

Tollcross Primary School

Travel Survey 2022

Report and Recommendations



Executive Summary

Tollcross Early Years Campus is a combined nursery/primary-level educational setting - comprising Tollcross Primary School (est. 1912), Tollcross Nursery and Lochrin Nursery School - with an approximate combined attendance of 300 students.

Within this most recent travel survey, the families of Tollcross Early Years Campus sought to reflect on our school run and highlight solutions which place safe, convenient and active travel at the centre of the school run.

Our data highlights that the majority of respondents - 73% - walk to school over a distance of less than 2 miles. However, many respondents reported that shortcomings in the quality of infrastructure made active travel unpleasant at best or impossible at worst.

Looking toward solutions, respondents indicated that widening pavements and improving cleanliness (e.g. emptying over-flowing bins) would make them more likely to choose active travel modes to get to school. More ambitiously, overhauling the design of Tollcross Junction to prioritise pedestrian throughput would bring positive, sustainable and long-lasting improvements to the lives of many of our families and to the safety of our children.

Introduction

Since the peak of the COVID-19 pandemic - and associated lockdowns - communities across the country, particularly those with children, are re-evaluating their relationship with their local built environment and asking the question - built for whom?

With this question in mind, the families of Tollcross Primary School sought to audit our school run in order to highlight areas of improvement and - based upon the data received - imagine effective solutions which prioritise the safe and active travel of our children and carers. Being centrally located within a capital city comes with many advantages - such as access to amenities - but in the absence of sustainable travel design, such central locations invariably have to contend with pedestrian-automobile friction which impacts active travel uptake.

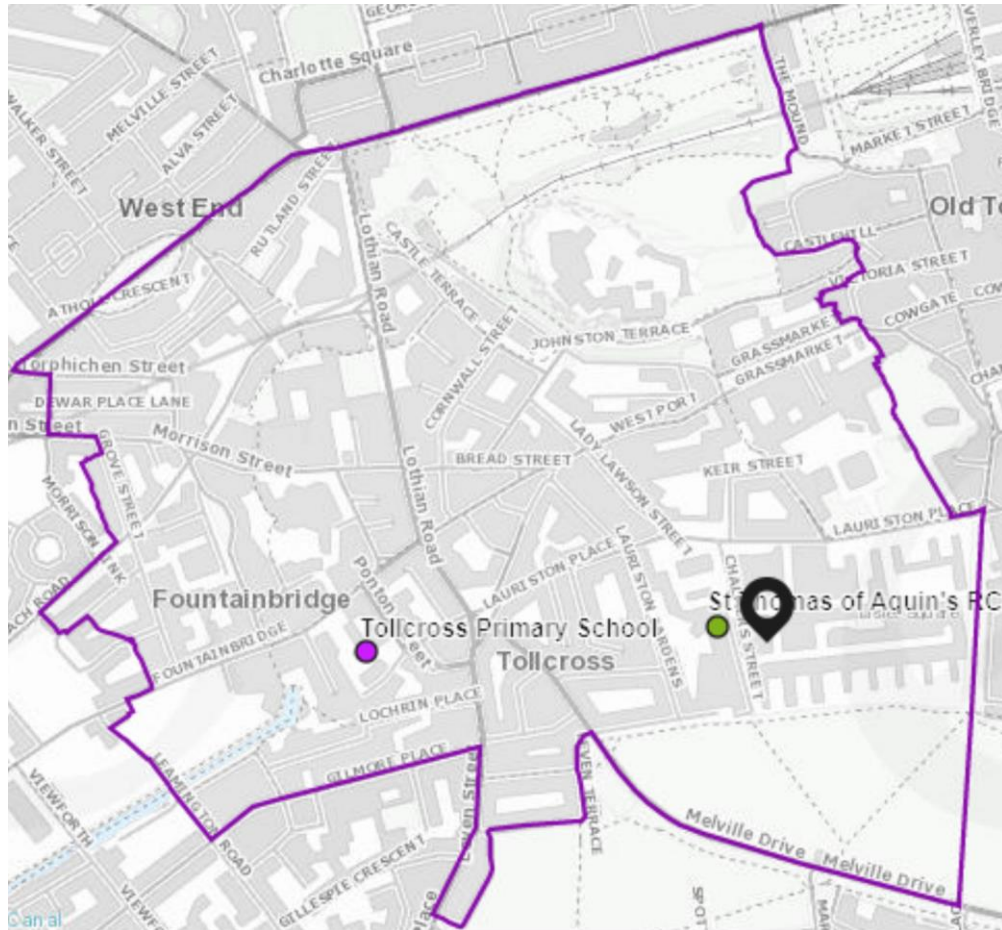


Figure 1 - Catchment area of TXPC, which extends from Melville Drive in the South to Princes' Street in the North.

