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Public transport as a "common pool resource" – sustainable configuration options in the case of Glasgow

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Abstract

With the combination of a growing population, expanding globalisation and increasing economic activity, the world is facing numerous challenges including climate change, social inequality and overuse of resources and space. One of the sectors that creates problems and therefore holds the opportunity for improvement is the mobility sector. Private vehicle-based transport causes the overuse of (road) space, increased emission of greenhouse gases, congestion, and health issues. However, mobility is essential for access to health care, education, employment, social interaction, and leisure time activities, which are valuable assets requiring equal access opportunities unattainable with purely car-based transportation. Subsequently, public transport has an important role to play and could therefore be viewed as a public good, or a "Common Pool Resource (CPR)" (Elinor Ostrom) instead of a service. Users cannot be excluded from the CPR, and its overuse leads to a constraint of its functioning. Therefore, the questions are raised of who should be providing this public good, and how? In Glasgow, public transport is provided by private companies in a deregulated market environment. Citizens and experts criticise the public transport in the city as it is expensive and not accessible for everyone; neither does it connect every neighbourhood to health care, employment, and education. Glasgow has high rates of poverty, inequality, and emissions from extensive car use. The new Scottish Transport Bill provides powers to local Councils for reregulating their public transport or putting it back into public ownership. Elinor Ostrom suggests letting communities own and organise a CPR. Re-regulation, public ownership, and community ownership, as well as mixed governance forms will be examined in this paper as solutions to Glasgow's public transport issues. The combination of scientific literature and field research in Glasgow will serve as a basis for that discussion.

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Statement of Authorship

I hereby certify that this thesis has been composed by me and is based on my own work, unless stated otherwise. No other person's work has been used without due acknowledgement in this thesis. All references and verbatim extracts have been quoted, and all sources of information, including graphs and data sets, have been specifically acknowledged.

Date:

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(6.01.2020

Index of Abbreviations

- app. appendix
- BSOG Bus Service Operators Grant
- CPR common pool resource
- CT community transport
- CTA Community Transport Association
- DfT Department for Transport
- ECT Ealing Community Transport
- e.g. for example
- fig. figure
- GB Great Britain
- GCC Glasgow City Council
- GCPH Glasgow Centre for Population Health
- GCT Glasgow Community Transport
- GGM Get Glasgow Moving
- GHG greenhouse gases
- GMCA Greater Manchester Combined Authority
- I interviewee
- ibid. ibidem
- ICT Information and Communication Technology
- i.e. id est
- LEZ Low Emission Zone
- LTA Local Transport Authority
- MP Member of Parliament
- MSP Member of Scottish Parliament
- PT public transport
- SPT Strathclyde Partnership for Transport
- TfGM Transport for Greater Manchester
- UK United Kingdom
- WPL workplace parking levy

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1 Introduction

In Europe, 72 % of the people live in cities, which contribute to the majority of greenhouse gas (GHG) emissions, and which face challenges resulting from climate change, social inequality, changing lifestyles, and overconsumption of resources and space (United Nations 2007; Grimm et al. 2008; Anand and Seetharam 2011; Nabielek et al. 2016). On a global scale, cities only cover approximately 3 % of the land surface but contribute to approximately 80 % of the GHG emissions and consume 75 % of the energy resources (United Nations 2007). In Scotland, some of the most disadvantaged communities can be found in cities (Transport Scotland 2020a). Despite space becoming scarce, there is an increased need for transportation. The way that cities are designed, as well as the way that cities are managed contribute to these challenges (Anand and Seetharam 2011). Transport, especially road transport, which is also concentrated in cities, is the largest contributor to GHG emissions, and is also one of the sectors where emissions decrease slower than in other sectors. In the UK, 28 % of the domestic GHG emissions come from transport with 55 % of those transport emissions coming from cars and taxis (GB DfT 2020). This development has been fostered by increasing levels of car ownership and the rise of individual, private car-based mobility. Apart from environmental pollution, the consequences can be congestion, economic disadvantages, and social inequality. In recent decades, cities have been shaped to cater for private vehicle use, which further enhances car use (Pucher and Buehler 2008). In view of the abovementioned challenges, public transport (PT) can provide an alternative to cars. "Public transport has a wider role than simply providing accessibility to destinations and this includes the inherent health and environmental benefits of public, as opposed to private, transport as well es providing inclusion in society and life opportunities" (Mulley and Nelson 2012: 1817). That applies to European cities in general, as well as to cities in the United Kingdom, and Scotland, such as Glasgow, which will be the focus of this paper. In the UK, Glasgow is known for high levels of congestion, air pollution, and social deprivation (Leleux and Webster 2018; Transport Scotland 2020a). At the same time, its population and levels of car ownership are increasing (KPMG 2017). This research deals with PT, especially buses, in Glasgow, and how delivering PT services differently, and possibly better, could help the city tackling some of its main problems. Buses are the most popular mode of PT in Great Britain (Taylor and Sloman 2016).

"However, bus users in Britain inhabit different worlds, depending on where they live. In the first world, Londoners experience frequent services on a network and timetable designed by a transport authority that has the powers and funds to make the system work as a whole. In the second world, other big cities experience some good bus services where routes are commercially viable, but serious deficiencies elsewhere. Rural bus users live in a third world with a skeletal service or, in some places, no service at all" (ibid.: 3).

Bus services in England, Wales and Scotland are declining, and the network coverage has shrunk to a level it last had in 1989 (Wilde et al. 2018). Councils have 45 % less resources to spend on buses, and more than 3,000 routes have been cut since 2010 (BBC 2018). Glasgow has seen a 10 % decrease in passenger numbers on buses, and the bus industry in the city could be defunct by the end of 2029 if decline continues at the current rate (GCC 2018). On the other hand, trams, subways and especially trains are difficult to extend further and have been rather static in the past decades (Glover 2012). Bus networks can quite easily be extended, and buses therefore provide a major opportunity for increasing the share of PT in the modal split. As bus networks are also the most flexible among the PT modes, they allow for greater innovation in terms of management, organisation, and ownership (ibid.).

Glover (2011) proposes to view public transport as a resource rather than a service, applying Elinor Ostrom's theories about common pool resources (CPRs). CPRs are resources which use cannot be limited, and which are subject to exploitation. CPR problems require some form of governance to manage their use sustainably. This management can be private ownership, governmental ownership, or community ownership, the latter being uncommon in the economic world (Ostrom 1990). As Glover (2017) states: "economic, technological, city and transport planning and human behaviour solutions are often hampered by ineffective implementation. So attention is now turning to institutional, governmental and political barriers" (foreword). Bus services in the UK have been privately owned and run since the 1980s. Several sources (e.g. Brandt and Schulten 2007) state that this form of governance has created more problems than it solved, and constraints PT from bringing the advantages that it potentially could. In particular, PT in Glasgow is said to be inter alia expensive, unreliable, inaccessible, unsafe, dirty, inconvenient, and slow (see chapter 6). Docherty (2020) states that Glasgow's transport system is underdeveloped compared to systems of other European cities, because it is missing good governance and policy integration. Improving that is as if not more important than improving the physical infrastructure (ibid.). The Scottish government agreed on new transport regulations, manifested in the Scottish Transport Bill 2019. For the first time since deregulation, Councils were allowed to implement franchising schemes or run their own bus services, thus having the ability to exercise more power over PT planning and delivery. The effect of this Bill means that additional options of managing CPRs, apart from privatisation, can be discussed, including state governance (franchising and public ownership), community ownership, and mixed governance forms, such as partnerships. In the beginning of 2020, the Scottish Government published the second National Transport Strategy, which presents a visions of Scotland's transport system: "a sustainable, inclusive, safe and accessible transport system,

helping deliver a healthier, fairer and more prosperous Scotland for communities, businesses and visitors" (p.2). It will be argued in this master's thesis that a shift in governance could help tackling Glasgow's transport problems, as well as the consequential social and environmental issues.

Cities are facing and producing numerous problems. Thus, finding solutions to become more sustainable is often a focal point of interest. In addition, the personnel and financial resources that can build this research are usually located in cities (Grimm et al. 2008). Even though the bus crisis is a national one (BBC 2018), by analysing how and by whom Glasgow's PT may be transformed in a way that would contribute to a fair and healthy city, the findings and ideas can be applied to other cities. The focus is on the confrontation of citizens' perspectives with suggestions from stakeholders in politics, transport planning, campaigning, and bus operations, coupled with uncertainties that were expressed regarding implementing solutions. Concomitantly, the relationship between stakeholders will be analysed. This thesis may also contribute to the work of several authors who discuss infrastructure or PT, respectively, as a CPR. To date, there has not been a detailed study pertaining to how PT in Glasgow could be transformed. This paper will try to close this gap by bringing different data, opinions, perspectives, and theories together.

In some parts of this paper the situation in Manchester, England, will be addressed, which is comparable to Glasgow in several aspects. Transport laws in England have recently been adjusted as well, and Manchester has already decided to use those new powers and began to investigate the implementation of a franchising scheme. Transport related grassroot campaigns from the two cities are connected.

This paper begins by defining the problem explicitly, before shortly summarising the existence of scientific research and knowledge that has already been published about PT and CPRs. Following this, chapter 4 characterises PT in the UK, and shortly describes the development of PT governance in GB from industrialisation to present. This chapter also includes a summary of the relevance of PT regarding sustainability. Chapter 5 presents utilised methodology. In this chapter, CPRs will be defined in more detail, and theories regarding PT as a CPR will be presented. The methods for conducting field research in Glasgow will then be articulated. The next chapter moves on to the results that were obtained in Glasgow, complemented by facts from reports and scientific literature. Chapter 7 will contain the discussion component of the paper, where scientific literature, reports, and results from the qualitative research will be evaluated. Solutions will then be proposed and weighed against one another, complemented with stakeholders' perception of them, and how this can either hinder or foster transformation. The paper will finish with a conclusion and an outlook.

2 Problem Statement

As expressed in this paper, there are numerous PT issues in Glasgow, especially relating to buses. These issues are intertwined with social inequality, poverty, and high levels of air pollution with congestion being both a cause and effect of declining bus patronage. The COVID-19 pandemic led to further cuts of bus services (Goodwin 2020). Recent attempts to address this problem have included discussing a workplace parking levy (WPL), implementing a low emission zone (LEZ) in the city centre, bus priority measures, and a bus partnership. Additionally, to address the transport and climate change situation, new laws have passed through parliament in 2019, giving Councils the powers to re-regulate PT by either implementing franchising, taking buses back into public ownership, or having quality bus partnerships. The Transport (Scotland) Act 2019 coupled with many voices in the city of Glasgow indicate that deregulation resulting in the market and private companies controlling PT may have failed to provide sustainable travel options. Solving Glasgow's PT issues would have a positive effect on air pollution, congestion, poverty and inequality, access to necessary services and health care, and, as research indicates, the economy as well, hence help the city to become more sustainable, and provide better living conditions for its inhabitants. The first hypothesis in this paper is that PT is rather a resource than a service, and that it could be improved by increasing community involvement in planning and decision-making, because mobility is essential for accessing employment and education, health- and childcare, supermarkets, and social engagement. The second hypothesis is that in order to achieve community empowerment, it is necessary for extending governmental control first, and return responsibility for PT management to either Glasgow City Council (GCC) or the regional transport authority Strathclyde Partnership for Transport (SPT). What this paper seeks to reveal is which form and level of governance would be best suited to manage PT in Glasgow, and which challenges may appear before the initiation of a transformation. Regardless of what the literature suggests, it is also important to give consideration to how stakeholders in Glasgow experience the situation, as well as how they perceive the chances and problems of implementing certain solutions. One particular challenge could reside in the differences between stakeholders' perspectives, wishes, and concerns, because a system change would require cooperation amongst agents. The formation of this paper has been enabled and supported by Get Glasgow Moving (GGM), a Glaswegian grassroot campaign that demands better PT by re-regulating it and eventually taking it back into public ownership. It will be presented in more detail in chapter 4. This paper shall support the work of the campaign by compiling evidence from Glasgow, expert opinions, experiences of local people, scientific literature, and examples from other cities, before discussing obvious as well as transformative configuration options and the challenges that may come with them.

3 Current knowledge

There is a plethora of undisputed research regarding the influences of PT on cities and their inhabitants (Glover 2017) which will be discussed in chapter 4. Additionally, there is research on the effects of privatisation on PT and on the extent to which the EU and its regulations influenced this development (e.g. Brandt and Schulten 2007; Morton 2011). Moreover, there are several publications which evaluate and/or compare different forms of organisation and operation of PT (e.g. Currie 2016; White 2018), which will be discussed in chapter 7.2. Other knowledge results from examining different areas of the UK, which offer examples of franchising, public ownership, and transformation processes (e.g. Taylor and Sloman 2016; Urban Transport Group 2019).

The idea of community transport is far from new, and there are numerous examples of community-based transport solutions (e.g. Mulley and Nelson 2012), whereas communityowned PT is not popular in the academic world. It has been proposed that transport could be handled like a "Common Pool Resource", however, there are few ideas or examples provided in literature of how this could be implemented in practice. Moreover, the concept of seeing public transport as a CPR and addressing PT issues by applying solutions that were designed to solve the "tragedy of the commons" is currently unpopular in the academic world with only a very few contributions, most of which are from Leigh Glover (e.g. 2017). Nikolaeva et al. (2018) express their surprise that the connection between commons and mobility is almost absent in the literature. The mostly discussed common resource in mobility literature is the road (ibid.). There are examples of communities that have successfully engaged in managing a CPR by communicating their needs, establishing rules and sharing costs for maintenance and implementation, but these examples usually refer to natural ecosystems or natural resources (Ostrom 1990). Hence, the majority of the research and work on CPRs has focussed on natural resource systems and the governance of socio-ecological systems, but few scholars have investigated the implications of taking socio-technological systems as CPRs (Künneke and Finger 2009). The most common application of CPR theory, apart from natural resources, is the Internet (Glover 2011). This will be discussed in chapter 5.1. Furthermore, research exists about transport in Glasgow, as well as about transformation in Glasgow, including literature about bikeability and walkability, and smart cities (e.g. Leleux and Webster 2018). A recently published book called "Transforming Glasgow" features a chapter pertaining to governance in Glasgow's transport sector (Docherty 2020). Docherty discusses the history of transport planning in Glasgow and identifies problems to be solved to improve future sustainability, however, Docherty does not specify the process that could solve infrastructure and policy fragmentation. The book also includes a chapter about community activism in Glasgow (Rolfe et al. 2020), which does not address activism in the transport sector but focusses on housing and neighbourhoods. It remains relevant because it discusses opportunities and limitations of community activism, as well as the role that the relationship among stakeholders plays. Lastly, there is plenty of literature about community involvement, participation, and empowerment (e.g. Rolfe 2017), including studies about participatory processes in PT planning (e.g. Sagaris 2018). Discussions include different levels of citizen involvement, power imbalances, conditions and requirements that foster community activism, and the division of responsibility. This information will be included in chapter 7. Although there is plenty of literature relating to community-based activism and engagement, it will not be discussed extensively, because the results in Glasgow primarily pointed towards the focus on re-regulation as a measure to *inter alia* enhance community involvement in planning.

4 Public Transport in the UK

Glover (2011) defines public transport as "transport services made available to the general public" (p.2), regardless of who provides them. PT on land usually consists of buses, trams, trains, and subways (Glover 2012). A local bus service as defined by the Transport Act 1985 is "a bus service using one or several public service vehicles to carry passengers at separate fares where the distance between stopping places or overall journey length is less than 15 miles (24 kms)" (Competition Commission 2011).

Bus use in England and Scotland is constantly declining (KPMG 2017). One of the few exceptions is London, where patronage is growing (GB DfT 2017). In Scotland, the modal split for travel to work shows that the majority of people are using the car (68 %). 12 % walk, 10 % use public transport (buses and trams), 6 % the train and 3 % cycle to work (Transport Scotland 2020a). The bus is the most important PT mode because it accounts for more than three quarters of trips made on PT. However, bus use has fallen by roughly 20 % between 2008 and 2018 (Transport Scotland 2020a). Moreover, the period between 2011 and 2016 saw a reduction of 27 million bus journeys (KPMG 2017). One of the main reasons is the increase in congestion resulting in longer journey times (Transport Scotland 2020a). Poor road (Transport conditions also cause disruptions, making journey times unreliable Scotland 2020a). Glasgow, for example, has halved its funding for road maintenance (KPMG 2017). "Whatever the causes of the decline in bus use, reducing passenger numbers risks driving down revenues and making some services unviable, resulting in their cancellations and, in some cases, communities becoming isolated" (Transport Scotland 2020a: 25). To still make profits, fares must increase, reducing passenger numbers even further (ibid.). Car ownership levels are rising and according to KPMG (2017) that has led to a 2.7 % reduction in bus patronage between 2011 and 2016, whilst fuel prices have

reduced in general. Online services, e-commerce and home delivery have further reduced trips made by bus (ibid.), and altered traditional working patterns impose new demands on transport systems (Transport Scotland 2020a).

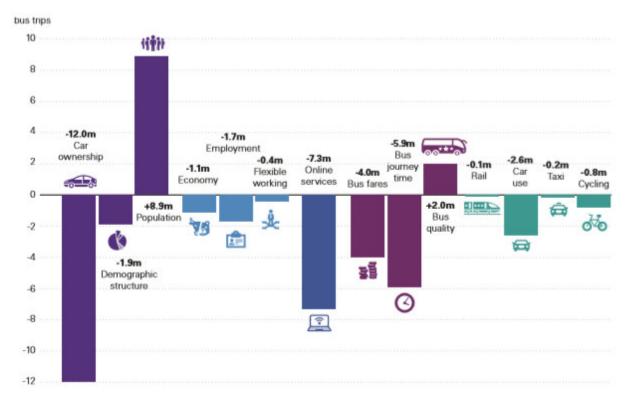
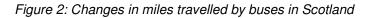
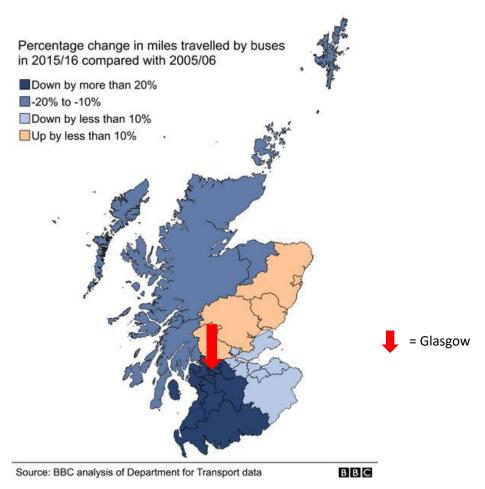


Figure 1: Drivers of change in bus patronage

(KPMG 2017: 4)

Public funding for the PT industry is provided by various means, primarily concessionary fares (concessionary passengers account for roughly 36 % of trips), the Bus Service Operators Grant (BSOG), supported services, local funding initiatives, and funding for transport-related initiatives, such as bus priority measures or general road improvement schemes (Competition Commission 2011). The BSOG "is paid to all eligible operators of registered local bus services and offsets a proportion of the duty paid on fuel consumed (in Scotland BSOG is paid according to the distance operated)" (ibid.: 2). Supported services are services that LTAs pay operators to provide because they are not commercially viable. These services account for roughly 22 % of bus mileage (ibid.). Commercial vehicle miles decreased less than supported vehicle miles (KPMG 2017).





(Wilde et al. 2018)

4.1 History of Public Transport in the UK

Motorised PT first emerged in the very beginnings of the 20th century, growing fast in the 1920s. Transport was provided by small and larger private operators, together with local authorities and other transport companies in the UK. The number of operators increased from 331 in 1916 to 3,962 in 1930 with some operators developing agreements to define territorial boundaries. Local authorities often protected their own operations by refusing licences to competitors (Competition Commission 2011). The result was a chaotic, fragmented system (Glover 2012) with safety issues (Competition Commission 2011). The Road Traffic Act in 1930 therefore defined regulations for vehicles, employees, and route licensing (ibid.). Between the world wars the private car gained popularity (Glover 2013) and cities started expanding with suburbanisation and private car use reinforcing one another (Pucher and Buehler 2008). Some British bus companies were nationalised after the Second World War. In 1968, regional authorities (Passenger Transport Authorities) were created following another transport act,

which subsidised bus services to keep the fares down (Competition Commission 2011; Taylor and Sloman 2016).

