

# CRITICAL ANALYSIS OF TRANSPORT OPTIONS FOR CHRISTCHURCH SCHOOL OF MUSIC

"Developing good transport options for accessing  
a new central city music school site"



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## **Executive Summary**







### **3.4 Accessibility and Behaviour Change of Active and Public Transport to the CBD**

The Christchurch City Council's (2022) transport survey found that 25% of Christchurch individuals used public transport annually in 2022. Dedele & Miškingte (2021) connect this behaviour to a transport network that

## **4. Surveying**

This section outlines the methodologies employed in a comprehensive survey-based study aimed at understanding and quantifying the influence of various factors on transport mode selection to CSM. This study encompassed both qualitative and quantitative methods,



## 4.2 Survey Results

The majority of those we surveyed indicated they are of NZ/European descent, with only 1 of the participants being of Māori/Pasifika background (**Figure 1**).

40% of participants indicated that they have more than one child enrolled at the school.

The most significant age demographic was the 6-12 year old age range, where 60% of those that participated in the survey being within this age group (**Figure 3**).

50% of participants indicated that the size of their instruments plays a role in determining how they travel to lessons.

96.2% of participants currently use a private vehicle as their primary mode of transport.

44.3% of caregivers said they would not let their child travel alone, however, if accompanied by another child (say carpool or bus) 55% of caregivers said they would let their child travel by a transport mode that is not a car.

55% of participants said the primary barrier to transport is time/distance. Most already travel 10-30 minutes to the current location so there is clear hesitance toward a site change for those

## ***2. What would you suggest in terms of travel options to and from CSM?***

Dedicated large instrument parking.

Subsidized car parking/special rates for CSM frequent users. “Even if you arrive early all the parks are taken, and you have to park illegally while you help your young child carry heavy equipment inside”.

“If I can’t drive there, I can’t work there. Parking is near impossible in the CBD so close & cheap parking is essential”.

A drop off/pick up area that’s covered for kids waiting with instruments.

Bike stands and secure bike storage (having lockable facilities).

## **4.3 Survey Discussion**

Evidently, there remains to be a heavy preference towards private passenger vehicles in Aotearoa (Figure 2). According to Mandic et al. (2020), Aotearoa has one of the highest rates of private vehicle ownership, with 82% of trips being made by privately owned vehicle



with Tuesday, students from some further locations like Kaiapoi and Rangiora will require less time to reach the CBD on Saturday. According to a previous survey, many of CSM's courses are held on Saturdays, which is a positive for those in these areas.

## 5.2 Car Access

*See Figure 7, Figure 8 and Figure 9 in Appendix B*

The maps show that cars can reach CSM within two hours with the widest coverage and the highest degree of freedom, compared to public transportation and bicycles. It takes less than one hour to reach CSM anywhere in the Christchurch urban area. Meanwhile, the survey results show that half of the respondents believe that carrying a musical instrument would affect their transportation choices. Cars are the most convenient option for students and parents who carry heavier instruments. Therefore, cars have the highest accessibility and convenience, which are further reasons as to why most people currently choose cars. Moreover, if CSM moves to the CBD, people living in the west of Christchurch generally have their car travel time increased by about ten minutes. Correspondingly, it will be more convenient for many students who live in the CBD, east and south of Christchurch city -especially in Sumner, Lyttleton and New Brighton, where driving time would reduce by 10 to 20 minutes. Overall, compared to public transportation, the impact of the potential CSM relocation is not significant.

## 5.3 Bike Access

*See Figure 10, Figure 11 and Figure 12 in Appendix B*

Access for active transport modes such as bicycles is like that of cars. Travelling this way is relatively free and less susceptible to external influences like bus companies. However, bikes have a smaller range of travel, compared to a car and can also take nearly twice as long as a car. It is a good option for those that do not live far from the CBD (within 15-20 minutes) and do not need to carry heavy instruments. Since bicycles are relatively unaffected by traffic jams in the morning and evening, there is no need to consider parking (except secure bike storage facilities). However, weather conditions and student safety concerns are common factors that

directly influence whether people choose bicycles. Therefore, bicycles require the consideration of many more factors, have a smaller scope of application, and have their own pros and cons; where individuals consider their own needs first

Carpooling does not just have benefits of forming new connections, but also has positive consequences of benefiting the environment through:

Lower emissions and air pollutants.