Methods

Before the Christmas break of 2021, parent and teacher volunteers circulated - digitally and physically - a survey concerning the travel habits of the families who attend the school [see appendix]. In total, we received 60 responses covering a variety of travel modes and distances travelled. In accordance with GDPR principles, all data was kept anonymous to uphold the privacy of respondents. Finally, the data was collated, summarised and plotted using Excel.

Results

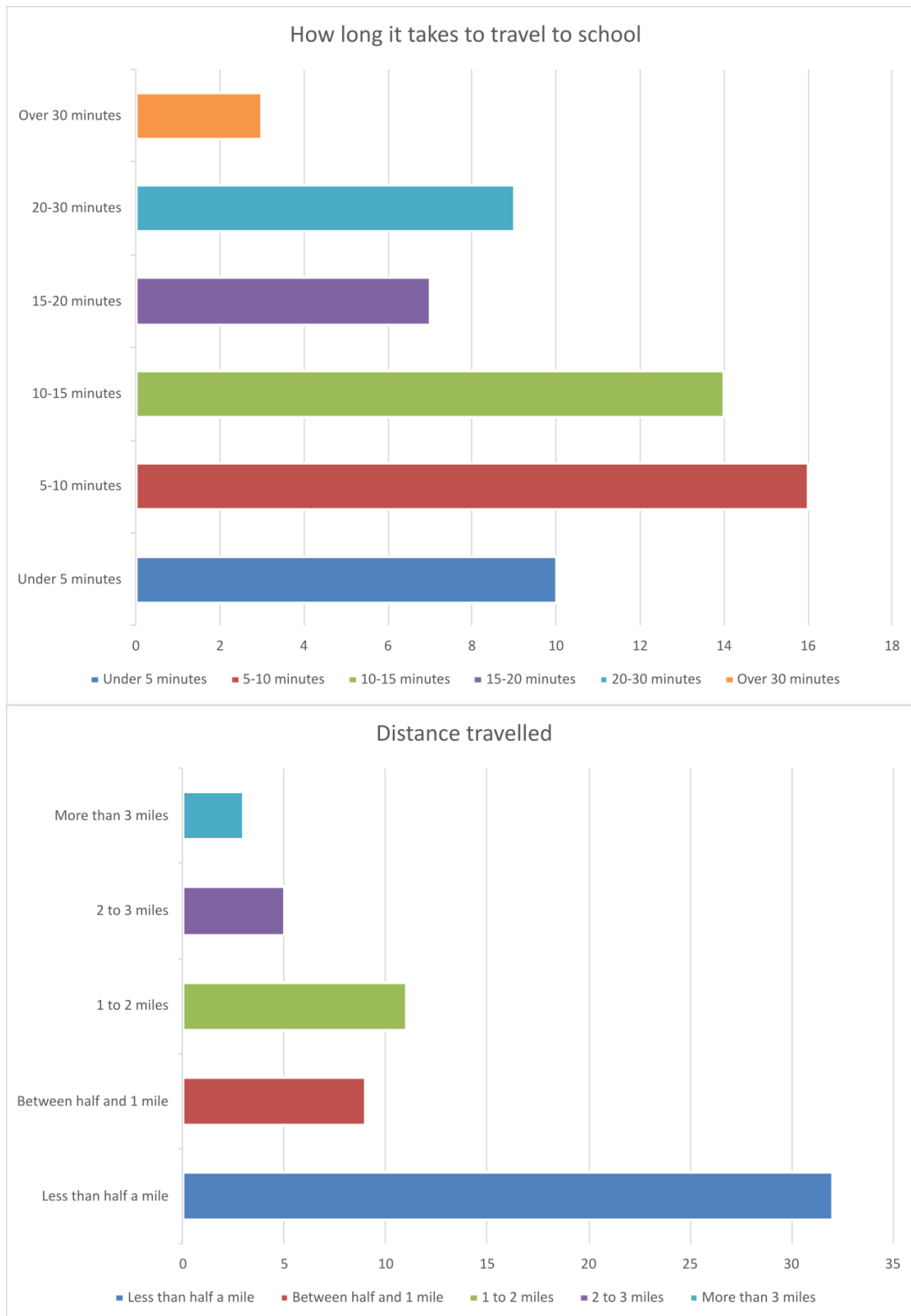
The data - summarised in the figures below - indicate that, of the individuals who responded, around 60% travelled less than 1 mile to reach the school with approximately 80% travelling less than 2 miles. This finding was reflected - for the most part - in the time spent travelling where 78% of respondents (47/60) made it to school in 20 minutes or less however it is worth noting the significant variation in travel time compared to travel distance.

