The Application of Push-Pull Theory in Promoting the Using of Public Transportation in Kaohsiung City (MRT and Buses System as Examples)

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Submitted to the Faculty of
Department of International Affairs in partial fulfillment of
the requirements for the degree of
Bachelor of Arts in International Affairs

Wenzao Ursuline University of Languages
2025

WENZAO URSULINE UNIVERSITY OF LANGUAGES
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Abstract

The purpose of this study was to investigate how the use of public transportation (metro and bus systems) in Kaohsiung City can be encouraged to reduce transfer from private vehicles to public transportation. As background, in this study, although Kaohsiung had built the metro and bus routes, the usage rate remained low, which means the existing public transport routes were not in proportion to usage, and therefore we intend to analyze the underlying problems from the point of view of push, pull, and intermediate obstacles. The literature review is followed by qualitative research using interviews with residents from various backgrounds to identify factors that affect choice of public transportation. The interviews find that convenience, safety, and time cost were the main factors affecting Kaohsiung residents' choice of public transportation. The research also found that the problems of coverage insufficiency, transfer inconvenience, and current preferential policies could not effectively assist the transfer of the public transportation system in Kaohsiung. Therefore, this paper suggests that the improvement of the public transportation system in Kaohsiung can be done by increasing more public transportation networks in conjunction with policy guidance, service improvement and cultural change. Through these comprehensive strategies it can help more people move from cars and motorcycles onto the MRT and buses, for a livable, eco-friendly, and sustainable Kaohsiung.

摘要

本論文的目的是爲了探究推拉理論在促進高雄市的大衆運輸使用率的應用(捷運與公車系統作爲案例)，藉此促進市民從私人載具到公共運輸的轉移。高雄已經發展了數個捷運與公車路線，但使用率一直都維持在低值，也就是既有的公共運輸路線和使用率事實上並不成正比的問題，因此希望從推力、拉力、中間障礙因素等因素來分析背後的問題。論文先回顧了相關的文獻，并且使用質化研究方法，訪談來自不同背景的高雄居民，分析影響他們選擇大衆運輸的因素。透過訪談發現了影響高雄市民對大衆運輸的選擇涵蓋了方便性、安全性以及時間成本等因素的考慮。此外，這份論文也發現了高雄大衆運輸系統的問題，像是覆蓋率不足、轉乘不便和既有優惠政策無法有效幫助轉移。因此，本論文提出高雄市公共運輸系統的改善最重要的是更多的公共運輸路網，並搭配政策引導、服務提升以及文化轉變。透過這些綜合策略的實施，幫助更多的人從汽車、機車轉移到捷運、公車，打造一個宜居、綠色和可持續性的高雄。

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[1] 洪馨儀，從民眾日常運具使用情形看新北市交通運輸發展， (New Taipei City Government: New Taipei City Government, 2023).

Introduction

Background

Public transportation systems development and improvement were matters of global concern and main public policy analysis and urban planning considerations for all governments around the world. In the 21st century, public transportation increasingly became an important part of people's everyday travel, especially in metropolitan areas such as Taipei, Taichung, and Kaohsiung, where multiple bus and metro lines had been completed one after another. Public transportation grew tremendously and improved citizens' daily lives, which strengthened community interactions, elevated social competitiveness, and promoted economic development. Though the public transportation system did not lead to a substantial increase in usage. However, at least half of the population in Taiwan preferred private vehicles as their main means of transport. Public transit systems were plagued with problems like poor coverage and inflexible transfers, hindering people from transitioning from private vehicles to public transport. Consequently, public transport was often bypassed by people in favor of private modes of transport.

For example, the market share of public transportation in Taiwan was around 15% in 2022[2]. The public transportation usage rate in the Greater Taipei metropolitan area was about 30% on average[3]. In contrast, neighboring countries' capital regions showed significantly higher usage rates: 84 percent in Tokyo and 60 percent in

[2] R.O.C. Government, 111 年 民眾日常使用運具狀況調查 摘要分析, (Ministry of Transportation and Communication R.O.C. 2023).
[3] Government, Short 111 年 民眾日常使用運具狀況調查 摘要分析.

Singapore[4]. In central Taiwan, Taichung City's usage rate was about 8.4%[5] while agricultural counties like Yunlin and Chiayi had rates less than 5%. Declines in public transport usage continued into 2020 following the COVID-19 outbreak[6]. Following the pandemic, the Executive Yuan inaugurated the TPASS monthly commuter pass to encourage public transit use by lowering travel costs. Things like punctuality, transfers, and capacity needed to be addressed to have a real impact.

Despite the government's TPASS monthly commuter pass lowering the cost of public transportation, the adoption of public transportation did not increase significantly in Kaohsiung. This was because the TPASS policy, in addition to attracting existing public transit users, was not highly effective in drawing private cars and scooter users to switch to public transportation. Even with economic incentives, non-economic factors of time cost, inconvenient transfers, and low coverage continued to constrain the actual effectiveness of the policy, as these commuters were not able to change their choices.

Kaohsiung, the central city of southern Taiwan and the nation's industrial capital, played a key role in alleviating traffic congestion and improving air quality by developing a comprehensive public transportation system. But the usage rate in Kaohsiung was still low, far below that of the northern regions, where public transit was well developed, and the rate hovered below 10%. From the users' perspective, this could mean concerns of citizens for the convenience, safety, or personal habits that

[4] 郭良蕙 涂恩慈, 考察新加坡客運業科技發展、管理制度及場站設施, (公務出國報告資訊網 2023).
[5] Taichung City Government, 主記處市政府統計簡析-臺中市運具使用變化, (Budget, Accounting and Statistics Office of Taichung City Government 2023).
[6] 陳國緯 李淑英, "新型冠狀病毒肺炎(COVID-19)與真菌感染之文獻回顧," *Taiwan Epidemiology Bulletin*, 2022, https://www.cdc.gov.tw/File/Get/9JWUfJvJP_JyiKRywGccLg.

came with using public transit. In comparison, private vehicles reach destinations faster and more directly than public transportation. However, there were still more aspects to discuss about what the specific influencing factors were. For this reason, the motivations of citizens in transportation choices must be deeply analyzed as a basis for more effective public policies. TSMC's commencement of investments in Kaohsiung brought a huge amount of upstream and downstream technology industry suppliers to the city. And this near future was Kaohsiung where more people lived in this livable, smart city with sustainable transportation. It was projected that in the forthcoming years, public transportation usage could increase.

Motivation

Researchers as university students living in Kaohsiung have observed a noticeable gap between the development of Kaohsiung's public transportation infrastructure and citizens' actual usage experiences. Although Kaohsiung was the largest metropolitan area in southern Taiwan, its public transit market shares consistently remained around 8%[7], which not only increased urban traffic pressure but also adversely impacted the environment. In fact, Kaohsiung had two metro lines and a dense road network, resulting in a relatively high level of public transit coverage. Given the existing infrastructure, this paper argued that there was room to increase the usage of Kaohsiung's public transportation system, especially in terms of service quality. Currently, research on public transportation usage in Kaohsiung was primarily focused on infrastructure development and policy promotion; however, the psychological and social factors influencing citizens' transportation choices were left unexplored. This study focused on the usage of Kaohsiung's metro and bus systems, analyzing the factors

[7] Government, Short 111 年 民眾日常使用運具狀況調查 摘要分析.

considered by different demographic groups when choosing public transit. It employed push-pull theory by examining push factors, pull factors, intermediary barriers, and personal factors and provided recommendations and empirical evidence for future public transit promotion policies.

Research Purpose

This thesis worked to explore what factors influence a group of people to choose public transportation. The purpose of this study was to understand the reason behind low public transportation usage rates by analyzing the push factors (promoting factors), pull factors (attraction factors), intermediary barriers, and personal factors affecting various groups when selecting the metro and buses. To promote public transportation usage, the thesis proposed feasible ways to enhance citizens' preference for taking public transit, forestall using private vehicles, and substitute public transit (mainly metro and bus). The core principles and objectives included reducing traffic congestion, establishing higher quality public transit services, and creating a man-focused, public transit-friendly city.

This research aimed to apply the push-pull theory to find out what factors would influence population segments with different demographic features to use public transportation and suggested some ways to encourage people to use public transportation in Kaohsiung. As more people switched from private vehicles to public transportation, the usage of bus and metro systems increased. It was for this reason that the core principle of the research was delivering higher quality public transportation services and creating a people-centered and public transportation-friendly city.

Research Method

The research focused on Kaohsiung's metro and bus systems. First, the literature review of the extant literature, current policies, and a separate analysis of the two transit modes were presented. With qualitative research methods, the researchers interviewed people from diverse backgrounds for better understanding the most important factors in deciding which public transportation or private vehicles to choose, the way socialization impacted transportation choice processes, and for-fare discount policies. Finally, this research integrated these insights into the push-pull theory framework and then summarized and made specific policy recommendations.

This research was based on a qualitative methodology in which the research design was structured around the three factors of the push-pull theory (push, pull, and intervening obstacles) to understand how commuters chose public transportation in Kaohsiung City. Gained in-depth insight into the perceptions, experiences, and suggestions of Kaohsiung residents; a semi-structured interview was employed. The population was equally distributed through random sampling, and participants were recruited from different community sources.

The research used the choice of public transportation of Kaohsiung citizens as a case study. Since complex phenomena and multiple perspectives of individuals were to be explored, the qualitative approach was chosen. This was an open-ended, flexible method that quantitative methods might not be so flexible with.

Limitations

First, this research focused primarily on Kaohsiung's two main public transportation modes: the metro and buses. It was concerned with accounting for the

reasons citizens chose between these two options in public transit, promoting a substitution toward public transportation through its quality improvement. The study, however, did not include the broader public transportation system (light rail, bike share, bus taxis) or a deeper analysis of private transportation. This might restrict the ability to fully characterize differences between different public transportation modes. Moreover, random samplings were used to collect data. Random sampling could pick up all kinds of opinions, but it didn't focused on any specific group. Therefore, there was high variability in the quality of responses. This meant that it might not be easy to make sure respondents' answers contributed to the ability to distinguish differences and draw conclusions.

Further, as this thesis was a team project, researchers had disagreements in task division and decision-making processes. These non-material factors could then cause an imbalance if one member contributed significantly more than the other members, which could then affect the thesis quality as well.

Delimitations

The limitation of focusing only on buses and the metro was addressed; the literature review introduced light rail and explored its potential to attract public transit users. To eliminate the randomness of the sampling process, the thesis used elements of quota sampling in the interview design to have equal amounts of private vehicle users and nonpublic transit users in the sample. By using this approach, the sample was representative of the different travel needs, and a more detailed analysis of the demands of the public transit system for the various groups was made possible. The researchers also looked more deeply into the shortcomings of the bus and metro systems in social, psychological, and economic terms. Due to the randomness, the researchers could

adjust the interview questions flexibly according to respondents' answers to get more valuable responses in a limited interview time and reduce the inconsistency of response quality caused by randomness.

To avert the possible difficulties in team collaboration, this thesis relied on a division of labor according to the expertise of each individual rather than equal distribution. This approach resulted in an uneven workload distribution but assured consistency and stability in the final conclusions and served as a response strategy in the international affairs programs for the case when decision-making was rational.

Research Questions

1. **What factors influence the choice of public transportation?**
2. **What are the difficulties of moving from private cars to mass transportation?**
3. **How can the push-pull theory be applied to increase public transportation usage in Kaohsiung?**

Literature Review

The current state of Kaohsiung's public transportation system was examined, and the city's urban development changes, as well as the current public transit conditions, were explored in this study. The study attempted to explore theoretical frameworks that may be pertinent to transportation choice and assess the relationship between social, psychological, and economic factors and the choice of transportation mode. The researchers compiled existing data, then summarized all literature and formulated hypotheses to guide the content of subsequent interviews. The core topic of the thesis was the application of the "push-pull theory" to promote public transportation usage.

Public Transportation Development in Kaohsiung

Industrial development was the foundation of Kaohsiung. The industrial capital of Taiwan and the world's third-largest port during the golden era of the 1980s and 1990s, Kaohsiung. In 1994, the Kaohsiung City Government proposed transforming the city into an Asia-Pacific Regional Operation Center[8], combining six key centers: media, manufacturing, telecommunications, finance, air transport, and maritime transport. The Taiwanese government's 'South Star Plan' (1996) proposed to move the Siaogang area of Kaohsiung to a newly reclaimed port area linked by the metro[9]. In addition, the completion of National Freeway No. 1, No. 10, and Route 88 established a "Greater Road Doctrine" in the development of Kaohsiung's transportation. However, with the outbreak of the 1996 Taiwan Strait Crisis, many domestic enterprises went abroad, so many large public infrastructure projects in Kaohsiung, including the railway

[8] Asia-Pacific Regional Operation Center, Foreword and Blueprint, (Asia-Pacific Regional Operation Center 1998).

[9] 王敏玲, "不能拿我們的性命去換錢！南星自貿港區開發爭議," in *環境污染-空氣污染* (Citizen of the Earth Foundation, Taiwan, 2016). https://www.cet-taiwan.org/node/2897.

underground project and the construction of National Freeway No. 7, failed to develop the city's public transportation system.

Frank Hsieh was the elected mayor of Kaohsiung in 1998, offering a governance blueprint to make Kaohsiung a 'Maritime Capital[10],' departing from the Kuomintang's aspiration that Kaohsiung become an 'Industrial Capital'. He stressed urban greening, city port integration, and the vigorous promotion of metro construction in Kaohsiung to transform it from an industrial city into a leisure city with commerce, culture, and entertainment as its center. Many piers in Kaohsiung City Government removed the fences, having riverside cafes and street performances as well as hosting large marketplaces that attracted a lot of locals and tourists. In 2023, Kaohsiung's top tourism and recreation areas attracted a total of 56,468,677 visits, a 32% rise over 2022, with 97% of these visitors to free, ticketless attractions[11]. The 2022 Kaohsiung Metro Company annual report showed that public transportation in Kaohsiung Metro amounted to 41 million riders; the light rail had 7.76 million, and buses had around 32 million rides.

As discussed above, Kaohsiung's metro (including the metro and light rail) and bus systems had very high ridership, partly due to two decades of effort by the Kaohsiung City Government, including the revival of the Love River, large-scale public transit projects, and promotion of cultural activities.

[10] "海洋首都——高雄 (1998)," accessed 10/27, 2024, https://www.ncf1991.com.tw/page/about/index.aspx?kind=71.
[11] Department of Tourism Executive Information System, 112 年高雄市觀光統計年報, (Kaohsiung City Government, 2023).

Traditionally, Kaohsiung was a scooter city, but with growing environmental awareness, the Kaohsiung City Government had incrementally increased public transit, including the metro, light rail, and bus routes, to turn Kaohsiung into an eco-friendly marine city. Yet, the wide roads, large size of the urban area, and huge urban-rural gap between the former city and county Kaohsiung areas render high-density public transportation coverage, such as in Taipei, very difficult. In the end, the real answer to public transit adoption was giving citizens the right to choose. As a result, the urban structure of Kaohsiung's metro, bus, and road network was constrained by its structural limits, which prevented the high-density configuration of Taipei and were therefore an upper limit to the use of public transportation in the city.

Scooters had been a big part of the city of Kaohsiung for a long time. Recently, the Kaohsiung City Government gradually promoted public transportation coverage and expanded the metro, light rail, and bus routes to transform Kaohsiung into an eco-friendly maritime city. However, the urban-rural gaps between the former Kaohsiung city and county, the large area, and the wide roads of Kaohsiung made it difficult to achieve high-density public transit coverage of Taipei. The most important thing to get people onto public transportation was allowing them to do so. Therefore, the structural restrictions of Kaohsiung's metro, bus, and road networks imposed an upper limit on public transit use in the city.

Statistics from the Ministry of Transportation and Communications' Highway Bureau as of 2023 showed that there are over 14 million scooters in Taiwan[12], or 6 out of every 10 people who own scooters. In particular, the city of Kaohsiung had one of

[12] Government, Short 111 年 民眾日常使用運具狀況調查 摘要分析.

the highest rates of scooter ownership of all of Taiwan's cities. Figure 1 showed scooter usage rates increase in southern counties. Much previous literature on transportation choices in different countries had been based on the social choice theory perspective. A weaker social perception of public transit may be an inherent 'push factor' in the decision to use public transportation and was associated with low usage rates. The market positioning and promotional strategies of public transportation were regarded as 'pull factors' that persuade people to make a final choice. The main influence on consumer behavior was this push-pull dynamic. As a result, public transportation choice was conceptualized as a reaction to these push-pull forces and proposed a more precise definition.

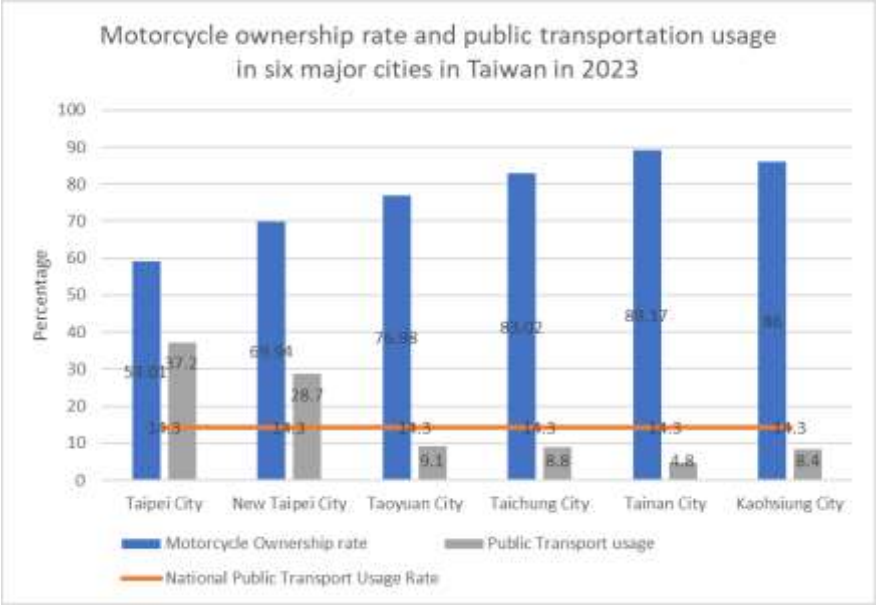

Fig.1 Motorcycle ownership rate and public transportation usage among six cities in Taiwan in 202313

[13] 洪馨儀, Short 從民眾日常運具使用情形看新北市交通運輸發展.

Kaohsiung Public Transportation System

But transportation infrastructure had always been a key signifier of a city's functionality. Over the years, local governments around the globe had actively promoted eco-friendly travel concepts, especially through the building and extension of metro systems as the main policy goals. Second to Taipei, Kaohsiung had the second most densely populated public transportation system in Taiwan. The metro (including light rail) and buses made up the bulk of the system. The Kaohsiung metro system consisted of the Red Line, the Orange Line, and the Circular Light Rail, as well as buses in urban and suburban areas.

Metro Red Line

The Kaohsiung Metro Red Line, the city's first metro line, officially opened in March 2008[14] at 28.3 kilometers between Siaogang and Gangshan South running vertically north-south. It runs through important commercial places and transportation neighborhoods like Zuoying High Speed Rail Station, Kaohsiung Station, and Kaohsiung International Airport[15]. By April 2024, Kaohsiung Metro was serving 5,173,170 riders, a month of which Red Line riders accounted for 3,894,889 rides, or 75% of ridership. Plans for the future include introducing a northward extension of the Red Line to Gangshan and Luzhu to connect the Nanzi Science and Technology Industrial Park, Gangshan Industrial Park, and TSMC Nanzi Industrial Park by 2029[16]. This southern extension was reaching Siaogang and Linyuan[17] to eliminate traffic hazards on Provincial Highway 17 and link the southernmost part of Kaohsiung.

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[14] "使命與願景," Kaohsiung Rapid Transit Corp., 2022, https://corp.krtc.com.tw/About/page?id=6df67da0dd21469da80e9528f32d7057.

[15] Kaohsiung Mass Rapid Transit, 捷運紅/橘線 路線說明（含路網及車站）, (Kaohsiung Mass Rapid Transit: Kaohsiung Mass Rapid Transit, 2024).