Less cars on the road and less congestion in the CBD.

Easier to transport multiple instruments and more equipment at once.

And could be implemented through an establishment of CSM vans/minibuses.

Carpooling can lower greenhouse gas (GHG) emissions and air pollutants by 4-5% per person per commute, according to Shaheen et al. (2018). If CSM peers and teachers were to implement this recommendation as a collective, they would be able to reduce air pollutants and travel emissions significantly; having further positive implications on health and wellbeing, alongside the overarching lower emissions emitted. Without carpooling, emissions from private vehicles will continue to rise. The Ministry for the Environment & Stats NZ (2020) both state that personal vehicles made up to 27% of Aotearoa's total GHG emissions in 2018, and if individuals do not adapt to alternative options, lowering emissions will become even more challenging to achieve. Carpooling provides less congestion on the roads, which in turn links back to lower GHG emissions, benefiting the environment and those participating in the behaviour shift.

Through the recommendation of carpooling, there can be the sub-recommendation of introducing vans or minibuses to transport the music students, as well as the dominating factor of their instruments of various sizes and their music stands. This would help lower the barrier of carrying large instruments at multiple distances.

To shift to the recommendation of carpooling, there will have to be the understanding of forming relationships and trust between peers, and this can be completed through group conversations and a system of gauging the interest of those willing to carpool.



## 7. Further Research

There are some concepts of interest that could have been researched, if this project had an extended timeframe. Two main concepts we would look to evaluate would be:

1. Looking into the size of various instruments and how this can affect travel accessibility, time and safety; understanding if this would hinder students' behaviour shift from private vehicle transportation to public transport.
2. Understanding socio-economic differences and the demographics of CSM students. Due to privacy constraints, we could not get a large enough sample on this, meaning it was not possible to draw any statistically significant conclusions. In the future, we would need a more extensive survey scope, targeting a wider range of demographics and socio-economic status' – ensuring that a correct ethical approach and questionnaire is formulated for students, caregivers, and staff to engage with.

## 8. Conclusion

To ensure students continue attending CSM, we recommend that private vehicle use is accommodated to, while public and active transport should be openly discussed and made more accessible for the outer suburbs of Christchurch. Our work is only the beginning of the journey. We hope to see a continuation of this insightful process; understanding who the students of CSM are, what they value, and what they expect to see moving forward with the new location plans. We are excited to see what the future holds for CSM and hope their potential relocation continues to promote accessibility, diversity, and a passion for music.