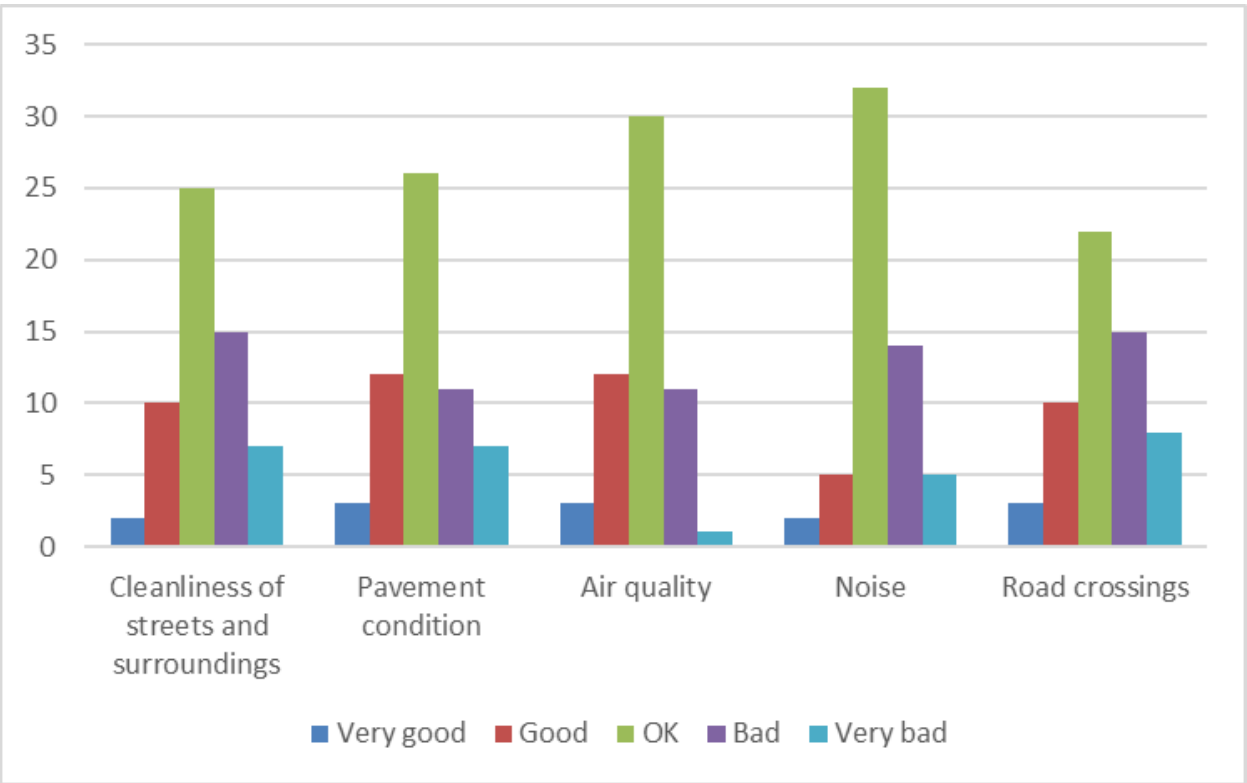
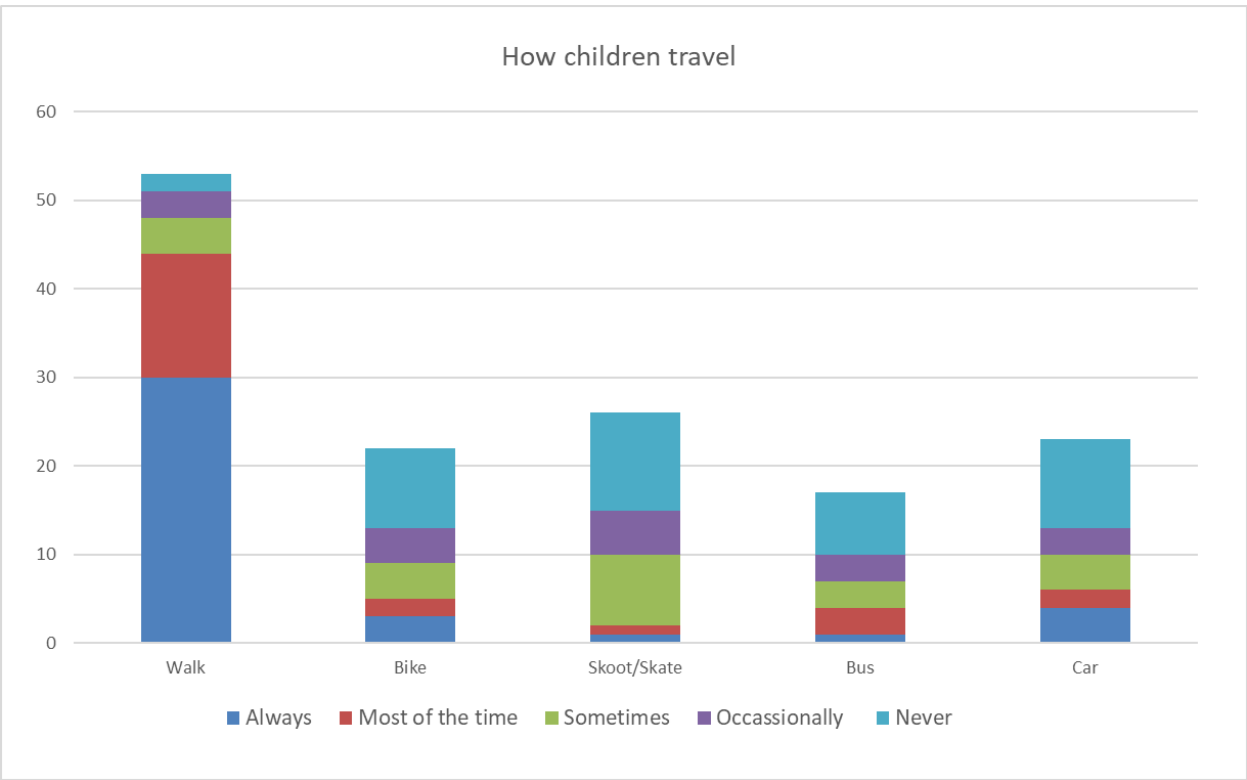
When considering travel modes, the most common choice, encouragingly, is walking with 73% (44/60) of respondents reporting that they walk either 'always' or 'most of the time' (see figure 2).