[16] Kaohsiung Mass Rapid Transit, 岡山路竹延伸線(第二 B 階段) 路線說明, (2024).

[17] Kaohsiung Mass Rapid Transit, 小港林園線 路線說明, (2024).

Metro Orange Line

Hamasen to Daliao spanned 14.4 kilometers, with key stations Yanchengpu Station, City Council Station, Formosa Boulevard Station, and Weiwuying Station, an east-west route[18]. The Red Line transfers were available at Formosa Boulevard Station. The Orange Line, with an annual ridership of 12,819,581 in 2023, was the second-busiest line in Kaohsiung. The Orange Line's stations, unlike the Red Line, were mostly situated in densely built, residential, commercial, or cultural areas. Kaohsiung residents were easily able to transfer at Formosa Boulevard and Hamasen stations onto the Red Line and light rail, respectively, making travel much easier.

Kaohsiung's urban development was promoted by the opening of the Kaohsiung Metro, as it had stimulated the growth of real estate, commerce, and tourism along the metro lines. Besides, the metro was known for its efficiency and punctual service quality. But the metro system had come under fire for its lower usage rates compared to Taipei's Metro. That was because the Kaohsiung Metro network was still poorly covered, and private vehicles are the most popular means of transport, as well as because it was difficult to fundamentally boost the willingness of residents to use the metro system even with network expansion. If these issues were not addressed, there could be substantial impacts on the future development of the metro system. Furthermore, the planning of Kaohsiung Metro had estimated passenger volume far higher than the current actual ridership, and this contributed to the decision of a higher capacity, more expensive heavy rail construction. The construction of the vast majority of segments of Kaohsiung Metro was underground, which raised costs even further.

[18] Transit, Short 捷運紅/橘線 路線說明（含路網及車站）.

This costs a lot more than the metro lines made the project economically unviable and slowed it down. Low public transportation usage rates had resulted from the insufficiency of public transportation facilities and lower quality of service. Both the Red and Orange lines are not very effective due to the poor public transportation development.

Circular Light Rail

Taiwan’s first light rail line, the Kaohsiung Circular Light Rail, covered 17.1 km with 38 stations[19]. The western section circular route connected major tourist attractions, including Hamasen, Dream Mall, and the Popular Music Center, as an important public transportation option for tourists visiting Love River and bay area attractions. Then it went through new urban development areas like the Art Museum and Dashun Road and forms a ring.

The light rail system was a supplement to the radial routes within the city to fulfill lateral connection. The southwestern section also linked new infrastructure and had a stable tourist ridership to guarantee that the southwestern section passes through the 'Asia New Bay Area,' a core development zone for Kaohsiung's future. The eastern portion, however, of the traverses’ mature development corridors where road widths were inadequate and traffic volumes are high, resulting in slow travel speeds and potential conflicts with ground traffic, deterring citizens from using the light rail.

[19] Kaohsiung Mass Rapid Transit, 環狀輕軌 路線說明, (Kaohsiung Mass Rapid Transit: Kaohsiung Mass Rapid Transit, 2024).

Buses

Between the early 20th century and 1970, Kaohsiung, one of Taiwan's most important southern port cities, underwent marked transportation changes. Since the Japanese colonial period in 1937, public transportation had been a necessary part of the city's development. From 1942, Kaohsiung's stations began to transport passengers instead of cargo to satisfy the urban development needs[20].

After World War II in 1945, Kaohsiung's population grew rapidly, and when export processing zones were established in the 1960s, the working population also rose. In this historical context, people who were reliant on public transportation for commuting became more and more[21]. Before Kaohsiung's population hit one million, the city had 280,000 bus rides, which meant that at least a quarter of Kaohsiung's population relied on public transportation for commuting.

However, the use of motorcycles became widespread, and the bus system's primary commuting option became less important, causing operational deficits in the bus system and reducing the size of the bus department. When bus routes became longer and fuel prices increased, the ticket prices stayed the same, increasing the difficulty of redeveloping public transportation. Having privatized the operation of the buses in 2014, the situation was slightly better[22].

[20] 童筱斐, "高雄市市區公車系統發展研究" (National Kaohsiung Normal University, 2012).
[21] 丁福祥, *高雄文明史* (高雄市政府教育局: 鄭新輝, 2002).
[22] Information Bureau Kaohsiung City Government, 移動的城市風景 高雄市公車聯營新里程, (2014).

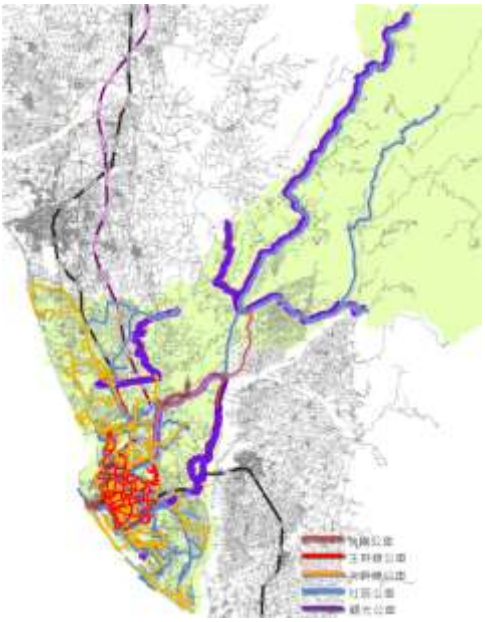

Fig.2 Distribution of Bus Routes in Kaohsiung City

Rational Choice Theory

The economic cost was the total cost incurred during commercial activities. Gary Stanley Becker, in his Rational Choice Theory, mentioned that individuals make decisions based on rationality, assessing the cost-effectiveness of their options to maximize their benefits[23]. Applying this theory to the choice of public transportation in Kaohsiung, it explained how consumers decide between public and private transportation based on explicit and implicit costs to meet their needs. This decision process was influenced by factors such as price, time, convenience, safety, and stability. The following sections analyzed the pros and cons of public transportation based on explicit and implicit costs.

[23] Catherine Herfeld, "The Potentials and Limitations of Rational Choice Theory: An Interview with Gary Becker," *Erasmus Journal for Philosophy and Economics* 5 (06/10 2012), https://doi.org/10.23941/ejpe.v5i1.101.

Explicit Costs and Implicit Costs

Explicit costs are the total tangible costs related to the economic decision-making that were paid out and recorded in the financial statements[24]. These costs were also easy to quantify and to track, simply because the receipts could be paid with concrete payment receipts or bills. Essential expenditures on economic activities were called explicit costs, most of which are money and time. The ticket prices charged for public transportation were a key consideration when deciding whether to use it or not. Unlike vehicles like scooters and cars that need periodic refueling, maintenance, and insurance payments, metro and bus travel usually use single trips, monthly, or yearly tickets with added costs. Time was the latter, which refers to the time required to travel between point A and point B in terms of explicit cost incurred when traveling from point A to point B, as opposed to implicit cost incurred when traveling from point A to point C, then to B. As a result, explicit costs associated with road usage vary depending on distance and time and implicit (e.g., transfer) costs. Determining which mode of transport provided absolute cost efficiency was difficult.

Implicit costs were different from explicit costs: they were the opportunity costs of using the owned resources for which a direct cash payment does not occur. They were the unintended, or unanticipated costs incurred by agents, which were typically intangible and hard to quantify. Public transit had a large amount of implicit costs, which affects consumers' transportation choices. Convenience was an important factor for travelers' choices in Kaohsiung's public transportation system. Travelers' decisions were affected by the positioning of a destination to the transport network, tight scheduling, and ease of transfers. If network coverage was inadequate, hubs from which

[24] VALDOSTA STATE UNIVERSITY, "Module 01 – Scarcity," (2020). https://www.valdosta.edu/colleges/business/deans-office/documents/senior-exit-exam-modules/economics/production-and-costs.pdf.

transit operators were distant from destinations, routes were complicated, signage was confusing, or passengers must make multiple transfers, these factors increased passengers' mental load and discomfort, reduced the probability of them choosing public transportation. Therefore, travelers often chose private cars, which provided the most convenient way to reach their destinations. Apart from that, choices of travel were also influenced by some other factors such as potential delays or traffic congestion. In the example of business travelers moving between counties, high-speed rail was preferred over conventional trains for the high-speed rail's punctuality that meets their commuting needs.

Travel Socialization in Transportation Choice Research

Travel socialization emphasized the relationship between individuals' preferences for transportation modes and the process of socialization, suggesting that people's "social perception" of transportation modes was shaped during childhood through four key influences: family, school, media, and peers[25]. According to Bslington (2008), the family and the peer groups affected individuals' inclination to purchase a car. For instance, kids who grew up with cars in the family were more prone to thinking that a car was a symbol of a happy life, and so achieving a driver's license was a big step toward developing reputation. However, children lacking this 'social perception' were more likely to picture a successful adult life sans car and experience far less social pressure. The social mobility between different types of transportation modes was thus dependent on the use of certain transportation modes, which also essentially assigned images to each transportation mode. Buses, for instance, were associated with the elderly, and luxury cars such as Porsches with success. According to Bslington (2008),

[25] Hazel Baslington, "Travel Socialization: A Social Theory of Travel Mode Behavior," *International Journal of Sustainable Transportation - INT J SUSTAIN TRANSP* 2 (01/22 2008), https://doi.org/10.1080/15568310601187193.

value norms formed through socialization were an important determinant of a person's choice of private vehicles and thus an important part of 'cultural transmission.' It was a social issue that should be addressed by 'social policy' interventions, rather than simply addressing travel demand factors (such as infrastructure or travel costs).

The travel socialization framework described the root causes of people's dependence on the mode of transportation, and its outcome depended on regional variations. For Kaohsiung, scooters were a form of lifestyle choice, which reflected a value of equality and grassroots at a societal level. So many people grew up riding scooters and used them to get to school, work, shopping, etc., making it a 'scooter culture.' As scooter ownership scales, usage scales as a snowball; one reason scooters took off after the post-war government lifted scooter restrictions[26]. The societal challenges of changing people's transportation choices were illuminated through travel socialization theory.

Push-Pull Theory

Origin and Application in Public Transportation

The push-pull theory came from Ernst Georg Ravenstein, who based it on his 'The Laws of Migration[27],' which used data on numbers and directions of migration into British cities. Ravenstein then based his ideas on factors of human migration behavior on demographic evidence, summarizing 11 major ones, among which economic factors were the main drivers of migration, and the development of commerce and transportation stimulated population movement. Building on this foundation, American

[26] 蕭莉珍 黃雅慧 "歷久不衰的機車王國—台灣機車科技系統研究," (Nanhua University, 2009). https://www.nhu.edu.tw/~society/e-j/79/79-09.htm.
[27] E. G. Ravenstein, "The Laws of Migration," *Journal of the Statistical Society of London* 48, no. 2 (1885), https://doi.org/10.2307/2979181, http://www.jstor.org/stable/2979181.

scholar E.S. Lee (1966) further categorized migration factors into four categories: intermediary obstacles, push factors, pull factors, and personal factors[28]. Factors related to area of origin, factors related to area of destination, intermediary obstacles, and personal factors were included in these. Push and pull factors were influenced by objective factors, political stability, and economic opportunities. Even such intermediary obstacles as time and spatial considerations and personal aspects such as individual perceptions of a particular location or matter often revolve around psychological aspects. Push-pull dynamics were not binary but rather a sum of factors.

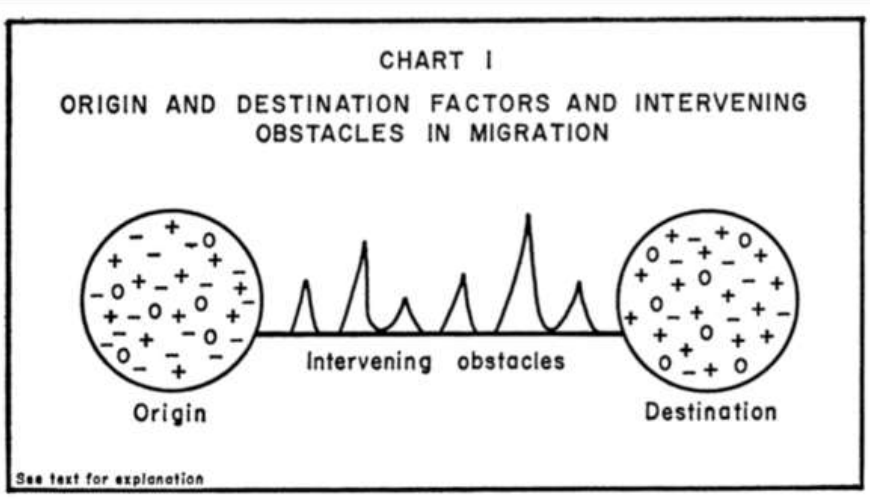

Fig.3 Origin and destination factors and intervening obstacles in migration, source: Lee,E. (1996). A Theory of Migration. Demography, Vol.3, No.1, pp.47-57

While the theory was often applied in the literature on migration and travel motivation, the theory was used seldom as a foundation to analyze public policy. For instance, G. Dann (1977) [29] argues for his push-pull theory of travel motivation; travel behavior decisions were driven by intrinsic drives towards specific intangible pursuits

[28] Everett S. Lee, "A Theory of Migration," *Demography* 3, no. 1 (1966), https://doi.org/10.2307/2060063, http://www.jstor.org/stable/2060063.
[29] Dann, G. (1977). Anomie ego-enhancement and tourism. Annals of Tourism Research, 4(4), 184-194.

(push) and the characteristics of the travel destination (pull). For instance, Ying-Jie Jheng and Chen-Wei Chang (2021)[30] study the push and pull factors shaping Taiwanese PhD graduates in the U.S. to stay or to go. They focused on six dimensions: It attempts to identify Taiwan's shortcomings in some aspects (such as recruitment process, social connections and pressures, promotion mechanisms, role positioning, job opportunities and salary) as "push factors" and the advantages of the U.S. in other aspects as "pull factors." Also, personal factors were also important, with political and economic instability and lack of comprehensive support measures as main personal considerations. According to the authors, the government should create a 'rotating mechanism' for the movement of talent and knowledge, which would create a stable and transparent job market for talent.

Application in Taiwan's Public Transportation

Public transportation development was one of the key focused for successive governments of transportation reform since the 21st century. As an example, in 2023, the Ministry of Transportation provided a 43.5 billion NTD budget, about 20% for Taiwan Railways reform and 30% for railway and road network upgrades[31]. Such an allocation means that more than half of the budget goes towards construction and improvement of public transportation, which was evidence of the committed transportation authorities. Yet, as far as outcomes were concerned, Taiwan's nationwide public transportation market share in 2022 was 14.3%, while Taipei was 37.2% and Kaohsiung 8.4%. On the other hand, usage of public transit in the capital

[30] Chen-Wei Chang Ying-Jie Jheng "推來拉去之間？從「推拉理論」分析臺灣人才流失與因應之道：以留美博士為例," *Journal of Research in Education Sciences* Vol. 66, Iss. 2 (2021), https://doi.org/10.6209/JORIES.202106_66(2).0001, https://www.proquest.com/openview/5316bdede25315282ad6a0c0de94833a/1?pq-origsite=gscholar&cbl=4438509.

[31] "人為什麼要遷移？," 2018, https://twstreetcorner.org/2018/09/11/kaoyuhui/.

regions of neighboring countries was 60% in Singapore and 84% in Tokyo, indicating much improvement is needed in Taiwan.

Past research on push-pull theory has been about balancing the push and pull factors. But when applied to public transit, a unique mode of travel, the switching threshold between public transit and private vehicles (primarily scooters) in Taiwan was notably lower than in other advanced East Asian countries. Low-cost and high-market-share scooters compete directly with public transit, and transportation choice was not a zero-sum game. Low usage rates and lack of flow between different transport modes were the main problems of Taiwan's public transportation. The "push factors" that may encourage private vehicle users to switch from private vehicles to public transit as their primary mode of transportation were high fares, unreliable schedules, and complicated transfer information.

To tackle these problems, the Executive Yuan had been implementing a series of policies in the past years, including the 'Public Transportation Development Promotion Program' (1996–2001), the Highway Public Transportation Revitalization Plan (2001–2004), the National Development Key Project (2003–2007, including the deployment of urban bus dynamic information system and promotion of fleet management system), the Highway Public Transportation Development Plan (2010–2012) and the Highway Public Transportation Improvement Plan (2013–2016)[32]. The TPASS monthly pass policy had recently come under the spotlight, increasing the usage of buses, railways, and other public transit options somewhat, but the effectiveness of this policy had been waning in recent months.

[32] 葉昭甫 林良泰 "以機制設計理論評析大衆運輸發展策略," *City Development by Kaohsiung City Government*, no. 20 (2016), https://research.kcg.gov.tw/Upload/EpaperFile/636057443221463143.pdf.

According to the Ministry of Transportation's 2022 survey on daily transportation use[33], the top five reasons people choose scooters were higher mobility (48.8%), no public transportation available (21.8%), destinations near enough to render transport unnecessary (19.9%), inconvenient schedules (11.5%), and complicated or difficult transfers (9.9%). That means that the other reasons were due to the flaws of public transportation and that the reason the convenience of scooters was 'because public transportation was inconvenient.'

A fundamental obstacle to reform in Taiwan had been the gap between government resource allocation and public expectations; the gap between push and pull factors had been widening. This study therefore surveyed respondents from different social backgrounds to find out how the push and pull factors influenced their decision to choose public transportation. This study examines potential improvement measures by analyzing the responses and perspectives of respondents from various backgrounds.

[33] Government, Short 111 年 民眾日常使用運具狀況調查 摘要分析.

Methodology

Research Design

This research used a qualitative research approach, focused on Kaohsiung's metro and bus systems. The researchers collected authentic feedback and perspectives from respondents via semi-structured interviews. This choice of a qualitative approach was justified because complex phenomena could be explored, and personal viewpoints and experiences could be captured. The openness and flexibility that this method provided may not be available in the same way in quantitative methods.

This study first turned to quota sampling to choose Kaohsiung residents from different backgrounds (a wide range of age, occupation, and other demographics) and made sure the sample was representative. The interviews were designed with open-ended questions and included core questions about participants' impressions, experiences, and recommendations of public transportation. The thesis focused on transportation modes chosen by respondents and the push, pull, and intermediary barriers from the push-pull theory as to the transportation choices by respondents.

The beginning was general impressions, experiences, and thoughts of public transportation, but then it got more in-depth to dig deeper to see what respondents really meant. The research focused on the following four key areas:

1. What are the positive and negative parts of public transportation in Kaohsiung?
2. What are the most important factors that Kaohsiung residents have in mind when they decide to take the metro or bus?
3. What specific difficulties do Kaohsiung citizens encounter when choosing public transportation?

4. What are the social, psychological, and economic factors that lead residents to choose riding the bus over the metro?

Data Collection

Respondents were selected through random sampling. This involved three steps in the data collection process. First interviewees came from various channels, including schools, communities, and public places, to represent as wide as possible the population of Kaohsiung City. Secondly, the interviewee had been given the information about what the study was for, how it was done, and the rights that might be extended to the interviewee (the right to withdraw any time). Before conducting the interviews, obtained informed consent.

Also, the interviewing could be conducted at any location; phone recordings were used for recording, which was freely converted according to the situation. Each interview took approximately half an hour, depending on responses provided by the interviewee.

Transcription

All the recorded interviews were transcribed verbatim in text files and organized to identify some underlying themes, to organize interviewee responses into different units, and to classify important sentences and paragraphs to the research questions. Data was checked through multiple sources (interviews, statistics, etc.) to cross-verify the data.

Further, a comparison of commuting groups, including those that used private vehicles and those that used public transportation, yields insight into which factors

drove commuting preference. The interview audio recordings were compiled verbatim and classified by themes to identify key factors and problems in the public transportation system and to bolster the reliability and validity of findings. The literature was compared and cross-analyzed with the data, and finally, targeted policy recommendations were made to assist citizens in transportation for the purpose of converting and improving the utilization rate of public transportation in Kaohsiung City.