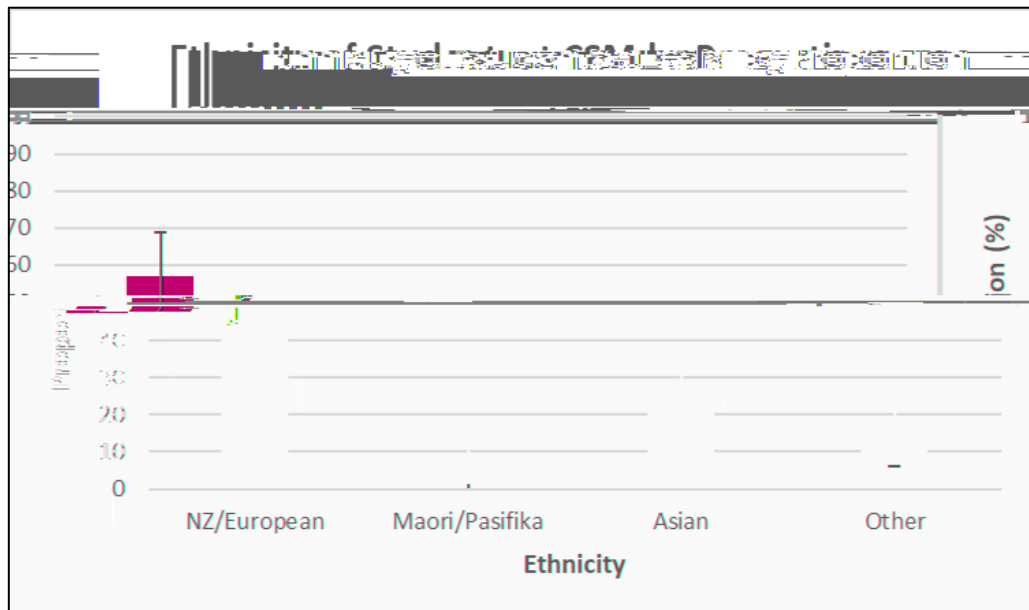
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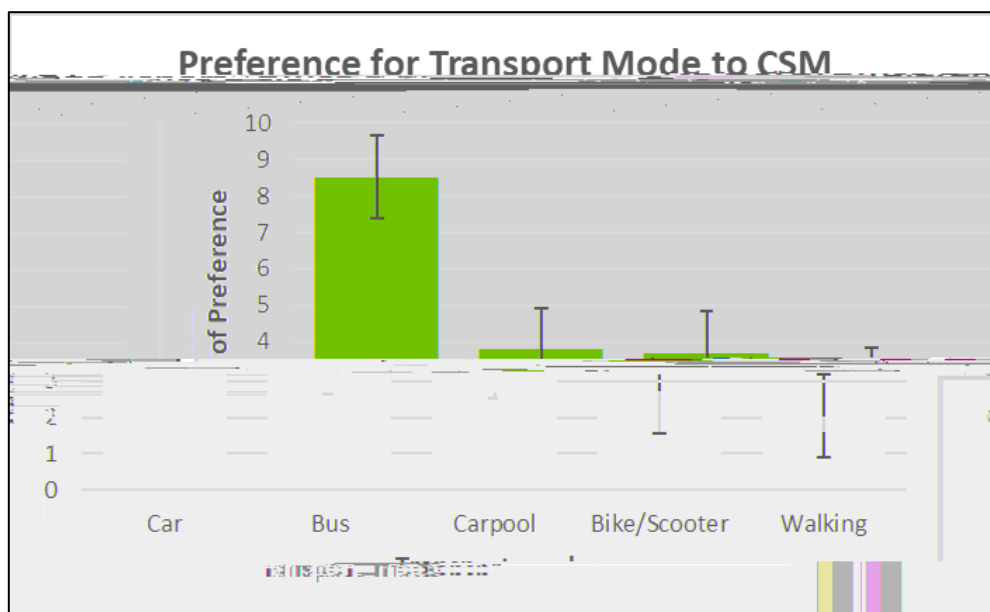
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## Appendix A



**Figure 1:** Proportion of various ethnic backgrounds of participants/students enrolled at the Christchurch School of Music as of 2023.