Beyond walking, active travel options occupied the majority of responses, while any travel by bus and car made up around 20% of responses each and of those, dedicated travel by either passive mode comprised around 1-5%.

When considering only those who travelled by car at least some of the time (13/60), the data revealed that 84% (11/13) travelled less than 3 miles to reach school. Despite this, their travel times were on average longer than those who employed active travel. When asked what would encourage drivers to choose an alternative travel mode, the most common responses were "safer crossing points on way to school" (6/13) and "better public transport" (5/13).

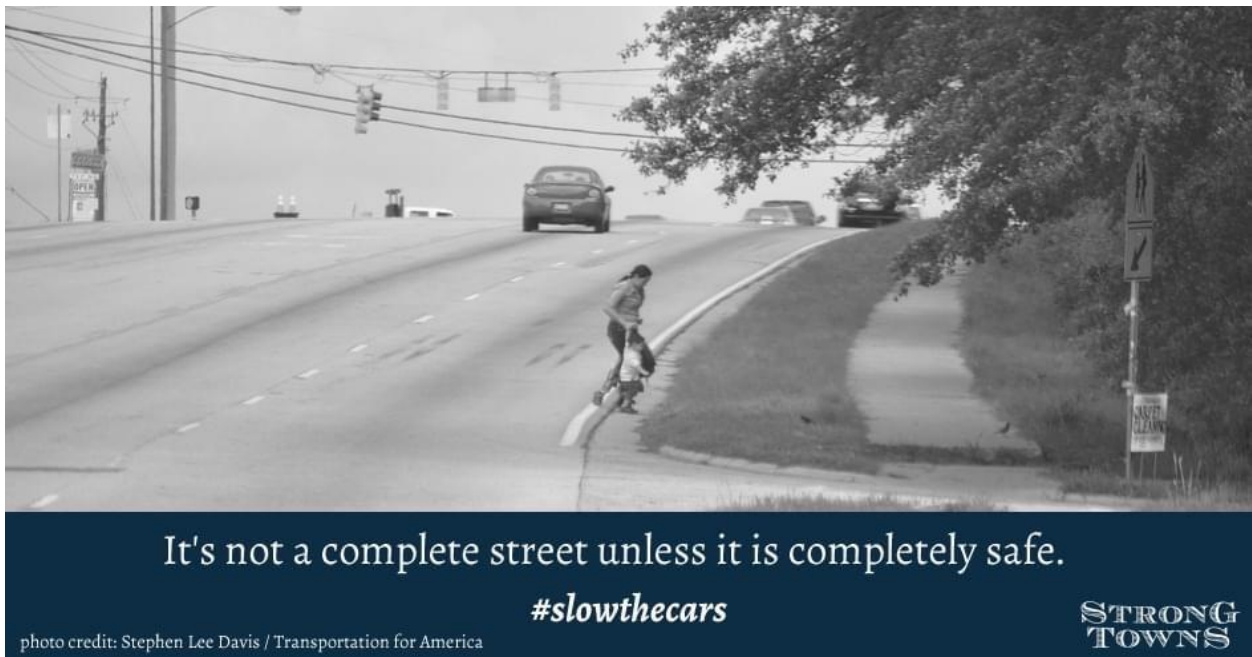
Pivoting back to active travelers. When asked to assess the quality of the urban realm observed during the school run - focusing upon noise volume; air quality; pavement condition; cleanliness and surroundings - the majority of respondents assessed the quality urban realm as 'OK'. However, within this dataset, some areas of concern become apparent, namely, the quality of 'cleanliness of streets of surroundings', 'noise' and 'road crossing'. In these areas, the data displays a skew toward more negative descriptions suggesting an appetite for improvement among respondents.