Data Analysis

Definition of Push Pull Theory in This Thesis

The central goal of this thesis was encouraging people to use public transportation more and to use private vehicles less. As such, "push-pull theory" was used as the main tool for data analysis and solutions suggestion. Previous literature had discussed push-pull theory as encompassing four factors: push and pull factors, intermediary obstacles, and personal factors. As this thesis centers on the transition from private vehicles to public transportation and, more particularly, on how public transportation could be improved by eliminating its negative aspects, these four factors were redefined as follows.

In this thesis, push factors were negative factors that pushed citizens away from public transportation, like inherent deficiencies and potential inconveniences with the public transportation system. For example, the bus system was not punctual, the bus network was not fully covered, and the bus stops were not safe. These factors reduced citizens' willingness to use public transportation and increased their willingness to use private vehicles for more flexible travel needs.

There were pull factors, which were positive incentives to ride on public transportation, such as policy benefits that encouraged the use of public transit because it was convenient, cheap, and eco-friendly. Though fundamentally positive, pull factors had not produced optimal outcomes due to policy design flaws, and policy adjustments were therefore required to achieve the desired outcome.

Intermediary obstacles referred to existing challenges of cultural and environmental aspects, including limitations in route planning and shortcomings in

urban infrastructure, all of which made the transition from private vehicles to public transportation difficult.

Users' psychological evaluations of transportation modes, including the cultural value ascribed to them, were captured under personal factors. For Kaohsiung, the factors were clearly present: scooter culture was popular, and public transportation was not considered safe.

Data Source

The material for this thesis came from semi-structured interviews with twelve respondents from various demographic groups in Kaohsiung. Participants were selected to represent a range of age groups, occupations, and modes of transportation to collect a diversity of perspectives. Their perceptions of private and public transportation systems, the factors influencing their mobility choices, and challenges with public transportation were all significant subjects covered in the interviews. We started by creating a series of questions with an emphasis on public transit to gather and evaluate the data in a methodical manner. To guarantee that the comments were accurate, audio recordings were created during the interviews. Artificial intelligence (AI) transcription software was then used to convert these audios into verbatim text. To improve the content, the transcriptions were then carefully examined and arranged. The study's conclusions were derived from the identification and analysis of significant variations and similarities among the replies. These data were examined using push-pull theory, which provided a solid basis for comprehending behavioral motivations and barriers.

Push Factors

Most Respondents were Satisfied

Respondents rated their satisfaction with Kaohsiung's public transportation system between 6 and 8 on a scale of 1 to 10. While both the metro and bus system had many problems, the bus system tended to be viewed as having fewer good qualities and more problems.

Metro System

Most respondents highly rated the overall punctuality and cleanliness of the metro; they appreciated the environment within the carriages and the convenience of the station entrance and exit. Indoor temperatures, accessibility features, and hardware-related concerns were the major reasons for dissatisfaction, while indoor temperature was the only place where dissatisfaction was highly concentrated. The biggest complaint was that the metro system lacked coverage. Compared to Taipei, Kaohsiung's metro was sparse, with only the Red and Orange lines and Circular light rail. Most stations were in the city center and served commercial areas and tourist attractions, making the system less useful for commuters to and from homes.

There were two main reasons for this. In the first instance, while planning the Kaohsiung metro, the city government overestimated future ridership, selecting high-capacity trains able to carry 20,000 to 60,000 passengers per hour[34]. Despite this, in 2023 the average daily ridership for the line was 177,606, representing only 9,867

[34] 白崑成, *捷運法規及常識* (千華數位文化 2022). https://www.3people.com.tw/book-store/book-sample/Q030G17-1.pdf?srsltid=AfmBOor40M2MbZ7iJRceklkxmRDuVM3HgZHqz8L0GJYTLow1ZpwMNbdL.

passengers per hour across a 16-hour operating day, far below high-capacity demand[35]. Due to the lack of users, high-capacity trains cost more to operate, maintain, and repair.

The second reason was that most of the Kaohsiung metro was built underground, which costs 2–3 times more than elevated lines. This resulted in a total construction expenditure of 42.7 kilometers of the Red and Orange lines of 183.96 billion NTD, or 4.3 billion NTD per kilometer[36]. In contrast, Taipei's elevated Red Line (Danshui Line), with a length of 22.8 km, had a construction cost of 75.84 billion NTD, which was 3.32 billion NTD per kilometer. In other words, Taipei's Red Line construction costs were 1 billion NTD less per kilometer than Kaohsiung's metro[37]. Looking back, the capacity planning would have been different, and the choice would have been between elevated and underground construction to save the vast amount of money, and perhaps even more lines such as Blue or Brown.

The restricted reach of Kaohsiung's metro system was often cited by respondents as a major obstacle. For example, Interviewee I, who worked at Kaohsiung International Airport, stated that "it was not feasible to commute by metro because the

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[35] 高雄捷運股份有限公司, "高雄捷運客運概況," ed. 高雄捷運股份有限公司 (2021). https://stat.motc.gov.tw/mocdb/stmain.jsp?sys=220&ym=9700&ymt=11000&kind=21&type=1&funid=b230201&cycle=4&outmode=0&compmode=0&outkind=1&fldlst=10001100011&rdm=XZniWljK.

[36] 林明昌 李永坤, *高雄捷運用地預算編列與經費執行研析* (高雄市政府捷運工程局 開發路權科, 2010), https://mtbu.kcg.gov.tw/FileContent/GetDownloadFile?fileName%3D20200312037745216.pdf%26fileDictionary%3DFileUpload%26fileCaption%3D99%25E5%25B9%25B49%25E6%259C%2588-%25E9%25AB%2598%25E9%259B%2584%25E6%258D%25B7%25E9%2581%258B%25E7%2594%25A8%25E5%259C%25B0%25E9%25A0%2590%25E7%25AE%2597%25E7%25B7%25A8%25E5%2588%2597%25E8%2588%2587%25E7%25B6%2593%25E8%25B2%25BB%25E5%259F%25B7%25E8%25A1%258C%25E7%25A0%2594%25E6%259E%2590%26fileFormat%3D.pdf&sa=D&source=docs&ust=1730395216367037&usg=AOvVaw2bTc-hatgIqZ8EALoVYmgS; 李永坤, *高雄捷運用地預算編列與經費執行研析*.

[37] 張舜淵 蘇振維, 呂怡青, 劉國慶, 陳昭堯, 吳雅惠, *鑑往知來—國內都市軌道建設系統型式發展趨勢*, 交通部運輸研究所 (交通部運輸研究所, 2017), https://tpl.ncl.edu.tw/NclService/pdfdownload?filePath%3DlV8OirTfsslWcCxIpLbUfmdCa1P8r-hEJj7i2NQN_DcJg3GovAXUqUbw9UWP4zbv%26imgType%3DBn5sH4BGpJw%3D%26key%3DccP9Jn_jMIszTcpGKlM-_kaKgy41b0OX5yU56KsUTHkeVVU9OyINO4qBZJhLTxWd%26xmlId%3D0006908024&sa=D&source=docs&ust=1730347928794757&usg=AOvVaw36NZzLGgOtkLSyEzzQWdVo.

closest metro station is far from my workplace." This comment emphasized how the metro's limited network made it less viable for everyday travel, especially in commercial and industrial areas like Qianzhen and Siaogang. Users were discouraged from using public transportation by such route coverage deficiencies, which were very consistent with the push factors found in this study.

Bus System

The opinions of respondents about the bus system were quite negative, and they focused on inconvenient transfers, punctuality, and safety on the bus. Respondents had a decidedly less positive view of the bus system than they had of the metro. Key issues included:

- Punctuality: Delayed start of flights, early departure, schedule inconsistency.
- Unequal route distribution: Long waits for buses and insufficient routes in newer areas.
- Inconvenient transfers: Failure to adapt to city changes.
- Safety: The potential for road design and bus stop locations to compromise boarding and alighting safety was considered.

For example, Kaohsiung's bus system had always been plagued by a lack of schedule frequency and reliability, especially in suburban areas and off-peak hours, resulting in many of the city's newly developed areas lacking public transit facilities. Hidden costs for users arose from early departures, uneven route distribution, and difficult transfers, especially the inconsistency between scheduled and actual arrival times. As interviewee C said, “Buses frequently leave before the scheduled time, which

was a common problem,"[38] making it difficult for unfamiliar passengers and the elderly. This inconsistency prevented buses from helping the metro fill its limited coverage.

Transfer inconvenience made citizens spend more time and energy on transfers, particularly the inefficient allocation and management of bus resources. The adjustments required in this situation involve new infrastructure (light rail) and high technology.

Problems arose with boarding safety because buses stop too close to intersections, curves, or anywhere without sidewalks, forcing passengers to wait or board buses from the road. This problem was very acute in rural areas where most bus stops lack well-paved and designed sidewalks and waiting areas. Scooters and buses often share the outer lanes, with Taiwan's traffic system of segregating car and scooter lanes and frequent close encounters, increasing the risk of accidents.

Data analysis showed that the low transfer from private vehicles to public transportation was influenced by user needs, transfer functionality, and route planning influence. The big problem was that Kaohsiung had very small public transportation coverage. The metro was fast and punctual, but it could not be used to attract residents to change to public transportation unless it fulfilled basic destination accessibility needs. More simply, even if all these other issues were solved, users would still use scooters and cars if the routes were not connected to residential or workplace areas directly. Meanwhile, the bus system had trust issues in punctuality and safety and no coordination with the metro on transfers. Route planning did not fully address transfer

[38] Interviewee C, "Interview of Overall Public Transport Experience and Feedback from Kaohsiung Citizens", interview by Kuan-Yu Chen, September 21, 2024

needs, and there was a gap between bus and metro service that required further cross-modal integration.

According to interviews, prospective passengers experienced a psychological hurdle when bus timings were unpredictable. "I missed my transfer because the bus arrived 10 minutes early," Interviewee A said. These kinds of stories demonstrated how operational inefficiencies served as motivators, causing commuters to use private automobiles.

Many respondents said that the TPASS monthly pass did not sufficiently address their main concerns of ease and dependability, even if they acknowledged the possibility for cost savings. Interviewee A said, "Even with a TPASS, the time I spent waiting and transferring was more than what I'd save in money." This demonstrated how pull factors were limited when push forces, such as inefficiency, were ignored.

Lack of Feedback Channels

Buses and the metro were all felt to be difficult or inconvenient to use by all the users interviewed. But when asked whether they had ever given feedback to the authorities, most were reluctant to act. In fact, the only thing that Kaohsiung Metro had was an open feedback mechanism where the users provided opinions with only basic information. Besides, the feedback boxes were also on the buses, and the metro and bus systems have customer service hotlines for inquiries and feedback. Efforts to reduce the cost of submitting feedback had failed to increase public willingness to provide input. Several potential reasons were analyzed below:

Institutional Aspect: Incentives for Feedback

Overall, there were a few problems that negatively impacted the commute experience of most users in terms of the public transportation's social service function. For instance, minor rubs like buses departing early or elevated platform temperatures might not be detected by users as they degrade their experience because they don't notice that these problems were systemic or systemic issues. The motivation to provide feedback was reduced when this 'tolerable' threshold was achieved.

In addition, some respondents stated that while there were direct feedback mechanisms in both the metro and bus systems, they were unaware of such channels or were finding the process inconvenient or that response times were slow. The minor inconvenience of most issues and that lack of familiarity or perceived inefficiency removed them as a source of feedback. In summary, while the system needs to make it easier for users to provide feedback channels, it was important to make users actively contribute to the improvement of public transportation.

Socio-Cultural Aspect: Lack of Challenge to Public Authority

However, some respondents thought that individual feedback would not really make a difference to the entire public transportation system, since their voices were too small to bring about large-scale change. Some thought it would be better to hold back with expectations rather than apply pressure on the government because the authorities had already allocated a budget for improvements. However, they did not give feedback because they did not believe individual voices were strong enough to change the system and instead adapted by planning travel times ahead or even changing transportation modes.

In his work On Public Authority, scholar Yu Hongsheng found that ‘public authority entities attach very high value to public approval and work hard to obtain public recognition of their authority in order to minimize resistance[39]’. From an obedience standpoint, authority-based compliance was a kind of submission that outsmarts resistance, i.e., true obedience. From a governance perspective, while Taiwan’s democratization in the 1990s had pushed away from authoritarian reverence for rulers and institutionally distanced itself from them, there had remained a cultural, latent ‘obedience’ to civil servants and bureaucratic systems with power for thousands of years. As entities that maintain public order with a complete bureaucracy or hierarchy, yet on the other hand they were privatized, Kaohsiung Metro and the bus company continued to wield an underlying 'legal-rational authority[40]'. For Taiwan's democratic deepening and the development of a higher quality civil society, it was therefore imperative to break down this authority and increase citizens' sense of political efficacy in public affairs.

Pull Factors

Policy Aspect: The TPASS Policy was not Effective

The TPASS official website[41] listed four main objectives for the monthly pass:

1. Reducing the transportation burden on the public
2. Bring private vehicle users onto public transit
3. Improving road safety
4. Balancing Urban and Rural Development

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[39] 于洪生, "论公共权威认同的机理——一种透视权威现象的新视角," *理论探讨 THEORETICAL INVESTIGATION* 2, no. 129 (2016), https://www.celap.org.cn/attach/0/1301141549257968349.pdf&sa=D&source=docs&ust=1730347928793157&usg=AOvVaw312kZl6fqESUrwHFt5MwSm.

[40] 鞠健, *新时期中国政治稳定问题研究* (中共党史出版社, 2008). https://books.google.com.tw/books?id=8McPAQAAMAAJ.

[41] "TPASS Official Website," RAYGATE Mobile Co., 2022, https://www.tpass.tw/about.

The TPASS intercity commuting monthly pass aimed to reduce the expense incurred for transportation via economic incentives to reduce the users' actual transportation expenses[42]. This policy was a positive push factor for those already using public transit. All but a few respondents supported the TPASS policy, as it really alleviates the financial burden for the regular users. But when questioned about whether this policy would prompt private vehicle users to switch to public transit, respondents responded 'no' every time: The economic benefits alone were not enough to change how they choose to commute.

A 2021 passenger survey from Taipei Metro found that 6.6 percent of the 24.5 percent of regular 1280 monthly pass holders had never used a private vehicle, which amounted to more than 93 percent of regular public transit commuters among monthly pass users[43]. The TPASS policy directly benefited the current public transit user's routine. Nevertheless, the policy did not deal with non-economic barriers to switching for private vehicle users, e.g., time costs, inconvenient transfers, and limited network coverage. Economic costs alone rarely persuaded private vehicle users to switch to public transportation; social costs were more often the decisive factor. Decreasing commuting costs without improving the attractiveness of public transportation was not increasing use at all.

Intermediary Obstacles

Urban Development Needs

[42] R.O.C., "TPASS Official Website."
[43] 陳子萱, "TPASS 上路，替 60 萬通勤族省荷包…自駕族仍不願「棄車」成瓶頸，專家：先解決這 3 件事," *今周刊* 2023, https://www.businesstoday.com.tw/article/category/183027/post/202307260008/.

An important tool for industrialized city commuters, public transportation in the form of a fixed route and schedule was ideal for people with fixed work or school commutes. Nevertheless, its rigidity made it unable to fully substitute private vehicles, especially for those whose travel desires change. As described in the literature review, rational choice theory divided costs into explicit and implicit. Explicit costs were the tangible costs of economic decisions, and implicit were the explicit costs like distance and time. Implicit costs were the risk of changing schedules and waiting time, which were also components of the cost to use public rather than private transportation.

On the other hand, private vehicles gave users a means to get to a point quickly with no dependency on public transit schedules and routes. For productivity in a developing city, mobility was important, which gave private vehicles an obvious edge. This did not mean that there were no costs associated with using a private vehicle, but that residents preferred to pursue economic goals. From a rational self-interest perspective, private vehicles were the cheapest and most efficient vehicles.

Kaohsiung Road Design Favors Private Vehicle

Unlike Taipei's narrow streets, Kaohsiung's road layout was wide and flat. This design reduced the driving threshold of cars and scooters, resulting in improved driving comfort and safety. Kaohsiung's roads were also typically straight, and traffic light synchronization on main and side roads reduced the likelihood of congestion on main roads. It also means that the time costs of traffic for Kaohsiung residents were not as great as for people in Taipei or other crowded cities. In other words, the wide road network in Kaohsiung allows people to go from place to place by road faster and more easily.

Parking spaces were also available for cars and scooters. Scooters have a parking advantage as most parking spaces for them are free. Since scooters take up little space, they can park in both urban and suburban areas. Scooters are already much nimbler than cars, can navigate narrow streets easily and without parking costs, and can be parked anywhere, at any time, to accommodate the ebbs and flows of daily life. One of the reasons scooters have become so popular as a mode of transportation in Taiwan is for this flexibility.

Personal Factors

Loss in Socialization Influence

Respondent answers to questions about the influence of family, school, or peers on their transportation choices were polarized. Half indicated that their mode choice was independent judgment and social need, with time flexibility, convenience, and safety being the most appropriate factors to choose the most suitable mode of transportation. But the other half admitted that family and peers influenced their decisions.

Ingrained transportation habits that predisposed individuals to continue using one mode or another, public transit not being the first choice, were what people called family influence. For instance, in Kaohsiung the prevalence of scooter culture and spacious open roads (compared to Taipei's packed streets) made private vehicles here a more attractive way to move around.

The tendency for students to use public transportation with friends and form shared commuting patterns reflected a tendency of students to be peer influenced. The

researchers observed that the influence of socialization on transportation choices decreases with younger generations.

The expanding public transit network and the multiple socializing ways the younger generation had become a main contributor to this shift. Younger kids had more channels to make their own decisions; traditional family and peer influence had also weakened.

Analysis further showed that, in general, respondents who were highly influenced by social groups were middle-aged workers, often tending to prefer private vehicles. This trend could be attributed to two main reasons from the travel socialization theory:

Social Perception

As discussed in the literature on travel socialization, people's perceptions of transportation had been developed during childhood, linking particular modes to personal life indicators. One positive image of public transit and one negative image of private vehicles. At a societal level, private vehicles signified equality, whilst public transit was simultaneously opposed to crowded, impersonal public spaces. Cars and scooters were symbols of adult independence because they were less flexible and less convenient than, say, cars, which were often seen as symbols of freedom and career success. Meanwhile, public transit was about sharing space with strangers, and it felt a bit like a "lower level" option. The control and autonomy of scooter travel were greater than in fixed schedules and transfers, giving more personal control of travel time.

Additionally, this demographic did not grow during a time of large-scale public transit expansion, leaving little systematic understanding and trust of public transit planning, usage, and transfer information. As a major intermediary obstacle, this knowledge gap made them more likely to rely on well-developed private transportation options.

Family Structure and Cultural Transmission

According to American sociologist George Herbert Mead's Symbolic Interactionism Theory[44] people use symbols (such as language, behavior, and objects) to understand and give meaning to the world and then to act upon these meanings[45]. In Taiwanese families, private vehicles were symbolized more than a means of transportation; they reflected economic status and the role of family leadership, and they were the possession of families, not individuals. In traditional Taiwanese families, middle-aged members were not only managers but also decision-makers and caretakers. Private vehicles gave us authority and, by implication, the responsibility to meet family needs. Dropping off family members, grocery shopping, and emergency runs to hospital were carried out with dependency on private cars, reinforcing reliance on them.

In addition, service quality improvement of the public transportation system was secondary but important. Owning a scoop or a car in some families from the socio-psychological point of view was not just an issue of convenience of transportation, but a symbol of economic status and family leadership. Rather than environmental awareness, fixed routes, or punctuality, for this group it was about responsiveness to

[44] Charlotte Nickerson, "Symbolic Interactionism Theory & Examples," *Simply Psychology* (2023), https://www.simplypsychology.org/symbolic-interaction-theory.html.
[45] ChatGPT, "ChatGPT 產生的文本," (2023). https://chat.openai.com/chat.

emergencies. They could not be served by public transportation, nor were they a family pillar. This mix of family structure, responsibilities, and demand was a tough combination for them to become used to public transit as they age and pass that preference on to the next generation. With cars and scooters being so popular in Taiwan, they were socially constructed, and patterns that people were taught and that language creates were passed down through tradition.

Application of Push Pull Theory

Public Service

The qualities of public transportation services highly influence overall user satisfaction in Kaohsiung. As urban population density increases and transportation needs become more urgent, bus systems have become critical parts of urban transit. But past interviews revealed that safety, comfort, and punctuality were problems with the public transportation service. Analytically and with recommendations, this study took on these issues from two angles.