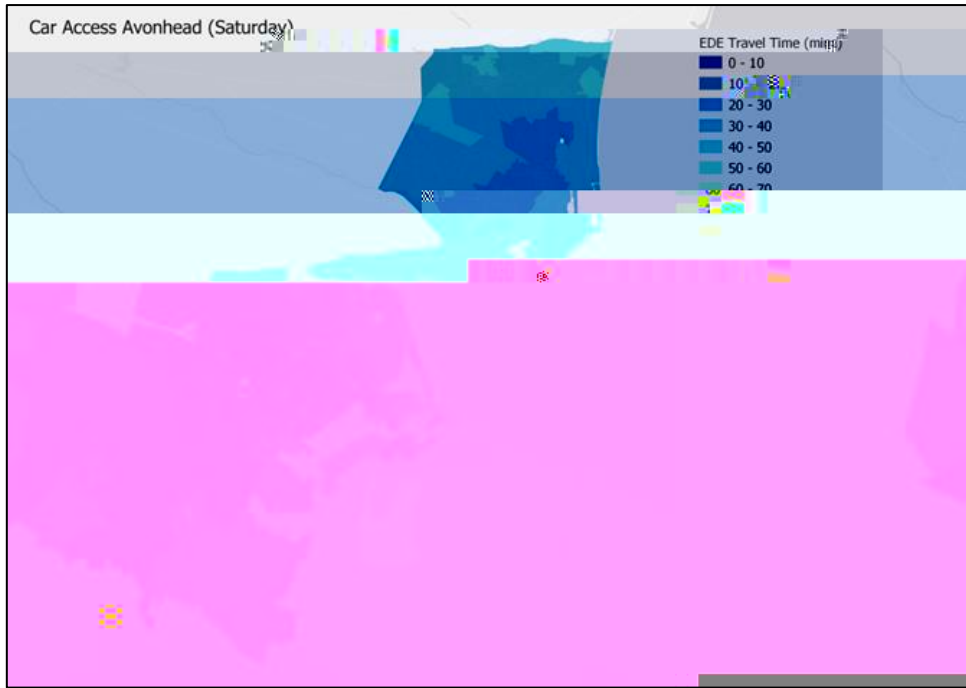


**Figure 2:** Average preference ranks out of 10 for various modes of transport to the current and future Christchurch School of Music site.