Prior to deregulation in 1986 private operators had to request a route service license which determined fares, timetables and routes to protect existing operators (Currie 2016). Traffic Commissioners controlled local bus service operations, which were mainly in public ownership since the 1968 Act (Competition Commission 2011). The coordination of bus services was encouraged in terms of operating times, fares, and tickets (White 2018). During the 1960s and 1970s there was a massive loss of bus patronage due to the rise of the private car (Glover 2013). The ongoing losses in the industry and the financial losses of local authorities resulted in the enactment of the Transport Act 1985 that de-nationalised the bus industry and allowed for a deregulation of services (Godfrey and Taylor 2018). Only in London a system of competitive tendering was introduced instead of full privatisation and deregulation (Competition Commission 2011). Opening up PT to the market and competition was rationalised with the aim to decrease operating costs, as well as increase efficiency and revenues (Brandt and Schulten 2007; Glover 2012; Currie 2016). As a consequence, previously publicly owned bus companies were sold and privatised, and governments were prevented from continuing to run their own services (Currie 2016). Competition, as opposed to cooperation, especially 'on road' competition, was encouraged and stimulated, and cooperation amongst operators was subsequently made almost impossible, with operators aligning their timetables or fares being deemed illegal collusion (White 2018). After 1986, 80 % of the network were operated on a commercial basis, which increased in the following years because local authorities reduced financial support. Deregulation also saw the abolishment of metropolitan counties that used to be capable of comprehensive planning in large urban areas (ibid.). The responsibility for PT planning was returned to private operators. When in the beginnings of deregulation there were many small companies, they later merged into a few big ones. In 2011 there were 1,245 bus operators, so less than in 1930 (Competition Commission 2011). Nowadays, operators can introduce, modify or cancel a service at their own will (Godfrey and Taylor 2018), setting routes, timetables, and fares (White 2018). Routes must be registered at the Traffic Commissioner with a document that has to be handed in 70 days prior to starting a route. Operators are allowed to compete on the exact same routes, with the same frequencies, and can even use the exact same service numbers (interviewee 3).

Prior to deregulation, the Strathclyde authority comprehensively planned and shaped the current regional network in the Glasgow area. It also planned on re-establishing the tram system but that was stopped by private bus companies in the 1990s (Docherty 2020). After deregulation, municipal Strathclyde buses, who previously had a monopoly within the city, was

involved in heavy competition. In 1996, First Bus bought Strathclyde buses. First Glasgow is still the major operator in the Glasgow area, serving about 80 routes (interviewee 3).

Since deregulation, the government "identifies any gaps in services and fills these through contracted services" (Currie 2016: 9) where routes are not profitable enough for private operators. Those services are usually meeting a social need (ibid.). In the Glasgow area, this is the responsibility of SPT. They can fill spatial or temporal gaps. Those contracted services have specified routes, timetables, and fares, but the operator can retain profits which exceed the forecast level, which shall improve marketing and service quality efforts (White 2018).

The general outcomes of the Transport Act in 1985 were a reduction of unit costs, especially because staff and wages were reduced, and peak services limited. Partly because subsidies fell, fares increased. Bus kilometres increased, too, but patronage decreased further (White 2018). According to Taylor and Sloman (2016), "bus operators found they could make more money by raising fares and trimming back to core services" (p. 5). This will be discussed more deeply in chapter 7.2. In 2006 (earlier in Scotland) concessionary tickets which allow free travel for passengers older than 60 were introduced and increased patronage. The British system is uncommon in Europa and other western economies, so it is often used as *the* example for deregulation and privatisation (Currie 2016).

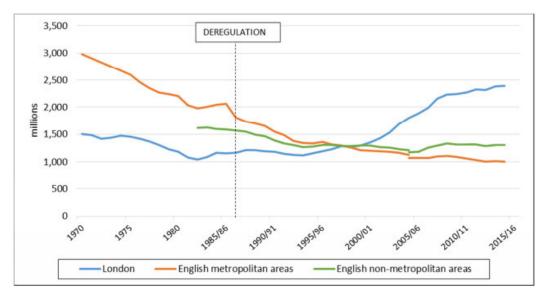


Figure 3: Annual passenger journeys on local bus services in England before and after deregulation

(Taylor and Sloman 2016: 4)

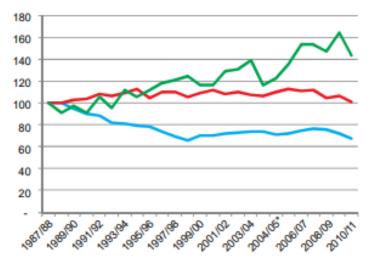


Figure 4: Passenger journeys (blue), commercial vehicle kilometres (red) and tendered vehicle kilometres (green) in Scotland

(Competition Commission 2011: 2-6)

4.2 Glasgow

Glasgow is a post-industrial city (GCPH 2010); the biggest city in Scotland and the third biggest city in the UK with over 625,000 inhabitants. The population density is 3,618 people per square kilometre. Roughly 1.7 million people live in the Greater Glasgow metropolitan area (Office for National Statistics 2020). Glasgow is located in the South-West of the country. The last election in 2017 brought a minority administration for the Scottish National Party (SNP) with 39 out of 85 seats. Labour won only 31 seats, losing the administration for the first time since the 1980s; the Scottish Conservative party won 8 seats; and the Scottish Greens won 7 seats (BBC 2017). The unemployment rate in Glasgow is higher than the average rate of Scotland, 5.9 % compared to 4.0 % (Transport Scotland 2020a) with almost 50 % of households living in poverty (Leleux and Webster 2018). Moreover, Glasgow faces higher than average levels of mortality and poor health compared to the rest of Scotland and England, which cannot exclusively be explained by levels of deprivation (GCPH 2010). The population in Scotland is increasing with growing concentrates in larger cities such as Glasgow, which has seen an increase in population of 2.7 % (KPMG 2017). PT has the potential to play a vital role in the city of Glasgow as car ownership is comparably low (49 %), as well as the share of cycling in the modal split, which is 1.6 % (ibid.). Glasgow has the most extensive motorway network in the UK (Docherty 2020), and the railway network inside the city boarders is one of the densest in the UK outside of London. Eighteen percent of the population use the bus every day, but the number is decreasing. In 2008 the rate was at 21.7 %. In comparison to the other local authority areas in Scotland, Glasgow faces the third greatest decline in bus use (KPMG 2017). The buses in Glasgow are mainly run by private operators. First Glasgow Ltd. is operating most of the routes with McGill's and Stagecoach being the second biggest operators, followed by West

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Coast Motors (interviewee 3). The subway is operated by SPT, the regional transport authority. SPT is furthermore responsible for putting out socially necessary routes for tendering and operates MyBus, a demand responsive door-to-door transport that can be booked for GP appointments, shopping, club meetings, or visiting friends (interviewee 2).

Glasgow is the third most congested city in the UK. During 2017, each driver spent on average 99 hours in congestion, which costs each driver £736 per year. Great Western Road was the ninth most congested travel corridor in a UK city (outside of London) (Transport Scotland 2020a). Travel is predicted to increase even further, leading to greater congestion. Bus service miles, as explained in the introduction of chapter 4, have fallen by 9 % in the South West and Strathclyde region, whereas services in the South-East have slightly increased. The Strathclyde region is moreover one of two regions were customer satisfaction with bus travel has decreased. Rail services, wherein patronage has increased by 33 % in Glasgow, did not see the decrease in service levels and increase in fares that bus services did, and therefore provide an alternative to bus use. The introduction of private car and taxi hires brought further competition to buses, both in Edinburgh and Glasgow. Additionally, Glasgow has affordable parking spaces available throughout the city, encouraging and increasing commuter parking (ibid.).

Edinburgh, the capital city located in the South-East of Scotland, has one of the few remaining publicly owned PT systems which has never been deregulated. Edinburgh and Glasgow are the biggest cities in Scotland and evolved in close proximity to each other. The population size is 524,930 (Office for National Statistics 2020) and is estimated to grow more than Glasgow's at a rate of up to 21 % (KPMG 2017). The Council controls and regulates buses through an arm's length company called Lothian buses, of which they own 90 % of the shareholding. The remaining percentage is owned by Mid Lothian, East Lothian, and West Lothian Council. Private operators can enter the bus market in Edinburgh, but only operate on single routes and do not have a monopoly like they do on most routes in Glasgow. Lothian buses remains the biggest operator and competitor (interviewee 3). Additionally, a tram system is serving Edinburgh since 2014 (KPMG 2017). Contrary to Glasgow, Edinburgh implemented a Controlled Parking Zone in the inner area of the city which discourages commuter parking. The bus use rate is the highest in the country with 27 % of the population using the bus every day. This number as well as bus service miles is increasing (KPMG 2017). In comparison to Glasgow, Edinburgh is denser and more compact than its neighbour, and has less inner-city railway connections (Docherty 2020). The price for a single ticket on Lothian buses is £1.80, whereas in Glasgow a single journey can cost up to £2.50. For Glasgow's subway, a single ticket costs £1.75. Edinburgh is presented here because it is often brought up as a best practice example for PT.

4.3 Manchester

Manchester is a city in the North of England and harbours 552,858 people. The population density is 4,766 people per square kilometre. The metropolitan area of Greater Manchester includes roughly 2.8 million people (Office for National Statistics 2020). The PT system consists of buses, a few trams and inner-city railway connections (Manchester City Council 2020). There are 16 bus operators running services in the Greater Manchester area (TfGM 2020) with the main operators being Stagecoach and First.

Manchester is comparable to Glasgow because of its size; its industrial history and background; and obviously because of the way that buses are operated. The bus commute mode share is similar, although slightly higher in Manchester at 23 % (Urban Transport Group 2019). Manchester also has to deal with a growing population and severe congestion (TfGM 2017). Moreover, the cities are comparable because they have similar socio-economic profiles and are both almost equally deprived. Together with Liverpool, Manchester and Glasgow have the lowest life expectancies in the UK (GCPH 2010). However, a significant difference between the cities is the political situation. While Glasgow is governed by the SNP, Manchester is governed by the Labour party, a predominately left-wing government, that proposes nationalisation of industries and public services on a national level (interviewee 5).

4.4 Get Glasgow Moving

GGM is a grassroot campaign of citizens that aims to improve the PT in the city by re-regulating it and eventually bringing it back into public ownership. The campaign was founded by three women in 2016, who had a background of campaigning for PT ("Think Outside the Circle", a campaign for extending the subway, "F*** First Buses", which demanded public ownership, and "Bring Back British Rail", a national campaign for public ownership of railways). They decided to bring those aims together under the umbrella of demanding an integrated system. The idea was supported by Unite, who demanded public ownership of buses in 2016 ("Haud the Bus", a campaign to save local bus services), and the founder of a campaign called "Rise for Fair Fares", that demanded lower fares on First buses and re-regulation. After launching and handing in their first petition, organising several hustings and protests at the Scottish parliament in Edinburgh as well as at GCC, and replying to consultations, GGM implemented a constitution in January 2019 so that they could form a committee (interviewee 6). The 2020 committee consists of ten members. The chair of the campaign group is one of the founders, Ellie Harrison. The official objectives of GGM are to "help expand Greater Glasgow's economy, address inequality and social isolation, reduce toxic levels of air pollution and tackle climate change, by campaigning for a world-class, fully-integrated & accessible, publicly-owned & accountable, public transport network for everyone in our region". The group demands franchising or a publicly-owned operator, a regional transport authority that unites transport and land use planning, better integration of existing modes, the extension of the subway, the re-opening of unused railway stations and lines, the establishment of a tram network, a smart card for all modes with a daily price cap, affordable fares and eventually free to use PT, and measures to extend active travel modes and their integration with PT. In 2019, the campaign received funding from the Foundation for Integrated Transport. To date, their petition "Get Glasgow Moving - world-class transport for Glasgow" received more than 11,000 signatures, and the campaign has multiple local and national affiliates, including "Glasgow Eco Trust", "Disabled People Against Cuts", "Common Weal", or "We Own It" (GGM 2020). The second petition, "Time to Take Back our Buses", was launched in June 2019, and has received over 7,000 signatures to date. It was presented to GCC leader Susan Aitkin in January 2020 (ibid.).

4.5 The Role of Public Transport

PT is widely considered a sustainable mode of transport, especially compared to private car use (Glover 2017; Transport Scotland 2020a). Sustainability is usually separated in the three categories "social", "ecological" and "environmental", which must be considered together to achieve social equality, environmental protection and economic prosperity (Bauer 2008). The role of PT, aside from its correlation with congestion, will be discussed according to the three categories.

4.5.1 Socially

PT is alleged to provide mobility for everyone, regardless of the age, gender, socio-economic background or disabilities. Destinations such as supermarkets; retailers; health care; friends' and family homes; education; and work should be accessible by PT. PT can therefore facilitate the provision of equal opportunities for citizens to fulfil their needs (Glover 2017). Furthermore, researchers established that people utilise PT for the sole purpose of experiencing social interaction (Transport Scotland 2020a).

In Scotland, over one million citizens are living in relative poverty, usually in areas which are at risk of transport poverty (Transport Scotland 2020a). People receiving low incomes report costs as the most burdensome barrier to accessing transport. 41 % of people in low income households travel by bus at least once a week, compared to 15 % of people from high income households. Additionally, only 41 % of people in low income households have access to a car, compared to 96 % of people in high-income households. PT is therefore essential to those on low incomes. However, "in many areas of high social deprivation, public transport options can be limited and relatively expensive" (ibid.: 10).

The design of PT may also contribute to or prevent gender inequalities. Normally, PT is designed to serve commuters which have a 'nine-to-five' working schedule. However, women are more likely to work part-time or have multi-purpose trips and are more likely to travel by bus than men, so they are disproportionally impacted by cuts to subsidises services (Transport Scotland 2020a). In addition, women are more likely to live in poverty than men and are thus more negatively affected by transport poverty. Women also report feeling unsafe or fearful when using PT more often than men, and report instances of sexual harassment. Other groups experience disability-related harassment, racism or homophobia (ibid.).

Scotland's population is ageing. "Factors impacting on older people include inaccessible vehicles (particularly taxis, buses and trains), journey comfort, frequency of bus services and poor integration between different transport services" (ibid.: 14). Disabled people experience similar barriers of accessibility (ibid.).

Increased transport emissions in Scotland brought increased road congestion which leads to poor air quality, resulting in an increase of diseases such as respiratory and heart diseases (Transport Scotland 2020a; KPMG 2017). Additionally, the rise in traffic is correlated with road related injuries and fatalities (De Hartog et al. 2010). Air pollution and noise from traffic can also lead to poor mental and physical health (Galea et al. 2005). As air quality is often poorer in areas of deprivation it consequently increases inequality (Transport Scotland 2020a). PT can reduce emissions and road related injuries and fatalities by reducing private vehicle use. PT has additional health benefits compared to the car, as the walk to the bus stops makes it a more active mode of travel than driving (ibid).

4.5.2 Ecologically

PT can provide mobility for mass amounts of people, contrasted to a private car that is frequently occupied by only the driver. The per capita emissions of PT are therefore much lower than the emissions of private vehicle use. The Scottish government has set a target of having net-zero GHG emissions by 2045, which, according to the transport strategy, requires a "reduction in the demand for unsustainable travel" (Transport Scotland 2020a: 2). Transport accounts for 37 % of Scotland's GHG emissions and is thus Scotland's largest sectoral emitter. Since 2013, there has been an increase in vehicle driven kilometres each year and transport emissions followed the same trend with 65 % of transport related emissions coming from road transport of which 25 % from Light and Heavy Goods Vehicles and 40 % from cars. The proportion of single occupancy car trips has also increased slightly between 2008 and 2018. Moreover, transport, especially road transport, generates about one-sixth of particulate matter and more than a third of nitrogen oxides emissions in Scotland (ibid). Emissions lead to air

pollution and climate change, which cause global ecological, economical, and social issues (Grimm et al. 2008; Transport Scotland 2020a).

4.5.3 Economically

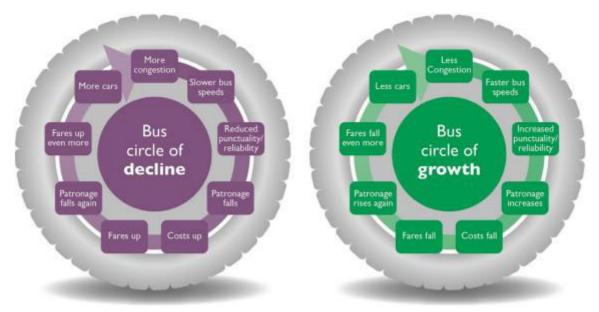
Aforementioned, access to transport impacts upon access to employment. Sufficient and affordable transport options give people access to education and jobs which can increase household income and prevent poverty. Conversely, insufficient and expensive transport options can lock people into poverty by increasing household expenditure, for example when fares are high, or when people have to buy a car (Poverty and Inequality Commission 2019).

Traffic congestion, primarily caused by cars, is a threat, as it causes delays in goods delivery and time spent waiting on the roads instead of spending it at work (Goodwin 2004). Businesses operating in city centres are seeing an increase in journey times and unreliability, thus impacting on costs and overall business performance (Transport Scotland 2020a). Costs from congestion were estimated at £30 billion in 2016 for the UK (KPMG 2017). Poor air quality, resulting from transport emissions, increases the risk of diseases. This increases costs in the health care system and eventually the whole economy (Fishman et al. 2015; Transport Scotland 2020a). A high-quality transport system providing connectivity between people and businesses can increase productivity and therefore generate economic growth. PT is also more efficient than car transport considering space (ibid).

4.5.4 Congestion

Congestion, which is enhanced by private vehicle use, is an increasing problem. Congestion and PT influence each other. PT is affected by congestion but can also be part of the solution (KPMG 2017). The actual effect of congestion is still unexplored. Congestion could cause a decrease in PT quality, but low quality of PT could also enhance congestion (ibid.). The research for this paper revealed that the majority of the stakeholders were concerned about congestion levels in Glasgow.

Figure 5: Congestion and public transport



(Transport Scotland 2020a: 25)

5 Methodology

This chapter describes the underlying theoretical research concept of this thesis (5.1) and the methods that were used to analyse the situation in Glasgow (5.2). The research concept shall provide reasons that make a discussion of the topic necessary and build a foundation for the discussion of the results and solutions in chapter 6 and 7.

5.1 Research concept

The research concept is based on economic theories of Common Pool Resource management that were initially developed by Elinor Ostrom in 1990. Her findings are based on a phenomenon called "the tragedy of the commons", which was identified by Hardin in 1968.

"The term "common-pool resource" refers to a natural or man-made resource system that is sufficiently large as to make it costly (but not impossible) to exclude potential beneficiaries from obtaining benefits from its use. (...) Examples of resource systems include fishing grounds, groundwater basins, grazing areas, irrigation canals, bridges, parking garages, mainframe computers, and streams, lakes, oceans, and other bodies of water" (Ostrom 1990: 30).

CPRs are usually subject to scarcity and exploitation, which adds to the above definition (e.g. Ostrom 1990; Künneke and Finger 2009; Glover 2011; Nikoleava et al. 2018). Economists

have suggested solving CPR problems by establishing private property rights in a free market, or by regulating their use via state control. Elinor Ostrom (1990) suggests that there is a third option: community-based governance or community ownership. Although CPRs are more popular with natural resource systems, Ostrom already associated CPR with infrastructures. Scholars have built on her research, treating infrastructure, mobility and PT as CPRs, as a platform for suggesting self-governance or community ownership as a solution for arising problems. "(...) the commons lens can help in conceptualising transition policies that are truly transformative, that aim to reconfigure the very relationship of humans with mobility and with each other" (Nikolaeva et al. 2018: 4). This, in the field of city-wide PT rather theoretical solution, as well as the other forms of CPR governance, shall be discussed considering the case of Glasgow, which cannot maintain its status quo because of numerous PT problems and associated consequences. It is presumed that the easiest process is to intensify the bus partnership, with a slightly more difficult path being the transformation to a tendering or franchising model, and that it becomes more difficult towards establishing an arm's length company or having full public ownership of services. Lastly, the most difficult and assumedly most profound transformation would be community ownership, a relatively new approach in the field of PT with limited or niched real-life examples. This assumption proves true after analysing the results and could be connected to theories about levels of citizen participation (e.g. Arnstein 1969). In the current situation, citizens can influence politics, but politics cannot influence PT. Franchising or public ownership could make citizen participation easier because they could indirectly have a say on PT provision via democratic, political processes. Community ownership would, as it implies, give citizens the opportunity to influence PT directly, and design it in a way that fits their needs. Based on these assumptions, Manchester is one step ahead of Glasgow and can, in some regards, model what Glasgow may experience during the process of altering governance structures, as well as what is necessary to initiate that. Glasgow is subsequently the focus of the research, as the city has not officially started a transformation process. Simultaneously, Manchester has a campaign called "Better Buses for Greater Manchester", which is similar to GGM. Edinburgh is often used as a best-practice example of public ownership from the Glaswegian perspective but cannot be a case study because it has never gone through a transformational process.

Returning to the research concept, the "tragedy of the commons" (Hardin 1968) occurs when a natural resource, called a "common", is unrestrictedly used by a group of people which need to earn a living. Hardin's example was a meadow that farmers are grazing animals on. In economics it is assumed that people make choices based on their individual best interest and well-being, regardless of the best possible outcome for the group, and that no mutual trust is involved in decision-making. This leads to an overuse and eventual destruction of natural resources, because every farmer in the example extends his number of animals to increase his profits, without recognising that the others do likewise and that the high number of animals destroys the grazing until no farmer makes profits any longer and the natural resource is exploited. The most popular solutions to this tragedy, which were originally provided by economists, are limited to state intervention and privatisation (Ostrom 1990). Ostrom criticises the economic theory (Nikolaeva et al. 2018) and claims that individuals who act around natural resources can cooperate and make decisions that guarantee the best possible outcome for the whole group. She proofs this theory by showing examples from all over the world where people have organised themselves without the initiative of the government or the private sector to profit from a natural resource (Ostrom 1990).

