonably representative of recent industrial activities.

We recommend that the conversion factor for industrial activities be lowered to 6.2veh/day/100sq.m GFA. As industrial trips are likely to be destination trips either for employees or delivery/collection of goods it is unlikely that reductions for pass-by trips could be applied in the same manner as for retail land uses.

6. Updated Conversion Factors

Based on our review of published trip generation rates, we recommend the following transport conversion factors are applied to the DC Policy.

Type of Development	Proposed Update
	Vehicle trips
Commercial (non-retail)	17.4
Commercial (retail) ≤ 4,000m2 GFA	25
Commercial (retail) 4,001 to 10,000m2 GFA	11 to 25
Commercial (retail) > 10,000m2 GFA	11
Industrial (per 100m2 of GFA)	6.2

Table 8: Updated Conversion Factors

Our analysis is based on the following key assumptions:

- Our assessment of trip generation rates is based relevant guidance and definitions set out in the relevant research reports and databases and therefore represents best practice based on the most recent published survey data.
- 50%ile daily trip generation rates from surveys contained in the Trips Database Bureau.
- Trip rates for commercial (retail) activities have been reduced using pass-by and diverted trips from the ITE Trip Generation Handbook, 3rd Edition.
- No reduction for pass-by and diverted trips has been applied to non-commercial (office) or industrial activities.
- The number of bands for commercial (retail) developments has been reduced from five to three which aligns with the discussion in Research Report 453.

Please contact us if you have any questions, or require clarification on the above assessment.

Yours sincerely

[redacted]

[redacted]

Transportation Engineer