Safe Waiting Environment

The government should allocate funds and resources to assess systematically all bus stops in the city to create a safer waiting place. Dangerous bus stops without a safe waiting area or slow down signal should be reconstructed or relocated, and sufficient shelter and waiting area should be established, especially along busy routes. The setup would shield passengers from traffic and weather and keep a safe distance from traffic lanes. Phased efforts should also attempt to make all public transportation hubs accessible by sidewalks to create a people-centered transportation environment.

Intelligent Transportation System (ITS)

As discussed in the earlier analysis, punctuality and uneven route distribution were two critical points that limit the service capacity of Kaohsiung's bus system. The result has been a reactive approach to problems with the involvement of bus companies in poor management and no oversight by transportation authorities. For this reason, this paper proposes that the role of government should be stronger to encourage the use of public transportation, and the Ministry of Transportation should work both internally with other departments such as the Ministry of Science and Technology and the Ministry of Digital Affairs as well as externally with bus companies to implement an 'Intelligent Transportation System (ITS). For instance, Japan's ITS enables car owners to share the vehicle data, and sensors swap traffic information in real time[46]. City traffic should be monitored in this system, and updates about bus location with high accuracy and the optimized routes to avoid unnecessary detours should be provided. In remote areas, direct or express routes could also be increased to reduce stops and travel time.

Simplifying electronic signage at bus stops would also help first-time users. Since 2001, parts of ITS[47] have been implemented in Taiwan with the Electronic Toll Collection (ETC) system, which had 86.2% of freeway users using it in 2011, easing congestion at toll booths. In 2014, ETC 2.0 was launched to add functions such as rerouting, disaster assistance[48], and safety driving aids to traffic management. It could be adapted to improve road management for buses.

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[46] 黃靖萱, "東京馬路「變聰明」，車禍死亡人數減一半！," *財訊雙週刊* 463 (2014), https://www.inside.com.tw/article/4110-tokyo-smart-city.

[47] Inc. Editorial Department of China Engineering Consultants, *日本推動 ITS 之現況與介紹（1）*, China Engineering Consultants, Inc. (2018).

[48] Inc. Editorial Department of China Engineering Consultants, *日本 ITS 現況與介紹-近年成功案例(七-二)*, China Engineering Consultants, Inc. (2018), https://www.ceci.org.tw/modules/article-content.aspx?s=1&i=120.

Policy Support

The feedback mechanism currently has failed due to two main issues: Overall, respondents lacked the motivation to report problems to officials, and there's no clear incentive system encouraging citizen participation. In addition, many respondents thought their individual impact was small and that feedback would not make a difference. Therefore, the government was obliged to raise motivation and restore confidence. Therefore, interdepartmental collaboration should be used to create comprehensive transportation policies for the promotion and development of public transit.

Feedback Mechanism

The Kaohsiung City Government could also create a points system to encourage feedback: points for useful suggestions which users can cash in for monthly passes, vouchers, or other transit incentives. They could also run regular competitions for improvements to the bus, with winners getting a free yearly bus pass. These were also a form of a return, so that citizens who might otherwise be unwilling to spend their energy observing, riding, and proposing change for a system that was yet to become their default.

The government must roll out a ‘Problem Tracking Platform’ where citizens can check how fast their reported issue has been resolved in real time, with transparent solutions and expected completion times, instead of just reporting results. More transparent and effective push-pull dynamics would come from strengthening mechanisms for motivation, participation, and responsiveness.

Increase the Costs of Private Vehicles

The government could lower private vehicle use by raising usage costs, e.g., reducing the number of parking spaces and levying congestion taxes, free up urban space for greenery, pedestrian walkways, or bike lanes, and improve urban quality of life while encouraging public transit when the government reduces urban parking spaces in areas where public transit was heavy. However, this needs to be done gradually, and citizens need time to adjust and should only be deployed once enough public transportation was in place and there were proper transfer options.

Successful Experiences of Other Countries

While Kaohsiung's broad roads made it easy to move around, congestion was still a problem because private vehicles have high reliance during peak hours. Charging vehicles into congested areas during peak hours, congestion tax was used to reduce the number of vehicles and the funds used to improve public transit. London, Stockholm, and Singapore have succeeded in implementing congestion taxes[49]; the traffic flow improved, and air quality was better. Electronic toll collection systems were already in use by Taiwan’s central government for highway maintenance and expansion, and congestion taxes could be within the purview of local government[50]. If this policy first encounters opposition, there are benefits emphasized that could win over such as environmental benefit, reduction of congestion, and urban space. Moreover, at the city edges, adequate park-and-ride facilities[51] would allow the transition to public transit.

[49] "Congestion Charge," Transport For London, N.D., accessed 1st November, 2024, https://tfl.gov.uk/modes/driving/congestion-charge.
[50] "About FETC," Freeway Bureau, MOTC, N.D., https://www.fetc.net.tw/en/OurBusiness/AboutFETC.html.
[51] "Park & Ride Systems - What Are They And How To Implement Them?," Parklio, 2024, https://parklio.com/en/blog/park-ride-systems-what-are-they-and-how-to-implement-them.

Since 1962, Tokyo has required that all vehicle purchasers prove ownership or lease of a legal parking space and provide the necessary documentation to police. It has successfully reduced illegal parking, controlled vehicle numbers, and alleviated the urban pressure of traffic. Tokyo's high parking fees and lack of land also encouraged many people to use public transportation, such as metros and trains, which increased usage of them[52].

In Singapore, the systems for the COE[53] and Electronic Road Pricing (ERP)[54] have formed private car usage, while the country continues to expand its Mass Rapid Transit (MRT) network[55]. The country has also started providing smart transportation services, e.g., real-time schedule information and the Ez-Link card for electronic payment[56]. Subsidies were generous enough to achieve a balance between affordability and service quality.

These successful cases provided useful references for Taiwan to copy or reference in similar implementation policy. But obviously, these are quite aggressive measures, so they need measures and phased implementation to give citizens time to adapt and change their travel habits. First, introduce pilot programs in high-traffic areas with good public service infrastructure, such as commercial centers or transportation

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[52] "The meaning of the "Garage Law" in the Encyclopedia Nipponica and easy-to-understand explanations (日本大百科全書(ニッポニカ) 「車庫法」の意味・わかりやすい解説)," 株式会社平凡社, N.D., accessed 5 January, 2025, https://kotobank.jp/word/%E8%BB%8A%E5%BA%AB%E6%B3%95-163423.

[53] "Certificate of Entitlement (COE) Renewal," Government of Singapore, updated 21 November 2024, 2024, https://onemotoring.lta.gov.sg/content/onemotoring/home/owning/coe-renewal.html.

[54] "Electronic Road Pricing (ERP)," Government of Singapore, updated 29 October 2024, 2024, https://onemotoring.lta.gov.sg/content/onemotoring/home/driving/ERP.html.

[55] "Rail Network," Government of Singapore, updated 19 November 2024, 2024, https://www.lta.gov.sg/content/ltagov/en/getting_around/public_transport/rail_network.html.

[56] "EZ-Link Adult Cardholders and NETS FlashPay Cardholders to Transit to SimplyGo for Public Transport Fare Payments by 1 June," Government of Singapore, updated 09 January 2024, 2024, https://www.lta.gov.sg/content/ltagov/en/newsroom/2024/1/news-releases/ez-link_adult_cardholders_and_nets_flashpay_cardholders_to_transit_to_simplygo.html.

hubs, and set up a transition period. If successful, these measures would then be gradually expanded to other areas.

Transit Oriented Development (TOD)

Transit-oriented development (TOD) was a form of development that concentrated around public transportation hubs[57], combining city development and land use to reach public transportation to all areas of the city. For example, real estate developers also owned rail companies in Tokyo[58], where residential, commercial, and hotel developments were focused along rail lines. This integrated approach brought together millions of people to a seamless rail network that was focused on a walkable station at the center of each new development.

TOD in Taiwan was often criticized as land speculation, while looking at public transit development as a long-term, people-centered investment in a sustainable city was more appropriate than a short-term fiscal gain. The large land area available in Kaohsiung facilitates phased TOD in suburban or less developed metro and light rail areas. International examples suggested that for such policies and regulations to be successful, the government could also enact policies and regulations that encourage developers to invest in transit-adjacent areas. These city policies might involve land use adjustments, tax incentives, or subsidies to encourage development that combines transit and residential, commercial, and recreational use seamlessly. The government could also show TOD's benefits through public education, outreach, and pilot programs, and by doing so would increase public acceptance of high-density living near transit.

[57] "大眾運輸導向發展(Transit-Oriented Development, TOD)," Urbanoter, 2024, https://urbanoter.com/tod/.
[58] "東京給台灣的啟示：從大眾運輸開始，練習文明與人本城市," 未來城市 Future City, 2023, https://futurecity.cw.com.tw/article/3053.

Permeability

It is important to have coverage of the public transit system. Transit system 'permeability' means the network reaches into the lives of citizens by being near their homes, schools, and workplaces. The absence of an adequately dense metro network and the lack of an even bus network lead to a reciprocal dependence on private vehicles. If the metro cannot offer enough coverage and convenience, citizens opt for private transportation and reduce transit ridership, which means less money for service improvements and expansion. Consequently, the push and pull strategies relied on a more extensive route network and convenient transfer systems, as these were how the ‘increasing private vehicle costs,’ ‘implementing the TPASS policy,’ or ‘transit-oriented development’ occurred. The metro and bus systems should also be integrated into the light rail and bike-sharing options, with flexible routes and frequencies based to accommodate a variety of area needs, i.e., the “last mile” problem.

Conclusion

Through the perspective of push-pull theory, this research examined the variables influencing the use of public transportation in Kaohsiung City, concentrating on four crucial dimensions: permeability, policy support, public service, and publicity. This study offers a thorough framework for improving the city's public transportation system and raising its use rate by combining findings from a literature analysis and qualitative interviews with locals.

Public Service

The results showed that individuals' propensity to use public transportation was strongly impacted by service quality, particularly dependability and safety. Common problems were found to include early departures, frequent bus delays, and discrepancies between scheduled and actual arrival times, especially at significant transportation hubs like high-speed rail stations.

Inadequate pedestrian infrastructure around bus stops and certain drivers' reckless driving practices sparked worries about safety. Potential consumers were discouraged from selecting public transit over private automobiles by these considerations. To address these challenges, it is essential to: Use Intelligent Transportation Systems (ITS) to give passengers real-time information and improve timetable accuracy. Redesign bus stops and transfer locations to increase accessibility and infrastructure while enhancing passenger safety and convenience. To encourage safer and more customer-focused service, regularly provide driver training courses.

Publicity

The general population's view of public transportation as a "secondary option" was a major obstacle to its increased use. While public transit was perceived as less prestigious and less convenient, many respondents linked motorbikes to independence and flexibility. This unfavorable impression was made worse by ineffective promotion. This study suggested the following strategies to reshape the social image of public transportation: Start a thorough marketing effort that highlights the advantages of public transportation for the environment, the economy, and society. Work together to promote public transit with neighborhood associations, educational institutions, and influential locals. Make use of social media and digital platforms to interact with younger audiences and raise awareness of the benefits of public transportation.

Policy Support

The TPASS monthly pass offered financial incentives to frequent users of public transportation, but it had little effect on drawing in private car users. The results implied that financial incentives by themselves were not enough to get beyond obstacles like difficult transfers and spotty network coverage. Furthermore, the efficacy of policy initiatives was limited since individuals were less inclined to report service faults when there was no clear feedback system in place. Congestion charges worked in London, reduced traffic volume. Tokyo credibly prevented the increase in vehicles by employing its Parking Space Certification System. Singapore, in turn, improved traffic conditions and increased public transit usage with a combination of Certificate of Entitlement (COE), Electronic Road Pricing (ERP), and public transit expansion. These international experiences can give Kaohsiung some references for its past transportation reforms that facilitate the strategies for better public transportation and less private vehicle use.

To improve policy support, the following actions were suggested: To balance demand and provide accessibility, use a dynamic pricing and subsidy system that modifies fares according to peak and off-peak times. To boost public trust and involvement, provide a feedback portal where users can report problems and track the resolution process. Utilize Transit-Oriented Development (TOD) to combine public transportation with urban design to maximize land use and enhance connection between transit, commercial, and residential districts.

Permeability

The use of public transportation was found to be significantly hampered by difficult transfers and limited network coverage. Peripheral districts were neglected, and inhabitants were forced to rely on private automobiles due to the MRT and bus networks' primary concentration in major metropolitan centers. The inefficiency of transfer points between various forms of transportation raised the time and psychological expenses of commuting. To improve permeability, it was recommended to expand the MRT and bus networks to reach underserved communities and provide full citywide access. To provide smooth connections between different forms of transportation, create multimodal transfer hubs. Simplify transfer processes and provide easily readable signs to make multi-modal commuting less complicated and inconvenient. Increasing Kaohsiung City's public transportation usage rate necessitates a multipronged strategy that considers network coverage, social perception, governmental support, and service quality.

By putting these suggestions into practice, Kaohsiung may encourage a move away from private automobiles and toward public transportation, making the city a

more livable, ecologically friendly, and socially inclusive place. The effects of incorporating cutting-edge technology, such as electric and driverless cars, to improve the effectiveness and appeal of public transit networks should be investigated in more detail in future studies.

In brief, this thesis recommended a sequence of efforts to improve Kaohsiung's public transportation system, starting with infrastructure, moving to policy guidance, service enhancement, and cultural shifts. These combined strategies could attract more people to make the move from scooters and cars to the metro and buses and make Kaohsiung a livable, eco-friendly, and sustainable city.

In Straphanger: Saving Our Cities and Ourselves from the Automobile[59], author Taras Grescoe provided an essential view on the vision and goal of the thesis, which was to build stronger communities and reignite our sense of the shared public spaces. As Taras Grescoe put it: "A car-dependent lifestyle alienates people from the experience of the city as a shared space. It privatizes what used to be public, and in doing so, erodes the civic sphere."

[59] Taras Grescoe, *Straphanger : Saving Our Cities and Ourselves from the Automobile*, vol. (New York: Times Books/Henry Holt, 2012).

APPENDIX A

Interviewee's information

	年齡	訪問者	訪談日期	訪談方式	學歷	職業	收入
A	**21**	陳	**9/16**	個人訪談	大學	學生	無
B	**17**	陳	**9/21**	個人訪談	高中	學生	無
C	**58**	劉	**9/21**	個人訪談	碩士	英文老師	**5** 萬以上
D	**24**	朱	**9/23**	個人訪談	大學畢業	上班族	**3** 萬 **2**
E	**45**	林	**9/25**	個人訪談	博士	大學教授	**x**
F	**23**	陳	**9/27**	個人訪談	大學畢業	櫃台人員	**2~3** 萬
G	**41**	劉	**9/30**	個人訪談	**x**	服務業	**5** 萬
H	**24**	朱	**10/1**	個人訪談	大學畢業	社工	**4** 萬
I	**22**	朱	**10/1**	個人訪談	大學畢業	小港機場上班	**x**
J	**66**	劉	**10/4**	電話訪談	大專畢業	駕訓班教練	**5** 萬左右
K	**27**	林	**10/4**	電話訪談	大學畢業	保險業務	**x**
L	**33**	陳	**10/7**	個人訪談	大學畢業	餐飲業	**5** 萬左右

APPENDIX B

Interview Questions

Interview of Overall Public Transport Experience and Feedback from Kaohsiung Citizens

1、您平常主要使用哪些交通工具？為什麼選擇這些方式且為什麼不選擇另一種？（了解整體來說是什麼族）
2、在沒有搭乘的情況下，您對高雄的公車有什麼印象？
3、在沒有搭乘的情況下，您對高雄的捷運有什麼印象？
4、您在實際搭乘高雄捷運時，分別遇到過哪些具體困難或不方便？
5、您在實際搭乘高雄公車時，分別遇到過哪些具體困難或不方便？
6、若對高雄公共運輸系統整體滿意程度 **1-10** 打分會打幾分，滿意和不足之處在哪？
7、上述問題和困難你有試圖跟官方反應過嗎？如果沒有是為什麼？如果有是透過什麼管道？
8、您認為私人交通工具有什麼公共運輸無法取代的優點和缺點？
9、在選擇交通方式時，您最看重哪些因素？ 為什麼？
10、您認為高雄的公車系統和捷運系統應該優先解決哪些問題？
11、在您看來，你在交通工具的使用和選擇是否受到特定社會群體的影響？（如家庭、學校、同儕）
12、在您看來，你在交通工具的使用和選擇是否受到城市總體環境（如道路設計、站點分佈）的影響？
13、您如何看待環境意識和健康考量在您的交通選擇中所扮演的比重？
14、您認為哪些激勵措施最能促使您選擇公共交通？為什麼？
15、你有沒有在用 **TPASS** 月票，您對於高雄 **TPASS** 月票政策有什麼意見？
16、若未來將高雄捷運系統和公車系統進一步整合，路網覆蓋更全面，有沒有可能讓你轉向搭乘公共運輸/更願意達成公共運輸？
17、你認為你從私人載具轉到公共運輸最大的障礙是什麼？
18、您還有什麼想法要補充的嗎？

Interviewees' Feedback

1、您平常主要使用哪些交通工具？為什麼選擇這些方式且為什麼不選擇另一種？（了解整體來說是什麼族）

A:我平常主要搭乘的是公車跟捷運，然後會選擇這些方式的原因在於說，這些交通工具相對於我自己騎車的顏色比較安全，可能原因是因為我是學生族群，這也算是比較便宜

那為什麼會選這些交通工具?就是主要是安全性跟舒適性是你主要的考量嗎?

沒錯

B:主要搭乘公車居多，上下班的話也比較方便，公車的話它的據點比較多相較其他單車,公車的車輛的車輛的車輛，相較其他工具來的方便許多

那公車,捷運的部分您搭的頻率又是怎樣?

捷運的話搭的相較比較少一點，但都是搭配公車轉乘

那您為什麼沒有選擇機車呢?

學生的話比較常搭機車，因為我比較守法還沒有成年

之後成年了以後會想要選擇機車嗎?

會選擇機車,因為相對的話也比較方便自由

C:好,我主要的交通工具，第一個就是我出門的話會有汽車，然後第二個就是公車，第三個是捷運，那整體來說我主要應該是算捷運，搭捷運比較多，如果沒有汽車的情況下我都是搭捷運

D:我通常是搭捷運比較多，然後為什麼不搭公車是因為我平常會去的地方捷運可以到，然後捷運的時間比較好預估

E:平常就是騎機車跟開車居多

那為什麼會選擇這樣的方式而不是其他的

因為這樣的話便利性比較高

好~所以您算是機車組這樣

嗯~算是

F:我是機車主，因為它比較方便，它可以隨時使用，然後也不需要考慮末班的問題

那機車主的話主要是私人載具，那為什麼不選擇搭乘大眾運輸工具呢?

它可以就是如果搭乘大眾運輸工具的話，它會有時間限制，比如說今天幾點會有車，或者是如果你剛好想要出門， 或者是趕不上的時候，因為有時候突發狀況真的無法避免， 然後如果說，像今天可能會有事情，那你可能也不知道時間要到多晚，會有末班車的問題，如果是私人載具的話就不會有這個問題

G:平常摩托車，因為機動性比較好比較方便，在高雄市來講的話

那為什麼不選用像大眾移居工具

比較麻煩

H:我平常主要是騎摩托車居多，我沒有搭公車或捷運，因為我覺得我覺得到某些，雖然交通工具很方便，但是到某些地段還是以摩托車更為方便一點，而且時間比較好掌控

I:因為我現在主要是騎機車騎機車上下班，對那因為高雄就是機車，就是方便嘛。然後然後住家附近也沒有捷運站，因為捷運的覆蓋率雖然有兩條線，加 1 個環狀線，但是還是有一點低

J:因為上下班方便

因為選擇機車上下班方便是嗎?

對

K: 機車 捷運 腳踏車 高鐵 / 目前的公共運輸很方便 無汽車駕照

L: 我平常都是騎車上下班，就是摩托車，對我來說騎車便利性比較高，而且因為我住的地方離大眾運輸會有一段距離，所以對我來說通勤是用機車比較方便

那為什麼不選擇大眾運輸工具?