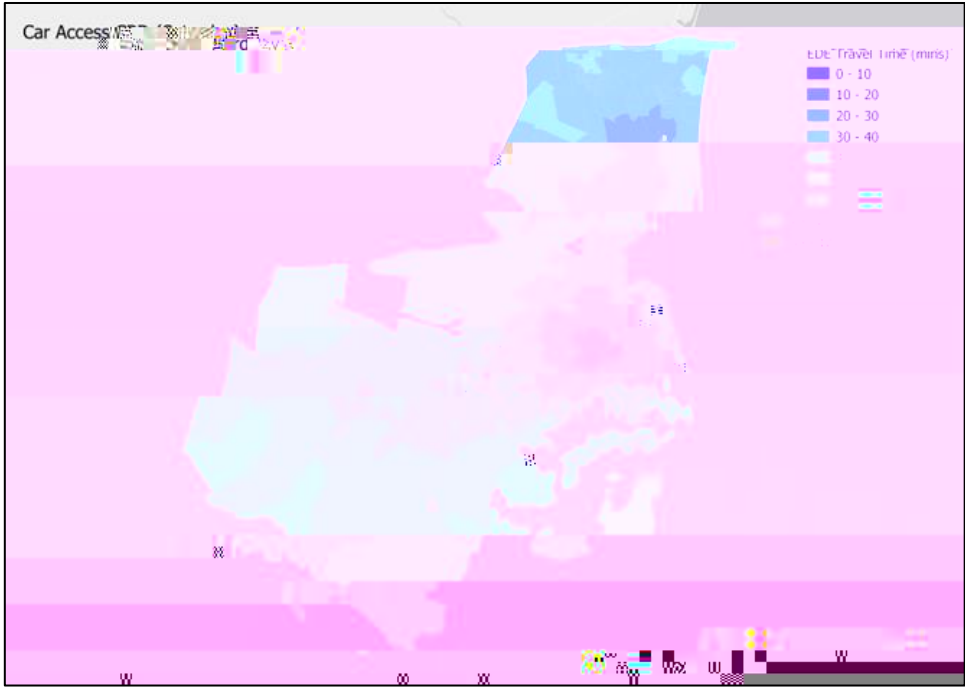
**Figure 3:**



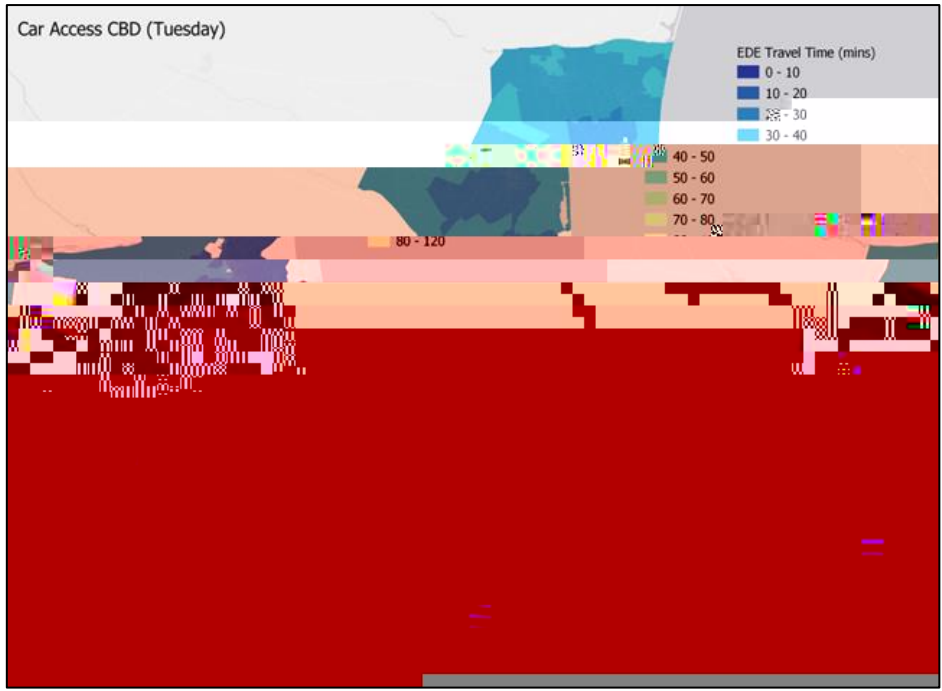
**Figure 5:** Estimated travel time using public transport (PT) access to the CBD location on



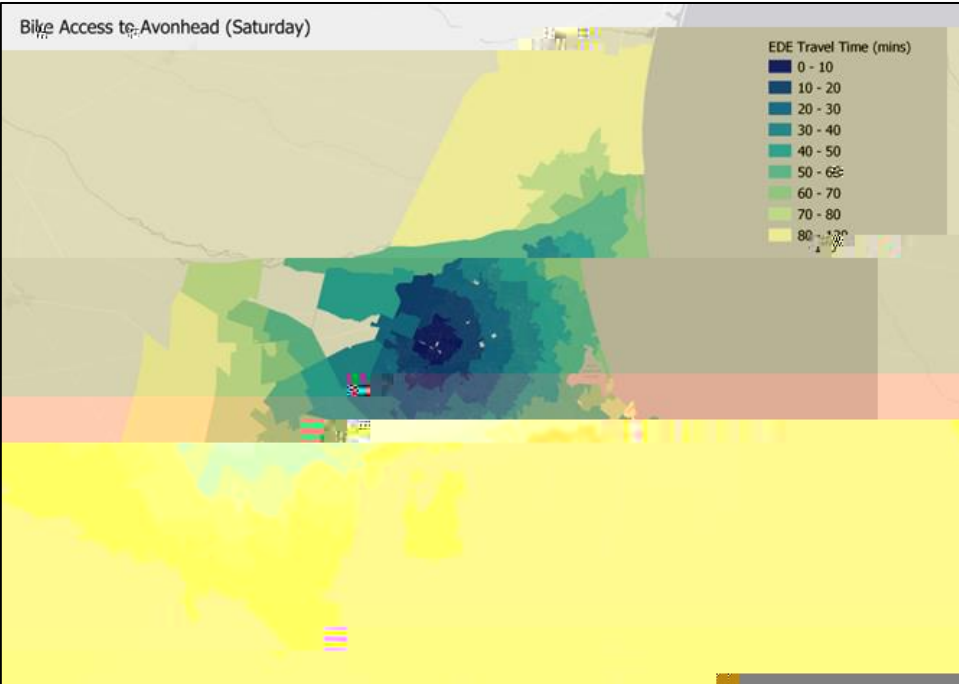
**Figure 7:** Estimated travel time for car access to the Avonhead School location on Saturdays