Scarcity, which leads to overuse, is a major CPR problem which is also present in the mobility sector and is raised in discussions about its transformation. Scarcity can hereby relate to the amount of money spent on mobility, the amount of time spent during transportation, the limited availability of space, or the caps that should be put on the production of emissions (Nikolaeva et al. 2018). Scarcity is used as an argument for both, accelerating or hindering transformation. In literature that combines the idea of commons and transport or mobility, the road is most often seen as the CPR, due to the scarcity of road space, which is generally perceived as a major problem in delivering efficient and sustainable transportation. The street is technically not a limited resource as it could be extended, but more road space never leads to less congestion, so the CPR criteria are still valid (ibid.). It is worth nothing that even private transport depends on a common, open access resource, the road, which requires centralised management (Glover 2017). Nikolaeva et al. (2018) argue that instead of road space, mobility is the scarce resource that should be treated as a CPR, because while car travel is usually the most promoted form of mobility, 80 % of it is accounted for by only 10 % of the world population (Change 2014).

Frischmann (2009) applied CPR theory to infrastructure, defining infrastructure as "the notion of a large-scale, physical resource facility made by humans for public consumption [or] the foundational resources (...) that enable and/or structure more complex systems of human activity" (p. 30). For Frischmann that includes "(1) transportation systems, such as highway systems, railway systems, airline systems, and ports; (2) communication systems, such as telephone networks and postal services; (3) governance systems, such as court systems; and (4) basic public services and facilities, such as schools, sewers, and water systems" (p. 31). Künneke and Finger (2009), whose contribution to this field is also about infrastructure in general, state that "Common Pool resources are associated to very peculiar governance problems. There are significant problems associated to 'crowding effects' and 'overuse' of CPR's in conjunction with insufficient incentives to invest in the system in order to guarantee its sustainability" (p. 3), which they say applies to socio-ecological as much as to socio-

technological systems. Although their focus is on infrastructure in general, their findings are still relevant for this thesis, because their CPR definition can be applied to PT (in Glasgow). Within physical infrastructure, networks connect nodes and links, and technological, economic, political, and social features interact within the system. Subsequently, actions must be coordinated and there is a strong interrelation between users of a system. Künneke and Finger (2009) argue that infrastructures can be perceived as "non excludable resources" (ibid.: 5), and they provide three reasons for that. Firstly, access points to certain infrastructure, like a public road, are difficult to monitor as infrastructure can spread out within huge geographical areas. Secondly, even if monitoring was possible, "there might be politically motivated universal service obligations, since infrastructures provide essential services" (ibid.: 5-6). Thirdly, it is almost impossible to detect the service that users take from the system. Users take benefits at the expense of others, resulting in competition. In the next section of their work they state that market liberalisation has contributed to CPR problems.

"Traditionally infrastructures were vertically integrated firms which were able to control all relevant aspects of the resource system. (...) However, as a consequence of the institutional restructuring (...), this vertical integration slowly eroded into an unbundled value chain with hybrid modes of organization and diffuse property rights structures. (...) Under liberalized market conditions the coordination needs are now to be performed by a multitude of actors with different interests and responsibilities" (ibid.: 7).

Liberalized market conditions mean that contemporary infrastructure is governed by varying combinations of the market, governments and the third sector, which can be called governance (ibid.: 13). Infrastructure increased in size and complexity, and although it originally might have been organised locally, it has now evolved to international scales, up to a point where it is difficult to be operated and monitored by one single central authority. Moreover, infrastructure systems have to fulfil increasingly varying demands, which contributes to conflicting stakeholder interests (ibid.). This can be observed in Glasgow. Künneke and Finger name four different functions of infrastructure that can be the reason for CPR problems; system management, capacity management, interconnection, and interoperability. A typical system management problem might be conflictual objectives between different actors. It is pointed out that, despite conflicting interests, the system can only function if operations are aligned (ibid.). This relates to the PT sector in Glasgow, which involves numerous stakeholders who cannot always align their objectives and operations even if they wished to. The results later show that that causes conflicts between different groups and institutions. According to Künneke and Finger (2009), increasing fragmentation of infrastructural systems requires a higher level of coordination. Capacity management, as the second function, is important due to the limited capacity of infrastructural systems, in this case roads. As noted in chapter 4.2, Glasgow has

severe congestion problems, especially in the city centre, where most of the high profitable and highly served bus routes lay. Künneke and Finger (2009) emphasise that demand and supply must be balanced carefully. The function of interconnection is another factor that can cause problems, however the interconnection of Glasgow's road based public transportation with other transport modes or with the PT system in the surrounding districts is not a focus in this paper and subsequently will not be discussed here. The last function, interoperability, "defines the technical and institutional conditions under which infrastructure networks can be utilized (...) [and] it determines the conditions of use as well as the rules for entry and exit" (ibid.: 12). That is a challenge if open access is required for a public service on the user and the competitor side, but certain standards shall still be met. Künneke and Finger conclude that "each of these essential functions requires proper institutional arrangements so that the infrastructure will ultimately function as a system" (p. 13), which PT in Glasgow does not yet, as integration is widely missing (see chapter 6). As infrastructural systems become more complex and fragmented, neither traditional ways of governing them, which include strict governments or public ownership, nor a reliance on the market, which includes the private sector and competition, have proven successful in maintaining sustainable systems and coping with emerging problems. Instead, a new approach is required that might involve "civil society self-governance" (ibid.: 17), like local initiatives or communities which do not have strong economic objectives (ibid.). Generically claiming that traditional ways of governing infrastructure systems have failed might not be correct, as there are researchers who disagree with that hypothesis, and examples that show otherwise. Those will be presented in chapter 7. Künneke and Finger's (2009) approach does not imply that all four infrastructural functions are controlled by the civil society. Certain CPR problems might primarily be solved by technological innovations, others by governmental regulation, others by private sector governance, others by third sector involvement or a combination of these (ibid.). Künneke and Finger (2009) agree with Ostrom that in the future, even with civil society involvement, infrastructures will be managed by a combination of "self-governance, government ordering and markets" (p. 16), just as private ownership of PT is based on public institutions that organise the use of (public) space and enforce standard requirements (Glover 2017). Apart from the new regulations in Scotland, this provides another reason why this paper does not only discuss community ownership, but also other forms of governance.

Leigh Glover made the most comprehensive attempt to apply the work of Elinor Ostrom to the field of PT. In 2011, he published a conference paper with the title "Public Transport as a Common Pool Resource". It was delivered at the Australasian Transport Research Forum in September that year. With his first paper concerning this topic, Glover aims to "provide a clearer understanding and definition of public transport (...) [which] can assist in understanding the respective roles for public and private involvement, and identify the essential government

role" (ibid.: 1). He explains that usually PT is defined as "transport services made available to the general public" (ibid.: 2), regardless whether it is provided by states, private owners or corporations, explaining that during the 19th century PT became "strongly associated with transport services provided or controlled by governments at the local, regional, state, interstate, and national scales" (ibid.: 2). For Glover, state interventions range from "government entities, public corporations, government coordination bodies, mixtures of public and private enterprises, public management of state-let contracts and franchises, to varying extents of regulation of private operators" (ibid.: 2). He describes three types of market conditions; closed markets to ensure a monopoly (controlled by the state but can be enjoyed by a public body or private firm); open markets without barriers (which do not exist in the real world) and regulated markets which permit limited competition. The same market types are listed by Künneke and Finger (2009) under different names, "monopolistic competition, access competition, and network competition" (p. 13). They explain them as follows: In monopolistic competition, the four essential infrastructure functions are monitored by one single operator, which can be private. In access competition, which they say is typical for railways, the "ultimate responsibilities" (ibid.: 14) remain with the government. In network competition, all functions, except interconnection, lie with the operators, and interconnection remains with the government, which responsibility has been reduced over time (ibid). The PT in Glasgow can therefore be associated with the market type of network competition, although under Glover's (2011) definition it would rather be an open market, as the other two do not apply. As a side note, Ostrom (1990) states that "a competitive market — the epitome of private institutions - is itself a public good. Once a competitive market is provided, individuals can enter and exit freely whether or not they contribute to the cost of providing and maintaining the market. No market can exist for long without underlying public institutions to support it" (p. 15).

PT, according to Glover (2011), can be defined based on several characteristics, but none of these are sufficient to distinguish between *private* and *public* transport. He hence starts considering PT as a Common Good according to Elinor Ostrom's criteria. Glover suggests that PT should be seen as a resource rather than a service. He explains that in classical economics, there are three types of market failures which occurred in the beginnings of PT and require state interventions. The three failures are collective goods, externalities, and natural monopolies. A collective good problem meant that is was impossible to establish universal services across the city as firms could select their operating territories, but in a city, there are areas of higher and lower demand for public transport. Livingston and Clark (2020) state that in Glasgow, this is partly related to the unevenness of population density in the neighbourhoods, which makes commercial bus provision difficult (ibid.). Therefore, governments were required to intervene to ensure that universal services were provided across the whole market (Glover 2011). This is currently the case in Glasgow, where either

GCC or SPT pay subsidies to the private operators for maintaining vital routes, or SPT operates services itself. However, this still does not mean that PT services cover every area of Glasgow. Competition also resulted in a lack of service extension or system planning, which could only be done by governments. This is part of the externality problem. The monopoly problem creates "excessive fares and unreasonable services" (ibid.: 7) in certain markets. Monopolies often exist in PT markets because high costs and exclusive ownerships are a barrier for market entry. If there is a monopoly situation in Glasgow will be examined in chapter 7.2, however First Bus provides most of the services and has monopolies on certain routes. Moreover, in comparison to Edinburgh, which services are not provided by private operators, fares in Glasgow are relatively high. Because PT sees these problems when it is served within a free market, according to Glover this means that PT services are a resource (ibid.). The resource could for example be a "PT system within a particular jurisdiction, such as a city, and the flow of benefits is the mobility service provided" (Glover 2012: 3). Glover (2011) then states that this resource is a CPR, because it fulfils the two criteria that Ostrom provides. These are, as afore mentioned in the introduction to this chapter, that a CPR is diminished by consumption or use when over-used or exploited and that a CPR causes a "free rider problem", which means that people "may be able to gain benefits without contributing to the cost of providing, maintaining and regulating the resource involved" (ibid.: 7-8). PT fulfils these criteria because capacity constraints and crowding occur, creating competition between users. Moreover, the use of services cannot be restricted. Everyone who is willing to pay the fares can use the services, and it cannot be monitored who is using the services. Fares can act as a restraint for people to use the service, especially for those on low income, but that is not the reason for the existence of fares. Lastly, even if in the real-world universal PT services cannot be provided everywhere and for everyone, they are expected to be. In conclusion, the same criteria that Ostrom (1990) developed for determining whether a natural resource is a CPR were applied to infrastructures (Künneke and Finger 2009) and to PT (Glover 2011), showing that public transport can indeed be related to as a CPR.

Under neo-liberalism in the 1980s, urban transport systems expanded in scale and scope simultaneously, which led to the dispersal of responsibilities to an increasing number of stakeholders; a phenomenon that Künneke and Finger (2009) also identified for infrastructure. As Glover (2011) says, "the institutional capacity for resource monitoring and allocation is outstripped by the growth of the system" (p. 9). Integration of systems and services is a major issue and requires coordination between actors (Glover 2011), which, as the research shows, is not given in the case of Glasgow. Glover claims that even under neo-liberalisation, the PT sector did not return to the types of market failures that occurred in the early days of the industry, because governments did not give up control in general. Instead, they established a variety of public policies, set to prevent CPR related market failures (ibid.). One might argue

that Glasgow's PT is experiencing market failure nevertheless, if the objectives of deregulations were to reduce costs and increase efficiency. If the objectives were to also reduce social and environmental costs, the system would certainly present a market failure. This will be discussed in more depth in chapter 7.2. Glover (2011) goes on to list strategic functions of public transport that are still controlled by the government, regardless of the extent to which private companies are involved.

These functions include "research and analysis of the transport system, monitoring overall system performance, setting overarching objectives for the system, transport system planning, engaging with key political, business, and community stakeholders in strategic issues, setting broad goals for service provision, managing and overseeing the system's financial operations, and being publically accountable for the transport system" (ibid.: 11).

Whether or not this applies to Glasgow can be questioned because the research indicates otherwise. Gleave (2019) claims that transport ministers in the UK are successively disacknowledging the role that governments play in transport provision.

Nikolaeva et al. (2018) contribute to the field by discussing the perspective of treating mobility as a CPR, opposed to infrastructure, the road or PT, the last still being mentioned in their paper as an important part of mobility. After interviewing over a hundred stakeholders which are associated with mobility transitions in several continents (ibid.: 5), they take the considerations further than the previously mentioned authors, criticising that Frischmann, Künneke and Finger, and Glover neither question the basic perception of mobility and its value in society, nor offer solutions to reduce the very need for mobility in order to reduce overall traffic and emissions (ibid.: 16). This need for mobility results from the "dominating belief in the priority of (...) economic growth and the dependence of that growth upon mobility of people and things" (Nikoleava et al. 2018: 4). They use Chatterton's definition of commons, which sees them as "complex social and political ecologies which articulate particular socio-spatial practices, social relationships and forms of governance that underpin them to produce and reproduce them" (Chatterton 2010: 626). There are many attempts of changing mobility patterns on an individual basis, and few attempts to collectively reduce mobility, but during their international research Nikoeava et al. (2018) established that this has not proven successful so far. It is highly criticised in their paper that people are encouraged to reduce emissions whilst governments still support the automobile industry instead of promoting policy and societal change. They appreciate that Glover promotes the idea of community ownership in PT, and that him and other scholars question the way mobility is governed, but they try to move the discussion beyond small-scale solutions and experiments, promoting the idea of a socio-political transformation in city and transport planning (ibid.). To date, community ownership is a smallscale intervention (Glover 2013), whereas re-regulation would be applied to cities, states, or countries. With respect to the introduction to this chapter, community ownership might not be the final or only solution as it is still based on the current socio-political system and neo-liberal ideals (i.e. ownership) (Nokolaeva et al. 2018). However, Nikoleava et al. (2018) admit that it is unclear what a true transformation would look like, although they claim that solutions cannot be based on "ideologies and corresponding forms of political and economic organisation [that] are supporting the current high carbon living" (ibid.: 4). Although not directly applicable for finding practical solutions in Glasgow, their insights on the topic are still valuable for this paper, as they provide new perspectives, and emphasise the role of governments for transition processes, which is why it is important to not only discuss community ownership in a case study that is based in a deregulated environment. It is important to acknowledge that innovations are "mediated by the socio-technical regimes, complex constellations of infrastructure and organizational standards, and bounded by (...) wider societal values and governance structures" (Nikolaeva et al. 2018: 7), which is what Ostrom (1990) and Künneke and Finger (2009) claimed as well.

The following factors distinguish urban commons from traditional commons. Huron (2015) states that urban spaces are "saturated spaces" which are "already densely packed with people, competing uses, and capitalist investment" (p. 963) and that they are composed by strangers, which makes sustainable and transformative governance more difficult (ibid.). These criteria apply not only to urban spaces in general, but also to urban mobility (Nikolaeva et al. 2018) and the PT in Glasgow, and they represent challenges that might hinder a change. Glover (2017) raises the question whether the rarity of alternative governance models is based on them being an anomaly, or if this rarity reflects the influence of "political interests, major stakeholders and established institutions" (p. 176) rather than economic and cultural factors, but leans towards taking the latter as an answer.

In his work of 2012, Glover emphasises the challenge that the focus of CPR analysis and problem-solving lies on natural resource systems and pre-modern management regimes, and that the criteria that Ostrom developed for successful CPR management are not always applicable to infrastructural systems, i.e. PT (Glover 2012). The so called "design principles" for successful, long-term functioning of user-developed institutions include clear boundaries between users and nonusers, as well as a clear resource boundary, the possibility to participate for every individual, the existence of individuals who are accountable, mechanisms and room for conflict solving, and the right for resource users to establish their own rules (Ostrom 2010). These principles distinguish cases of successful community governance from failed attempts (ibid.). It will be difficult to achieve some of these criteria in PT, like clear boundaries of the resource and its users (Glover 2012).

Block and Jankovic (2016) highly criticise Elinor Ostrom's work on solving the tragedy of the commons and argue that community governance or communal ownership are not any different from private partnership arrangements, at least not in the examples that Elinor Ostrom provides. According to Block and Jankovic, all that Ostrom does is discuss various forms of private partnerships. They claim that as soon as a CPR is commonly managed by a set group of people, i.e. community members, and external stakeholders are excluded from using or benefitting from the former CPR, the resource has been privatised, and is no longer a CPR. They explain that in every one of Ostrom's examples the form of governance is that of a private partnership, or a joint ownership, where usually the rights to use a resource are transferable in a free market, and therefore community ownership is neither a new form of governance, nor a third option next to privatisation and state control. They argue further that historically, there have been cases of legal and economic frameworks for regulating market activities that have not been enforced by government entities. Hence, even when what Ostrom calls "communal ownership" is not enforced by the state, it is still a form of private property. They conclude that Ostrom "did not discover any 'new' form of governance beyond private property and government control. Rather, she discussed some interesting variations in contractual regulation and enforcement of private property rights" (ibid: 290f). However, even if Block and Jankovic are correct, which shall not be discussed in this paper, the theories of Elinor Ostrom and the solutions she provides for governing scarce resources, whether they are natural or infrastructural, are still viable, and can nevertheless we applied to PT. If all she discussed were innovative forms of private partnerships, these could still offer a form of governance that empowers communities and their needs, and that could provide more comprehensive and sustainable public transport for Glasgow.

5.2 Implementation

The methods that were used to analyse the problem and evaluate solutions are composed of literature and qualitative research. Moreover, the researcher spent two months in Glasgow and the campaign GGM was temporarily joined as an intern. By doing so, the researcher experienced the PT in Glasgow herself, became familiar with the day to day campaign work, and accompanied the campaigner and other members of GGM to several meetings, events, and parliamentary sessions. The results from eight events/meetings are incorporated into this paper. Thus, GGM became the starting point of the qualitative research, connecting the researcher with citizens and some of the stakeholders inside and outside of the transport sector.

Part of the qualitative research were expert interviews. The interviewees were chosen based on observations and contacts made during the campaign work for GGM. Six out of eight interviewees have had previous interactions with GGM, ranging from intense or regular cooperation to short encounters. The interviews are partly anonymised to protect the interviewees and their freedom to share their opinions, but to still allow a detailed interpretation of statements based on the background of interviewees. Interviewee 1 (11) was a politician in GCC who is involved in PT organisation, interviewee 2 (I2) was a representative of SPT, interviewee 3 (I3) was a representative of a private bus operator, interviewee 4 (I4) was a representative of the campaign "Better Buses for Greater Manchester", interviewee 5 (I5) was a representative of GGM, interviewee 6 (I6) was a supporter of a Labour party MP who is involved in public transport, interviewee 7 (I7) was not professionally involved in PT, but a representative of the Women's Institute in Manchester, which had a focus on transport in 2019, and interviewee 8 (I8) was a member of GGM who started campaigning for a neighbourhood bus service. The interviews were guided with a semi-structured guestionnaire (Mayring 2016). The guestionnaire was used to allow for a comparison of interviews and the given information, while the semi-structured design allowed for further queries, and for the interviewees to choose what they wished to focus on. However, as all the interviewees had different backgrounds and positions, all questionnaires varied in the questions they contained. Furthermore, the questionnaire was also a summary of the information that the researcher wanted to gather, hence not all questions needed to be asked when the information was given in the context of another question. The order of questions was handled flexibly to allow for a more natural conversation. In general, all the interviewees were asked about their perception of the transport situation in Glasgow, or Manchester, respectively. If they identified problems, they were asked for their opinion about possible reasons for those. The interviewees were then guestioned about their valuation of the new governmental powers, i.e. the British Transport Act or the Scottish Transport Bill, and if and how they would like those powers to come into play. If they said that they were in favour of transforming the governance, they were asked about their outlook on the procedure and possible challenges. The remaining questions were tailored individually. The interviewees were contacted by e-mail, phone, or in person. The interviews were either held in person, via the phone, or via video conference. Five interviews were recorded, from which only four were transcribed (app. 1), because the quality of one of the recordings did not allow for a transcription. One interviewee did not agree to have the transcription printed. The phone interview could not be recorded due to a technical problem. The interview with I7 took place during a crafting session with other participants in hearing distance, and hence could only be minuted (app. 2), as well as interview 8 that took place in a café, where background noises were too loud. I8 provided a written statement afterwards (app. 3). The interviews were transcribed using the literal transcription method described by Mayring (2016). It allows for a good readability and is used for expert interviews where the content has priority.

The other major part of the qualitative research was the participation at events (app. 4). The events varied in the positions of the participants that were invited, from fully supportive of GGM and their aims or campaigning themselves for similar reasons to opposing any idea of reregulation. The researcher's role during the events was usually that of an observer, only in a few occasions did the researcher participate herself. The researcher did not always know what would expect her at an event, so preparation was difficult, and notes were taken in an informal and unstructured way. The researcher also did not have any influence on shaping discussions or topics that were addressed. The other participants usually knew the researcher's background.