因為像剛說的,它離我家有一段距離， 而且應該說從小養成的習慣，我個人家庭的習慣就是我們沒有太常搭乘大眾運輸，而且通勤要時間,而且有時候會遇到一些氣候因素，或者是電力等等不確定的因素，這樣會影響到我的出缺勤，所以對我來說,我覺得騎車是我比較能掌握的

2、在沒有搭乘的情況下，您對高雄的公車有什麼印象？

A: 對我來說我覺得高雄公車好的點在於說其實它的搭車其實比較...那個叫什麼啊？舒適度還蠻夠的，因為其實搭的人不多，然後壞的點是因為其實高雄公車其實在有某一些路段的時候上下車其實會造成道路上的阻塞

道路上的阻塞嗎?

對,因為它上下車的時候有時候會擋到，因為它只有像是一些兩線道的時候，然後道路上面也有蠻多微停的，它其實變成說乘客必須要在馬路上面上下車，等於說其實公車擋到了整條線道

那你覺得這個問題會影響到你選擇公車嗎?

嗯...可能會，因為其實在上下車的時候，其實我們在道路上面，因為其實在台灣大家騎摩托車的時候，其實大家會轉來轉去，其實有時候蠻危險的，那你說其實安全性也是有一點小問題

那你覺得為什麼會造成這樣的現象?

因為主要就是高雄的道路停車，就是違停啊，那些我認為說可能懲罰程度不夠等於說大家變成說，你這樣做的成本太低了，大家會認為說無傷大雅，然後我就會持續停啊，對我來說沒什麼影響

B:相較之下它比較老舊，看起來，外觀的話，外觀比較老舊

那還有什麼其他的印象?

好的印象嗎？比較沒有，沒有好的印象。壞的印象就是它的外觀比較老舊

C: 我對高雄市公車的印象就是其實它的那個公車班次，我覺得算…以我的地區來說我覺得頻率算 OK，不會說等很久，然後公車司機的態度，有時候好,有時候不好，那尤其是對比較長輩的朋友，就我的觀察，有時候他們還是不夠 nice，對,整體來說算…，算有 80 分，我對公車的評價是這樣，然後算乾淨整潔

D: 我覺得高雄公車可能就是班，與班的間距稍微比較長，然後很多公車路線沒有，就是特別的公車站，就是他可能會是在路邊 1 個站牌而已，上下車會比較沒那麼安全一點

E:對高雄的公車有什麼印象在沒有搭乘過的情況下， 對高雄的公車的印象應該就是在高中的時候比較長大， 就是會覺得高雄的公車，它的班次還有這個霧點的狀況，並不是非常的好，就是...

F:我本來覺得高雄公車可能會很混亂，就是混亂的點是切車道啊，或擠壓到機車啊，

或者是好多號碼，應該就是這樣說啊，可能沒有一個系統性的感覺，因為系統性的原因是可能，好它跑有沒有可能它跑這一區，但是它跑得棒的可能就，就是那樣，就是沒有辦法一次，分配好它要跑哪裡可能就是，重複路線會很多然後很雜亂的感覺，就是它的路線公車路線的分配比較不均勻的關係

G:還好，因為沒有做過，沒做過

那沒有試過去做做看嗎

沒有

H:便利，然後班次蠻多的，我覺得還不錯，

I:其實覆蓋率還蠻廣的，就是，不管是從左營到其上或是其他奇奇怪怪的位置，其實都會有班次

J:公車的話現在是比較方便，以前的話是比較而且就那個機車設計比較隆重，現在比較新的話就看起來比較進步很多，更具體的話我不太知道因為很少搭乘公車

K:高中畢業後就不用公車了 已無印象 但比起捷運較沒有效率

L:我是有搭過公車的，我自己對公車的印象其實...

正面或負面都可以

我試試看，其實沒什麼特別的印象，我覺得基本上它就是比捷運再晃動一點，以整體的感覺來說,它就是比捷運再晃動一點，因為它會比較沒有那種距離感，它會比每個人都...你會覺得每個人都很近，尤其是在上下班巔峰的時期，對我來說,我不喜歡遇到那麼接近，就是比較大重型的、比較平價的運輸

那整體來說,您對公車的印象是正面還是負面?

正面

3、在沒有搭乘的情況下，您對高雄的捷運有什麼印象？

A: 那跟高雄的捷運就是可能相比台北啦，就是高雄的捷運其實路線不太夠 你說路網不夠多，還有一點就是高雄的公車捷運在離封時間的時候班次有點少，等於說你搭一班車可能要十分鐘三十分鐘，其實是有點久。然後甚至說高雄的捷運有時候站內是沒有冷氣的，等於說一些站其實舒適度是不太夠，所以你對它的負面影響主要集中在，覆蓋面不夠廣，然後班次也比較短，然後再加上在舒適性，就是可能溫度比較高，冷氣開的比較熱，然後會覺得比較不舒服

B: 印象中是很乾淨的

乾淨?

也比公車來的方便許多，比公車來的方便許多

好那您所謂的方便具體指的是什麼？站點都比較接近熱鬧的地方，比較接近熱鬧的地方?

對

C:我其實常搭捷運，我對高雄捷運的印象非常好，就是…就是高雄整個車身、車廂的環境，然後整個捷運站的環境，還有進出站的這種便利性，然後包括就是捷運服務人員的態度，有時候要徵職，有時候要請他幫忙處理一些現場狀況，我的印象都很好，整體來說我覺得可以到 90 分以上

D: 我的我的捷運印象其實跟台北差不多，但是就那個，因為台北比較多不同的支線，那高雄就比較少，這樣子

就這樣嗎？那有沒有其他比較特別的地方

比較特別的地方喔，可能是之前有聽說過，就是高雄的捷運，好像比較不會開冷氣之類的，但是我最近大家好像就是這個問題有被改善

E: 一樣是在沒有搭乘的情況下的話，嗯...沒有搭乘的情況下，對高雄的捷運會覺得說，它的路線的安排可能沒有比較少的選擇，是意思是範圍沒有很廣，範圍沒有很廣

F: 捷運的話是規劃得其實還不錯，因為捷運的話它做得好很好的點是它重要的站它都會就是捷運會通的到，比如說高雄城這樣，三多商圈也很重要，然後西子灣那邊也會有，甚至南岡山，其實我覺得南岡山也滿夠的，那它有什麼樣的，就是不好的印象對捷運 ，捷運不好的印象可能就是，我覺得它裡面，就是它每一個站的，首輔梯，它對於無障礙設施的部分比較可能沒有那麼的完善，因為有時候好美，今天搭電梯可是那電梯可能設在，離出口很遠，離那個人今天在的所在地很遠，比如說他今天不好，就

是導航到一個點，我今天導航到這個點是捷運，在導航的點我今天到，然後那個人可能會離電梯，可能會很遠，離電梯很遠就是無障礙設施沒有做好 ，然後它很多出口很多都是沒有手機的，所以如果說今天最近的那個，出口還沒有手機它會造成行動不便的人，他要繞比較遠的路去找到電梯，花時間

OK 就是對一些身心障礙人士的保障不足，關心不足

G: 比較貴，比較方便，比較貴不方便是怎樣的不方便的話，它的點跟你要想去的點，到站你還要走很遠，不是你想要的地方，而且它的費用來講的話算貴，騎摩托車更便宜

H: 我覺得時間沒辦法完全自己掌控，所以我還是對於摩托車比較覺得摩托車比較方便

就這樣嗎？還有是哪方面的問題，就是你的印象就好了

印象就是跟其他縣市比起來，我覺得高雄的捷運及公車就是便捷，許多就是，而且他的站數比台中或者是比桃園更為便捷一點，這是我蠻喜歡高雄捷運及公車的地方

I: 印象？高雄捷運紅線是蠻方便的，就是它有比較知名的一些景點或是購物中心，這樣也有高鐵跟火車站的串聯，對，至於紅線感覺就還好，就是王西子灣那邊，而且那一條那條路叫什麼就是磺溪的那一條路，其實感覺機車就是比較多，對大家可能機器車會比較多，他那個輕軌的話，但我不是使用者，所以不好說什麼

J: 捷運也是我很少搭，之前有搭過一次，它捷運是沒有像台北那麼方便，我有搭過一次，有時候搭外線是輕便舒適比較快捷哦，就這樣子

K: 方便 也適合當個與人相約的標地

L: 雖然以高雄來講,有些點它還是沒辦法到達，但是如果不是我現在這個年紀,是我讀書的時段的話，我覺得這個東西對我來說是蠻方便的，就是只要幾十塊錢,我就可以搭到我要的地方，我也不用去麻煩我的父母，或者是有些人的家庭背景可能是比較單親，父母要比較早上班,沒有辦法在你上學的狀況，我覺得這個對學生來講是一個很方便的東西，而且另一個考量點說,它比較不會有危險性的存在，雖然會有人拿刀在上面,但是這個是少數，所以我是覺得它比你自己在外面騎車的安全性比較多，而且比較不用花時間去停車啊等等之類的，以年輕一點的考慮的話,我會覺得捷運是不錯的

4、您在實際搭乘高雄捷運時，分別遇到過哪些具體困難或不方便？

A: 捷運上面倒相對來說比較沒有，捷運的比較大的問題還是一樣，就是可能舒適度，有時候冷氣開跟不開，然後有一些特別是站內像美麗島站，然後不開的時候裡面像是在蒸桑拿

B: 我覺得比較有困難的是進出站它沒有分流，因為有時候會，同時有人要進的時候又要出捷運巨蛋站的時候比較容易發生

可是它的那個，電輔梯不是就是單向的嗎?

對,我主要的是進出站那個地方，它會有時候可以兩邊都可以刷卡進來，對,那比較容易造成兩邊人要同時過的時候會，比較堵塞

OK,那這個站除了在巨蛋站其他站也會有遇到類似的情況嗎?

其他站也會有，因為人多的地方，像高雄車站就比較還好，但還是多少會有，就是它有些地方是可以開的，然後有些地方也是可以進的

C: 我沒有遇過困難或不方便，也沒有看到困難或不方便，到目前為止沒有，我對捷運是非常滿意的，不管他的座位設計、環境、乾淨度，還有捷運站服務人員的態度，這些我都很滿意

D: 捷運的話還好，可能就是尖峰時段，比較多人車廂太擠，就是沒有辦法很舒服的搭乘捷運這樣

E: 不足的點可能就是因為高雄的那個捷運，其實它的搭乘量呢，還是沒有北部那麼的多啦，所以就是在推廣的這一方面，可能是高雄人他要怎麼樣從以往的習慣，把它轉換成搭乘公共運輸的這一塊，可能都還有很多的改良之處

沒有遇到困難的都不方便，因為高雄捷運算是路線很單純， 所以再加上身體比較沒有什麼樣的困難不方便，所以一般來說算是可以去接受的，如果說不方便的話，因為這個其實也要考量到營運上面的問題，因為高雄捷運它的班次在平常日跟假日的調度上面，它其實是不太相同的

F: 捷運剛提到說主要的大站都有，如果你今天要來回南北高雄，很方便可是如果說，對於上班族群來說還是，都會有沒有辦法到達的地方，像之前有在前鎮，加工出口區工作的地方，前鎮加工出口區是完全沒有公車沒有捷運，任何搭重運輸工具都沒有搬來

去到的地方是公車也沒有嗎

沒有

那您自己通勤的話就是機車嗎，對就是機車那有接駁車嗎

沒有耶接駁車也沒有

***OK** 那捷運的話總結來說就是，您剛剛說的就是一些偏向的地區或者是一些跟目前捷運的兩條線以外的地區就是比較沒辦法拿到*

G: *您是不是沒有搭過捷運*

有，有搭過

那有沒有可以分享一下你的體驗嗎

體驗就還好啦，還好，高雄的還好啦

那你有坐過其他城市的捷運嗎

台北

可以就是就是分享一下這兩者的差距嗎

台北它的點比較多，台北點比較多，你要讓一些觀光的地方，你捷運到了它就在門口而已，到門口，所以台北會方便很多，然後也比較便宜，台北比較便宜

你現在高雄搭從高雄搭大寮來講的話一個人就要多少

一百多了

H: 就是尖峰時段，人數會很多，然後就非常擁擠，就是乘車體驗不是非常好，但這應該是就是每個地方都會有的狀況，所以我覺得也不能歸咎在高雄高鐵、高雄捷運的狀況，

I: 其實我覺得班次真的很少，我覺得班次很少是硬傷，因為我也因為這個問題，所以也只搭過幾次而已，因為高雄真的機車方便很多

J: 是還沒有啦，目前的捷運是很方便很快捷，時間都是蠻快的都有準時到達，都還不錯

K: 北下南的位置較不好購買，比起南上北

L: 應該說你是自己第一次搭,一定會有些...即使裡面都已經把捷運分佈圖啊,哪裡到哪裡都已經有講好了，但如果沒有一個實際的人員去帶你怎麼操作這些，你其實會有點困惑吧?說真的，就是捷運的指引，如果有一個實際的人員說你等一下按這個,從這邊進去，到哪裡到哪裡，那當然以我們成年人來講,這些東西對我們來說都是我用看的就可以了解，但是有些學生會緊張啊什麼之類看不懂，我覺得如果有更詳細的說明,也許會更好，因為我其實有一段時間沒有搭了，我不確定有沒有新增一些指示說明，我以前搭的時候是要自己去了解一下

5、您在實際搭乘高雄公車時，分別遇到過哪些具體困難或不方便？

A: 高雄的公車，特別是高雄公車。高雄公車就是，大家不是在搭公車的時候會有站牌會有一個就是公車的站表嗎?你說幾點會來幾點不會來，那其實高雄的公車，我相信應該是因為搭的人不多，所以它有一些看板，它的表上面還是顯示說有這一班車，但是實際上面沒有來，然後變成說你可能搭車，你必須要去賭說它這一班車到底有沒有。所以變成說如果它沒有出來的話，你反而通勤時間又要再等下一班，然後下一班就是一個小時兩個小時後，所以說我認為這是高雄公車的一個很大的問題，就是在班距的時間的預測上面它比較不準確。

就是因為說有一些班假如說現在說現在五點半，它表上面顯示說五點四十有一班，但實際上五點四十根本沒有這一班車，它的站表上面一樣顯示說有這一班車，所以說我認為說這是一個公車上面，它的準確性的問題，也就是說其實沒有這一班，但是它表的地方上面還是顯示。

你有曾經因為這樣的不準確然後沒有趕上公車嗎？

有我記得我大一的時候我考試，然後有一次那個期末考的時候，然後最後那一班車我發現後面沒有到，然後我等大概 15 分鐘 30 分鐘，然後最後面我選擇就是說直接叫計程車，然後直接來學校，所以我認為這是一個蠻大的問題

B: 主要是公車容易遲到，還有就是它時間還沒到的時候就會提前開走，是比較常遇到的

時間沒有到是只發車第一站發車的時候嗎?還是?

對,第一站發車的時候或者是就是，具體基本上就是它有規定時間大概什麼時候到，但它有時候會提前可能一兩分鐘就開走

是在哪一站會遇到過這種事情?

比較常在高鐵站，高雄高鐵站那邊

那除此之外還有遇到過哪些困難或是不方便嗎？除了不准時以外

這個除了這個以外其實還好

C: 我個人倒沒有遇過困難或不方便，但是我看過有其他乘客遇過的困難跟不方便，譬如我曾經在我要去搭公車的時候就看到前面的老先生或老太太，她的招手，可能就是公車來了招手，她可能太慢，公車就跑過去了，我覺得這一點的話可以改善，就像是公車司機在接近公車站，快到公車站的停等點的時候，速度可以放慢一點，以便於年紀比較大的老人家，可以來得及招手跟，公車司機可以來得及停下來載他們

D: 我之前搭過就是真的是比較難上下車啦就是可能要閃一下機車，或是你真的必須到馬路上，然後我覺得這個安全疑慮還是需要更加強這樣，然後有些有些司機開車比較比較重，或是怎樣轉彎，比較沒那麼安全，然後乘客可能就不管是站著還是坐著，都會被影響到

E:我幾乎沒有搭公車耶，所以我很難回答這個問題耶，因為現在搭公車應該是很方便，因為它可以去透過一些 APP 去看一下公車的時間，我想是方便的只是說我幾乎沒有搭公車

那如果是在實際搭乘捷運的時候

沒有遇到困難的都不方便，因為高雄捷運算是路線很單純， 所以再加上身體比較沒有什麼樣的困難不方便，所以一般來說算是可以去接受的，如果說不方便的話，因為這個其實也要考量到營運上面的問題，因為高雄捷運它的班次在平常日跟假日的調度上面，它其實是不太相同的

E: 第一個是找不到站牌，如果說我今天開 App，就是今天假設我到一個我不熟悉的地方，我不常搭這條線但是我有找到公車的時刻表，好我今天知道我要往哪個方向搭，可是我可以從 App 裡面看得到地圖，但是我實際看 App 裡面，地圖的時候因為它也沒有標，可能也沒有把路名標清楚，它只有一個點說那個是哪一個站，然後我們要去猜，或者是要去估說，那個站牌在哪裡，要不然坐錯邊就很麻煩，就是我今天好不容易到達那個站，結果發現 App 的方向然後公車剛好來，就會非常的方便。

然後第二個是誤點的部分,就是有時候假設你今天沒有用手機也沒有用 App 的話，那你的就是只能看站牌上面的時刻表，平常那個時刻表是不準的，你要看 App 的上面才會是很準，如果今天路面 1 手機沒電，那你怎麼辦，這個真的是特靠運氣

然後第三個是你招手的時間點，就是如果說這個是前提，在兩台公車同時到達的情況之下，今天我要招第一台公車的話，那可能沒有什麼太大問題，如果我今天招

第二台，那第一台會停下來，然後就會發背到，可能他們沒有乘客要上下車，對啊我會去耽誤到其他乘客的時間，然後還有，按鈴的時間點今天我從 A 站到 B 站，我要在 B 站下車，那公車是要在 A 站離開的瞬間就按還是我今天要快要到 B 站的時候才按

OK 就是按那個下車鈴的時間點的問題，那像你剛剛提到的就是下車鈴的話你們覺得有什麼可以改善的建議嗎

我覺得還是宣導吧，就是如果說他應該有一個明確的手痞，可以這麼說， 就是我今天按鈴要在哪一個區間，因為今天經過，這個站牌立刻按還是怎麼樣，你覺得他可以講一個建議的方式或者是宣導會好一些

F: 沒有搭過公車，公車我真的沒有搭過

好那就是沒有去搭一下嗎

就是公車，因為我覺得沒有需要去搭那個，我就不會搭，沒有吸引力，然後也不方便，對啊，高雄就騎摩托車，就是最方便了

那像高雄有沒有就是他有推薦一些優惠啊像 T-Pass 那些有沒有去了解

沒有

那有什麼像什麼新聞嗎就是有報導高雄公車有去了解一下嗎

沒有， 都沒有

對於高雄完全沒有去了解

對於高雄那種公車都沒有

G: 有時候公車司機可能很急，然後就是對於我們一些對於乘客的安全可能沒有那麼的注重，我覺得需要再加油一點

H: 喔有一次從高鐵去其他縣市，然後回來要然後就是高鐵下車，然後要去轉搭公車的時候，然後公車等一等，然後就發現欸，怎麼辦是沒有來這樣子，結果後面只能搭計程車回去，這樣子就是蠻亮光的

所以是時間或班次的安排，或是他站體的設施標示不夠清楚嗎？

等一下，我那天是站在對的地方，但是高雄有些地方的站牌，覺得不管是站牌還是設立的點，我都覺得有點怪怪的，像如果今天你要搭公車到，就是左右半邊那邊的話，你又要到另外 1 個地方搭公車，怎麼說他就是在高鐵站外面那個車棚，你要走到其他地方對這個就有點不

I: 公車它的站有時候，標示的不夠明確，而且常常換來換去，所以說怕坐過頭或怎麼樣，怕擔心這個問題啦，因為還很少坐公車啊

J: 無經驗

K: 公車就是上下,一樣遇到巔峰時段的時候會塞車，然後會比你預期要大概幾點到，但是會有一些突發不確定性，說實在公車對我來說就是會有一個比較密閉性的空間，對我自己來說，所以就是準點性跟它的空間密度是你比較在意的點，那如果對高雄整體的公共運輸系統

6、若對高雄公共運輸系統整體滿意程度 1-10 打分會打幾分，滿意和不足之處在哪？

A: 我可能給個五六分吧，然後剩下的分數可能扣在就是說那個一些道路問題跟那個，還有一點就是高雄搭車的這些人有時候其實是蠻貴的，如果你沒有買月票的情況下，票價的問題

B: 會大概給 8 分

C: 我會打 9 分，然後我的滿意就是，不論公車或者捷運，他的就是…就是環境，我要公車內的環境、捷運內的環境，我會就是打 10 分，我覺得這方面我很滿意。然後對於就是服務人員的態度，我會打 9 分，因為有時候還是會遇到，有些像公車司機態度不夠理想，這部分有扣分，那其他就是便利性，還有時間，就是搬車兼具的安排的時間，我覺得這些我都滿意，尤其是捷運，我很滿意

D: 我覺得我會積分就是大致上來說，大部分的地區在高雄的話，大眾運輸都可以到，但是就像我剛剛說的，有些公車只有公車站牌，沒有一個乘客上下車的地方，然後高雄就是比較多機車多汽車的地方，這樣乘客上下車的時候就會稍微比較不安全，然後捷運的部分就是也是希望可以再多開闢多條線一點，這樣對市民來說也比較方便，可以到更多的地方去

滿意就是我發現說，那個高雄市它其實有逐漸在進步了，就包含像他們就是捷運跟公車的轉乘方面，有比較多的改善，那還有就是他們對那個老人的服務方面，比如說老人家做捷運、做公車，都有折扣啊，甚至是免費的狀況，這個對整個社會的福利都有所改善跟進步

E: 我覺得這個問題有點不公正耶，因為....，對啊~因為你叫我打分數

因為我們這個是主觀的打分，所以其實沒有關係

嗯...應該 8 分吧

F: 7 分滿意點還是要算方便，但是就是很方便的點就是他雖然說覆蓋率沒有那麼高，但主要你今天要去逛街或者是今天 有去出差的需求，都還滿方便的，今天要出差我可以去搭直接搭起運動小港機場，我今天要出差我要到台南去我到台北去，我就直接到高雄車站，我今天要逛街深度上去就可以到，都還滿方便的。

但是如果沒辦法就是不滿意的地方，是他沒有辦法像台北那樣 ，可以完全不用機車，高雄還是機車主比較方便，他是也不太，如果說是私人載具的話，他在比起捷運跟 公車來講他會是比較省時方便，對

G: 應該說一半而已吧，就五分，就一半一半，不滿意的話就是太貴了

只能說跟機車比嗎

對啊，騎摩托車，去哪裡就去哪裡，高雄捷運現在目前的捷運站算很少，就是觀光點比較多而已

就是只有設在觀光點?