Remaining on functional assessment of the urban realm, when asked what would make families feel safer when travelling to school the most popular response was, “less traffic” with 38% of the response while other responses were evenly divided among “child pedestrian training”, “road safety education” and “safer places to cross the road” each of which held around 27% of the response.

Moving toward cycling, when asked, “what would encourage cycling to school?” the most popular answer was “cycle training for children” with 34% indicating their support. In a close second we find, “dedicated cycle routes to school” with 28% of the responses.



Discussion and Recommendations

Within the United Nations framework of Sustainable Development Goals (SDG), road traffic injury stands as the only form of injury with a specific target - SDG 3.6 calls for the halving of global deaths and injuries from road traffic accidents (RTA) by 2030 while SDG 11.2 calls for the improvement of road safety via improved access to transport systems and expanding to transport.

The need for improvements in road safety is most acute for children and young people, globally speaking, individuals aged between 5 and 29 are most likely to die from an RTA than any other cause. In Scotland, child pedestrian casualties accounted for a third of all pedestrian casualties of all ages.

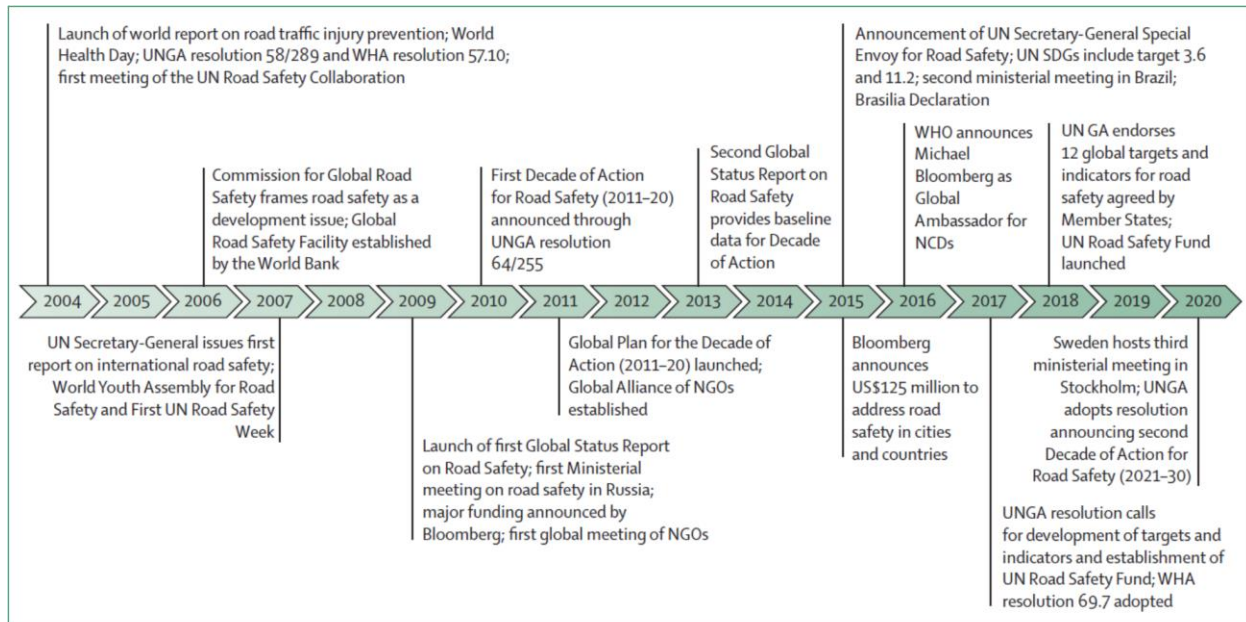


Figure: Timeline showing major global events in road safety between 2004 and 2020

NGO=non-governmental organisation. NCD=non-communicable disease. SDGs=sustainable development goals. UNGA=UN General Assembly. WHA=World Health Assembly.

While progress continues to be made, complacency - from both an environmental and safety perspective - cannot be entertained.

Shown below are some specific recommendations for how the safety of Tollcross Families can be upheld through modifications in urban design within the area surrounding the school:

Tollcross Junction -

Tollcross junction lies at the heart of the community, housing a large volume of businesses and residences while also acting as a transitory hub for those entering the city center, however, it also provides the largest single barrier to active travel in the local area. To quote the Alternative Department for Transport, a satirical blog intended to promote sustainable travel infrastructure, Tollcross Junction is, “[...] Some sort of 1960’s town planner’s dream scheme” ([link](#)). With high volumes of heavyweight, high-speed traffic, long wait times at pedestrian crossings, highly restricted pavement space and a complete lack of passive traffic calming features the junction crosses the line from being merely unsightly to being a genuine hazard to those travelling out with a car.



