



Cork City Development Plan TIER response

October 2021

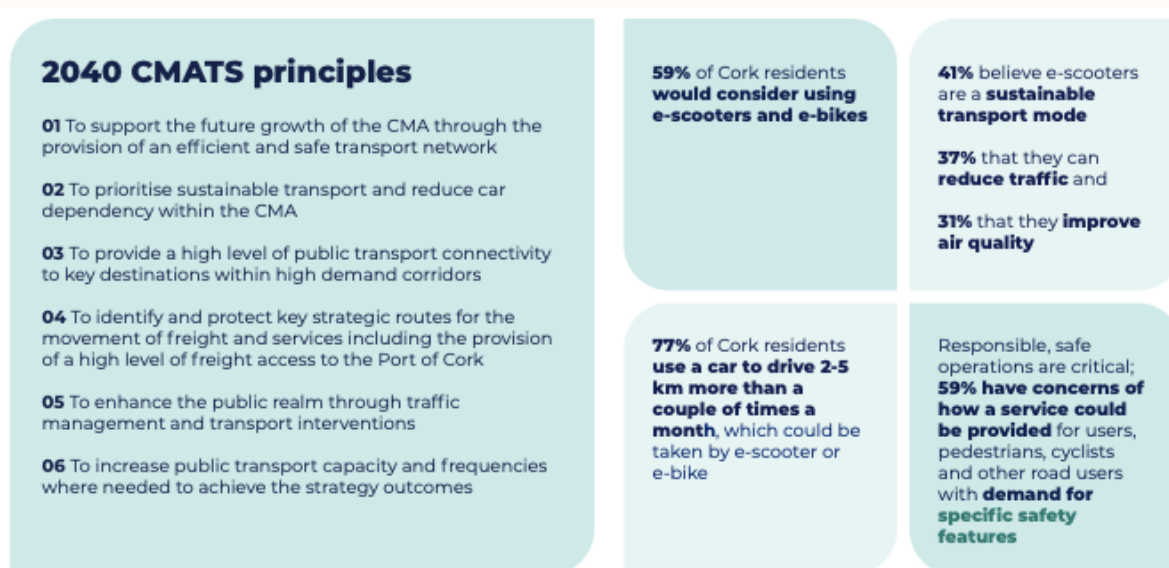
TIER

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1. INTRODUCTION

TIER Mobility believes that, subject to enabling legislation, a successful micro-mobility scheme in Cork would complement and advance many of the ambitions envisioned in the Cork City Development Plan 2022-2028. A network of safe, accessible and sustainable micro-mobility options would support the long-term development of the City as an integrated network of socially and economically successful settlements and communities. In June 2021, TIER published research into residents of Cork's view on the role of micro-mobility to support Cork Metropolitan Area Transport Strategy (CMATS). This together with our ongoing trial in DCU is informing the recommendations set out in this submission.



Source: Ireland Thinks, *TIER Cork City Research 2021*

In August 2021 we visited Cork to better understand the city infrastructure and how broader adoption of micro-mobility services by the city could help benefit its wider ambitions as included in the current draft of the City Development Plan. Having successfully launched micro-mobility services in 148 partner cities across Europe and the Middle East, TIER has experience working with councils and municipalities that have taken a variety of approaches to deploying micro-mobility services. The learnings from these experiences have been summarised in this document and made applicable to Cork as appropriate. Within this response, we have shared our recommendations for implementing a successful micro-mobility scheme, and the outcomes Cork City Council can expect from adopting these recommendations.

We are excited to assist Cork City Council in making this submission in respect of the Draft City Development Plan with the aim of helping design and implement a micro-mobility service which will help the Council achieve its short- and long-term goals. We welcome any further questions and are happy to provide any additional support. Please feel free to contact us at any time.

Contact details

TIER Mobility is Europe's leading provider of micro-mobility, with a mission to change mobility for good. Since our founding in 2018, TIER has successfully deployed micro-mobility services in 148 partner cities across 16 countries, and employs around 1,600 people globally.

We are driving behavioural change in the transport sector, aiming to significantly reduce car traffic in cities by providing people with a wide range of electric vehicles - including e-scooters, e-bikes and e-mopeds.

In a sector rife with financial unsustainability, TIER reached profitability before our second birthday. We recently secured a \$250m Series C investment to deliver our long-term vision and ensure we can last the course when partnering with a city.

Our extensive international experience and track record of responsibility, affordability, innovation and safe outcomes suitably positions us to contribute to Cork City Council's request for submissions in relation to the Draft Development Plan for Cork City.



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2. RECOMMENDATIONS FOR SUSTAINABLE MICRO E-MOBILITY FOR CORK CITY

Introduction

We note from section 4.1 of the Draft Cork Development Plan 2022-2028 that a significant increase in the demand for travel is anticipated and the wellbeing of the city must be safeguarded from multiple social, economic and environmental perspectives. E-mobility has a key role to play, when incorporated into an integrated transport system, in bridging the first and last mile gaps between transport hubs, connecting communities within a city and improving the sustainability of the city by achieving the modal shift that reduces the car dependence of residents of Cork City.