The results of the events, stemming from the researcher's notes and material that the researcher received from the organisers of events, were joined in a table. The table distinguished between the events, and between problems with transport, especially PT, and suggestions and solutions that participants offered. The problems and solutions were then categorised and clustered, regardless if they were mentioned by officials, experts, or people from local communities. The categories were formed inductively following Mayring (2016). For problems. the categories Working are Climate. Conditions/Strikes, Profits/Profitability/Finances, Fragmentation/Land Use Planning, General Problems, like safety, service quality and the like, Inequality, Governance/Regulations and Others. For suggestions, the categories are Cheaper Public Transport/Fares/Discounts, Integration, Measures Against Inequality/Improving Safety and Disability Friendliness, More (Efficient) Public Transport/Less Cars, Service Quality/Comfort/Innovations, Capital/Financing, Campaigning/Listening and Governance Structures. The categories will be used to analyse the situation (chapter 6). People that took part in events or meetings will be referred to as "participants".

5.3 Reflection

A major challenge during the interviews and the events was certainly deciphering the Glaswegian accent, which slightly limited my understanding. Moreover, I was concerned of the interviewees' perception of me, as they may have assessed me as unprofessional due to my lack of precise and mistake-free wording and phrasing in comparison to theirs. Being sympathetic to the campaign, the people behind it and their aims, I might have been biased during the research, although I became aware of this after self-reflection. Lastly, as the contact to interviewees was established with the help of GGM, or as they had already met me at previous events, the interviewees mostly knew my background, and that likely influenced the replies they gave.

When evaluating the results from the interviews it became apparent that the idea of community ownership had not (yet) come up in people's minds as a solution to public transport issues. However, because community ownership is one focus of the research, it would have made sense to acquaint the interviewees with the idea prior to the interview, before asking them in which way they could imagine it to be implemented, and how they would rate its potential success.

Another way to improve this dissertation and its outcome would have been to narrow the topic and research design down before the internship in Glasgow started. The internship dynamically turned into a period where I conducted most of my research. The topic and focus of this paper should have been outlined before commencing the internship to allow for more precise research and better preparation for events and interviews.

6 Results (Glasgow)

This part of the master's thesis deals with the analysis of the field research in Glasgow and will summarise the results from the meetings, events, and workshops, as well as the interviews. Chapter 6 focusses on presenting problems and suggested interventions, while chapter 7 presents solutions and discussions that evolved around them. The results in these chapters will be complemented with findings from the literature to put peoples' perception into perspective.

6.1 Problems

In general, many people, groups and organisations in Glasgow are demanding better PT, and often express a strong dislike of the privatised system. This result is biased because most of the meetings and events that the researcher attended where with groups who sympathised with GGM. Only at a meeting with a wider range of stakeholders, including politicians and representatives of private bus operators, not everyone supported re-regulation and public ownership options. What all the groups and stakeholders had in common was that they criticised (public) transport in Glasgow. When living in Glasgow and talking to people it becomes obvious that the general public is not content with the traffic and transport situation in the city either.

The in meetings and events most often mentioned *General problems*, the largest category, that relate to safety or service quality of PT, are that there are not enough night and Sunday services, that people feel unsafe on PT, particularly on late services, that buses are

overcrowded and dirty, that fares are too high and increase at a higher rate than wages, that there are not enough routes and services, causing underserved areas, and that routes keep being cut. Moreover, buses' frequencies are low, buses come at inconvenient times, and are hence not suitable for shift work. Access to hospitals and childcare can be difficult. I1 stated that in some parts of the city buses can be "infrequent, inconvenient, and not take you to the places where you need to go". I2 specified that on the contrary, the city centre is an area with good, frequent, and integrated PT. According to the interviewees 1 and 2, buses in other areas can be unreliable, expensive, and people are dependent on traffic movement. I3 attributes the unreliability to increased congestion and claims that bus operators often have to adjust their timetables to extended journey times. To rectify this, they could allocate extra buses to maintain the frequency, however that may turn a profitable route into a route that runs at a loss. The Urban Transport Group (2019) says that bus fares have increased by 56 % over the last ten years, after an adjustment for inflation. However, the above-mentioned problems applied mainly to buses and not to the railway or the subway. In terms of fares, reliability, and frequency the railway and subway got much better ratings. Nevertheless, it is criticised that the subway only serves a small area of the city and has never been extended, and that it doesn't run late on Sundays. The railway has similar network problems as it also does not serve every area of the city. This characterisation of the railway was shared by 11, who says it can be a disadvantage for people to not live on one of the railway lines. I3 explained that the railway network is one of the greatest bus competitors, because it is very extensive with about 70 stations within the city boundary, can therefore provide local services and not just intercity services, and is "heavily subsidised by the government". According to I2 that investment leads to fares lower than bus fares, and allowed for the network to be electrified, which increased capacity and journey times, while the railways, opposite to buses, are not affected by congestion (ibid.). The subway only serves a very small part of the city, and the neighbourhoods with more two or more subway stations are characterised by low rates of income deprivation and some of the highest shares of sustainable transport modes compared to the rest of Glasgow (GCPH 2017). Coming back to General Problems in PT, people had more to criticise than the previously listed, like that there are no additional services for city events. It was also criticised that bus stops are too far away from where they are needed, and that journey times are too long. Congestion was said to be a problem as well, particularly in the city centre, where all the buses pass through or terminate. In terms of safety, some participants talked about drugs on buses, and many cases of racism and discrimination. Overall, the conclusion was that using PT is stressful, and a lot of people, as well as I1 and I2, memorise PT systems from other cities, which they experienced as better.

Problems that were clustered in the category *Inequality* included issues for disabled people as well as inequality considering affluent areas and affluent groups of the population compared

to those on low income. A problem identified by participants as a concern at several events was the inequality between women and men. It was explained that PT does not serve women as well as men in terms of (perceived) safety and in terms of childcare (access to PT as well as accessibility by PT). This has also been addressed by I7. The major problem for people with reduced mobility or the elderly is the limited accessibility of PT. The subway was highly criticised for only offering two stations with wheelchair access, although all stations had been modernised and upgraded in the past years. Moreover, no representatives of disability groups were invited into the bus partnership. The most discussed inequality problem was, however, that transport is an issue in almost all the neighbourhoods, and that it is even a barrier for a number of communities. Peoples' perception of the situation therefore mirrors the facts presented in chapter 4.5.1, and inequality issues also appeared in the expert interviews. I2 has the impression that in a PT system based on market principles, people with little money have little power in negotiations, because they cannot meet commercial interests of operators. I1 also stated that there is "a lot of inequality" in PT because "some areas are served much better than others" while there are "certain areas that are much more cut off than others". I1 mentions Glasgow's low car ownership in this context, which I1 sees as an opportunity, although I1 says that:

"some of that is through choice, and some of it through poverty (...). I would much rather people didn't have a car through choice, or rather than they can't afford one. And on the flip side we have some people that have to own vehicles because there is not good enough PT, and again that isn't right 'cause they should be able to have good, cheap PT, and spend that money on something better than a car that they don't necessarily want or need. So, there a lots of things there around fairness, I think, around the cost and the choices".

18 described the situation for some people in her neighbourhood:

"Populations of Knightswood (17,000) and Jordanhill (10,000) left without direct access to Hyndland, Byres Road, Glasgow University and the Sauchiehall Street end of town (access to work, education, shops, theatres, cinemas, Buchanan Street Bus Station) for almost 3 years now since Firstbuses axed their connection to the 4 bus service in October 2016. Journeys that previously took 15-25 minutes on one bus now take up to and sometimes over 1 hour with long walks and using two modes of transport. In all weathers and pavement conditions. Totally unacceptable. Someone said to me recently that people had got used to not having the 4. I disagree. People are getting on with it because they have no other option."

It was also claimed that affluent areas are better represented in politics and receive numerous PT links despite of high car ownership. Docherty (2020) and Rolfe et al. (2020) confirm that

this is not just peoples' perception, but actually reflects the situation in Glasgow. One example was usually the West End. "Research has (...) found a relationship between living in areas with higher levels of deprivation and having poorer transport options. (...) areas with higher levels of deprivation tend to have worse public transport links in terms of both the number of options and quality of services" (Poverty and Inequality Commission 2019). Docherty (2020) adds that subsidies per rail passenger are higher than subsidies per bus passenger, although it is usually those on low income who use the bus and are heavily dependent on it. However, Glasgow has focussed investment on rail and road and not inner-city transport (ibid.). Participants moreover complained that some buses, despite charging the standard fares, offer higher quality services, like announcements, plug sockets, laminate floors, and cleanliness, just depending on the area that they operate in. People felt that there is a stigma of only poor and working-class people using buses. A household survey that was conducted in Scotland in 2018 showed that wealthy people are more likely to drive or take the train, and less likely to use buses or walk (Transport Scotland 2018). It was a general concern that the inequalities in PT transport provision enhance social inequality.

The category *Working Conditions* is related to inequality issues. It was criticised that the working conditions for bus drivers are "horrible" and that the wages are too low. That does not align with the statement from I3 that "the bus industry just now (...), it's very much a driver's market at the moment", with bus companies increasing salaries or offering incentive schemes in the competition for drivers. However, the bus drivers seem to share the opposite view, as they organised strikes. Members of Unite the Union explained that because of the many private operators it is difficult to unite bus drivers from different companies to take action. Brandt and Schulten (2007) examined working conditions in the UK local PT industry before and after deregulation. The found that the median wage has declined to below the level of the general median wage, that there have been reductions in staff, especially administrative staff, that working conditions have deteriorated and there are less payments for overtime work and holidays. Wages are lower in private firms (ibid.).

The following three categories, namely Fragmentation/Land Use Planning, Profits/Profitability/Finances and Governance/Regulations are related as well, because financial and fragmentation issues were usually attributed to the current governance system. The most often mentioned fragmentation or integration problem was the lack of access to PT and the "last mile" challenge. In that context, pedestrian friendliness was criticised a lot. I1 stated that the integration of the sustainable transport modes (walking, cycling, PT) should be better. Another issue that came up more than once was the lack of integration between land use planning and PT, for instance that a hospital is planned and built without equipping the location with sufficient transport links. I3 specified that; talking about a new, huge hospital which was built in the South side of Glasgow, combining what former had been four smaller hospitals in different locations. I3 mentioned that First bus, who operates most routes, cannot guarantee a direct connection to the hospital, but only connections that require one change. Moreover, 13 explained that some connections have proven difficult as they have to pass the congested city centre on the way to the South side. Docherty (2020) states that Glasgow still builds new housing facilities around motorway junctions which have no connection to PT. Taylor and Sloman (2016) also thematise that planning authorities cannot guarantee PT services for new developments and have too little certainty to build in PT facilities. One problem that was addressed at the events and by I1 focussed on centralisation, which inter alia affects communities. Representatives from the Community Empowerment Department explained that it is difficult to hold community meetings within neighbourhoods because all transport connections lead to the city centre. With respect to integration within the PT system, people at the events complained that the three systems (buses, subway, trains) are not connected at all. 11 specified lack of integration as one of the main challenges. Participants generally commented that the zone card, a ticket that is supposed to improve integration, is too complicated and expensive. I2 criticised that the zone card is a voluntary scheme, where profits are divided between the operators, but that it is not a subsidised governmental scheme, which would be cheaper and consider people's income. Aside from the zone card, integration is not possible amongst the private operators. Moreover, some bus passes or discounts are not valid on all operators.

The greatest *financial problem* was clearly perceived to be a lack of financial resources and funding for PT in general. That was also seen as a major issue in the expert interviews. The majority of participants considered money to be the greatest barrier in transforming the system, although they are unconvinced that the current PT system is economically viable. It was also criticised that the city "wasted" money on bus corridors, although there are no services to use those. One person had conducted research on concessionary tickets and revealed that operators betray for subsidies by using concessionary tickets to fake extra mileage, because in Scotland the BSOG is based on miles operated. Regardless of whether this is true or not, it demonstrates peoples' attitudes towards the bus companies. Participants complained that profits go to shareholders and "greedy" companies instead of being reinvested into Glasgow's public transport. Taylor and Sloman (2016) calculated that in Great Britain an average of £277 million per year are paid to shareholders in dividends, which adds up to a "leakage" (p. 6) of £2.8 billion over a ten-year period. On average, 5.7 % of total turnover are paid out as dividends, whereas the percentage of turnover that are reinvested into bus services ranges between 0.2 and 1.5 %. Participants thought that therefore innovations like electric buses are not affordable, and unprofitable routes or night-time services have to be reduced. For a future transformation, the concern is that franchising could be too expensive, but that, if the Council

starts its own bus service, the Transport Bill does not provide sufficient power to the Council to subsidise such a service, and would hence also be too expensive. Data from a KPMG (2017) report showed that the financial resources available for the PT industry have indeed declined between 2010 and 2017. For instance, the BSOG decreased from almost 70 million pounds to 53 million pounds during these years, and the support for concessionary passengers has been reduced from 74 % to 60 % of the adult single fare.

The category Governance is the second biggest after General Problems. The most often addressed issues in this category were privatisation, multiple private operators, competition, and competition laws/state aid rules. Privatisation and the resulting fragmented landscape of private operators were seen as the major cause of multiple issues at five out of eight events. This view has been shared by I2. At one event, where private operators were present, it was not discussed as a major issue, but still seen as a challenge, and the desire for changing governance structures also became obvious. At two events, privatisation was not mentioned as a problem, but suggestions revealed that a more integrated, regional approach to PT would be preferred. The complaints, all from different events, are related to the above listed issues. The competitive nature makes services worse, privatisation does not work, the current governance structures are too complex and make integration difficult, First Bus and Stagecoach are abusing their monopolies, threaten to take out routes and "blackmail" with subsidies, rail and bus do not run as public services, the Council cannot set rules for new companies entering the market, the private operators need governmental help to be profitable, and there are neither representatives from campaigns nor from local communities on the bus partnership, that does not discuss passenger related issues anyway. I1 stated that the working relationships with SPT (subway) and the Scottish government (rail) are easier to manage than the relationships with different private bus operators and the Traffic Commissioner. Managing all those relationships together as well, because of the "different types of ownership [of] various (...) parts of the transport network" imposes a challenge on GCC. The Transport Bill, although in general perceived as an opportunity, was criticised in several aspects as well. Participants thought that it will be very difficult to open up and change the current governance structures, and that the Transport Bill facilitates change, but does not do it. For instance, the Bill does not limit the power and influence of the Competition and Market Authority. It also allows the introduction of a WPL but cannot guarantee that the PT is there to replace private cars. There were also general concerns that buying First Bus, which had been announced to be for sale, could be the only option to initiate change, but that this option was not secured either. This has proven true, as First Bus will not be disposed anymore. Furthermore, the question regarding responsibilities was raised. It was not apparent to participants of events and meetings, whether they were experts or local community members, who is responsible for initiating change. One complaint in this category was that politicians hardly use PT and hence do not know what it is

like, which again shows mistrust between stakeholders. Another concern is also the situation around "Brexit", which makes times unstable.

The last category is *Climate*, which has mainly been discussed at an energy conference, where *inter alia* Friends of the Earth Scotland were invited as speakers. The criticism was that the PT in Glasgow cannot help to tackle the climate emergency, especially not with the constant increase in fares. Glasgow has illegal levels of air pollution, which partly results from old diesel buses (Keane 2019). I2 expressed frustration about the climate emergency not actually being treated like an emergency, and that plans are being made instead of acting straight away. I3 claimed that the operators know their role in tackling climate change.

"(...) we can see more so now that we need to be responsible and take charge of our impact on the environment, so, it's not that we don't want to do it, we do know the reasoning behind it, and as a responsible operator we do want to do it, it's just finding the funds to be able to do it in such a short time period".

At two separate events attention was also called to the introduction of the LEZ, which, from the perspective of the people, was decelerated due to lobby work of the private operators against emission levels and targets. I3 described that some "healthy meetings" were held between Council and operators to define the time frame of meeting LEZ requirements, because it requires the purchase of new buses whilst the old ones have not finished their life yet and need retrofitting, but added that the Council had been firm on their objectives. I1 confirmed that the private operators only had a say to some extent. Additionally, I1 explained that if the LEZ had been introduced too quickly the bus operators would have been compelled to take buses off the road for retrofitting, or it would have caused problems because purchasing new, cleaner buses takes time. The risk hereby was that the operators would have raised their fares.

"...we need to make sure that they have a bus service that keeps running, we don't want you to double your fares overnight so that we have a clean air, there has to be that balance. You put fares up more people get into their cars" (ibid.),

which would increase emissions. The LEZ is thus another example of the mistrust of citizens towards private operators and politicians. One last, particular concern that was raised at several events was that car ownership is increasing, and that people are simply not willing to give up their cars. I1 ascribed that to street and neighbourhood design in Glasgow, which makes cars the most obvious and easiest way to get around and added that it is also a habit that people get in their cars.

"(...) at the moment we have a city where there are a lot of journeys that are just much more straight forward by car, because it's easy to drive there, it's quick, and it's easy to park, so those are challenges in making public transport feel more attractive". This view has been shared by I2, who complained that the PT quality is not good enough to persuade people to stop driving themselves. I3 attributed it to the relatively low costs of owning a car.

"Now when you factor in that our ticket basket is already competitively priced, (...) for example our network product for, say, a four weekly basis, is (...) about 65 pounds, (...) but when you consider that maybe for just an extra 30 pounds a month you can have your own vehicle, and go where ever you want, never have to wait for a bus, you can understand why that becomes an attractive proposition to a consumer".

6.2 Suggestions

At every event, many suggestions and solutions were offered to improve the often highly criticised PT situation in Glasgow. A number of these solutions directly address governance structures, and an alteration of those seemed to be assumed as a requirement for improvement at every event, even where private operators were present. Many people suggested several measures for improvement, while explaining that they were not convinced implementing those measures would be possible within the current system of multiple private operators providing the PT. In conclusion, most measures can be implemented with private operators, but only few are likely to be implemented, and some cannot be implemented at all. All the solutions that were suggested at events or meetings, like the problems, will be presented according to their allocated categories. Only the suggestions and wishes in the categories Campaigning/Listening and Governance Structures will be included in the next chapter.

To begin with, the suggestions in the category *Capital/Financing*, will be presented. At six out of eight events and meetings, participants were convinced that more investment, more funding and more subsidies would improve PT in Glasgow regardless of the governance structures. Requests were put forward, for better targeting of SPT investment, for Scottish government support because the Council is impoverished, and for the region to better work together to finance PT. The remaining three proposals in the category aim for public ownership. It was proposed that the charges from the WPL flow into Council owned PT, that funding is re-directed from roads to publicly owned PT, and that the £304,000,000, that are given to private bus operators each year, should be given to Councils to run a bus service. In 2016, the Scottish government spent £1,095 million on roads, £621 million on rail, £112 million on buses and £880 million on concessionary travel, other local PT, aviation and water transport. Two thirds of these 2,708 million came from the central government, one third from local governments (KPMG 2017). Although investment in roads can also be beneficial for buses, not just for cars, the sums support the impression of Nikolaeva et al. (2018), that while governments promote

behavioural change towards sustainable transport, their funding priorities indicate strong support of unsustainable car-based mobility. Between 2011 and 2016, government revenue expenditure on bus services decreased by 11 % in real terms, government capital expenditure fell by 50 % for PT while it increased for highways by 8 %. At the same time, operating costs have risen by almost 30 % per vehicle mile (KPMG 2017).

The next category, where suggested measures are possible in a system of private operators, is Measures Against Inequality/Improving Safety and Disability Friendliness. Proposals are to establish public advertisements about hidden disabilities, such as autism and hearing impairment, to upgrade stations regarding safety and comfort, e.g. install lighting, shelters and visual displays, to initiate an anti-discrimination campaign, and to improve the working conditions for bus drivers in public transport. These are all measures that the Council or the Scottish government can initiate. Improving the working conditions for bus drivers would also help to make them feel respected, which was another proposal, with the aim to help them be better informed about rules, be more polite and hence more helpful for passengers in need of help. Participants also wished for more conductors (on trains and buses) to improve safety and support people with visible or hidden disabilities. It was moreover proposed to have audio announcements of next bus stops and key alighting points. In general it was put forward that bus fleets should improve, that PT should be safer overall, that there should be direct actions for safety and positive atmosphere of good social experiences on PT, that the transport discussion should become a social one and that the stigma, that only poor people use buses, has to be challenged. To tackle inequality, it was proposed that workplaces become responsible for transport to and from work, not their low-paid workforce, although that had not been explained in further detail. Measures for improvement on the bus must be taken by operators, the remaining measures by the Council or Scottish government.

The following category, *Service Quality/Comfort/Innovations*, includes measures which have to be implemented by different institutions, because service quality is affected by external factors like congestion. The suggestions are to inaugurate a guarantee from transport providers to run their services on time, and to improve the reliability of existing services, especially night time services, to provide cleaner vehicles and to solve overcrowding, to provide more accessible buses for biking gear, more accessible service information, more information on the buses and more disruption information for the public via smartphone, and to introduce an integrated smart ticket. One proposal was to establish infrastructure for electrified transport and to put pressure on operators to invest in clean technology. That can to some extent be achieved by the introduction of the LEZ.