Many of the grievances we have with Tollcross junction have been raised in the past, so rather than re-hash familiar arguments we will here instead focus upon solutions which seek to address the problems, here arranged in increasing order of predicted disruption during implementation.

Adjust traffic signals to accommodate pedestrian transit

Travelling by car, crossing from one side of the junction to the next - once given the green light - takes less than five seconds. By contrast, travelling across the junction by foot - adhering to all traffic signals - can take over 10 minutes and requires 3-4 pedestrian green lights.

With this in mind, one of the lowest impact solutions (i.e. no construction required) would be to adjust the timings of the traffic lights to reduce the number of individual green lights required for pedestrians to fully transit the junction while ensuring they are not being encouraged to crowd onto narrow traffic islands with road traffic passing on all sides. Moreover, in cases where cars and pedestrians are provided simultaneous green lights, the pedestrian crossing signal should change well in advance of the road users' to provide the opportunity for drivers to clearly see the pedestrians crossing.

Raised Crossings

Taking a leaf out of the Dutch design book of junction crossings, the implementation of raised crossings - wherein the road is raised to meet the pavement in contrast to the more familiar dropped curb - provides a strong visual and physical cue to drivers that they are entering a high pedestrian friction area and need to proceed slowly and with caution.

Reduce Corner Radii

It is now well established that the larger the corner radius of a given road, the faster a car will travel that road, and the less attention the driver will afford to the maneuver. Armed with this knowledge, we can suggest with confidence that squaring the corners of the junction, thereby forcing drivers to slow down and pay attention, will lead to improved safety outcomes for pedestrians using the junction.