TIER is mindful in making this submission that Cork City Council has demonstrated its progressive nature and willingness to adopt best practices through its experiences with the Coke Zero Bike scheme and with temporary cycling lanes installed in the wake of the Covid pandemic.

E-mobility as deployed in similarly-sized cities to Cork has supported the move towards more sustainable transport modes, namely walking, cycling and public transport. In our experience, the micro-mobility transport networks which have had the highest positive impact are founded on the following core considerations:

Implementing Diverse and Flexible Transport Options

The Coke Zero Bike scheme, while popular, is not best served by having bays placed in positions that do not fully cater to user needs. It will be important that e-scooters and e-bikes, if introduced to the city, are optimally placed and contribute to a more diverse range of micro-mobility. Cork City Council should additionally ensure that there is a sufficient number of micro-mobility vehicles on the ground to serve the city's needs and that there is flexibility to users by avoiding a 'route-based' scheme.

Research shows that 60% of shared micro-mobility users (e-scooters and e-bikes) drive cars less often, whilst 34% of shared e-scooter users report that they would have otherwise used a car. The flexibility afforded by the diversity of transport options accommodates varying user preferences, and thereby increases the adoption of micro-mobility options for short trips in place of car use. A diverse range of transport options reduces the dependency on cars by providing reliable alternatives for short trips, while a higher fleet density increases rider uptake, by providing greater visibility and flexibility to the public.

Parking infrastructure for orderly streets

The e-scooter industry has advanced technological solutions to be able to block e-scooter operations from designated areas within cities and to contribute to orderly streets. Cork City Council should work with local communities to identify areas that should be designated as no-parking zones, to protect pedestrianised areas from clutter and reduce the likelihood of vandalism. Orderly parking and tidy streets ensure a smooth transition to

the new mobility options. Limiting disruption to everyday life for the wider public prevents a backlash to the scheme.

Similar-sized cities (e.g. Grenoble in France) offer a mixture of mandatory parking zones in high density areas (e.g. City Centre, Shandon and South Parish), and a free-floating parking solution in low density areas (e.g. the City Hinterland). This model provides the rider more flexibility to use the micro-mobility option to ride home, unrestricted by the need to park the vehicle in a mandatory parking bay located far away from their home.

Cork City Council should collaborate with micro-mobility operators to identify what public space is available for e-scooter parking and may consider repurposing car parking spaces and existing street furniture to provide room for micro-mobility parking. Virtual parking bays are commonly adopted by cities because they are cost-efficient, easy to move and can be adapted for different usage.

A lock-to parking scheme is an expensive parking option (installation for each Sheffield stand often costing in the region of €500-1,000) which requires vehicles to be locked to parking infrastructure. Its appropriateness should be carefully considered as it can result in vehicles being locked to inappropriate infrastructure (e.g. traffic lights, railings on narrow pavements), create resentment and reduce the flexibility of the scheme. These are concerns that have been raised by NCBI and Irish Wheelchair Association in their role sitting on the TIER Ireland Safety Board.

Driving competitive micro-mobility environment which drives innovation

Cork City Council has highlighted in the plan the need for innovation and we note the potential for innovation and design has solved issues such as anti-social behaviour and safety (speed control through GPS zones). To create a competitive environment, we recommend that Cork City Council works with two preferred micro-mobility operators, whose approach and culture align with Cork's key objectives.

A limited number of operators with larger fleets better captures demand and has a sufficient utilisation rate to ensure sustainability. Innovation and efficiency are driven by competition, as operators work harder to provide as much value as possible to their riders and the local community.

Designing the Procurement Process

We have participated in 100+ city procurement processes. The best processes focus on outcomes (such as improving service access, safe parking, encouraging good user behaviour) to ensure essential requirements can be fulfilled by e-scooter operators.

Critically, the tender process should force operators to demonstrate how they will complement and advance local sustainable transport planning, policy and broader strategy ambitions. For example, operators could be asked to demonstrate how they will make their mobility service accessible to everyone, supporting Ireland's national Smarter Travel Policy goal of improving accessibility to transport.

Cork City Council should consider what the most important outcomes are from a micro-mobility scheme and accordingly reflect that prioritisation via the appropriate percentage weighting in the tender's evaluation criteria. A procurement process to ensure a prospective operator can meet the objectives and needs that are most important to Cork (such as safety, sustainability or pricing) gives greater control over the micro-mobility network to Cork City Council, and increases operator accountability. Given the varying claims of different operators (e.g. around parking accuracy and geo-fence performance) it

is critically important to test the hardware and software performance prior to selecting operators.

Protecting the Vulnerable

Engaging with representatives and champions of vulnerable population groups is essential to understand the specific needs of those populations and should lead to safety innovations such as audible alerts, specially designed ID plates and reflectors, that increase the visibility of e-mobility solutions for partially sighted or otherwise vulnerable people.