對啊，你像這種還是不方便， 因為它的觀光來講的話是可以

所以對於觀光來說是可以的?

像演唱會啊，都有那個設點，所以他們那是可以，可是如果一般，比較像你要通勤啊什麼的話，是覺得摩托車就好，就是點也還不夠廣，摩托車像我在這裡，如果要通勤的話，我要騎到巨蛋，我騎那個那一段，如果要騎摩托車就好了

H: 我會給七分，然後滿意

那你滿意跟不滿意的地方分別是什麼？

時間的控管就是比較不滿意的，滿意的地方是就是便捷站數多

I: 公共運輸系統六分吧六分、六點五分到七分。因為我覺得這個其實你在路上看都看得出來，就是大家騎車還是比較多，為什麼就是因為機車還是比較方便，捷運也沒有，也沒有覆蓋率，也就只有那兩條跟 1 個環狀線都是集中在南高雄比較多

有沒有要上班比較清楚的、滿意或不滿意的

地方滿意或不滿意的地方滿意的點是就是如果你今天剛好，剛好就是想要逛的，都在紅線上的話，你可以騎車到 1 個地方，然後去坐捷運，你也不用在路上這樣子擠機車機車的缺點就是因為大家都騎機車，所以有時候會很擠，捷運就會方便，一些不足的地方，就是班次車太久

J: 公共全部的話呢應該是 7、8 分啦那不足就是說你捷運的點太少了

K: 8 分，好的點是曾在高鐵上丟失錢包立馬收到通知 效率高，不好的點是商務包廂還是有嬰幼兒吵鬧 不如買自由座

L: 我覺得大概 6 分吧，然後我覺得是滿意的啦，就像我來說我覺得那種，應該說可以給人家選擇性遇到這個一定是好事，因為你也難保我今天騎車難保車子突然電瓶沒電，不是什麼什麼之類的，不一定每個人都這麼有錢可以搭 Uber 搭計程車，有更多樣的選擇性這一定是好事，對啊，只是因為高雄就不像台北有這麼多店，就是可以我想到哪裡基本上附近都會有那個點，高雄可能有些地方我到了那個地方我可能還要再走一段路，或者是我可能要騎個 U-Bike 之類的才能到達那個地方，所以可能點跟點之間啊或者是站點，增設一些或許會比較好，就是他的交通運輸的覆蓋率不夠

7、上述問題和困難你有試圖跟官方反應過嗎？如果沒有是為什麼？如果有是透過什麼管道？

A: 我是沒有，因為我是覺得可能，因為我看到大家都在罵了，我就想說我就沒有反應了

B: 有,那像公車的話我會用公車 APP 或是相關的客運去直接打電話給他們，都能有不錯的反應效果

那你有反應過哪些事情?你自己印象中

也像就是遲到的話就還好不會特別去反應，就是有些有就是已經有舉手要搭乘了，但它還是直接開走的問題比較多

那你反應以後後來有改善嗎?

有改善過但後面好像就比較少發生了

C: 其實沒有跟官方反映過，就是一般我覺得應該，我不是那麼積極的市民吧，就是市政府已經有的我們就盡量利用，那如果沒有的我們看到市政府已經在規劃了，那就充滿期待。那至於說，沒有的話，沒有是為什麼，因為我也會考慮市政府是不是有這樣的預算，然後他的人力、規劃，然後整個市政的藍圖是什麼，我們會考慮這些問題，

可能因為我天生比較體貼別人，比較不會要求很多，那如果有我們就感恩，如果沒有有就期待。

那如果說我要透過，如果透過要反映的管道，我的建議就是在這些，比方說捷運站，或者公車站相關停等的地方，可以有一些，設一些比方說意見反映箱，但現在因為就是都是透過網路了，就是政府的相關的，比方說捷運站的網站或公車站的網站，如果我要反映我會透過網站反映，也不會用什麼意見箱，我覺得用網路比較環保，然後也比較快速吧，如果公務人員有常常每天去看他的網站的話

D: 我沒有試圖跟官方反應過，因為感覺比較不會短時間內會有做出改善，我自己是這麼覺得

E: 沒有，因為不常坐捷運啊，所以一般人也不會因為說，因為我所遇到的問題並不是什麼重大的疏失，所以也不太需要說跟官方去反映什麼

F: 基本上搭公車沒有很多，很多年所以我沒有反應過，後來是大眾運輸轉成機車主因為上班的需求，所以比較不會用到大眾運輸，之後就沒有很在意這件事情

G: 沒有

然後如果沒有是為什麼或是有透過什麼管道嗎

就是我覺得，我們是小市民，反應那個有什麼利用

H: 沒有，因為我覺得這個不是短期可以解決的，我覺得以我個人的力量可能比較微小，可能沒辦法改善，所以我就覺得不用反應

I: 沒有耶。對，因為因為我自己就有機車了，所以我就有辦法去其他地方，所以因為我不是真的使用者所以那個根本沒有必要反應這樣

J: 沒有啦，因為很少搭乘的關係所以感覺不出來

K: 個人認為 高鐵是資本公司 以大局著想 就算沒有解決這些問題 也會因方便而妥協的乘客並不是什麼太大的問題

L:（沒問）

8、您認為私人交通工具有什麼公共運輸無法取代的優點和缺點？

F: 優點就是他不現實，就是如果你今天想要，用他就用他你今天也不需要，等比如說我一定要什麼時刻，我才可以用他，然後我也不需要去走到特定的地方去等，等說他什麼時候會來，那缺點的話就是，他其實比較危險，危險就是危險性來講，路上真的遇到太多傷報，就是為了要自保可能都還要去，就是隨時注意很注意要非常注意路況

你剛剛上述提到的所有遇到的困難，如果都解決的話，你有可能會從機車主轉到大乘客公共運輸

如果便利性也解決他，對就像你剛剛提到的路線的覆蓋率不足，然後準點率，對落實的保障，招手的問題，你剛剛提到所有公車跟捷運遇到的問題，最後都被解決好了，你有可能就因此轉到公共運輸，會傾向，所以還是會稍微考慮一下，因為其實奇蹟推進變成一種習慣

G: 就我們如果我們騎自已的話就是比較方便性，我們隨時騎就騎啊，就到哪裡就到哪裡，就單純方便，就一個通勤方便啊，去哪裡就去哪裡

那會因為天氣的因素而去影響到你的選擇嗎？像搭太陽然後騎機車就很熱，最後還不如搭大眾運輸工具之類的

還好

所以天氣也不會影響你的選擇

不會

好那接下來是您認為私人的交通工具有什麼優點是私人交通工具，有什麼公共運輸無法取代的優點和缺點

時間可以自己掌控，然後有一些交通、公共運輸沒有到達，的地方自己的交通工具可以順利的到達

那有什麼缺點是公共運輸無法取代的

就是那個停車位的問題，交通、公共運輸不用擔心停車位

I: 是交通工具就是方便嗎？對啊你說缺點嗎？就是高雄的路，真的那個像民族一路就是太急了嘛。而且那邊也常常出車禍喔。而且高雄的紅綠燈，我覺得蠻不 ok 的，因為他都不是，他，都不是給你一整排綠燈一紅燈，對其實我不太我沒有很了解為什麼道路規劃會長，這樣，我覺得這個是道路規劃，當然那個如果你說路線的話，我覺得很好，就是那個紅綠燈

J: 公共工具是比較比較比較方便，那從時間上就不會等很久， 方便性，比較省時間啊

那有考慮到價錢嗎?

因為都是要使用的嘛，像機車你每天都要使用嘛所以是必要支出，但是你公車的話或者捷運的話，你有時候需要到一些地方，想到或者怎麼樣，除非是跑比較遠的地方才會選大眾運輸工具

K: 相對於比較比較明顯的就是停車吧，就是如果假如說因為畢竟私人交通工具是我自己自由的產物啊，那這樣子的話我可以就是隨便停在例如說人行道或是停車格之類，

就是比較有自己的空間，其他的無法取代優點缺點，缺點的話就是剛好他們就是一個雙面刃啊，因為高雄的停車停車位其實也很少，所以如果真的要比起來的話就是，剛好是任何有一個位置可以停車，但是外面給予的停車位又很少，大概是這樣吧

L: 嗯當然首先就是便利性啦，就是我今天想去哪裡，基本上不會有人把車把自己的機車或汽車停在，我住的地方 10 到 15 分鐘距離，他可能就停在樓下，我想走我想去哪裡就去哪裡，我不需要特地到一個站點去才可以出發到我的目的地，就是我可以想走就走，這個是比較沒有辦法去做取代的啦，而且我可以應該說我可以很輕易的改變說我今天，我假設我今天搭捷運塔了，我要到美麗島，那我中途我突然想要幹嘛，我突然回心轉意我突然想要幹嘛幹嘛，但我已經在路途中我就比較沒有辦法去，突然我可能要到一個站點，我要換到另一線我才可以再走回去，但私人交通工具就不會有這個問題，我想要去哪我轉個彎就可以

那你覺得公共運輸他的缺點在哪，不好意思你覺得像私人交通工具他的缺點在哪

缺點在於如果你今天去一些，假設假日或者是人口可能百貨公司假日比較密集，人比較多的地方，你在就是我們的停車點其實是很少的，就是那種公共停車的其實對我的認知來講，我覺得是非常的不夠，是你要停車，你要對你很你可以很常看到大家在路上，在那裡大家的車就為了巧一個停車位出來，更何況是汽車汽車，假日你基本上你不排個 5 到 10 分鐘，或 10 到 30 分鐘你是沒有位置可以停的，這個是蠻不方便，就以停車來講的話，如果你又不好好停車會造成交通的亂象

9、在選擇交通方式時，您最看重哪些因素？為什麼？

A: 我覺得特別是時間跟成本，我還是覺得說就是如果他表定上面有就應該要出現吧，你在搭車的時候，因為其實假如說特別是你是上班族的情況下，或是你在你有重要的事情的時候，如果你搭到大眾運輸工具，他卻沒有辦法在準時的該出現的時間出現的時候，你的行程跟是不是時間又被拉的更，就是很容易就是說你會變成缺勤，或缺勤

某一些重要場合，那這個就是我覺得說大眾運輸工具我比較看重，如果你時間內都沒有辦法來，我覺得反而說會減少我們搭乘的意願

那你認為說如果今天你是使用私人交通工具，在時間的成本，時間成本跟路上的成本的話會有優勢嗎？你說以騎行機車來說，跟大眾運輸那肯定上時間來說

我認為你在高雄騎車絕對會是比你大眾運輸工具快，因為說實話就是，那個高雄的大眾運輸工具系統就是真的是，時間上面班次太少再加時間也不太準確，你騎車反而還會比較快，就是說你停車那些其實成本也很低，跟你的票價比起來，那你認為高雄的公車系統跟捷運系統應該優先解決哪些問題，那這些改進會不會影響到你的選擇，優先改進。

B: 會覺得通勤時間要比較短一點，這樣可以比較快抵達你要的地方，或者是更快執行你下一步要做的事情

所以時間因素是你最主要的一個因素?

對

那像比如像是安全性、舒適性這些或者是票價這些因素你覺得對你的影響會大嗎?

票價的話還好,因為現在都有相關優惠方案

C: 選擇交通工具的話，當然就是他的便利性，還有他的價格，就是你要便利，然後又不能太貴，越方便越好，離家越近越好，還是說我去辦的事情，在辦事情的地點，隨時也就有那樣的捷運站或者公車站，讓我可以接駁到另外一個像輕軌、捷運公車那當然是最好，還是就是在比較主要的觀光景點，還是主要的辦公大樓附近，要有公車站或捷運站那是最好，我看重的是便利性，還有當然不要太貴

D: 是什麼我覺得首要還是便利性因為如果你在交通上花的時間太多的話，就是會，我會比較不傾向，如果大眾運輸不方便，你就不會想要搭大眾運輸出門，就可能會選擇自己開車或是自己騎車之類的，所以我覺得最最看重的還是方便性

E: 當然是看重比如說時間啦，這個就是看人就是會去考量說你是看重時間或者是看重金錢啊， 因為你的金錢少時間就多，金錢多時間就少啊，大部分是這樣子，所以就是時間成本的關係

F: 就是便利性跟合適性，現在如果是便利性就像我剛剛講的，就是隨時隨地都可以用它，然後合適性就是我今天我要去上班我搭怎樣子的交通工具，或是我自己騎交通工具，這些就是，有沒有比較符合我現在生活的模式，像以前我到前陣加工出口去上班

的時候，我一定是騎機車，因為我到我那個地方是沒有任何的大眾交通運輸可以到的地方，那現在的工作會騎到機車，其實也有一個點是因為主管會交接的事項，我這個櫃台是補習班的櫃台，我要去外校區，其他的國校去，集合學生他們放學 都會自己跑出來，你要防止他們就是，應該是要主動他們的安全，然後你就要就是牽著，然後看他們有沒有不要讓他們亂跑，等到跟車的老師來的時候再交接給他們，這個有需要就是在我的工作上，就是需要的所以我需要去騎車去等接學生這個需求

就是你自己工作上的需求是需要機車的

G: 方便

便利性是嗎

便利性

那為什麼呢

就是綜合因素考量下便利性,價錢機車都比大眾運工具更方便

為什麼會選就是因為便利性而選擇機車嗎？ 對阿那汽車?

汽車 汽車還好，除非家庭要出遊的話才會開汽車，要出遊才會開汽車，高雄是開汽車也是很難訂車

問題是高雄的不是都很多路邊就是地蠻空曠的，不像台中市跟台北市是找不到車位

是啊

你空曠的地方是一個偏僻的地方，可是你一般會出門 要想出門一定會去一個熱鬧的地方景點，那個地方的話車位一定就是很少，而且現在拖掉檢舉很多，拖掉跟檢舉很多

對 汽車一般都是全家出遊，或者要去賣場買才買，他們都常常開汽車，不然說真的還是以摩托車為主，還是以摩托車為主

H: 就是地點吧 就是戰術的地點跟時間，就是希望多辦一點

I: 其實就是方便，用什麼方法可以最快到達目的地，這樣子對因為就像因為就算下雨天還是有雨衣，而且自己騎車可能還真的會有點不適，有點會比較省一點

你說省一點是時間還是花費

時間也有花費的話，花費的話也是我覺得會在省

J: 使用交通工具的話就是方便啦，方便簡潔，啊不是說還要等時間上還要等的很久，大部分就方便性為主吧

K: 應該都有吧，安全的話，安全現在應該蠻多，因為畢竟是大眾交通工具，所以它的安全程度一定是有到一定的標準吧，我覺得這個應該是還好， 最主要應該是效率吧我覺得。因為畢竟我自己是業務嘛，那我覺得如果假設說，像那種我可能有約好時間了，然後我也確定好我要坐高鐵，但可能因為今天颱風天的關係， 有延遲之類的就會比較麻煩，所以重點是效率

L: 就便利性，就是我今天想要幾點出門我想要多早到，我可以比較能自己去掌控

10、您認為高雄的公車系統和捷運系統應該優先解決哪些問題？

A: 高雄公車系統我相信我覺得最大問題就是那個班次的準確性，那個問題我剛才有大致提過，就是我認為他可能解決方式就是說，他把那個全部都改電子化，等於說站牌那邊不要再出現什麼指的，因為他其實沒有辦法即時更新，那等於說他今天如果這一班車確定不會來，他可以提前先告辭，那如果這樣乘客才可以，當那個當下看到的時候就可以選擇說，欸我是不是可以轉達其他交通工具，反而說你臨時發現他沒有來的，我是不是要再額外花，臨時再叫計程車把時間改搞得很緊。我覺得這是一個問題，然後可以解決方式，就是準確性的問題，那捷運系統有哪些解決的問題你覺得，我覺得捷運系統可能就是，可能把站點再擴大吧，現在就是因為可能電，就是路網不夠寬，其實大家搭的程度就低，等於說他變得，變成說搭的人變少，只是他沒有那個，就是不夠他反而就是虧錢，然後虧錢沒有辦法，虧錢就沒有辦法再擴大他的路，變成說這是一個惡性循環，就是高捷的問題就是這個

B: 捷運的話就是像剛才的進出站標示分流比較重要，那公車的話可能就是想辦法再繳需更多的班次或路線，這感覺比較重要

C: 我覺得要優先解決兩個系統的連結性，就是你可以利用公車，然後進一步利用到捷運，或利用捷運進一步運用到公車，然後方便到達你想去的地方，我覺得他們彼此的連結，就是點的設置，就是它的點可以方便，再透過另外一個系統，可以幫助你解決交通上的問題，我覺得這個是要優先解決的。

所以當然就是多設一點捷運的路線跟停等點，這是我覺得最優先要解決的，如果這兩個來說的話，就捷運系統

D: 我覺得應該要優先解決，就是乘客上下車安全的

問題，你是說公車嗎？這個部分

對，關於公車的部分，捷運的部分比較還好，因為捷運如果要開闢新的路線的話，其實需要非常、非常多的，所以我覺得慢慢捷運可以慢慢來沒關係，但是我覺得公車上下車的安全疑慮是需要盡快去解決的

E: 我覺得這個激勵措施這個就是要看，如果是講更實際的話就是要看說你如何接駁嘛，就是你接駁的點夠不夠多啊，這個就會是一個激勵措施啊，所以主要的一個點可能還是包括到現在覆蓋率不夠廣