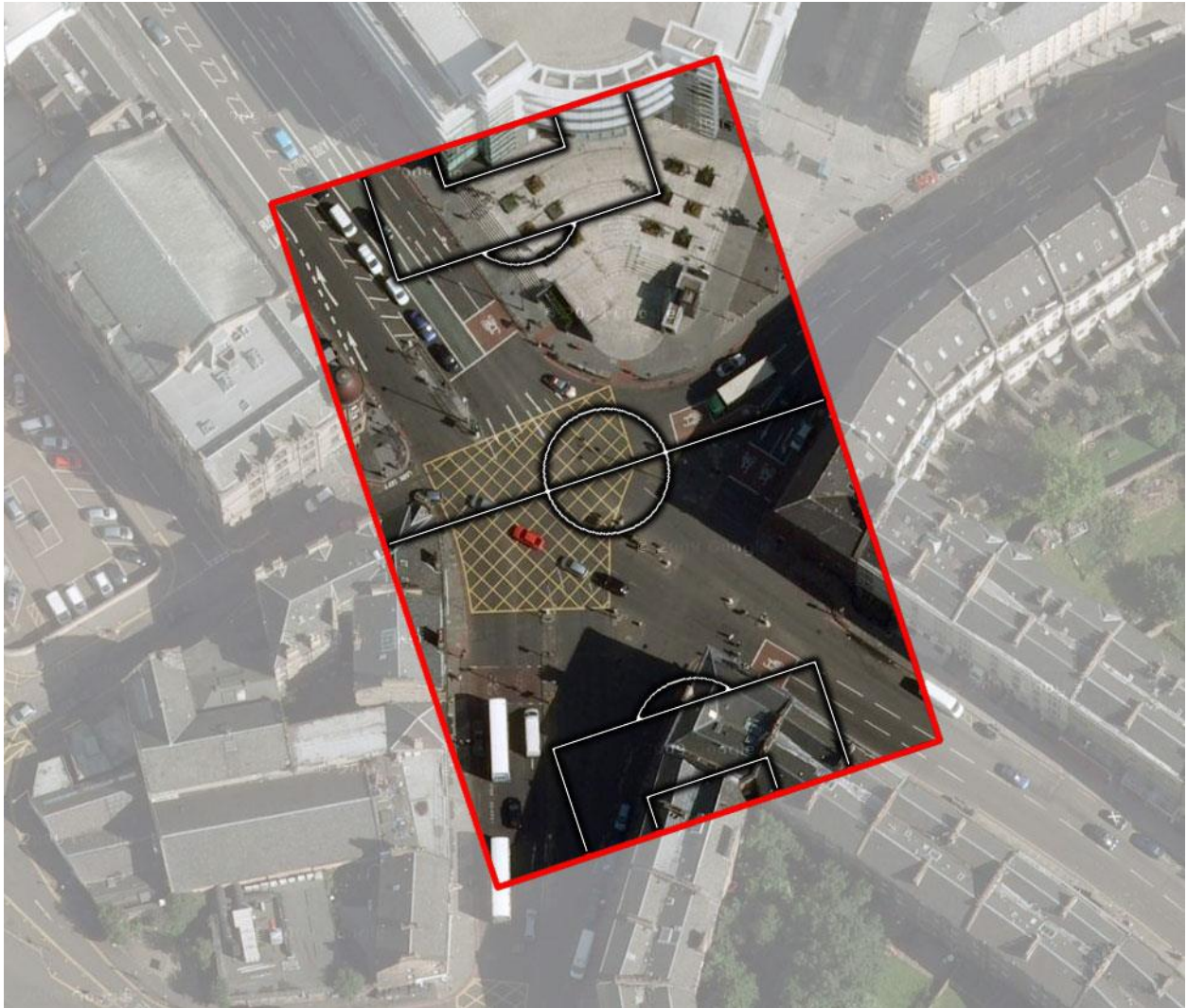


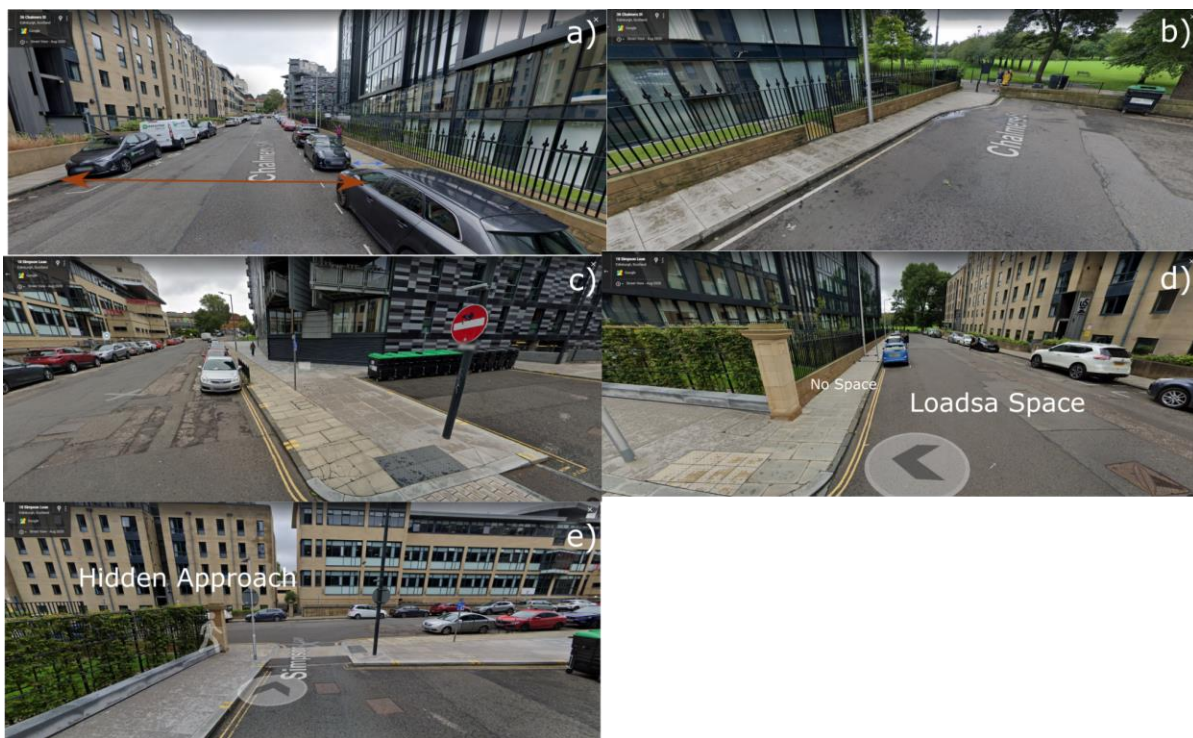
Figure 2 – It's easy to overlook – or at least grow complacent to – the sheer volume of space dedicated to car infrastructure within our communities. This figure, taken from the Alternative Department for Transport, provides a familiar scale to place our priorities in perspective.

Viewed together with the planned improvements to Forrest Road and the recent improvements to Early Grey Street, these changes to Tollcross will serve as part of a larger transformation of the city center which demonstrates our collective commitment to placing pedestrians at the top of the travel hierarchy.

Chalmers' Street -

Chalmers' street is a primarily residential street - situated very close to the center of Edinburgh - which also contains healthcare and educational facilities.

The rich mix of amenities, access to local parks and high density of residential properties - many of which house Tollcross families - mean that the majority of travelers using the street, use active travel to do so.