Micro-mobility transport options must be designed to cater for all sections of society, including vulnerable populations. Cork City Council should work with operators to bring attention to the common ways in which e-scooter services may cause issues for vulnerable populations. For example, this can be achieved by educating users on good parking practices through in-app messaging and marketing campaigns.

3. BENEFITS BEYOND MICRO E-MOBILITY FOR CORK CITY

Introduction

Micro E-Mobility is often viewed through the lens of modal shift and sustainable transport, but there are other potential benefits that should be incorporated into planning activities.

Promote Operator Collaboration

High competition amongst micro-mobility operators has yielded considerable innovation and initiatives designed to add as much value as possible in the cities they operate. Cork City Council should leverage these innovations and initiatives to maximise the value of the micro-mobility schemes. One suggested innovation is that Cork City Council would encourage operators to work with businesses to subsidise e-scooter use for employees.

Integrate with existing infrastructure

Cork City Council has invested significantly in cycle infrastructure and continues to do so with the Lee to See Greenway Scheme. There is an opportunity to promote these lanes to tourists and commuters in a flexible manner with less infrastructure intervention required. E-scooters and e-bikes will support active travel in a city that is half flat/half hills benefiting cyclists/those who are less fit, increasing adoption and promoting active travel options across a wider area.

Building parking infrastructure together with mobility operators provides safe and attractive parking that can enhance pedestrian and micro-mobility areas. The “parklet” model provides opportunities to combine greenspace and leisure areas with micro-mobility parking. Parklets are a popular way to reshape problematic spaces into places that people want to occupy because they can be implemented rapidly and reversibly.

Stimulate the High Street

The flexible nature of micro-mobility transport options can be leveraged to stimulate growth on the high-street. For example, TIER deploys user-battery swapping stations (called PowerBoxes) that enable users to benefit from free rides when they swap depleted batteries for full ones at any PowerBox, typically hosted in local shops and cafes (at no cost to the owner). The PowerBox initiative proves to be a much-needed boost for the high street, with data from our pilot in Finland showing that PowerBox hosts welcomed an average extra income of EUR18,000 per year from the additional customer footfall.

Public Transport Integration

Operators who are experienced in integrating with other transport providers allow for a smooth incorporation of e-scooters into the transport landscape. Mobility as a Service (MaaS) is the integration of all transport modes that a traveller may use during their journey onto one platform that is accessible on demand. App-integration allows users to pay for their journey all in one place. In Berlin, for example, TIER has integrated with the transport app Jelbi, which allows users to buy tickets for buses and trains and complete

their journey by e-scooter. We have 40+ such integrations, from public transport providers across Europe to the likes of Google Maps and Citymapper.

Set Standards to avoid a “race to the bottom”

Compliance and harmonisation with the Council's goals for a micro-mobility service are enhanced when minimum requirements for operator competency are enforced from the outset. It is important to set clear standards at the outset as to what is an acceptable operator to meet the needs of the Development Plan. This will avoid a “race to the bottom” cost-cutting measures and ensure operators can meet the needs of the municipality.

Comprehensive data-sharing for transparency and mutual learning

Cork City Council can capitalise on new technology like “Internet of Things” (IoT)-enabled vehicles. IoT turns a vehicle into a data-generating device as it sends information on its use, location, status (active/inactive, maintenance history, battery level) and more, all in real-time.

The successful implementation of the Development Plan will depend on having data that enables understanding and continuous improvement. For example, data on usage rates per scooter per day and by location and aggregate data like heat maps of ride start and end points to see areas of high usage to support the impact of service on local objectives. Added value data includes demand prediction mapping and incident data to inform infrastructure improvements and increase active travel.

4. IMPLEMENTING THE PLAN WITH OPERATORS

We have identified below the key features that Cork City Council should look for in a micro-mobility operator when deciding on the suitability of the operator to help the region achieve its transport and sustainability ambitions.

Financial sustainability	<p>A number of operators in the micro-mobility industry are not financially sustainable. If an event occurs which dramatically reduces ridership (such as prolonged lockdowns), such operators may face financial difficulties which impact their ability to continue operating and repairing their fleet.</p>
Environmental sustainability	<p>The Cork Development Plan 2022-2028 highlights the importance of supporting and facilitating a sustainable transport system. To achieve this, Cork City Council should work with the operators that put sustainability at the heart of their decision-making - ensuring the operators do not contribute to the problem that Cork is trying to solve.</p>
Prioritising safety	<p>Cork City Council should work with the operators that have designed their vehicles to ensure high safety standards. In order to ensure the safety of communities and riders, all e-scooters which are deployed in Cork should have demonstrably best-in-class safety features.</p>
High quality local employment	<p>In Paris' Charter of Good Practice and the Linz Code of Conduct, the inclusion of protections for employment and operational partners was prioritised to ensure that the business practices were sustainable and contributed to the economic growth of the local economy. By engaging with operators that uphold fair wage employment practices, the Council can attract companies that provide local employment opportunities and prioritise investing in the local community.</p>