F: 公車的部分

第一個是路線不改的全面性，就是剛剛有講到雖然說大站都到，但是真的沒有辦法想到高雄的哪裡就到高雄的哪裡

第二個是 APP 今天表示的清晰程度我剛剛也有提到，它的路牌的部分，跟就是路牌的標示跟路牌上面的標示，時刻標示它的準確程度跟清晰程度。

然後第三個是公車班次的均勻，不均勻的部分，我剛剛也有提到

捷運的部分，就是除了路線的覆蓋以外，你有遇到過什麼樣，就是覺得說可以解決的什麼事情

捷運的部分就是剛剛也有提到的五障礙設施，剩下的沒有什麼太大的問題

G: 捷運，就是捷運或公車，公車我是覺得我不知道，如果捷運的話是意義它的站不要只有設在那種方向景點的站而已

所以你覺得還是要設像台北一樣

就是一個社區出來就有捷運，是夠方便

你覺得捷運設的點就是還不夠多

對阿在市民觀光節才有那些點

那公車系統呢

其實也不差，也有優惠減免，但是我來高雄那麼久沒有做過，完全沒做過，完全一點吸引力都沒有，因為我覺得我不需要

會因為他太老舊了不想搭

沒有啦，因為我出門就騎摩托車，我要搭公車要搭公車

那你有去試過輕軌嗎

輕軌有

輕軌那體驗如何

就新奇而已，像政府不是宣傳了很多就是輕軌有多好多好，我覺得就剛開始新奇去做一下好玩而已，做一下好玩而已，因為輕軌它是一個觀光的東西，它不是類似通勤為主的東西

問題就是他們一起捷運到不了的地方輕軌可以補上，這樣子會提升你的意義了嗎？還是你覺得輕軌太麻煩了，還要把東西都拆掉才能做它的軌道？

對啊，我覺得還是捷運，如果捷運再多一些據點的話，捷運會比較好，那輕軌就覺得這只是一個觀光而已，觀光就是作秀之類的，我覺得輕軌是觀光而已，這樣啦就是做捷運

H: 可以舉個例子嗎？

像是，班距或是硬體設施支付方式之類的

支付方式吧？就是可以希望可以提供多個管道

你說是像信用卡或是電子支付那種功能嗎？

對

I: 捷運公車的話，它覆蓋率其實蠻高的，所以還好，那捷運的話，就是感覺他覆蓋率可以再高，一點，而不是只有那兩條線跟 1 個環狀線

J: 公車的話，有些公車路線有時候，當然司機素質又有差，司機的數值的話，他開的一些，速度啊動作那些，有時候他們會去趕時間，而且有些他的可能路線有些太密集或怎麼樣，他有時候公車有時候會產生拓放的情形。他捷運的話是時間到就起步這樣子，不過說差很多啦

那會希望他增加站點之類的嗎?就是增加他的站點，就是多設一些點因為好像目前的站點都是觀光的站點居多

對啊都是觀光的，當然沒有算太沒那麼捷運那種方面，因為捷運的話你看都是網狀次的，還有西方式的，所以我們就在使用的工具的話，就機車就很少使用，如果捷運方面的話，當然是以長途為主吧，那時候是到市區短途的話呢，就是起步車機車為主。那有時候公車的話，公車有時候路線太模糊了，有時候沒有注意看的話，有時候會搞亂掉，到什麼地方，有時候不知道到什麼點的地方，就會搞亂掉，有時候那個標示有時候看得不會說很清楚，到站幾點到站，有時候搞混掉

K: 這一塊我沒有特別去思考過耶，我覺得他們本身應該沒有什麼，沒有什麼問題吧

我可以給你舉一些例子，你可以類比一下，就是像有些人會講到說，公車可能因為它站牌的地方，它只有一個站牌沒有一個下車的點，所以會擋到其他的用路人，而且會不太安全對下車的人來說，或者是一些像誤點不準時，或者是有些班次會直接取消，然後之後但是又沒有通知之類的這種

喔 真的假的，這個我是不知道耶，你說誤點的話，我覺得誤點是難免的啊，你自己本身一輩子也不可能，就是你真的都很準時嗎，我覺得誤點是難免的，但如果是以下車的這個點來看的話，我覺得這個也很難去改變耶，因為在日治時期的時候，被統治的時候，我們的路權本來就已經都已經規劃好了， 所以其實已經算很好了，就是以現在的路面規劃其實算很好

L: 我覺得就是覆蓋率吧，像你剛剛說的， 我覺得對我覺得可以再多一點，

站點

對啊，可以到可能沒比再遠一點啊，就可以點一點大家可能沒比在旅遊或是觀光的時候對外國客來講也不用說我每次只要 到那幾個 點就好，就是你點一點之間多一點大家的選擇就是像我說的選擇性多，就是大家可以，所以我才可以說那我今天不一定我一定要去美麗島我一定要去，八五大樓，想去個小地方，就是那個地方其實有這個點對我來說是我不用再特地，要花一點時間再走去那裡了解

11、在您看來，你在交通工具的使用和選擇是否受到特定社會群體的影響？（如家庭、學校、同儕）

A: 我是沒有啦，因為我還是因為我個人是，真的對安全性比較考量，我自己是覺得騎摩托車比較危險，騎摩托車比較危險

B: 比較不太會，那我們還是因為主要以快速回家為主，因為不會特別有其他選擇

如果你有機車的話你會選擇機車來作為同情的工具呢?

對,這樣就不用等車時間更方便

C: 交通工具使用跟選擇，受到特定群體的影響，我覺得這一點沒有，我是蠻自主的，完全就依照我自己的需要，如果家人喜歡用公車，但是我覺得捷運比較方便，我不會因為這樣的影響去搭公車，我還是會搭我的捷運，還是說我要去的點，就是一定要搭公車才會到，我也不會因為家人都搭捷運，我就跟他去搭捷運再去搭公車，我不會做這種事，所以我是比較自主的去決定，不太受家庭學校或同儕的影響

D: 如果是就是跟朋友出去玩，然後約約近的地方比較不是大眾運輸工具可以到的了的地方，我就會選擇用私人的交通工具去抵達那個地方，所以我覺得還是有影響的

E: 沒有沒有沒有

F: 多少會，如果說今天我們的就是，原生家庭它比較傾向用自己私人的載具，那我今天出門都是開車都是騎車，那我會養成一種習慣就是我出門就是，常常累月下來就是，大眾運輸交通工具不會是我們第一個考慮的選項下意識的，就是被家庭影響這樣子

G: 家庭會啊

H: 同儕 因為像之前就學的時候會跟同儕一起搭車，上下學，就是安全考量

I: 當然會啊。群體的話是還好正我覺得就是跟家庭比較有關係，就是你家，可年比較多都是用機車，你就會騎機車這樣

如果是一群人，他們在要出門的時候，一起選擇某一種交通工具，例如都是騎車或是都是搭捷運，那你選擇的方式會不會跟著受影響？

這個感覺就比較看個人耶。因為我自己是傾向，就是
我自己方便，然後我就坐什麼，假如我今天住在捷運站附近，我可能可能就會搭捷運區上班，因為現在也有那個 T-PASS 這個就是一個很好的政策，然後當然因為我平常會對我除了現在比較遠之外，就是騎車比較方便，當然如果住附近就是有捷運的考量

J: 應該都沒有，沒有

K: 如果是學生時期的話，會比較常坐公車，確實是會因為那個，家庭跟同學而影響耶，

那就是主要是在學生時期的時候這樣

學生時期的時候一定都會坐交通工具啦，但因為畢竟在高雄嘛，高雄就是大部分每個人，一個家至少都有兩台機車騎跳啊，所以我覺得應該也是因為是在高雄的關係， 高雄確實是騎機車比較方便，比起開車的話

L: 我覺得以高雄來講，因為高雄大家就是，可能或許就是，我們的交通沒有管制到這麼像台北這麼嚴謹，所以我們會有比較多可能騎上人行道不戴安全帽，就是這樣年輕族群都會覺得這個東西方便，所以他們都會這樣這樣去做選擇，但是我騎車我不會受到什麼管制，就是不像台北，抓到就罰錢這樣子，所以大家就會，高雄大部分我自己

觀察是比較多人都是騎車，對啊就是騎摩托車然後，年輕族群就喜歡改車嘛，帥啊我本改捷運，我也不用改公車我可以改我自己的摩托車啊，這樣帥啊

那你自己在選擇像機車的時候你會有，會被家庭或者是你的同事啊，朋友這樣影響而去更選擇機車嗎?

我自己不會，我在選擇交通我是以我自己便利為主啊，我不會因為我家，家庭說你騎摩托車啊，除非他說我騎摩托車給我五百塊，我就騎摩托車

12、在您看來，你在交通工具的使用和選擇是否受到城市總體環境（如道路設計、站點分佈）的影響？

A: 城市整體環境嘛，我覺得高雄的道路設計，就是我會說就是停車的問題，所以說其實公車的上下車，其實變成說你要在路上，蠻常見的，那我相信這一點會讓蠻多人，就是蠻厭惡公車這個交通工具，像你騎車的時候，他一台公車卡在路上，然後等於說大家都覺得，可能會覺得說大家公車的，就是某些人蠻討厭的吧，或是什麼的，所以這一點會讓大家，可能介紹大家，就是公車這些大眾運輸工具的那個形象

OK 總體來說你覺得高雄的道路設計其實蠻糟糕的?

對 就是因為那個停車問題，然後變成說你公車的上下車是一個影響啦，變成說他上下車的接駁，你就會卡在道路中，就是比較對搭乘公共運輸的人，相比來比較不安全，對然後對那些開車的人來說，也是不方便。然後在站點分佈的部分，你覺得說站點分佈太稀疏太少了，這倒是一點沒有錯，因為其實他站點其實，就是因為可能搭乘人數不夠啦，他沒有辦法擴大那個公車的量，所以他變成說他的站點分佈變成非常的稀疏，你可能某一些點才能搭到

B: 我會因為要去的地方,有沒有這個站點或是哪個比較快，會去選擇交通工具，可能捷運或公車的搭配

C: 當然，我覺得就是在使用交通工具當然會會受到站點分布的影響，比方說我的家靠近哪個站，還是我要辦事情的地點，靠近哪個捷運站，或者公車站，我當然會去考慮，我是不是要使用它。如果它的距離太遠，或者它的班次不夠密集的話，那我就會捨棄它，我就會選擇其他的交通工具，比如說就自己開車好了，我就不會去選擇交通工具，所以站點的分布當然會影響

D: 我覺得這個不會耶。因為像是如果是在高雄市中心的話，我是自己會使用大眾運輸，交通工具比較多，因為因為是比較市中心，你那個車子一定會很多，就是相對的

會比較危險，那大眾運輸工具，例如捷運的話，就也沒有塞車，或是容易出交通事故的問題。

E: 這當然是受到道路設計的影響，因為我們多半我們的政府都是用比較遇到問題解決問題，比較沒有做一些通盤上面的一些考量，像高雄現在的那個那個叫做輕軌啊，這個也都是後來才去做建置，那包含像現在高鐵想要延伸到那個市區，這個也都是一個一個要去做評估，就是說很多時候公共事務它並沒有做一個長遠的計劃

F: 不會，因為我其實也會優先考慮便利性和合適性，重點就是便利性和合適性

G: 道路設計應該也是還好，可能是因為習慣了

就是跟其他城市比起來，就是聽說高雄的道路設計會有很多問題就是常常出車禍然後，你有這樣的感覺嗎？

我覺得還好，只是說現在高雄火車站那邊就比較亂，

火車站那邊的道路設計比較亂是嗎

我覺得有點比較亂，所以還是要跟著線走，跟著它顏色它現在有分顏色，對啊捷運　沒有它一透開有顏色，你就跟著它顏色跑，可是你到一個轉彎處你會，你會混亂

所以就是應該是有那邊標示不明確是嗎?

就是那些，那些牌子不明確，其他的局外排號都習慣了，那出來突然來一個新的你會不習慣，反正我會很少去那邊，去過一兩次而已

那就是像我當初來的時候就是就有那個小黃司機跟我講說那個，高雄的那個車特別的就是會常常出車禍所以要小心一點，或是素質就是會有老人不戴安全帽

那是個人素質，對啊，不然就覺得還好

H: 多少還是會啊。因為有些地方可能沒有那麼便利，就是他可能雖然捷運有到那個地方，但是他的 U-bike 或者是一些共享機車，沒有那麼的便利，就會影響我有沒有決定要搭的意願

所以如果站點的部分改，你的意思是，如果站點部分改善，或是有比較好的設計會提升，你使用的意願是這樣嗎？

對

I: 這是當然的啊，家裡附近有沒有站其實蠻重要的

所以如果道路站點多一些，讓你使用上更方便，一點會增加你使用的意願嗎？

會啊，畢竟大家都在宣導的坐，大眾運輸工具就坐，雖然那個真的沒有機車方便啊。高雄來講

J: 會,因為高雄的環境我會選擇機車當交通工具因為非常便利，還有輕軌應該比較適合建在外圍這樣才不會影響汽機車跟公車的運行

K: *就像是有些可能站點太不密集，然後之後你要去一些地方會比較麻煩這樣*

可是現在有輕軌啊，輕軌反而倒是有去完善到就是例如說一些，比較重要的點，像你看我一整天，我只要要坐輕軌我就可以一整天就是馬上到，例如說駁二然後到那個夢時代，我一天我就可以去兩個點，但如果沒有輕軌的話，基本上就是一天只能去一個點，我覺得還是有影響的

L: 會啊會啊會啊，就像有時候我可能，因為像我說我大部分都是騎摩托車，但是有時候如果有一些地方，你就已經知道那邊不好停車，就會稍微猶豫一下，就是說那我還要騎車去嗎，或者說我可能要停比較遠，我要走一段路才要去，那我是不是該考量一下別的交通工具，或是什麼資本

13、您如何看待環境意識和健康考量在您的交通選擇中所扮演的比重？

A: 我是沒有啦，因為我是覺得環保議題，可能對我來說是比較偏向一個假議題啦，因為高雄的，像是台灣的發電，其實本身就不是那麼的環保，但是你一個火力發電，就以前是一個環境大破壞者，你如果是以這個，為你的，說環境影響的話，我覺得環境意識跟健康考量我覺得，其實都不是重大議題啦，都是算少數的，重點還是在安全性的考量，跟舒適性的考量

B: 比較不會受環保意識去影響，還是以自己最方便為主、最快速，因為我們也都搭大眾交通工具，也算是有環保到

C: 像是有那種，年紀大了 不方便的那種嗎

像是那種就是為了要環境保護而去搭,像什麼電動公車,像是台中的 BRT 之類的,就是會因為它是電動公車,而選擇去搭嗎？

這個我會考慮，因為我覺得我是比較有環保意識的，如果我可以的話，我會選擇比較環保的交通工具，比方說有油車跟電車，我一定是選電車，如果說我要買機車，我一定買電動機車，不會買油車。那如果公車，你有油車跟電動車，我當然是會選電動發力的，就是對環境比較友善的

D: 我覺得這個也是會，就是像現在大家也是環保意識提高嘛。然後搭乘大眾交通運輸工具，確實是會比私人運具還要更環保一點，然後如果我自己是不排斥走路的，因為，我的工作性質的話，就是你要坐坐在辦公室一整天，其實運動量是相對比較不足的，所以如果路程是大概十十分鐘，我就會選擇，如果可以走路，有時間也是充裕的話，我也會選擇走路這樣好

E: 我覺得是 5 分耶，你說是環境意識，坦白講我覺得環境意識跟健康考量，它可以是分開的也可以是合在一起的，因為健康考量的話你可能說我如果騎摩托車我可能會遇到比較多的空污，這樣的問題啊，那環境意識的話這個就是比如說我騎摩托車有空污，那可是如果是開火車，這個也都是會有一些環境的影響，所以這個如何去權衡我覺得這個不是那麼容易

所以你認為兩個人可以跟他分開看?

我會覺得你的健康考量會是，比如說像我除了我騎摩托車有空污，或者是說我老人家不方便的健康考量，這個也是一個，但是這個如何跟環境意識真正的去 match 上，我覺得這個題目你是不是要講說環境意識，主要是以環保意識這樣看，那當然大宗教通工具來講的話　　，他當然是可以減碳啊當然他是很環保的啊，當然是以這樣的角度來看是這樣子，以碳的角度減碳的角度

F: 不會因為這也不是什麼我的第一考量的運輸就我來說

OK 所以環保的意識不會影響您去選擇，可能更加環保的公共運輸這樣

G: 不會欸不會考量

H: 我比較擔心，就是公共運輸，可能因為人多，所以會有一些傳染病，或者是一些剛好前陣子的 COVID-19 就是會影響我大家交通運輸的意願，就比較會選擇私人的摩托車之類的。

I: 我其實這兩個比較沒有在我的考量點，那我覺得當然環境也是很重要的，就是環境，應該是比健康在重要一點，就是畢竟坐大眾運輸工具還是會減少一點排碳量
而且你搭捷運也是在走路，然後也會，可能幫助到一點健康

這樣，所以你覺得這兩個因素會影響你使用的選擇，可是在你平常的使用習慣比例不高，是這樣嗎？

對，因為方便還是還是很重要

J: 當然這個空氣的影響因素也是有的，環保因素也有，最主要的我講的也是方便性，所以還是便捷性的話憂心，當然有環保當然有考量，也有一點是最好，空氣品質不會那麼糟

K: 喔 這個部分嗎，這個部分我比較沒有特別去，我比較沒有去意識到這個問題耶

L: 因為我自己騎的是電動車，所以我這樣對環境應該是有一點幫助，我個人覺得，對我個人覺得我其實是電動車吧，所以我已經有減少碳排量感覺啦，雖然電池也是一個消耗，但應該說您你在買電動車的時候， 你有把環境考量放在你買車的這個因素，如果以停車來講， 這個有， 因為電動車是不用收停車費的，這就是其中一點點考量，但基本上不是主要，不是因為我不想付停車費，所以我買電動車，對但是這是其中一個誘因啦，詼我今天騎了電動車我不用付停車費，好像還不錯，所以是因為不用付停車費，對這是其中一個誘因啦，但那不是就是他可能就佔了 0.5%

那你會因為他碳排比較少而加入你的考量之中嗎

最一開始其實是有這個想法，就是詼好像騎電動車好像對， 整體的城市會比較好，比較不會有那種，你就看到路邊有一種阿公阿媽騎那種，後面都冒一堆煙的那種車，這對呼吸道一定是一種理想吧，對環境也是對適容也是，所以其實是啦，但是買的時候是這個想法沒錯

14、您認為哪些激勵措施最能促使您選擇公共交通？為什麼？

A: 我自己是覺得，高雄目前的機率措施像票價的，以前做的不錯了，但現在就是，就是還有這個措施，補助之後其實我覺得，本來就搭的會更願意搭啦，但是僅限於那些會搭的，因為其實大家願意騎車。原因就是因為，我覺得說他們對，騎車來說，大眾運輸工具還是比較貴的，因為你機車的成本還是比較低，因為你騎車油錢可能都沒有那麼貴，你一個禮拜可能加一次，就算是 T-Pass 政策的票價減免，還是沒有辦法說服那些搭乘機車的人，他在價格上還是沒有辦法有優勢

第一點路網不夠，等於說我可能要再轉乘其他車，等於說時間成本上面，我也搭不上

第二點是我騎車，本來我可能一個禮拜花個一兩百塊吧，以油車來說你可能一兩百塊，如果你騎得很多的話，你可能會上頂，如果大家，大眾運輸工具其實你一個月下來，如果你買月票其實也是，五百到一千塊，我覺得整體下來，搞不好你就算四個，你騎車四個禮拜等於說我們就算，一個月一個月下來，假如說我們以豐底兩百塊，就是你一個禮拜你花八百塊，然後你如果搭大眾運輸工具你買月票你還是要花一千，你多了兩百塊時間也沒有，時間也沒有贏，我覺得大眾運輸工具的吸引力其實不太夠

除了剛剛講到票價的部分，你覺得還有哪些激勵措施可以促使你去更傾向選擇公共運輸，就是票價激勵措施應該是比較沒有用

我覺得做一個懲罰性措施可能會比較好，把那些違停，就是現在道路上違停機車亂停車的或是紅線停車這些，把它加在這些違法的，把它加在它的那個罰款上面然後拿來補貼大眾運輸工具，我覺得可能會是一個比較好的決策。就是把大家騎車的成本提高，拉上去之後，因為現在其實很多人，你看路上大家，高雄不是被譽為行人地獄，因為這是因為摩托車都停在，人情道上面，其實這些東西如果我們能夠把那些罰款的錢，等於說我把那些微停的，它的微法，風險就是成本提高，微法的成本提高，微停一次可能，因為現在不是很多都沒有抓，也沒有辦法檢舉或什麼，如果現在是可以開放檢舉，甚至說會有什麼累加性的懲罰，比如說它今天微停一次，下一次我們累積記點，然後下一次就扣牌，我們是不是可以減少說路上的摩托車的數量。那如果大家減少了可能說我騎車的成本，提高了我是有機會去搭大眾運輸工具。

我了解你的意思，就是增加我們選擇公共運輸的推力，增加機車的成本來導致選擇，來把這些民眾推到公共運輸這一邊

對,然後這樣反而說，我搭的大眾運輸工具可能我得到的就是說我的用戶提高了，那我的至少我可以維持到我的零走，甚至說我可以提高路網，那這樣整體來說高雄的大眾運輸工具才跑得起來，才因運得起來。意思就是說先把這些私人載具的人，把它轉移到，透過增加使用成本的方式，把它轉移到公共運輸，那這樣公共運輸才會比較有自己的經費，然後可以去建更多的路線路網，然後讓整個服務品質更好，那是不是大家會更願意就是說，路網提高，那我覺得說，本來有點排斥的會發現說，其實路線很方便,那我是願意去搭乘，這對我來說是，我覺得相對的解法

B: 像高雄的話,有公車、捷運互相轉乘的時候，會變得更便宜，現在也有推出新的方案

可以講一下轉乘可以更便宜,是什麼意思?