However, despite walking and cycling making up the majority of travel modes, the design of the street heavily favors travel by car and other vehicles. In frames a), b) and d) of the figure above the contrast of space afforded to car travel, compared to pedestrian travel, is made clear, the street design provides enough room for 4 cars to sit side-by-side while pedestrians are afforded enough space for single-file travel in either direction with no room for stopping.

Frame c) shows the short length of the street where the pavement widens to be more accommodating of foot traffic, however, this is not emulated further up the street despite the presence of a healthcare center which primarily serves elderly patients with impaired vision.

The final issue requiring attention is shown in frame e), the design of the garden wall and choice of foliage create a hidden approach for pedestrians coming to the raised crossing. This issue is especially acute for young children, who are almost completely obscured by the wall and who often approach the road more quickly than adults, thus leaving very little time for drivers - or pedestrians - to react to a potential collision.

Widening pavements, improving pedestrian access to healthcare facilities and ensuring pedestrian visibility to drivers - and vice versa - by removing obstructive walls and foliage will go a long way toward improving the walkability of the area while encouraging active travel to local schools, including Tollcross.

Lauriston Place -



In a similar fashion to Chalmers' Street, Lauriston Place provides access to a rich mix of residential, healthcare and educational (primary, secondary and tertiary) settings which are primarily accessed by foot but which the design of the street encourages to access by car. Frames a) and b) highlight the narrow pavement present on the corner of Chalmers' Street and Lauriston Place which becomes incredibly crowded during rush hour, moreover, frame b) shows the narrow access afforded to those wishing to access public transport services on the street - a feature which regularly creates a bottleneck to foot traffic. Frame c) highlights a precarious crossing on the corner of Lady Lawson Street wherein cars approach from behind the pedestrian walking toward Tollcross with no explicit pedestrian crossing. Finally, frame d) illustrates the very long and very narrow path that pedestrians travelling to Tollcross are invited to use.

Similarly to the points raised for Chalmers' Street, many of these issues could be addressed by the widening of pavements in order to accommodate the volume of foot traffic which use the street and through implementation of raised crossings at crossings.

West Tollcross –

Being situated directly outside the most popular entrance to the school, the area around West Tollcross sees the highest overall volume and intensity of parent-child foot traffic of any of the areas highlighted within this report. While the Parent Council is thankful for the provision of crossing guards at this junction, the inconsistent attendance of the post requires that we explore solutions not contingent upon human resources.

As such, in a similar vein to the suggestions for Tollcross Junction, we believe the junction would benefit from raised crossings and reduced corner radii - the design of which compels drivers to reduce their speed and pay close attention to the junction.



Lower Gilmore Place –

Many families approaching the school from the West make use of the Union Canal and surrounding streets - such as Lower Gilmore Place. Due in part to the mix of medium-density residential developments and vehicle service businesses, Lower Gilmore Place is often blighted by the vision of over-flowing refuse bins. Moreover, the narrow streets, coupled with large bins, mean that the pavements of the streets are effectively off limits to individuals travelling with a pram or who require wheelchair assistance.



To address these issues, increased provision of refuse bins - possibly housed within the footprint of the residential developments on the street - would serve to reduce pressure on the bins currently *in situ*. Further, to improve walkability, it would be worth considering how pavements could be widened and pavement bins appropriately housed on the road. Taking this further still, smaller side streets in the area - such as the lower portion of Leamington Road - could be pedestrianised in order to reduce through traffic and make the area safer for pedestrians.

Gardener's Crescent & Fountainbridge

After West Tollcross, Fountainbridge stands as the most popular route of approach for families travelling to school. However, similarly to those passing through Tollcross junction, the design of the urban realm along the route would benefit from improvements to make walking and cycling safer and more feasible.

As can be seen in panel b) of the figure below, the junction between Gardener's Crescent and Fountainbridge represents a significant expanse of road that families must traverse to access the school. Similarly to the recommendations raised regarding Tollcross Junction, the junction at Gardner's Crescent would be significantly improved through the implementation of raised crossings, reduced corner radii and through reconfiguration of traffic signals to prioritise pedestrian crossing – *i.e.* ensure the green man is activated for as long as required to fully traverse the junction.

Finally, the crossing next to the school - shown in panel c) - is currently manned by a crossing guard during school entry and exit, however, since the safety of the crossing remains contingent upon the fulfilment of human resources its safety could be greatly bolstered through the implementation of built resources such as a raised zebra crossing – thus providing a safe crossing in the absence of crossing guards.

Conclusion

We want to walk, we want to cycle and we want to be safe. The sun of car-centric urban design is now setting, and in its place, a future of low-impact, sustainable and active travel is coming into view. The data in this report, alongside the suggested solutions, form part of a broader change in perspective - a change notionally shared by local government - which places the highest priority upon active pedestrian travel to school. It is our hope that this report will form the basis for change in the local community and make a lasting and positive impact upon the families of Tollcross Early Years Campus.