The next category, *More (Efficient) Public Transport/Less Cars,* is the largest together with *Governance.* Measures to reduce individual car use in cities are amongst the responsibilities

and powers of the City Council, like to ban cars from the centre, abolish on-street parking, or give more road space to buses. It was proposed to provide more space for buses on regular roads and motorways, and to manage those more efficiently for PT, alongside with installing bus priority measures. I1 explained that the city was built for cars, hence why a lot of road space is given to cars, but because the car ownership is low, that provides the opportunity to reallocate road space for buses, bikes, and walking. An extension of PT was called for at most of the meetings. People would like to have more services in rural areas, more bus routes, which could mean reinstating former routes, dedicated express services, although without cutting local services, better airport links, more P&R services, especially for city centre journeys, more evening, weekend and night services, more regular and clear services, more routes that go to supermarkets and hospitals, and more routes/services between Scottish cities. However, more PT will only be achieved if the demand is first present, if the demand is being communicated and if it is profitable for operators. The Council or SPT could partly intervene, but only if they finance new routes. It was also suggested to upgrade and extend the subway, to establish trams and to introduce shuttle or minibuses for workers, which would all be in the responsibility of the City Council or SPT.

The measures in the next category, *Cheaper Public Transport/Fares/Discounts*, would be difficult to implement with private operators. That PT should become more affordable was a wish at six of the meetings/events. Amongst others, the suggestions were to introduce tickets with an affordable price cap, and to reduce the price of the zone card. Completely fare free PT for everyone was proposed twice. Free travel for asylum seekers was another suggestion, as well as free travel for job seekers or for job centre appointments, which was put forward at three different events. It was explained that free PT, where tested, showed unexpected economic benefits and improved health and social isolation. Furthermore, many types of discount tickets were proposed, like extending concessionary tickets to those with visible or invisible disabilities, to students, to those on low incomes and to young workers. Currently, concessionary tickets for elderly can only be provided because of governmental subsidies. I3, when comparing Glasgow's to Edinburgh's ticket prices, explained that cheaper fares are not feasible as long as profits have to be passed on to shareholders. Moreover, private companies cannot align their fares or discounts, as that is considered illegal. Tickets, that for instance give free travel to job seekers, are therefore not possible under prevalent regulations.

That leads to the last category, *Integration*, where the measures that relate to integration within the PT system can only be realised if governance structures change first. The demand for more integrated PT and more integrated planning of such was put forward at five events, the request for equal fares and one integrated ticket for all operators and modes was put forward at four events. The zone card is not considered to be the integrated ticket that people want. Further suggestions were to develop integrated timetables, simplify services, establish publicly owned taxis as part of the system, cooperate with employers and companies to match timetables and working hours, and to link PT and health care in order to address poverty and inequality. Proposals for solutions that fall under the responsibility of the Council address integration between transport and other aspects of city planning. These are better access to bus stops and train stations, denser land use planning for viable PT, a reduced need to travel, and improved pedestrian friendliness which would increase the PT accessibility.

7 Discussion

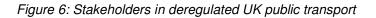
This chapter discusses possible solutions for improving the PT situation in Glasgow, and how they are evaluated by different stakeholders, by combining results from the events, interviews, and literature, and the theories presented in chapter 5.1. Reflecting upon the problems and suggestions presented in chapter 6, it becomes apparent that CPR related problems occur in Glasgow, and that only a few of the proposed measures can be implemented under the prevalent governance structures. Some measures could be implemented if the operators were willing to, depending on the amount of funding and the success of negotiations. However, the operators make decisions based on profitability, so will likely only implement measures that increase patronage or that reduce their costs, and are unable to implement measures that jeopardise their business. The Council can suggest measures that are for the benefit of people or the environment but has no power to implement them completely as they wish. SPT has the power to complement the network but not the ability to improve the situation on private operators' routes. I2 concludes that the system is a compromise between what the public is willing to do on one side, and what private operators are willing to do on the other side.

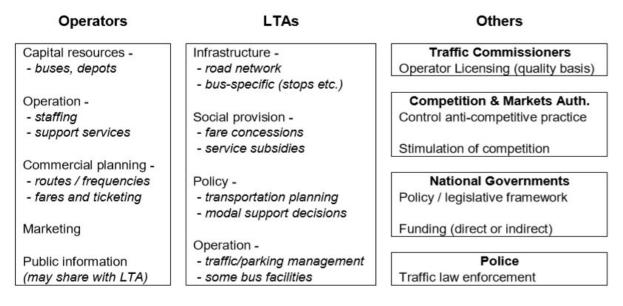
The new statutory bases for England and Scotland will be explained, followed by the options for solving PT issues. As explained in chapter 4, CPRs can either be managed by privatisation, governmental regulation, community governance, or mixed forms, like partnerships. The results in chapter 6 indicate that privatisation has failed to sustainably manage the PT in Glasgow, and that thesis will be seconded in this chapter. Hence, re-regulation in general, as well as the remaining options for governing a CPR will be discussed as possible sustainable configuration options for Glasgow.

7.1 Statutory basis

There are several stakeholders that engage in British PT. Four of them have an influence on the private operators by law (Godfrey and Taylor 2018). Moreover, there are seven

local/regional transport authorities in Scotland, like SPT for Glasgow and eleven other Council areas (SPT 2018), that hold supporting functions. Operators can design their own services "within a framework of policy and regulation involving both national and local government" (Competition Commission 2011: 2). Examples are regulations that define who can drive a bus, or the procedure of withdrawing timetables, but the bus network cannot be shaped politically (I2). Local Transport Authorities are responsible for designing strategies, implementing policies, and tendering contracts for supported services (Competition Commission 2011). Routes have to be registered at the Traffic Commissioner's office. When a regional transport partnership exists, like in Glasgow, new routes also must be registered there, so that SPT can set up the infrastructure in time, like bus stops (I3). The Traffic Commissioner has the power to refuse a route, which hardly ever happens, but cannot refuse the cancellation of a service, which goes through the same 10-week process as a registration (ibid.). The following figure presents the different stakeholders.





(Source: Godfrey and Taylor 2018: 3).

GCC, as well as all the other local authorities within Strathclyde, are a member of SPT, which is one way for GCC to influence PT. The other way is via the bus partnership which is rather informal (I1). Besides GCC and SPT, the operators First Glasgow, Stagecoach, West Coast Motors, and McGill's are members of the partnership (GCC 2018). Moreover, GCC maintains a close relationship to the Scottish government, that is responsible for rail transport (I1) in the sense that Transport Scotland defines rail franchises and the subsidies for rail transport come from public sources (I2).

7.1.1 Bus Services Act 2017

The Bus Services Act 2017 received Royal Assent on the 27th of April 2017. It applies to England only and is aimed to "improve bus services for passengers by providing local authorities, the Secretary of State and bus operators with a new toolkit to enable improvements to be made to bus services in their areas" (GB DfT 2017: 5). The Act gives Councils and Mayors of Combined Authorities new powers for establishing Advanced Quality Partnerships and Enhanced Partnerships with bus operators, Franchising, Advanced Ticketing schemes, and better provision of information for passengers on the buses and about bus services. The franchising powers are only available to Mayoral Combined Authorities because of the financial risk that franchising bears. However, other local authorities can request franchising powers. In England, local authorities are not allowed to set up municipal bus companies, which is the major difference between the English and the Scottish Act. Community transport operators, which are not operating for commercial reasons, should not be affected by franchising (ibid.). The Act provides powers but does not make it mandatory for Councils to use them, hence why it says in the foreword to a supporting document for understanding the Bus Services Act 2017: "Powers in legislation do not help anyone unless they are put into practice" (ibid: 4).

Prior to the Bus Services Act 2017, there had been Acts in the years 2000 and 2008 (White 2018). The Act in 2000 provided local authorities with powers similar to those in London, albeit with many restrictions, so no franchising scheme was proposed. It also allowed Councils to introduce a WPL, which was only implemented in Nottingham, where PT is publicly owned. Quality Partnerships were introduced, too, but only implemented in very few cities. The Act in 2008 allowed partnerships among bus operators, like for joint timetabling or ticketing, and also enhanced the franchising powers, called 'Quality Contracts'. However, the only attempt to implement franchising happened in Tyne & Wear (Newcastle and Sunderland) in 2014. The private operators in that areas opposed the proposal, and a 'Quality Contract Scheme Board' decided that the proposed scheme had failed. One reason for that was that the proposing authority did not provide sufficient data to assess the business case satisfactorily. It is worth noting that after deregulation it was not obligatory for operators to publish data about costs, ridership, etc. The latest Transport Act was supposed to resolve these issues, for example by making it mandatory for operators to publish data when there is a franchising attempt, like journeys and revenues. The Act also further enhances partnerships by restricting competition laws, and local authorities do not have to compensate operators which get displaced after franchising anymore. That shows a profound change of thinking that includes a shift from the focus on competition to an emphasis on partnerships or franchising that could eventually eliminate 'on road' competition (ibid.). White criticises that the 2017 Act does not allow local authorities in England to set up municipal operations, because they could be helpful when

transport authorities struggle to secure bids for contracted services if the authority could then fill the gap with its own offer. He argues that authorities could have been given these powers without allowing them to bid on the same contracts as private operators in a franchising scheme.

7.1.2 Transport (Scotland) Act 2019

The Transport Act received Royal Assent on the 15th of October 2019. It addresses parking, LEZs, road works, smart ticketing, Regional Transport Partnerships, Scottish Canal Boards, and the WPL. Most importantly for this paper, it also addresses Bus Services (Transport Scotland 2020b).

"The Transport (Scotland) Act 2019 provides powers which offer an ambitious new model for bus services. It provides local transport authorities with options to influence and improve bus services in their area, collectively ensuring that there are sustainable bus networks across Scotland. The Act will support local transport authorities to meet local needs and circumstances, whether they wish to pursue partnership working, local franchising or running their own bus services" (Transport Scotland 2020a: 52).

Outcomes of the Transport Act for bus services are new partnership options, the power to franchise and for local transport authorities to provide socially necessary services, the requirements for operators to publish information about their services to the public, and to transport authorities when a service is withdrawn. It is not mandatory for Councils to use those tools (Transport Scotland 2020b).

The option for Councils to run their own bus services or implement franchising was not originally part of the Transport Bill. GGM and the Labour party campaigned for amendments that provide new powers to local Councils, which has proven successful, and eventually convinced the SNP (I5). GGM worked in collaboration with "Friends of the Earth Scotland", "Unite Community", "Unison Scotland", and "We Own It" to encourage people to respond to several consultations about the Transport Bill that were released by the Scottish government in 2017. During the consultation process for the full Transport Bill in 2018, GGM had a running petition called "Get Glasgow Moving - world-class transport for Glasgow", which had received over 10,000 signatures by October that year (I6). As afore mentioned, SPT, the regional transport authority, has always had the power to franchise, and has also been using these for years. However, I2 explained that due to competition laws SPT can only franchise routes which are not offered by private operators.

The Transport Bill has been criticised in parts because it does provide powers, but no means to implement them (I2), which has also been the critique of the English Act (I4), although I1

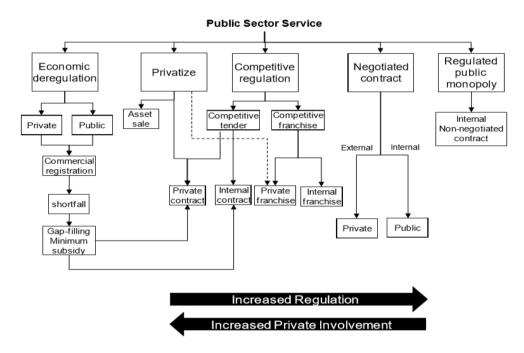
stated that "having the transport bill is a really important first step". In the Scottish National Transport Strategy, the new powers of the Transport Act are presented as an option, not a suggestion. I6 said that "the Transport Bill is still a bit of a joke compared to what's necessary" and that it is "not the work of a visionary leader", because it would look different if there was a vision behind it.

7.2 (Re-)Regulation

Amongst others, Transport Scotland (2020a) identifies congestion as one of the major issues of PT and the bus industry. This has been confirmed in the interviews. I3 sees increasing congestion and the possibly correlated fall in patronage as the main problem. However, only taking measures against congestion will not solve every PT problem that has been discussed throughout this paper. Moreover, poor PT will further enhance congestion. On the other hand, congestion shows that the road is indeed a limited resource, which no one can be excluded from and whose quality and benefits diminish from overuse. In addition to that, PT is partly overcrowded itself, and, most importantly, people are excluded from using it for numerous reasons, which should not happen if it is a CPR. With reference to chapter 5.1, that requires a change in the governance and use of such resource.

According to GGM, re-regulation is the only opportunity for improving the quality of Glasgow's PT. Moreover, most of the interviewed stakeholders and almost every participant of the events and meetings are in favour of increased regulation. The most popular options are franchising and public ownership. A few examples from other UK cities can help demonstrate the associated problems and benefits such as: London, who has had a franchise system since deregulation; Manchester, who is in the process of implementing franchising; Edinburgh, who has always had a system that is close to public ownership; and some other UK cities where there have been attempts to re-regulate the system or where public ownership is already successful. There are many types of markets and ownership structures in European public transport (Brandt and Schulten 2007). Currie (2016) presents different forms of ownership and competition models.

Figure 7: Regulatory Models



(Source: Currie 2016: 8)

The main difference between economic deregulation and privatisation is the sale of government assets during the latter. However, they both have the same outcome. Currie (2016) explains that privatisation occurred in the UK, but the UK's PT system also fulfils criteria of economic deregulation. Hence, the two terms are used synonymously in this paper. The different regulatory models lead to different types of competition. Usually a distinction is made between competition "in the market" and competition "for the market". In the former, operators compete for passengers on the same route, like in Glasgow and most British cities, in the latter they compete for the right to provide a monopoly service on certain routes, which is the aim in Manchester and has already been established in London (Brandt and Schulten 2007; Currie 2016). If there is competition in Europe's bus service sector, the most prominent type is competition for the market, whereas Britain is the only country with competition in the market. Additionally, while elsewhere regulation outside of public ownership has increased, it has decreased in the UK (Brandt and Schulten 2007). Ten publicly owned operators remain in the UK, the most famous ones being Lothian in Edinburgh, Scotland, and Nottingham City Transport in Nottingham, England. Where local authorities are still in control, ridership and service quality performance are good (White 2018). "They operate as 'arms' length' businesses, not under direct political control of their owning authorities, and not able to receive general subsidies (they receive compensation for concessionary passenger trips, and may tender for services on the same basis as other operators)" (ibid.: 342).

The predominating fully deregulated PT system of Great Britain is highly criticised (e.g. Brandt and Schulten 2007; Currie 2016; Taylor and Sloman 2016). Currie (2016) examined different regulatory models and found that neither public ownership nor full deregulation are the best option to provide sustainable, efficient, and fair PT. Usually, public ownership is not cost efficient, whereas full deregulation leads to unhealthy competition, a fragmented system, a decrease in service amount and quality, an increase in fares, and a decline in patronage. Full deregulation also restricts governments' options for bus improvements and can lead to "on route" competition (ibid.), which "has been widely criticised as wasteful" (ibid.: 9). That kind of competition only takes place where services are profitable, i.e. where farebox revenues exceed costs, which is rare. PT is almost never profitable regarding farebox revenue, so government subsidies are required. "On route" competition presumes the free availability of road space for every competitor, which cannot be guaranteed in the real world (ibid.).

Glover (2012) characterises on route competition as a market failure, in addition to service interruptions or failures, lack of services on unprofitable routes while popular routes are congested, social inequality, bankruptcies of smaller bus companies, loss of accountability to the public, and cost reduction in cleaning, maintenance, and environmental protection. All of these "failures" can be observed in Glasgow with respect to the results in chapter 6. A major problem are monopolies. It resulted and still results in governments taking back over some control (Glover 2012) and "it was the CPR (and wider collective goods) aspects of public transport that required government intervention" (ibid.: 7). In the UK, the five major bus companies, namely Arriva, FirstGroup, Go-Ahead, National Express, and Stagecoach, provided 69 % of local bus services in 2011. There is also high geographical segregation, which means that most areas are mainly served by one or two operators. 69 % of local bus services in an urban area are usually provided by one large operator. Fares tend to be higher in these areas (Competition Commission 2011). For the Competition Commission (2011) the lack of head-to-head competition is, opposed to the opinions of the scholars in the above passage, limiting consumer benefits because fares, frequencies, and service quality are not offered on a competitive level. Effective head-to-head competition appeared on only 3 % of routes. The lack of such competition results from "short-lived rivalry" (Competition Commission 2011: 1) which usually leads to the exit of one operator. Just the anticipation of such rivalry is a barrier to expansion or entry and promotes monopoly-like situations. Operators have "core territories" (p. 1) where they do not have to fear competition, because they avoid invading other operator's territory to discourage them from entering their own territories (ibid.). The report adds that competition is ineffective where there is no head-to-head competition. That leads to the assumption that most bus markets in the UK are not effective in delivering services. I3 describes competition in Glasgow as "healthy", but admits that "smaller, independent operators have tended to melt away" during and after the financial crisis in 2008.

Apart from Paisley Corridor in Glasgow, where First is competing with McGills, First has a monopoly position in Glasgow. Only operators with very specialised services can potentially enter a market with monopoly conditions, which usually leaves the monopoly operator unaffected (Competition Commission 2011; Glover 2012). I3 explained that First Glasgow has the most comprehensive network and provides most of the routes. The other larger operators only operate in niche markets, like Mc Gill's, which can be found in certain areas or on certain corridors, Stagecoach, which only offers express services to the city centre, or Glasgow City Bus, owned by West Coast Motors, which only operates two routes. The former state-owned operators in Scotland, before deregulation in the 1980s, had a complete monopoly, where competition was prevented by law. First Glasgow managed to mostly maintain the monopoly situation after they purchased the former municipal operator (ibid.). I2 agreed that there is a monopoly in Glasgow, and that the reason for deregulation, namely competition that would drive down fares, never actually occurred, hence there are no arguments left for providing PT in a deregulated environment. It is worth nothing that the Competition Commission, who identified the same problem, opposed regulation. Firms with monopoly power "can exert significant influence over governments contrary to the greater public interest" (Glover 2012: 4). Glover (2012) raised the question why one would expect markets to "now perform in ways that historically they were incapable of doing" (p. 7) and argues that there is only a case for neoliberal reforms if governments remain the major supervisor of the system, and if private companies only operate in spheres where they cannot cause market failures, because ultimately the government has to protect the wider community from the consequences of failure (ibid.). In Glasgow, the city government cannot prevent its citizens from the above-mentioned market failures, because they occur, and only SPT can offer additional, socially necessary services on routes that are not yet served by private operators (I2), which makes the case for re-regulation.

Neo-liberal reforms were originally supposed to benefit the government, and therefore the wider society, by offering greater efficiency and lower costs which would benefit consumers (Glover 2012). Political decision making had to balance social, economic and political aims, and could not focus on business objectives. Governments also preferred to transfer the risk of financial losses to private operators (Currie 2016). The private sector was expected to invest more in services than the public sector which would lead to a reduction in subsidies. The private sector was also expected to be more sensitive to consumer demands and their preferences, alongside with the ability to quickly respond to market signals rather than political decisions (ibid.). There is evidence that an increase in competition reduced the unit costs of PT. Between 1968 and 1995 the costs reduced by 41.4 % in London, and by 44.7 % in the rest of the UK (Cox et al. 1997). Similar, although slightly lower reductions in costs were found in Australia and the USA (Currie 2016). In the UK, some costs had been shifted to local

authorities after deregulation, therefore cost reductions might have been overstated initially. Moreover, costs did not remain low, but increased after the year 1999, primarily attributable to a raise in bus drivers' wages (White 2018). While the cost reduction in London was slightly lower than the rest of the UK, patronage increased by 1.4 %, despite declining by 27.5 % in the rest of the UK (Cox et al. 1997). White (2000) found that subsidies decreased by 59 % in the UK, but patronage decreased as well, resulting in the service effectiveness declining which offset the cost savings. Operating costs per passenger increased after deregulation, and lack of integration reduces cost efficiency even further if services are not combined where it would make sense to do so (Taylor and Sloman 2016). However, White (2000) mostly blamed this on an increase in car ownership, congestion, and competition from taxis. In Punter's (1990) opinion, "the erosion of local government powers [in British cities] has led to a wholesale disinvestment in the public realm and foreclosed many possibilities of locally-based positive intervention" (p. 9). Other critics argue that the benefits of corporations are a loss to the wider community (Glover 2012). To fully benefit from the advantages of deregulation, governments should retain "measures for safety, consumer welfare, environmental standards, and financial responsibility" (Glover 2012: 8). Currie (2016) adds social equity and congestion relief to that list and claims that regulation is necessary "where cost savings have dominated actions and where ridership/quality and the wider objectives of transit in reducing congestion, environmental impacts and providing social equity have been disregarded" (p. 22), which seems to be the case when comparing possible advantages of PT (chapter 4.5) with the situation in Glasgow.

Currie et al. (2018) found that public and non-public transport were generally equally sustainable in the categories environmental and economic sustainability and system effectiveness, but not in the category social sustainability. Social sustainability is higher in public operations, whereby public means that there is no private sector involvement at all (ibid.). Chapter 4.5.1 and chapter 6.1 showed that there are many intersections between PT and social aspects, which makes Currie et al.'s findings highly relevant.

Most authors conclude that a threat of competition, that appears in tendering or franchise models, improves cost and system effectiveness, and reduce the government's expenditure resulting from subsidies. Hidson and Müller (2003) studied competition models in Europe and found that patronage growth is on average highest where there is competition for the market, slightly negative in cities without competition, and lowest in deregulated systems.