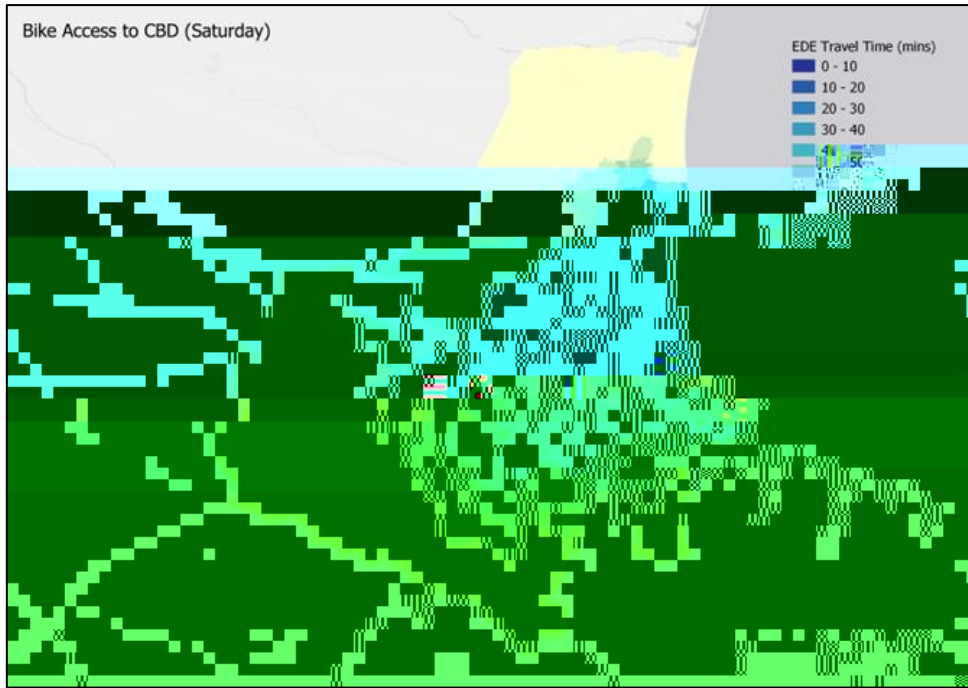
**Figure 8:** Estimated travel time for car access to the CBD location on Saturdays



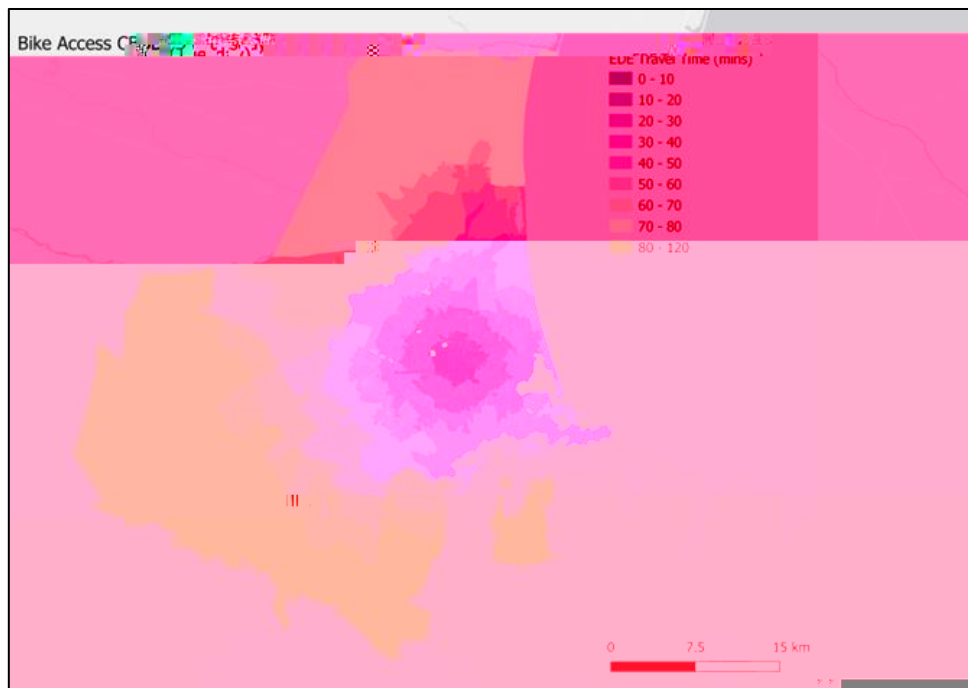
**Figure 9:** Estimated travel time for car access to the CBD location on Tuesdays



**Figure 10:** Estimated travel time for bike access to the Avonhead School location on Saturdays



**Figure 11:** Estimated travel time for bike access to the CBD location on Saturdays



**Figure 12:** Estimated travel time for bike access to the CBD location on Tuesdays