Taylor and Sloman (2016) evaluate different forms of PT provision, namely total deregulation, voluntary bus partnership, statutory bus partnership, and bus franchising, by comparing how these can deliver a "world-class bus system" according to 16 attributes that define such system. The 16 criteria are a comprehensive network, simple area-wide fares, coordination of

services between buses and other modes, buses that are reliable, a stable network, comprehensive information for passengers, affordable fares, friendly staff, good quality vehicles, efficient and accountable use of public money, free bus travel for elderly and young people, all road travel governed together, bus network for public benefit, one area-wide brand, development focused on PT network, and policies to reduce car use and grow bus use. Taylor and Sloman state that under deregulation, 13 of those attributes cannot be achieved, and 3 can only be partly achieved (reliable buses, friendly staff, good quality vehicles). Partnerships and franchising perform better, which will be presented in the respective chapters.

Moreover, Taylor and Sloman (2016) calculated that in the deregulated industry, the "dividend leakage is roughly equivalent to one-tenth of the public money that goes into supporting bus services" (p. 7). Furthermore, over 40 % of bus operator revenues consist of public money, made up of funding for socially necessary (tendered) services, payment for the concessionary scheme, and the BSOG. Public money also pays for bus lanes, bus priority measures, real-time passenger information, and infrastructure such as bus shelters. Taylor and Sloman (2016) commented that despite the large financial contribution that local authorities make for buses, they have too little control over the shape of services (ibid.), which affects the level of citizen influence on PT. I1 said that "...the people who are riding on the buses (...) are also the people who vote or don't for me and my colleagues, and therefore we all need to achieve something that works for them, because they are the same groups of people", but politicians' power is limited. In addition to their financial reflections, Taylor and Sloman (2016) concluded that regulatory reforms are not transformative on their own and should be strengthened by giving authorities the statutory duty to improve bus services, for example by designing funding programmes in a way that regulation is a condition.

Currie (2016) claims that there is no real market orientation in deregulated PT. For example, the market wants higher frequency of services, but private operators cannot meet that demand due to high costs and low revenue growth with increased frequency. The results from chapter 6 also indicate that the market cannot meet the demands of the people. Regulation gives governments the opportunity to develop PT systems (Currie 2016). Private operators could develop the system, but almost never do in practice because they fear costs and political risks. The most sustainable option for organising PT therefore arguably lies between full deregulation or full public ownership and includes regulated competition (ibid.). Brandt and Schulten (2007) explain that the "disastrous" (p. 35) deregulation experiences in the UK lead to the EU not supporting full deregulation, but rather competitive tendering practices, where the responsibility for PT remains with the local governments, and Currie (2016) hopes that looking at negative outcomes in the UK should discourage other countries from introducing full deregulation.

The wish for regulation of PT was communicated at all of the events and meetings, and it became apparent that people think that GCC should have more powers and be more accountable for problems within the sector and problems that cause ripples in other sector. It was put forward that the government should uphold the commitments it made on the climate emergency, equality, discrimination, and health, that PT should be more transparent, and that governance structures should open up. Moreover, it was mentioned that abolishing state aid and competition laws would help improving PT provision, and that the Transport Bill should come into action, which could either mean franchising or public ownership, but certainly means some sort of regulation. Lastly, it was proposed that people should be able to communicate their needs, and that every stakeholder should be included in having a say in where they want to go and where they want their infrastructure, which is currently not possible with private operators. I3 from a private bus company claimed that regulation is not necessary. I5 and I7 clearly expressed that the market has failed, because for the PT sector it only makes sense in theory. I7 explains that in theory all elements are supposed to be equal, which they are not in reality, like physical access to bus stops and purchasing power, and that there are too many variables in the target market, while a variation in needs is not considered either. That creates a top-down approach on where services are provided, because market forces dictate that instead of people's needs, which causes monopolies and the elimination of bus services to increase profits. I2 adds that competition laws were implemented to prevent the public from exploitation but actually had the opposite outcome. I2 provided an opinion that the transport in Glasgow cannot actually be called "public", and that there is no proper PT in Glasgow, because it is neither defined by the public, nor does it serve the public properly, but instead is defined by commercial interests. I2 went even further and claimed that public transport in Glasgow would be a good idea. According to I2, PT does not necessarily need to be publicly owned, but publicly directed, because there are examples of PT systems that work well although they involve several commercial operators. It is the experience of the traveller that matters. I5 stressed that most people oppose privatisation, as least in the transport sector, and I1 stated:

"I don't think anybody is particularly enthusiastic about the way that deregulation has worked for our buses". (...) I think I already would agree that having more direct influence over our bus network, and actually a more integrated public transport network would give us more levers to design the city the way that it needs to be designed. (...) If we had the magic wand then obviously it would be fantastic just to be able to integrate all of the public transport together, and to have a much more obvious way, or a more unified form of governance over it."

14 stated that the majority of MPs in Manchester is supportive of some sort of public control, and 11 from Glasgow said that GCC would also like to have more control over managing the

PT system, like fares and routes, and hopes that the Transport Bill helps in fulfilling that wish. I2, on the other hand, describes the Bill as giving a craftsman tools, but no wood to use those tools, because the Bill does not provide resources coupled with its powers. I6 articulated the impression that the transport ministers do not want the new powers to be used, because they do not have the vision of a decarbonised, integrated transport system. *"But the powers are there! So, we need to model visionary leaders, either SPT or in GCC to now see those powers and utilise them. (...) We need to keep going!"* (I6). In the interview last year, I5 communicated pessimism about the possibility of a transformation if the Tories remain the governing party on a national level, which is what happened, because they believe in the market, as well as SNP. GCC is willing to *"investigate every opportunity that there is"* (I1). However, I1 explained that, even though the Transport Bill is a first step, the challenge remains of how to make use of the new powers while it is uncertain what level of regulation can actually be achieved to improve service levels in a sustainable and manageable way. I1 claimed that *"the challenge now is not what we'd like, but how we get from where we are to where we want to be"*. I2 agreed that the favoured outcome is clear, but the options on how to get there are not.

7.2.1 Franchising

According to Currie (2016), competitive tendering and franchising are not exactly the same, but are on the same level of regulative intensity, so will be used synonymously in this paper. Another expression that can be used is "competitive contracting" (White 2018). "The contracting authority may specify the pattern of services to be provided, along with fares charged (including all types of ticket, technology to be used, etc.)" (ibid.: 340). Franchising can happen on different levels. Contracts can be let on an individual routes' level, on the depot level for groups of routes, or for a whole city or region (Taylor and Sloman 2016).

Franchising is facilitated by the new regulations in the city government in Manchester and is what "Better Buses for Greater Manchester" is campaigning for as the English Act does not allow public ownership. The majority of MPs in Manchester supports franchising (I4), which was followed by a consultation process that lasted from October 2019 until January 2020. Eighty-three percent of citizens are also in favour of franchising, whilst only 8 % oppose it. Major opposition came from the private bus companies, who proposed different partnerships schemes instead. The primary concern amongst opposers was financial feasibility. Community, environmental, disabled, human rights, and heritage groups strongly supported the proposal (GMCA 2020). I2 expressed that they would prefer franchising over public ownership, at least in the case that PT in the UK will continuously be provided within a market system. The advantage would be that companies would not be competing for passengers but for the right to operate in an area. I2 explained that London is not economically efficient when it comes to the occupancy of vehicles, but it is effective for the people, because they enjoy the

system. However, it may not be as easy to implement franchising in Glasgow as it is in London, because London's buses were never subject to deregulation. Furthermore, the attempt to newly implement franchising bears the problem of strong opposition of the private bus companies, as observed in Manchester (I2; I7), although Manchester, in contrast to Glasgow, has strong political will and financial resources for franchising (I2). I2 expressed concern that in a legal argument, private bus companies would be able to afford better lawyers than a public body and hence may win and successfully oppose franchising. The legal territory is also tricky (ibid.). I7 is also concerned that the legal process will be difficult and take very long. I6 fears that nobody is prepared "to take on" the private bus companies, because there are so many of them, and they are so powerful. The British Bus Services Act from 2017 gives franchising powers to Councils in England but does not protect them from the resistance of the private bus companies against these attempts (17). I2 complained that these issues had been observed before the Scottish Transport Bill, which partly copies the British Act, went through parliament, without adjustments being made. That makes it likely that disregardful of the benefits of the new powers, Scottish Councils will be facing the same issue. In this context, I4 pointed out that Newcastle in England tried to implement franchising in 2015, but it was too difficult for the Council when the bus companies opposed that. I4 hopes that the new legislation from the Bus Services Act will not be meaningless. However, the Act has made it mandatory for bus operators to share their data, so it is at least easier for Councils to investigate their options. Moreover, 13 stated that private operators may not completely oppose franchising in Glasgow. 14 claimed that a disadvantage of franchising when compared to public ownership is that dividends would still "leak" instead of being re-invested into the system. Taylor and Sloman (2016) saw that disadvantage, too.

I1 was not sure if GCC has the necessary experience to organise franchising, while I2 claimed that SPT has the skills for procuring franchising in the twelve Council areas that they oversee, because they already provide contracts for the socially necessary routes, and coordinate Strathclyde's school buses. I2 expressed concern that SPT is lacking the financial resources because money is already scarce. However, based on last year's government announcement to fund bus infrastructure improvement it is assumed the Scottish government likely has resources they could provide. Nevertheless, paying private companies for running contracted service may exceed the cost of current subsidies, because the operators will probably demand more money for higher quality services (ibid.).

During the events and meetings, franchising was seen as one of the possible solutions in category *Governance*, whether it was directly proposed or necessary to implement other measures. Franchising was directly suggested at two events for two different reasons, one being that it would be easier to implement than public ownership, the other one being that it

may be a step forward in a transition process towards public ownership. Another proposal was strategic funding for bus services, so the Council gets control over fares, routes, and the quality of buses. That may as well be a circumlocution for franchising. There was no opposition against franchising, but big concerns that the transition may be too difficult.

White (2018) also sees financial limitations and opposition from private operators as the major constraints for implementing franchising schemes in the UK. He explains that financial resources of authorities are limited and were reduced even further in the past years, which already resulted in reductions or eliminations of contracted services in some areas. Moreover, a survey has shown that managers within the bus industry favour retaining the deregulated system, potentially with partnerships, or full contracts, where the risk remains with the authorities. Non-British operators, which have franchising experiences elsewhere, did not oppose such schemes. Furthermore, White (2018) claims that franchising bears the risk that operators lose revenues from profitable services in urban areas, which might affect the provision of services elsewhere.

Taylor and Sloman (2016), that assessed different organisational schemes by sixteen criteria that define a "world-class" bus system, established that under a franchising scheme, like in London, seven attributes can be fully achieved (area-wide fares, integration, reliable buses, stable network, comprehensive passenger information, good quality vehicles, free travel for elderly and young people), and nine partly achieved. Franchising therefore performs better than deregulation or partnerships, but still does not allow the full achievement of all sixteen attributes. They moreover calculated that if every deregulated system was replaced by a franchising scheme, the net financial gains would be £340 million per year. This comprises keeping profits from bus operators that are above the profit levels of operators within the regulated London system, and increased patronage and revenue resulting from more integrated networks and tickets. The financial surplus is high enough to compensate for cuts to the BSOG and local authority funding and could be extended when patronage and revenues increase further over time. That way, the number of services may eventually exceed levels from before cuts in 2010 (ibid.). Taylor and Sloman (2016) added that franchising can be a first step in achieving public ownership, which could be implemented when the franchises expired. I1 and I6 had the same opinion, although I6 provided a different idea of how franchising could lead to public ownership, which will be presented later. The Competition Commission (2011) dismissed franchising in their report but admits that LTAs may have social or political objectives which may legitimate that they introduce franchising to be accountable for the outcomes of local bus markets.

Although Glover (2012) proposes community-based public transport, he admits that private companies are perfectly capable of efficiently and effectively operating certain parts of the PT system if governments are responsible for planning and setting basic requirements. He states that the mixture of state influence and market provision help to prevent market failures that were listed in chapter 7.2. Many of the best practice transport systems are managed by a cooperation between governments and the private sector (ibid.). According to the Brandt and Schulten (2007) the EU also favours competitive tendering over full public ownership and complete deregulation and privatisation.

Although the consultation responses in Manchester mostly supported the implementation of franchising (GMCA 2020), the COVID-19 pandemic had and has an impact on buses in Manchester, and on the financial resources that are available (Griffiths 2020). Therefore, another consultation process started in December 2020 and will end at the end of January 2021 to include the effects of the pandemic. A decision that was supposed to take place in March 2020 had to be postponed by one year. To date, Manchester is still the only authority that officially intends to implement a franchising scheme, after the Transport Act has been in place for three years (ibid.).

7.2.2 Public Ownership

Public ownership is what GGM is ultimately campaigning for. The two options that have been presented by the campaign and the interviewees are that Glasgow either sets up its own public transport operation from scratch or that the Council buys one of the major bus companies. Taylor and Sloman (2016) present a third option, which is to "team up with a local authority that already owns a municipal company" (p. 18), but that has not been proposed.

Last year, it was expected that First UK would be up for sale soon and that the different city fleets could be purchased separately. I1 explained that GCC was in favour of public ownership, and that seemed to be based on the idea of running the then former First Glasgow buses. I5 and I6 also stated their opinion that this was the most promising, as well as the clearest option. The Council wanted to assess the option of public ownership in a feasibility study that should examine the purchase of a bus company, but only after First Glasgow was officially on the market. The plan was for GCC to register its interest to receive details before the initiation of the study (I1). The motion for a feasibility study was put forward by Labour and supported by the Greens (I5). I3 had only been informed of the separation of the UK bus operation First Bus from the rest of the US-based First Group, and the divestiture of First UK was officially announced to be off the table in the beginning of 2020 (Dalziel 2020). However, the question remains that if there was a publicly owned operator, who would be running it, GCC or SPT. I1

clarified that the Council may be lacking the knowledge of operating a comprehensive PT system:

"In terms of (...) running a bus company; it's not something that we have recent experience of doing. And therefore you're looking at having to create that capacity building of, of making sure you have a structure, of making sure that whatever you set up has governance that's appropriate, that you don't open up the Council to risks inadvertently. So, getting all that in place that's a huge piece of work when it's not something that's been going on (...) recently, and therefore you don't necessarily have that experience in house".

I2 argued that SPT has the necessary knowledge to run bus services, as they are already operating their own buses and the subway, and sees an attraction in providing and coordinating all of the services, but is not sure if public ownership is necessarily required to create a decent PT system. I1 confirmed that "SPT have knowledge, expertise, and structures in place". I5 suggested that it should be the Council who buys or starts up a bus company, in close partnership with SPT. I2 saw the main issues in the financial barrier, especially for SPT, although GCC does not have the necessary resources either. I3 also said that the costs for purchasing the whole Glasgow operation may exceed what the Council is able to pay for, but that the costs for GCC to start its own operation would be even more "astronomical". The costs for purchasing a major operator would, as guessed by I3, probably be far higher than at least £200 million. I2 added for consideration that not only the company had to be purchased, but that the fleet also needed upgrading, which would expose the Council to even higher costs. I1 stated that the Council might prefer options which are financially more manageable than public ownership, but also said that the financial constraint can be worth the social gain. Moreover, there may be a financial gain, too. I5 stressed that it should not be seen as funding for PT, but rather as an investment into environmental, social, and even economic benefits. I2 made a similar statement, saying that the current system may be economically efficient because little money is spent on it from the government, but that for society it might be inefficient, economically as well as socially. I2 is convinced that PT is cheaper than private transport for the society as a whole, because it is fundamentally more efficient, while externalities of private car use are never calculated. Glover (2017) presents the same arguments for community owned transport, which is often criticised as economically inefficient, too.

I3 specified that the Transport Bill is "effectively completely reversing what has happened from 1986 up until now", but emphasises that it would not lead to the same situation the UK had before deregulation, because transport companies are not nationally or municipally owned anymore. The act allows public ownership, but "while the act makes provision for it to take place in theory, in practice it really remains to be seen how that would actually be delivered,

or, for wanting a better word, enforced". Private operators will not simply give up their businesses, they would have to be bought back. Another issues in reversing deregulation is that former municipal and regional operators do not exist separately anymore. First Glasgow, for instance, unites a former municipal and two former regional operators. Its network exceeds the boundaries of GCC, so it could probably only purchase the operator by including all the Councils that First Glasgow operates in. According to I3, a model that may work would be for SPT to buy First Glasgow as the biggest operator, while the funding comes from all the Councils that SPT covers. In this model it still remains unclear what role the remaining private operators would play, which is also a question that I2 raised. I5 suggested, in the case that GCC bought First Glasgow, that the Council should then run their services on every route, which includes going into competition with the remaining smaller operators. I5 communicated confidence that the Council could simply offer better services on existing routes and drive the other companies out of business. I6 has a slightly different vision, but also wants to use competition laws against the private operators. Although ultimately aiming for public ownership, I6 also indicated that first, franchising is necessary to achieve that, suggesting that SPT designs a comprehensive plan of the PT system as a whole, like the authorities in Manchester did, a plan to "run it like a proper PT system". GCC should then impose a franchising scheme for that whole network which has been planned ahead, while a publicly owned operator is set up, or purchased. Because the publicly owned operator does not have to pay shareholders, it can offer cheaper bids on franchising contracts than the private operators, and this way take over more and more sections of the network, until it is the only operator. The responsibility for planning the network should always remain with SPT, as a public bus operator could still not design an integrated system that includes all modes (I6). I7 prefers the Edinburgh system over a deregulated one and over London as well, because in terms of standards, safety measures, and meeting needs of the local population, public ownership is more capable of achieving that. I4 called it a shame that public ownership is not allowed in England, articulating convincement that only publicly owned buses will make a longterm change and can help to provide mobility as a service.

The interviewees 2 and 3 made different statements about the alignment of the new Transport Bill with existing competition laws. I2 believes that in the Transport Act, it does not say that the Act overrules competition laws. Local Authorities get the power to run their own bus service, but not in competition to private operators, so cannot establish services on existing commercial routes. I2 also believes that there is the risk that a local authority bus service attracts passengers on a formerly not provided route, which would then make a commercial operator come in and force the local authority to cancel their service. I3 communicated convincement that with the current legislation, a Council can immediately start its own bus company if it had enough capital, and operating as just another competing company, going through the same registration processes as commercial operators, being able to compete on the exact same routes. It exceeds the limitations of this paper to investigate the actual laws in this case, so it can only be concluded that there is uncertainty about the alignment of transport and competition laws, which would probably complicate a transformation to public ownership. I2 pointed out that with the Council buying a majority operator like First Glasgow the competition laws would not come into play initially, because the routes are already registered, but in the long-term commercial operators could compete with the Council on the same routes, which bears the risk that the municipal bus company might be driven out of business. However, enough financial resources may help surmount some legal issues. I2 added for consideration that GCC buying First would not create the same situation which can be found in Edinburgh, because there the municipal bus company had never been privatised, and the depots had never been sold, thus the brand is well known to the people, revenues were always reinvested into the system and the fleet, and the services are integrated. Therefore, GCC buying First Glasgow would not create the same type of monopoly that Lothian buses has in Edinburgh. Moreover, I2 raised the concern that when GCC subsidises their own bus company to keep the fares low, that it could be classified as a market distortion, which would possibly lead the private companies to demand the same amount of subsidies. And if the Council could not support its own bus company, it may lose the competition. Overall, I2 expressed concern that a publicly owned bus company stuck in a market system might not bring the control and the change that people wish for, which can be linked to the findings from Nikolaeva et al. (2018) in chapter 5.1. Additionally, a purchase might be exposed to technicalities and issues that were not expected (I2). I5 and I6, as afore mentioned, seemed to bear in mind that competition laws will still apply despite of the new powers, but that they can be used to drive private operators out of business.

11 and 12, which have leading political positions, articulated that money may be the biggest constraint in reforming the system. Alternatively, 15 and 16 said it was primarily political will and ambition that was missing. I6 also expressed frustration about the lack of vision from political leaders and is convinced that a transformation will require stamina and determination for long-term campaign work, stating to be *"ashamed that the transport ministers have done nothing"*. However, according to 15, money is the next biggest challenge, with Glasgow being dependent on funding from the Scottish government, although the public already subsidises bus services, so has basic resources available anyway. I2 agreed that the money is out there, but that a lot of it is spent on individual transport, either by the government or by people using cars, where it is wasted considering the climate emergency, congestion, and the time lost being stuck on the roads. Moreover, according to 15, a municipal operator could cross subsidise, so they could use revenues from profitable routes to run unprofitable routes. Remaining funding could be generated from the WPL or congestion charges, which would have added benefits like

reducing cars and congestion (ibid.). Docherty (2020) also suggested that the WPL and congestion charging can potentially fund PT in Glasgow.

Democratic public ownership for PT or bus services was proposed as a solution at four out of eight events and meetings. Furthermore, the nationalisation or re-municipalisation of transport were put forward, and implementing a system like the one in Edinburgh, where buses are operated under an arm's length company. The last one does not exactly mean public ownership but is closer to public ownership than to franchising or community ownership. It was also proposed to transfer jobs from the private to the public sector, and to stop running PT with the sole purpose to generate profits to shareholders. These can be taken as indirect suggestions of public ownership because franchising would still involve jobs in the private sector and shareholder profits. One suggestion that showed sympathy with the idea of public ownership, too, was to extend the PT system with publicly owned taxis. It was advanced twice that to establish public ownership, the City Council should buy First Glasgow. Especially at one meeting it was jointly agreed that the expected sale was a massive opportunity for a transformation of the PT system.

Morton (2011) investigated the influence of EU law on British PT provision and raised similar concerns as I2 about British competition rules, although the UK has privatised independently from EU regulations. Nevertheless, depending on the design of Brexit contracts, European law could have an influence on future policy choices. EU competition law influences public sector activity mainly through State Aid rules. Tendering is supported by EU law, but public ownership could be complicated to re-establish. Morton (2011) stressed that a UK governance reform may require a reform of EU competition law first. However, Taylor and Sloman (2016) wrote that EU law dictates that "a local transport authority that directly awards a contract to run local bus services to its municipal company must exercise control over that municipal company that is 'similar to that exercised over its own departments" (p. 17).

Taylor and Sloman (2016) found that one of the main benefits of public ownership is the ability of a public company to reinvest its profits into its bus services. Where the percentage of reinvested turnover is 0.2 - 1.5 % in deregulated areas, it is 12 - 15 % in Reading, where buses are municipally owned. Taylor and Sloman also calculated the financial gains that public ownership would deliver, which exceeds the gains that can be delivered by franchising because dividends are not paid to shareholders. That allows for profits to be reinvested, which reduces the amount of necessary subsidies. Gains from more integrated networks and ticketing would be equal to the ones under franchising. The total annual gains would be $\pounds 506$ million (for Britain excluding London), so investing in new services would be possible, as well as restoring funding cuts equivalent to £189 million since 2010 (ibid.). I3 from a private bus company indicated that not having to generate profits, because no dividends and no

shareholders have to be paid, but being able to reinvest all revenues, is an advantage that only municipal operators have. Municipal operators can also offer lower fares, which is one of the reasons why bus travel is a lot cheaper in Edinburgh than it is in Glasgow (ibid.). Nevertheless, Taylor and Sloman (2016) claim that remaining municipal operators in the UK do not have the same benefits as municipal operators in Germany, Austria, and France, because competition is not completely absent. Municipal operators still have to compete with and run alongside private operators, and hence cannot easily implement an area-wide brand or area-wide fares. Moreover, local authorities in Britain have less and more restricted possibilities to raise funding locally than other European cities (ibid.).

13 concluded: "I don't think it's been clearly thought through. The legislation is there, obviously, to provide an option that might lead to further evolution of the transport industry, but as to what shape...I don't think it's a finished product yet. It's really just a framework within the act. And I think there probably needs to be more done before anything would actually physically take shape as (...) a direct result of the Act".

There is no life example for the use of powers in the new Transport Bill. There are examples of franchising and public ownership, but those cases have existed historically (ibid.). In conclusion, public ownership has been discussed more extensively than franchising, but opinions were also more controversial, which supports the assumption made in chapter 5.1 that public ownership will be more difficult to implement than franchising.

7.3 Community-based Transport

Glover (2017) defines community-owned transport as "a mobility service provided or facilitated through a community-based organisation located within civil society" (p. 163). He considers community-owned transport as an extension to conventional PT, at least up to this date (ibid.). Community transport (CT) can also include collaborative consumption models, like carsharing, if they are not for profit (Glover 2017; Nikolaeva et al. 2018). The UK Community Transport Association's definition for CT is the following: "Community transport is about providing flexible and accessible community-led solutions in response to unmet local transport needs, and often represents the only means of transport for many vulnerable and isolated people" (CTA 2018). Typical services are school and hospital transport, community bus services, group hire services, or voluntary car schemes. Most services are demand responsive, but a rising number are scheduled services registered for fixed routes where conventional operators do not run buses. "As community transport is always run for a social purpose and never for a profit, it is often the most reliable, resilient and accessible way of ensuring the broadest range of transport needs can be met" (ibid.). Glover (2017) stressed that what he defines as welfare transport, i.e. special needs or special purpose or group only

transport, is not the same as CT, although the terms are often used synonymously, because welfare transport excludes members of the general public. However, transport providers can offer both service types.

There are not many examples of common PT management yet (Glover 2013). The main reason for that is that profitable transport requires returns from scale, so that large capital investments are necessary for entering the market. That factor acts as a barrier for community-owned transport, which is usually operated on a small scale. Moreover, there are limitations of CT, which can be:

"Limited hours of operation (usually not in evenings and weekends), small service territories, high priority to medical trips; low priority to social trips, vehicle fleets underutilized, few institutions to optimize fleet use, carrying capacity of vehicles underutilized, service providers focus on vehicle acquisition, not service provision, and information on services not widely disseminated" (ibid.: 7).

The model for community transport is usually that of a social enterprise that "operates on business principles to achieve progressive social and/or environmental protection goals" (ibid.: 7). Hereby, profits are used to achieve the enterprise's goals instead of just being the final outcomes of operations. Social enterprises can *inter alia* take the form of a charity or a cooperative, so that they can adapt to different types of communities (Glover 2017). Resources are generated from fees for services, paid or volunteer labour, income, or in-kind contributions. Social enterprises act autonomous, comprise local knowledge, can adapt quickly in respond to changing circumstances, are easy to scale up or down, and hold a legal identity, which simplifies cooperation with governments or private companies due to secured accountability and certain standards. Social enterprises are increasing on an international level, probably because due to market failures, or problems of welfare states, like financial constraints or bureaucracy. Moreover, demand for social services has increased, and there are new possibilities for cooperation between social and economic agents (ibid.)

In 2010, there were about 1,700 CT organisations in England alone, providing over 15 million trips. CT is usually associated with niche markets (Mulley and Nelson 2012). In Glasgow, Glasgow Community Transport (GCT) is the largest provider of such services, offering special needs or special purpose services, group transport, as well as two registered routes which are available to the general public (GCT 2021).

In Britain, there are two ways for operators of non-profit services to acquire a service license. "Section 19 permits allow organisations to operate vehicles to transport their own members or people whom the organisation exists to help. They cannot be used to carry the general public, but can serve isolated and rural communities" (Mulley and Nelson: 1818). There is no need to register a route. "Section 22 permits allow organisations, concerned for the social and welfare needs of one or more communities, to operate a community bus service - this can be for the general public and include registered and flexibly-registered services" (ibid: 1818). Between 2012 and 2018, 87 of those permits were issued in Scotland (CTA 2019). CT organisations in Britain are allowed to charge fares, thus they have to ability to cross-subsidise (Mulley and Nelson 2012). The CTA (2019) states that section 22 services serve routes that have low patronage and were not commercially viable, but still feed into the main network, whilst doorto-door section 19 services improve access to commercial bus stops and train stations on the main network, which is beneficial for commercial services. This is one example of how different governance models can work in harmony. The major concern Glover (2013; 2017) was met with is that CT is difficult to integrate, and could worsen the situation in cities or areas where there is already a lack of integration between operators and/or modes as CT would just be another part of a fragmented system. That could be a legitimate concern in Glasgow. However, he tries to dispel the concerns by arguing that firstly, organisers and users of community-owned transport have a high desire of integrating their services with the existing ones. Secondly, even if CT was not integrated, it would still have social benefits and reduce car use in areas with poor transport services.

There are more advantages of community-owned transport that are not available under state or private governance (Glover 2013). The first advantage is that CT improves social equality because it can provide services in areas that are underserved by public transport. Secondly, CT is an alternative to driving, so helps reducing GHG emissions and other associated problems with private car-based mobility. Thirdly, CT has benefits especially in remote and suburban areas, where traditional services are not viable. Usually, car ownership and use are higher in these areas, but not everyone has access to a car or is able to drive. Glover admits that the state or privately owned companies could provide those service, "but empirically there have been few efforts to expand the services into these areas or to systematically consider meeting the needs of those of impoverished mobility opportunities" (ibid.: 8). Lastly, CT operators are accountable to the people they serve, and the small-scale can be very innovative. That allows CT to better meet the needs of communities and fulfil the important role it plays for sustainability as described in chapter 4.5 (Glover 2017). The expectations for PT services have changed. Traditional demands have declined, as already mentioned in the introduction of chapter 4, and the system needs to react to changes more quickly (Glover 2011). A study from the Ealing Community Transport (ECT) charity (2016) states that CT is part of the solution in times where budgets for public services are continuously reduced. Sometimes, CT is the only available transport mode. Some people live in areas with PT but cannot walk the distance to a bus stop and therefore need door-to-door options (ibid.). Mulley and Nelson (2012) stressed the importance of CT not only to tackle lack of access and inequality, but also to foster community development and independence. Furthermore, CT can help building social capital and meet environmental targets, as well as reduce economic costs, not only for the health care system when people are transported to medical appointments, but also for society as a whole with respect to the economic advantages of PT that were discussed in chapter 4.5.3 (ECT 2016; Glover 2017).

However, "because access to VT [sic!] services is often restricted by the characteristics of the user, there is often unmet need from clients who do not meet the required conditions. The degree of unmet need is a concern for funders although difficult to measure unless CT operators record unmet requests (...). Short-term funding, legislation, lack of perception and acknowledgement from statutory organisations and Government all affects their ability to support desired levels of services" (Mulley and Nelson 2012: 1819).

Alternatively, Glover (2017) states that one advantage of community-owned transport in the form of a social enterprise is its independency from public finance, and the independency from political decisions to achieve development. This does not fully apply to Glasgow's already existing CT, because they receive funding from SPT (SPT 2018), and are influenced by political decision making, such as the establishment of the LEZ (CTA 2019). Digital technologies have enhanced community organisation (Glover 2017). The use of ICT would benefit service provision further, but barriers to this lie in finding and implementing a resilient governance model (Mulley and Nelson 2012).

Scotland passed a Community Empowerment Act in 2015, which "will help to empower community bodies through the ownership or control of land and buildings, and by strengthening their voices in decisions about public services" (Scottish Government 2017). The Act is divided into 11 different parts, who came into force individually, mostly between 2015 and 2017. Part 2 issues Community Planning Partnerships for local authorities. Part 3 allows community bodies to initiate dialogues with authorities about local services and problems, for example by suggesting improvements, offering volunteers, or proposing community delivery of a service.

Part 10 is supposed to enable ministers to "require Scottish public authorities to promote and facilitate the participation of members of the public in the decisions and activities of the authority, including in the allocation of its resources. Involving people and communities in making decisions helps build community capacity and also helps the public sector identify local needs and priorities and target budgets more effectively" (ibid.:6).

Two years after the Act received Royal Assent, part 10 had not come into force. An event with stakeholders did not lead to a decision on where and how to use the new regulations (ibid.),

which is another indication that opinions are varied and that before the implementation of longterm solutions, stakeholders need to be brought together.

Rolfe et al. (2020) conducted research on community activism in Glasgow, investigating to what extend it is influenced by community history and capacity, as well as relations with local authorities. One form of community activism is 'mutual self-help', which includes communities providing services themselves. The ability of communities to participate varies according to internal and external factors, hence it is subject to inequality. Rolfe et al. (2020) compared a historically affluent Glaswegian neighbourhood, a formerly deprived neighbourhood in transition with an evolving socio-economic mix, and a rather deprived, but really diverse neighbourhood. In Scotland, Community Councils with statutory representation function as mediators between communities, local Councils and other public bodies. The Community Council's approach to participation is usually formally democratic. In the first community, the authors found that one factor that influences activism in Glasgow is mutual suspicion between community and local Council, although the community was generally a strong participant. In the second community they found that when new residents with a different background enter the board of the community group, that could create tension and complicate existing relationships with Councillors. In the third neighbourhood, the community group split after officials stopped organising the meetings and the group became independent with its own constitution and board. The committee of the original group became rather homogenous, which lead to the formation of a second group that focuses on different issues. People were frustrated with the lack of progress. The number of people engaged in community activism decreased (ibid.).

Glasgow demonstrated that it has ambition for transformation when it won the "Future cities demonstrator competition" with aspirations of becoming a smart city (Leleux and Webster 2018). Leleux and Webster (2018) investigated to what extent Glasgow is delivering smart governance to its citizens. They established that partnerships were formed between public, private, and academic institutions, and that people were encouraged to participate using smart technologies. Online participation was still relatively low, which they ascribed to deprivation and associated little access to technologies, a major challenge for implementing innovative smart governance solutions with equal, active citizen involvement. Nevertheless, the project included measures for community empowerment, raising awareness, and implementing new options for citizen engagement in decision-making. That has proven most successful when citizens were interested in local occurrences, and when activism was related to local issues, "as opposed to city wide initiatives and policy" (ibid.: 170).

According to Rolfe et al. (2020), their comparison also shows that city-wide activism is unlikely because of the richness in community diversity, which can already be experienced within

communities. Ostrom (2010) established that local communities in small and medium sized cities can exert significant influence, but that neighbourhoods in large cities are often not heard in decision making. Glover (2017) stressed the importance of mutual trust in the commons, but also in strangers that are sharing the system. Ostrom (2010) named trust as one of the main success factors in community ownership, which can be built by communication and face-toface meetings, while isolation of stakeholders can lead to the destruction of a resource. The results show that so far, there is not much trust in Glasgow, especially not between different groups and stakeholders. That can be a result of past planning failures (Sagaris 2018). Moreover, inequalities exist in the capability of communities to organise themselves to participate democratically (Rolfe et al. 2020). I1 stated that "certain communities in our city are very good at making themselves heard when they are not happy with decisions we make, and others aren't heard". Ostrom (2010) stressed that it is essential to provide room for communication. Sagaris (2018), who investigated citizen engagement considering two transport planning examples in Chile, found that "in both cases, creating a roundtable that brought institutional actors together and then brought these actors together with citizen organizations generated new collaborations and consensuses, facilitating project/plan development" (p. 408). According to I1, there is no forum in Glasgow in which campaigns or community groups can discuss their experiences related to PT. Another constraint for effective community participation comes into play when financial resources limit the extent to which the public and private sector can implement solutions which go beyond self-help (Rolfe et al. 2020). This has also been found by Leleux and Webster (2018). Rolfe (2017) claimed that austerity programmes in the UK constrain the possibility of empowering communities equally, and maybe even disempowers already disadvantaged communities. Furthermore, "wider structural constraints may undermine (...) policy aspirations" (Rolfe et al. 2020: 15) like the Scottish Community Empowerment Act (ibid.). Conversely, the social, economic, and political setting does not only influence CPR users, but can also be altered by them (Ostrom 2010). In addition, diversity and inequality within and between communities emphasises the importance of smallscale local activism (ibid.). When citizens in metropolitan areas are unsatisfied about public service provision, which they are in Glasgow, they tend to become active in voting for governance structures that better match their needs (Ostrom 2010).

It is worth noting that Glover (2012) generally states that neo-liberal reforms did not lead to the same conditions that were caused by free PT markets in the 19th century, but rather resulted in "the (re-)entry of private firms into a framework in which the state retains a strong and central oversight role" (p. 6). Although that might be true for Australia, which Glover's paper is based on, it certainly does not apply to the UK. Glover's proposals for community-based PT are resting upon the assumption that the state usually has a strong role within planning and

coordination. It may be more challenging to transfer Glover's theories and suggestions to the UK situation, where the state does not have a central role in PT provision.

Community ownership was neither explicitly suggested in the interviews, nor was it directly proposed at events or meetings, but the role of communities, and the necessity of their empowerment, was discussed a lot. At many events the essence was that PT should create welfare for communities, not for shareholders. At two events it was suggested that communities plan the routes that they need, and at three events it was put forward that small, local buses would be best serving communities. One person also suggested car-pool like solutions that people can organise within their neighbourhoods. This sounds similar to the definitions of CT that have already been presented. I5 proposes to run buses as a real public service, not as a means to generate financial returns, because mobility is essential for people. That matches Frischmann's (2005) opinion, who claimed that when resources have public and social values, the market value is difficult to measure, so communal management should be the primary approach. I2 proposed that a genuine PT system should adapt to the people instead of making people adapt to the system, because at the moment transport planning is based on a guess what people might want, combined with data about where and how people have travelled in the past, but it should be based on peoples' actual travel needs. Participants at events also demanded that every stakeholder should be included in planning processes, whatever the governance model is, and that people can have a say in where they want their infrastructure, and where and when they need to go, so that transport can be provided accordingly.

I3 from a private bus operator explained that some communities have a very strong connection to their bus service because *"it's been a long lasting part...it almost becomes part of the fabric of those communities, that they've grown up with it, it's always been there, it's been a constant".* In these cases, the company tries to acknowledge that by not changing the service, brand, or number. Communities can also approach a bus company and request the establishment of a service in their area. Requests are collected in the customer service centre and the network and timetable are reviewed regularly. If there are several requests from a certain area, the operator examines if a new or different service would be feasible (ibid.).

One participant said that PT should be a public right, not a commodity, and the interviewees 2 and 7 said it should be considered a public good, because mobility means access, and allows people to leave the house, socialise (even on the bus), work, learn, access healthcare. Mobility also connects communities (I7). This is the same idea that builds the basis of CPR theories. I7, the only person that used the expression "community ownership", articulated that it could include the full scope of what people need but added for consideration that the community level might be too narrow and too focussed on their needs, so that a central department would be necessary. That aligns with the findings from chapter 5.1 that in the real world there are

often mixed governance forms, and that complex system require multi-level governance (Ostrom 2010).

I2 added for consideration that demands from the public can only be fulfilled if they are coupled with the essential resources. Activists can be successful, given that they are responsive to the needs of communities, and effective in communicating, because in a democratic environment that activism can influence decision makers and legislators. They can then generate public money, because no vision can be fulfilled without capital. And eventually, these decision makers and legislators could not only provide resources, but also hand the power to the people who make a change (ibid.). That gives an idea of where community activism can start to successfully spread and finally reach a state where communities are the PT decision makers throughout Glasgow. It is worth noting that I2, a representative from an authority that operates demand-responsive services, and supports CT providers (e.g. SPT 2015; SPT 2019), spoke about empowering communities and individuals in transport planning, but still envisions a future where state or local authorities manage and operate the system.

I1 pointed out that it is important to have people speaking up for those "who maybe aren't heard as often", and that "quite often that is bus passengers, or people from low socioeconomic groups". Those voices can support GCC in pushing forward and making progress, and also ensure that the Council can be held to account while fulfilling people's needs. I1 indicated that campaigns, like GGM or other community groups, are really important for that. At events, it was put forward that public desires should be continuously projected by campaigns like GGM, and that there should be additional campaigns across communities. One recommendation from the events was to encourage people to comment on consultation papers, lobby their local Councillors and MPs, join the Community Councils, and demand better public transport from the Council in view of the climate emergency. I5 also proposed that communities and campaigns should lobby politicians in Glasgow, or that people get involved in campaigns that already do lobby work. I7 emphasised how important it is that people share their experiences with their local politicians and respond to consultations but explained that people sometimes get frustrated because they feel overruled by power dynamics or politic forces. This could be experienced by GGM. The campaign had been invited to be a part of Climate Emergency Working Group, which was supposed to set out recommendations for the Climate Emergency Implementation Plan. One of the recommendations was to investigate the option of franchising, another one to assess the option of free to use PT. In the end of the year e-mail (2020), GGM's treasurer stated that:

"However, unfortunately of the transport recommendations have been either watered down or outright rejected and this includes bus franchising (re-regulation). We are angry about this and the completely erroneous and misleading reasons given for rejecting franchising, which is that Bus Service Improvement Partnerships (BSIPs) are 'required' by the Transport (Scotland) Act 2019. This is not only untrue but contradicts the assurances given to Get Glasgow Moving by council officers over the summer that all options in the Transport Act remain 'on the table'" and suggests to GGM members that: "you can read the reasoning the council gives in its response to the transport recommendations on page 59 of the Plan. GGM will be expressing its anger when it makes its response. We encourage you to do the same."

I4 explained that there are many smaller, community-based campaigns in Manchester, which are usually trying to improve or save their bus service and could be connected. The connection of smaller campaigns was also proposed at events in Glasgow. Quite often, local groups are able to win back services, but cannot initiate longer term changes on a city-wide or regional level (I4). I3 talked about the case of a bus service that connects Glasgow with one of the suburbs, which supports the statement from I4. The service was not doing well, so in 2019 the operator put a cancellation application in. The local community asked their local elected representatives for help, who then sought contact with the directors of the operator. I3 described that as *"political table thumping"*, and explained:

"This is disgraceful, but as a commercial business routes have to at the very least cover the cost of operation (...) but we can't really operate services that run at a loss, otherwise you would go out of busines. So in the case of (...) [this bus service] we listened to the public sentiment, because we are a responsible operator, we've got an important part to play in the communities that we serve, so any decision that we take (...) there is a business case behind it, passenger numbers have been studied in depth, the cost to run the route against that, and so...a decision [can] only be taken if we've exhausted all over options. And that would be like advertising, route promotion, that sort of thing, and it's only if all else fails. You can see well we've tried everything, and it's not worked, so time to go".

However, the operator then decided to re-register the route with short notice so the costumers would not see any disruption (ibid.). The service was monitored for a few months, and in February 2020 the operator decided to retain the service (South Lanarkshire Council 2020). The service was suspended during the COVID-19 lockdown and in the beginning of July the operator announced that the service would be withdrawn permanently, explaining that despite all promotional efforts the service was not performing well (Bartynek 2020). MPs and MSPs that represent communities across the suburb arranged a meeting with the operator, achieving that the service will continue to run, at least until the post-pandemic demand has been tested (Suter 2020).

Ostrom (1990) explained that in the real world, it is usually public and private institutions working together in different forms, especially in complex metropolitan areas (Ostrom 2010), and her examples showed that governments and wider structural basics were still involved in self-organising solutions. Glover (2017) mentioned that activities on a community level without regulation can be problematic, for example considering safety standards. As stressed earlier, Künneke and Finger (2009) and Chatterton (2016) agreed that there will hardly ever be pure forms of private, state or community governance. Rolfe et al. (2020) found that, depending on national and local policies, communities are sometimes encouraged to participate in planning and decision-making, and in other cases they have to claim their right to participate. They claim that the intensity of community activism is influenced by internal as well as external factors, which can be "national and local policy frameworks" (ibid.: 3). Alternatively, interaction between stakeholders can lead to the alteration of underlying structures (Ostrom 2010). Governments shape the space for communities to participate, as well as their relationships to local public sector bodies, leading to controversial discussions about state involvement and its role in taking responsibility. Enabling communities to participate can empower them but can also mean that the state withdraws from its accountability (Rolfe et al. 2020). However, Glover (2017) states that "the case for community ownership becomes stronger the greater the adoption of neoliberal approaches to mobility provision" (p. 186), which supports the idea that promoting community ownership is a reasonable approach for Glasgow. Nevertheless, there are basic requirements that need to be established before community-based governance is possible with the literature indicating that these include inter alia mutual trust, common interests, underlying governance structures, and institutional guidance, while the research in Glasgow demonstrated that some of these requirements are not fulfilled yet, primarily because there is no universal belief in the possibility of change. The current governance and PT provision is widely criticised, and even though community ownership was not one of them, numerous suggestion for solutions and improvements were put forward and discussed, some of which would only have smaller impacts, others which are proposing a transformation in governance. Alternatively, what the results have in common, too, is that the implementation of transformative measures will be difficult, because none of the stakeholders has a clear vision of a possible process, especially not after the announcement of the sale of First Glasgow was revoked. Everyone has a different perception of existing problems, and a different focus on future problems. It may be that a transition can start at a community level, changing peoples' mindsets along the way, including those of politicians and stakeholders that possess power, who can then initiate a system change whilst providing the necessary resources which will further empower communities. However, it may also be that a change in mindsets needs to happen on a different level first, creating the bare opportunity for communities becoming involved in public transport. Glover (2017) seems convinced that any objections to new ideas

can be overcome if the political will is strong enough, which aligns with views of citizens and campaigners in Glasgow. Nikolaeva et al. (2018) use the term "commoning" (p. 13), a development of the noun "common", to emphasise that it is a process promoted by collective action. Sagaris (2018) claims that change is required on multiple levels, from individual behaviour, to laws, to "incentives for building sustainable transport systems" (p. 404). The example of the afore mentioned bus service, or the participation of GGM in the working group, show that currently, although possible, it is rather difficult for communities and campaigns to influence decision making. Grafton (2000) established that every form of governance can be successful if the active participation of stakeholders is encouraged, which political leadership is key for (Leleux and Webster 2018). Sagaris (2018) concludes that participation often fails when the level of citizen involvement does not reach a collaborative as opposed to an informative rank. Consequently, even if community ownership is not an option for Glasgow, the theories can help to emphasise and enhance the role of citizens in decision making, while undertaking efforts to increase communication amongst stakeholders. The wishes that were put forward by citizens and campaigners, who currently seem to feel helpless against politics and private companies, even in view of the new powers in the Transport Act (see chapter 6), could turn into constructive recommendations if citizens were empowered in their role as active co-creators in PT planning and decision-making.

7.4 Further Options

This chapter mainly discusses the idea of partnership working, but also includes other measures that were proposed in the interviews, and further aspects that need to be taken into consideration. After a request for an updated statement in view of the cancelled disposal of First Bus, I1 from GCC replied:

"At the moment our efforts are mainly focused on strengthening our bus partnership with the operators, ahead of the Scottish Government Bus Partnership Fund being launched. This is funding that can be used by local authorities to bring about improvements to bus services through infrastructure and bus priority measures".

Moreover, when I1 was asked "how likely is it that something is going to change about the private operators or the whole system?", I1 replied: *"I don't know! I wish somebody knew!"*

The Scottish Transport Bill supports partnerships, and I1 hopes that this helps to work towards a mature relationship with the operators. According to I1, the bus partnership has to date focussed on tackling congestion issues and improving bus journey times. For example, GCC introduced the LEZ in negotiation with the bus operators, so that they were able to meet the required emission standards in an agreed time frame. Simultaneously, the Council put in bus gates that created streets which only buses and taxis could use to fasten journey times, and therefore generate savings for the bus companies. Those savings could then be invested into upgrading the fleet to higher environmental standards. The agreement from the negotiations was recorded in a legally binding document under the Traffic Commissioner (ibid.). Other measures that the Council was wanting to undertake are bus priority implementations, such as designated bus lanes and adjusted traffic lights. When asked if the main purpose of the partnership was to improve journey times, I1 explained:

"It's one of the ways in which all the other outcomes happen, so we want more people to be riding the bus, and in order to do that you need to increase things like frequency, you need to make sure the fares are reasonable, you need to make sure you've got buses going where people want them to go, and all of those things are only possible when the bus operators are spending their money as efficiently as possible, so by making the buses go faster, what you do is you save them enough money to re-invest in other ways. (...) A bus going faster in itself is not actually the outcome".

Indirect benefits can be that faster journey times allow bus operators to run a certain route with less vehicles, and deploy the excess vehicles on another route, where it could increase frequency, and get more people to use the bus. In exchange, to increase the efficiency of measures that improve journey times, the bus operators agreed to exchange their data and maps with GCC (ibid.). I3 expressed happiness about a £500 million fund that the Scottish government announced last year to enhance bus priority measures, the first fund aiming to tackle congestion instead of subsidising the railway or retrofit programs. I3 indicated that they are highly convinced that this will help winning back patronage, because bus companies cannot continue increasing fares and cutting routes, raising the question if "you keep going until your ticket price is a million pounds, and you're only running one bus?" I1 articulated that they would also like to achieve uniform branding for buses in the city, and simplified fares that people can understand intuitively. Lastly, a bus partnership can help integrating land use planning and transport, for example to ensure that new homes are connected by PT (ibid.). These can definitely be beneficial outcomes of the bus partnership in Glasgow, but there is no guarantee for GCC that operators keep fares on a certain level, increase frequency on a route when another route requires less vehicles, or agrees on uniform branding and fares. The operators will still only do such things when it is economically viable for them. Docherty (2020) calls the bus partnership a "last ditch attempt to try and make a voluntary collaborative approach work" that has not been successful so far (p. 89). I2 shared a similar opinion, stating the current short-term interventions, including subsidising unprofitable routes, just put stitches and patches on a system that needs a holistic transformation, a step change. However, the bus operators obviously have an interest in serving new neighbourhoods or new facilities (I3),

which is one goal of the partnership, and that can be simplified for both sides within that. Beyond a bus partnership, I1 points out that in order to make PT in Glasgow more sustainable, it is essential to design streets, neighbourhoods, and services in a way that encourages people to use public instead of private (car) transport, and in a way that deprioritises private cars. That would increase revenues through fares which could be re-invested into better and more services, and it would create a healthy, viable, and social city. I3 would like to see the implementation of a WPL, which was enabled by the Transport Bill, because it could encourage people to leave their cars at home, or pay more for using it, which might then decrease congestion, increase patronage on PT, and generate funding for sustainable transport options. I3 points towards Nottingham, that has introduced the levy successfully, but adds that it works well because of the public ownership of PT, with the revenues from the levy being directly invested into buses and trams. The WPL has been discussed controversially in Glasgow, which is why GCC has commissioned a feasibility study, and it will not be implemented before 2022 (Williams 2020). A partnership approach is also what private bus operators are proposing in Manchester instead of franchising (Griffiths 2020).

The Competition Commission (2011) is aware of the benefits of partnerships between operators and LTAs, for instance because multi-operator ticketing schemes, of which LTAs should determine the characteristics, can be beneficial to the bus market. However, the commission fears the risk of a misuse. They warn that partnerships could further enhance geographic segregation in the market or coordination of operators. They found that individuals' bus use is driven by factors like income, life stage, proximity of home to bus stop, and car access rather than preference of competing modes. Therefore, partnerships with LTAs might not cause operators to improve their offer, e.g. lower fares, because bus demand is dependent on factors which cannot be controlled by operators, not even when bus priority measures or parking charges are implemented (ibid.). Nevertheless, the Competition Commission (2011) advocates partnerships if there are tailored to increase competition in a local area. KPMG (2017), who found a decline in the UK bus market, does not suggest re-regulation of any type as a solution. However, it is stated that there are local bus markets in Scotland and the UK, where patronage is growing in contrast to national trends, and that in these areas "a more proactive policy approach" (p. 12) was adopted, seeking engagement between local authorities and operators. The CTA (2019) is in favour of the new regulative opportunities from the Transport (Scotland) Bill but would welcome if it was made an explicit requirement for local authorities to include CT providers in partnerships or franchising schemes. Taylor and Sloman (2016), who evaluated deregulation, partnerships, and franchising using sixteen attributes that define a "world-class bus system", found that voluntary and statutory partnerships perform better than deregulation, but that only 5-6 criteria can be partly achieved (area-wide fares, integration, reliable buses, stable network, friendly staff, good quality

vehicles), while 10-11 criteria cannot be achieved. Different types of partnerships exist in some cities and regions, involving at least one local transport authority and one bus operator. However, there are no multilateral partnerships between an LTA, a bus and a rail operator (Godfrey and Taylor 2018). The Urban Transport Group (2019) discovered that partnership approaches can be beneficial for the level of bus commute share when comparing different systems in the UK in order to evaluate potential versus actual bus use in certain areas. Areas in which the actual bus use exceeded potential bus use were characterised by strong policies of bus prioritisation to reduce congestion, policies of keeping fares low and implementing integrated ticketing, innovations and proactive marketing, and cooperation between operator and authority, coupled with investments on both sides. Brighton & Hove is an example for a successful partnership approach between local authority and operator. The main bus company is owned by Go-Ahead, but still locally branded. In 2001 a flat fare was introduced. Council and bus company heavily invest in improvement, such as bus priority, high quality vehicles, passenger information, and parking restriction. All stakeholders promote bus use, and bus commute mode share has increased over the past few years (ibid.).

KPMG (2017) suggests that "the policy debate needs to reach beyond ownership and regulation of the bus market to consider alternative ways in which operators, technology firms and local authorities can form alliances to meet the challenges ahead by creating an environment that encourages service and product innovation, together with improved infrastructure asset management and supportive longer term policies on land-use and transport planning to cater for Scotland's changing economic and social needs" (p. 13).

According to Currie (2016), a partnership is essential for successful franchising contracts, which means that it could also be first step towards franchising. Franchising could then be a first step towards public ownership, according to interviewee statements, which could eventually lead to community-based governance. This result-based hierarchy of the order of steps in which regulation and participation could be achieved supports the assumptions made in chapter 5.1. According to 11, it is important that GCC does not try to achieve all that is possible in one big step, but rather take small steps. I1 said that *"any incremental change that takes you (...) in the direction you want to go is always a positive thing"*, and that it can be difficult in politics to achieve everything that people want in a short amount of time. I1 seemed to be convinced that

"when you make progress in a direction quite often you don't go backwards again. You tend to keep moving forwards (...) and (...) it changes people's mind sets along the way". [But] change is difficult. Full stop." i1 added that "any big new thing is hard, and really hard in local government, because things (...) do move slowly".

It is worth noting that a single measure cannot provide a solution for every transport related problem. I3 believes that "no one method is not the solution to everything (...), it has to be a patchwork of different things that work together to help deliver benefits to the city". KPMG (2017) claims that several measures need to be implemented co-ordinately to improve bus patronage in different ways. So simply re-regulating buses will not suddenly boost bus patronage, improve social equality, and eliminate private cars. What is also essential for boosting bus provision and use are investment in buses and bus priority, and car reducing measures. The Urban Transport Group (2019) wrote that "without a significant increase in funding for bus services, enabling reductions in fares, and widespread improvements in services, it is highly likely that there will be continuing decline in bus use and many areas will continue to fail to realise the potential of the bus" (p. 51). On the other hand, investment and local authority support sometimes cannot be as beneficial as they could be after regulation. For example, in Tyne & Wear in England, although there is a strong political incentive for promoting bus use, and investment in high quality infrastructure, bus priority, and a network of non-commercial services, the lack of integration between different operators, high fares, and a more complex than strategic network display major challenges (ibid.). Docherty (2020) concludes that Glasgow needs heavy investment in buses and their infrastructure in the longterm future, but that short- and medium-term it is more important to improve governance than build infrastructure. Organising the chaotic governance will be very challenging for GCC, but only after policy coherence and the lack of coordination have improved, money can be invested where it is needed (ibid.). That aligns with the findings in this paper.

8 Conclusion

Public transport is essential for sustainable city development. With PT, masses of people continuing to live in cities, can be transported to destinations in a manner which limits GHG emissions in comparison to equivalent private car use. PT can be affordable and accessible for everyone, subsequently enhancing equality in terms of mobility and access to supermarkets, shops, employment, social contacts, and health care. Additionally, PT may also help limit governmental costs associated with congestion, environmental pollution, health issues and poor education. Lastly, PT may contribute to solving global problems, such as climate change, locally. With the importance of PT being apparent, PT may be seen as a common pool resource, one that everyone should have access to and benefit from equally. A concept embodied by the name itself "public transport". However, despite the possibilities created with PT, it is also a resource that needs to be managed carefully and efficiently to prevent the exploitation of people or resources.

In Glasgow, PT does not have the aforementioned qualities and benefits, at least not for everyone. Buses are operated by private companies relying on market mechanisms. This is one way to govern a CPR. Elinor Ostrom, the founder of CPR theory, espouses two other ways to manage a resource, namely state governance, and community ownership, which were discussed in this paper. State governance has been discussed in the forms of franchising or public ownership. Moreover, as researchers suggest, PT management is usually comprised of mixed governance forms in the real world, which can combine state, private, and community management. Further options in this paper include inter alia partnership working, however, research results were mixed. Citizens together with official experts and researchers criticise the deregulated UK system, articulating numerous problems that they attribute to the market system and private operators. Hence, when it came to solutions, there were even more varied opinions. Almost everyone suggested re-regulation, albeit in different ways. Moreover, franchising, public ownership, and partnership approaches are each advocated and criticised. However, even when such approaches were advocated, only some participants and interviewees in Glasgow articulated a plan (I5 and I6), while others could not identify a possible process for achieving either of the scenarios, or expressed concerns that too many problems would arise, including 11 and 12, who represent institutions that could facilitate change. Moreover, 15's and 16's plans only partly overlap. With respect to the levels of change that were identified in chapter 5.1, it almost alludes that the more political power, the less hope, or vision, there is. Hence, the institution endorsed by 11 is assessing the partnership option; while 12, who is from an institution with a little less decision making power, proposed franchising; and 16, who represents a grassroots campaign without formal political powers, lays out a plan on how to achieve public ownership and free PT, although without addressing possible financial constraints, that 11 and 12 seemed most concerned about. Alternatively, citizens have numerous suggestions, but indicated that they often feel powerless and fear that change will be difficult despite the new legislative powers. Additionally, people may feel more pessimistic now that First Bus is no longer for sale as this was seen as a promising opportunity. Just one interviewee proposed community-based governance, and this interviewee was neither based in Glasgow nor involved in the transport sector. Local citizens and interviewees in Glasgow said they wished to involve communities more, but community ownership was not directly proposed once.

Stakeholders in Glasgow could learn from the Manchester experience, where the attempt to implementing franchising was facilitated by a strong political will and significant financial resources, which were said to be missing in Glasgow. It supports stakeholders' statements that capital and ambition would foster a transition and shows that a city with similar characteristics as Glasgow is capable of change. Edinburgh can be distinguished from Glasgow in this respect. The municipal ownership of the bus company is historically routed

and has always been successful. It can show the benefits of municipal ownership but cannot act as a role model for Glasgow.

City-wide community ownership would be the most transformative and possibly most holistic approach, that would allow people to contribute to the decision-making process with respect to meeting their transport needs. However, none of the stakeholders and citizens in Glasgow considered that opportunity in the plethora of other possible scenarios and solutions which seem prima facie much more manageable, at least in the short and medium term. Community ownership is a promising concept, but well-functioning PT systems in Europe and even in the UK prove that sufficient and sustainable transport, which meets peoples' needs, is possible without community ownership but with some sort of regulation. Additionally, going through regulation will have to be the first step for UK and Glaswegian bus services, at least as long as the partnership approach is not successful and excludes certain groups. Many stakeholders in Glasgow are eagerly awaiting a transition, and the powers are there. However, considering the varying perspectives of stakeholders, even re-regulation will not be implemented easily and quickly. In three years of the English powers being in place, only one city has officially announced to investigate the franchising option, while Glasgow has not even started to officially assess regulatory options. Community ownership may be too great of an endeavor for now. To achieve better involvement of communities or community groups, it might however be helpful to combine all the bigger and smaller campaigns. Most of them are interacting at some level, but the next step would be to coordinate and or consolidate the local and city-wide groups, that each have different focusses, but eventually pursue the same objectives. Many interviewees suggested this notion while stressing the importance of lobbying politicians to ensure the peoples' voices are being heard. In this regard, CT and CPR theories can help to show what communities are capable of, and how beneficial their empowerment can be.

Despite Glasgow not currently being in a position to implement the theoretical concept of community ownership into practice, there are helpful insights that may be gained from the CPR literature, and the scholars that combine CPR theories with mobility in general or PT in particular. The findings in this paper indicate that PT is an essential resource for people in every aspect of life. Moreover, stakeholders in Manchester and Glasgow, as well as Glaswegian citizens, are aware of the benefits of PT as well as the disadvantages and problems attributable to its absence. Accordingly, they support the idea of viewing PT as a public good rather than a service that is dependent on profit-making. Although the paper originally pursued finding the best possible configuration option for Glasgow, it fails: to provide a solution to the addressed challenges; to answer questions about where change has to be initiated; to further enhance the theory of community ownership; or, to lay out a detailed instruction on how to achieve governance transformation in Glasgow. Instead, after it became

apparent during the research that in order to start a transition, stakeholders and their perspectives need to be brought together; the paper offers a reflection of peoples' varying mindsets, suggestions, concerns, and priorities, that can both foster and hinder a significant improvement of the current PT situation, and analyses the relationship between actors. It can therefore still add to the debate about sustainable PT governance.

9 Outlook

Further research should primarily clarify the legislative background of the discussed approaches, especially how European and British competition laws interfere with the Scottish Transport Bill, because there seemed to be confusion amongst the interviewees, and the legislative background for local fund raising. In addition, although the general costs of deregulation, franchising, and public ownership in the UK have been calculated in general, an estimate of the costs for Glasgow could facilitate a decision. Close collaboration with authorities in Manchester might be beneficial there, as they already conducted a cost analysis of franchising. It would also be helpful for problem solving to investigate how stakeholders could be brought together and how perspectives could be united. Research on a larger scale should also discuss the influence of laws like the Community Empowerment Act.

A discussion about the governance of PT cannot include the full scope of aspects that need to be addressed within the transport sector, but also outside, where transport forms interdependencies with numerous other sectors, like economy, health, employment, education, and so on. Transport is moreover influenced by globalisation, lifestyles, social structures, population growth, digital technologies, or challenges like a financial crisis or the current pandemic. These sometimes fast changing global trends affect PT, in addition to national and local governance structures, which should be part of a comprehensive analysis and discussion. A particular challenge is the uncertainty of the future in view of short- and long-term trends in opposition to currently rather static PT systems. One aspect that should be included in the research for Glasgow is land use planning, for example the question why, knowing about the transport situation, smaller hospitals were merged into one large hospital, which was then not built at a central location, or why housing is developed at motorway junctions without PT connections. That touches on another aspect of sustainable transport, as the most sustainable transport consists of trips that do not have to be made. Decentralised, but compact land use planning is essential for reducing distances between housing, employment, shopping, and recreation. Furthermore, although imposing a threat on the viability of PT, alternative work schemes, like home office, can further reduce the need to travel.

Lastly, attention can be drawn to the realisation that a major part of the discussion pertains to finances, affordability, and profitability of PT. There are two wider discussions that can evolve around this, one being the question if this fixation on economic outcomes needs to be abandoned when transforming governance structures and empowering communities. In a broader picture, this could be linked to degrowth theories, where financial values and economic prosperity are not the primary topic of interest. This would reduce challenges for the implementation of community transport, like barriers to market entry, or the need to make profits. On the other hand, if there needs to be a price tag on everything, one way of using that could be to associate a financial value with every aspect of public transport, including social and environmental benefits while weighing them against properly calculated externalities of car traffic. CPR theories can certainly enhance thinking outside the box.

10 Literature

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Appendix

-Appendix deleted in publication for data protection-