轉乘的話,像公車的話，你搭三次,第三次的時候會免費，這是比較舊的方案，你公車互相轉乘的話也會比較便宜

OK,那現在沒有嗎?

現在應該也是有，只是現在有主要的 T-PAS 的月票活動，那捷運跟公車如果是兩個轉乘的話

C: 就成如剛剛所講的，如果你的交通工具是比較環保的，就比較健康的，比較友善的，那我就會選擇它。比方說如果我比較常搭汽車，但是因為現在的捷運系統，改善的比較站點比較多，然後它又是比較環保的，公車也是，它站點比較多，班次多，然

後就是比較環保的，那我會願意選擇交通運輸工具，而不要自己開車，因為交通運輸工具，就是大家去然後可以支持政府的政策，然後可以讓一個城市活絡，然後也可以比較環保，那我會願意就是不要開車，尤其我如果慢慢年紀大了的話，也不太可能再選擇開車，我就會想要選擇搭公共交通運輸，那如果它越健康、越便利、越便宜，那我就越喜愛，這是一定的

D: 激勵措施像是票價的優惠或是其他活動那類的，票價的優惠，我覺得像是如果用悠遊卡，可以就是會比直接買票更便宜的話，我覺得這個還不錯，就是如果你有常在搭大眾交通運輸工具的話，我覺得這個算是也是積少成多啦。就是對自己還是多多少少會有幫助這樣子，

E: 我覺得這個激勵措施這個就是要看，如果是講更實際的話就是要看說你如何接駁嘛，就是你接駁的點夠不夠多啊，這個就會是一個激勵措施啊，所以主要的一個點可能還是包括到現在覆蓋率不夠廣

F: 我覺得類似像購物金回饋 Shop bag 的概念，像我們會有 T -PASS 可是 T-PASS，等一下就是，它的方法是它是免費搭乘，可是我覺得比較好的方式是，它如果是今天比較常搭的人去買 T-PASS 這樣子的話，它回饋的，就是它的票價可能會比之前搭沒有那麼多次的就不應該是一次同仁，這樣子。或者是我今天搭幾次之後會有多少的回饋回饋金也可以，回饋免費搭幾次也是可以，不一定就是要買月票，你才可以有那個優惠。對或者是你今天，比較常搭的人對於比較常搭的人來說可以給優惠，今天不常搭的人可能就比較沒有，使用者付費，不常搭的人他就是偶爾可能搭幾次還是可能會有回饋只是說常搭的人，他的回饋會更多

I: 也要看你的生活的通勤還是怎樣，主要是生活通勤

就是如果推出什麼樣的政策會讓你使用大眾交通工具？

如果常搭的人的話，你如果月票優惠的話，應該就會。如果像我這個少搭的人，我覺得還好， 就少搭，就完全沒想過

J: 有票價減免會影響我搭乘交通運輸的選擇，就是當然是越便宜、越好越便宜，選擇的可能性就越高

就是，但就是像現在的那個就是那種月票啊 TPASS 啊 1 個月 399 可以搭捷運，那個那個我就覺得很好，然後很有當初出的時候就是，然後我覺得如果那個捷運的最直觀的來講，就是如果你能把捷運的票價調低，當然是最好的，

所以你覺得針對票價去調整，會對你來說是最是最有感覺的措施

除非是他設計的站點能夠更完善，或是能有償賺點能夠去更遠的地方，而且每個站的地方鄉鎮的區區隔，市區的區隔但實際上都能夠到的了就好

K: 我覺得像是月票之類的，應該就蠻符合，它應該就是一個激勵措施吧，因為畢竟月票的話就會比較便宜嘛，那如果是以像我這種業務來講的話， 月票就是一個很不錯的一個措施，因為會很常通行，可能就會比較選擇交通工具之類的，公共交通

L: 大眾運輸工具，就是突然車子壞了， 你原本的交通工具，突然故障了或者是，可能今天，下雨天天氣的因素，今天下雨天或者是，怎麼了你覺得，今天汽車就是，如果你今天要騎車就一定要穿雨衣，一定要搞很多裝備，但如果今天要搭交通工具，我可能就帶個一把傘就好了，就是對阿可能，就是天氣後的因素會有影響，不然就是你本身載具可能出了一點問題，等等的， 或者是你可能今天你跟，三五好友有約的時候，你可能說那我們，們今天有三到五個人，四四到六個人，但是你們沒有更大的載具，我沒有汽車，我們大家都摩托車，我們想要同時到一個地方，那我是不是可以約在一個站點，我們一起做結冰過去

那如果是從政府的角度來看，你覺得政府最應該出台哪些機力措施,就比如說票價優惠，或者是你剛剛講的路線覆蓋率更高，或者是其他的

如果要，增加大眾運輸的話，我覺得最快方便就把停車給全部都弄掉，你沒有停車大家就會想要， 去做大眾運輸，因為你沒辦法停車嘛，就對機車組來說這個就是一個煩惱，然後說啊我不能停車，好吧那我就大眾運輸，但這是這個就會造成另一個問題說

大家可能就會開始亂停車

因為沒有停車格

大家就會開始亂停車

可是如果要達成大眾運輸

這個也許是一個比較極端的方法

15、你有沒有在用 TPASS 月票，您對於高雄 TPASS 月票政策有什麼意見？

B: 我覺得學生族群反應蠻大的，就是幫助很好，因為它有分 399 和 999，399 的話可以幫助學生在交通這方面省很多錢，像以前的話,我有搭公車和火車這樣轉，公車、火車捷運這樣轉乘的話，一個月也快要花到 1000，但現在都可以用 399 去解決，幫助蠻大的，所以是在票價的整體交通，整體票價少蠻多的，而且轉乘的方式蠻多元的，都可以做使用

那你覺得 T-PAS 政策還有什麼可以改善的地方?

目前的話沒有

C: 嗯 我有在用 T-Pass，就像一卡通，但我不是那個月票，不是學生的，但是我的那個什麼，我有那個叫做什麼，我的信用卡就有連結，那個叫 TPass 什麼的，就是一個月多少錢就搭到飽的那種

對 就是一個月內大到保，就現在 599 跟 999

我知道 就是那個它政策一直在講的那個，我目前是沒有在用，但我以前學生時代是有在用月票的，那如果我到一個年紀的時候，我很想我就會去買那個，因為現在還沒有到那個年紀，就沒有說平盤到一個月，假設你一個月要搭個十天以上，那應該就會去辦了，那你如果一個月搭的沒有到那樣的次數，你不會去搭，但如果沒有自己開車，沒有人在的情況下，我都是搭捷運 公車，捷運比較多 公車比較少，那如果我的使用，就是說這個題目其實是跟，跟前面所講的是一樣的，如果你所設的站點多，班次多 路線多 很方便，那我會基於這樣的便利性然後去辦 T-Pass，使用度頻繁的你就會一定會這樣辦，這樣比較划算。這樣有回答到問題嗎，就是說應該是說，我目前沒有在使用 T-Pass，但是 T-Pass 正是在高雄的執行效果如何，我有聽到身邊的人在講，他們是滿意的

你是透過什麼樣資訊去了解

就是政府的宣導還有身邊的人談

D: 我目前是沒有在使用 TPASS 可是我大概知道 TPASS 的運作方式，那我我我也是有看過有一些用 TPASS 月票的人的感想，我自己是覺得其實如果你是每天的，都需要搭到捷運之類的通勤族的話，TPASS 算是一個，對民眾來說，算是一個蠻划算的選擇啦。因為畢竟你在高雄，你一個月只需要不到四百塊，的，價格你可以省蠻多的其實

E: 我沒有用 T-PASS 但是我知道這個 T-PASS 他很好用啊，尤其是像通勤組的話他的金額等等啊都可以省下非常多錢

所以你認為現在高雄的資金效果不錯嗎？

我覺得不錯啊

F: 沒有

那你對高雄的 T-PAS 的月票政策有什麼自己的看法嗎？它可以不只是月票可以是計票？

計票可能會比較好一點，不是嗎計票今天如果好真的常搭的人計票是不是比較好，如果今天有回饋的話，對計票可能會好一點，如果你今天買計票，那我計票都免

費，對於就是應該是這樣講，對於常搭的人來說，他會比較如果有提出優惠，比較好賺一點，配套措施滿山的話，你是說從月票變成計票，然後可以有月票跟計票兩種方式，可以給你選，就是類似電視影院，會有很多方，然後計票他的價格，再更優惠一點，對如果你今天計票除以三個月誰會約我一季，　　我今天除以三會比月票更便宜一些這樣就可以

所以你認為說 T-PASS 的政策他的票價，購買這個月票的票價，可以再下降

對他可以再下降，應該說他可以提供多元性讓顧客，去讓我們大眾去做選擇，就是有更多的不同時期的分級，然後我朋友的話他是說 T-PASS 其實是蠻方便，他的這個想法是很好，他可以想要讓大眾去免費這件事情來促進大家交通工具的意願度，而且他比較好的點是他火車也可以通

G: 沒有

然後您對於高雄 T-Pass 月票政策有什麼意見

沒有因為我不知道，完全不知道不知道有 T-Pass 這個東西

那政府也有在宣傳但是都沒有注意到是嗎?

我沒有去注意，我很少搭那個東西我不會去出那個東西

那你知道有這個東西嗎

我不知道有這個東西

H: 看法我沒有使用，但是我對於這個政策，我覺得我蠻贊同的，因為對於可能通勤族需要依靠火車捷運的，一般上班族來說，可能就是在在固定的價錢，可以達到他們想要的戰術，我覺得這個政策是還不錯，但是對我對我，因為我自己本身就是都騎摩拖車通行，以我覺得對我來說還好，但是蠻贊同這個政策。

I: 我沒有在使用，但是這個真的很不錯，這真的是德政，我覺得就算我自己沒有在用，但是這對一些學生或者是那個一些有在通勤的上班族來說，都是，就是在花費在開銷上，每個月都會少蠻多的東西，而且他好像蠻高屏都可以用，沒記錯的話，對所以你今天就算出去
玩，你也是可以用那一張，所以，就非常方便

J: 好像跟那個很少用，都是因為我很少搭嘛，說這很少用，我最近都用那個，像他前一段的話都是儲值的票，然後搭

K: 我覺得還行啊，如果假如說我一個月，至少搭兩三次以上的話，就算蠻划算的，對我來說應該算是蠻不錯的，因為我一個月至少坐高鐵，從台北到左營，我至少一個月都會去四次

它好像不會包到高鐵，它就是到台鐵這樣子

喔 真的假的，爛欸，那我建議就是它可以包到高鐵（笑死）

L: 沒有，也沒有意見

16、若未來將高雄捷運系統和公車系統進一步整合，路網覆蓋更全面，有沒有可能讓你轉向搭乘公共運輸/更願意達成公共運輸？

B:沒有建議

那你覺得它們整合對你選擇公共運輸會有幫助嗎?

還可以,因為還算是挺方便的

C: 我剛才已經有建議了對不對，這是一定要做的啊，就以台北現在已經這樣事情很久了，從我比較年輕的時候，我那時候去二十年前去，我就覺得他們結合的很好了，那高雄可能礙於經費的關係，他還沒有辦法，所以我是很期待，就是紫線黃線通車，然後當然可以再延伸到更遠的地方是最好的，包括台南 屏東可以這樣。然後公車系統可以整合，那我看我大概每天出門，都會搭捷運跟公車，因為那就會很棒，尤其是年紀越來越大的人，因為他就是開車，有一定的受限度了，危險，而且在高雄是不是更危險，在高雄那種機車就是很多都不太守規則，我們說真的又很多，然後空氣又很差，所以如果剛剛講的說，你如果可以是有環保意識的，就是用綠能的比如說電力的，然後又可以把捷運跟公車系統做一個完善的整合，包括路線的多 站點的多，然後價格的降低，那我就會覺得太棒了，那是一個理想城市的藍圖願景

T-PAS 好像有南高屏就是他的是 999 的話，這樣的話你會因為他都有跑到台南而願意去嗎?

對 台南人高雄屏，目前還沒有，我目前沒有因為這樣而去，但因為我年紀比較大，然後因為健康因素，我最近都沒有去台南，過去三年沒有去。但是以我的想法，如果他有這樣子有沒有的結合，應該身邊的人會覺得很不錯，你知道台南然後可以這樣，但主要是他的路線規劃，還沒有到那麼多，你說公車通到台南，怎麼去連結到台南，捷運要連結到台南，怎麼連結到台南，都沒有連結，所以雖然說他有這樣的票卡的優惠，但是因為路線上的規劃還不完整，所以利用率應該不會，因為這樣而那麼

高，因為去台南還是要不就開車，要不然就是搭火車搭高鐵，就台鐵高鐵這樣去，你說要利用到 T-PASS 這樣去，有難度吧，以我的了解對不對

D: 我是覺得捷運的部分，目前還是希望可以再多開多一點路線啦。但是這個還是需要去評估到底有沒有需要但是我個人是希望就是可以多多條線一點，對民眾來說也會更方便，那公車的話，可能可以增加班次，或是就是像有政府給一些激勵措施，我覺得這個會對市民、搭乘意願提高會有幫助

E: 就是時間點跟時間點的接駁啦， 這個可能就是要去看怎麼樣去做這樣子，就像是可能公車下來一個站然後對接的那種高鐵或捷運的班次應該要更貼合這樣子設計，對對對更貼合

F: 可能還是有點困難，但是如果是更全面的話，就是也要解決班次的問題，然後也要解決就是準點率的問題，其實有一點點微複雜，然後還有可能個人習慣吧，就現在已經養成大汽車的習慣了，所以習慣這個問題還是要改變，改變民眾的行為還是很困難

G: 會，如果跟台北差不多的話，要弄得跟台北一樣就會考慮一下，因為大概很多的社區的話像一個大社區來講的話，他外面就有的話我就意願，因為我們一個像這個合體社區來講的話，他外面有捷運，如果我假日要出門的話我就會意願去搭那個捷運，因為我出來就有，就比較方便，如果像我從這裡，我還要騎到十幾公里，五公里，然後再有捷運搭， 我就快到人家目的地了，我搭那個幹嘛

H:有啊當然是有可能讓我更願意大眾運輸，因為它路網覆蓋更全面就代表更便利了

I: 當然如果捷運覆蓋更廣，像台北這樣的話，一定覺得一定會有很多人跟我一樣，就是轉達公共運輸設施，我相信那個路上車子一定會變成機車，一定會變少很多

J: 當然，如果有這個趨勢的話當然是最好的，那網站跟那個那個都很翻面就更好啦

K: 我覺得這樣會礙於一些，例如說我可能有機車之類的，那它有包含就是這一些例如說補助嗎，你想嘛他們會希望我們可以去搭公共運輸，第一個就是減碳嘛，然後環保之類 這些可能是最主要的，再來就是例如說，消費者就是例如說，我們可以提升我們的觀光的這個市場

但它，我覺得後續可能會有更多的一些，我們沒有看到的隱性問題，我覺得如果這些隱性問題，可以解決掉的話，而且是大眾都可以接受的話， 我或許可以更能接受公共運輸，如果它能做得更全面一點的話

那你可以稍微再多講講你說的隱性問題嗎

隱性問題嗎，隱性問題的話，例如說你看嘛，最近蓋的應該就是那個輕軌嘛，你看輕軌在這之前什麼， 高架橋，可是高架橋之前是什麼，也是平面的， 就是高雄的橋一直都是平面，然後又拆掉又蓋橋，然後蓋橋之後又拆掉又平面，而且在這之前，不是有說什麼要地下化，也沒有地下化，就是或許是因為可能沒有 達到更多的一些共識， 或者是更好的措施，但我覺得如果要你看，好像那種你看捷運跟公車，他們這個有些點，例如說我捷運好了，公車它的點是不是就更密集，例如說我可能在某一個巷口，我就可以下車之類的，但如果它捷運系統也是做成這樣，那可能就會有一些問題，例如說路況它有辦法這樣子嗎，那我是不是例如說我下車，你看光是那個公車下車都有問題了，你想要整個全面性的，然後去措施這些下車的問題，是不是就應該例如說它的點要更大，或者是怎麼樣，那這樣子你的位置要更大，那這些位置有辦法出來嗎，你光是連那個，公共的那個畫格線的停車格，都有問題了，那你是不是隱性問題，有可能就是我要把這些車子，公共外面那種畫車位的，那種公共的車位 是不是就要移掉，那移掉的話會怎麼樣，因為移掉的話就會有一大堆人，有一大堆車 沒有地方停，然後就有一大堆微停，就是它是一個連鎖反應，你懂我意思嗎

所以， 它會有一個連鎖反應，那這樣子我車子要怎麼辦，對吧，你要嘛就是你現在不要賣車，你車子不要一直產嘛，你不要賣車，對 然後讓車位越來越少，你既然想要去做這個公共整合的話，這些都是連鎖反應，這就是我認為的隱性問題

L: 會，可能會，增加考量啦，會把它納入選項，但還是，上班族還是以自身便利性為主，我覺得，如果它真的方便到我家走出去，三分鐘就到捷運站， 到公司只要十分鐘，然後我再從捷運站再走三分鐘就到公司，那回覆嘗試一下，對不對，會不會增加想要使用的機會，感覺覆蓋率提升這樣子

17、你認為你從私人載具轉到公共運輸最大的障礙是什麼？

F: 習慣就是時間啊，真的是時間就是我今天如果騎機車的話我可能可以不用那麼早起床，為了去趕車，那我今天如果要搭大眾運輸，我就必須要在大眾運輸到之前，現在那邊等一年就是錯過這一班的班次

G: 選擇和方便性吧，就有更多更好的選擇還有，最大障礙應該是方便吧

H: 一樣就是就是站點的便利性吧有些站點可能沒有 U-bike 或是沒有共享機車，這是會影響我選擇公共運輸的障礙

所以你的意思是，因為公共運輸的路網沒辦法，部分沒辦法深入到你的目的地，所以你覺得自己的私人載具還是比較方便好嗎？

是

I: 一個是一個是你去控制時間，另一個是你去配合人家的時間，公車什麼時候來，你就要什麼時候上車過去，然後你還要轉成自己，如果有機車或汽車的話，當然就可以自己控制時間，然後也方便一點，所以障礙大概就是方便性

所以你的意思是，在你一個使用者的角度，你覺得能自己掌握出門，或是使用的時間，不用去配合交通工具的時間表，對你來說，你會比較傾向這樣子，對不對？

沒錯但跟個性也是有差，自己調配

J: 金錢當然也是考量之一啦，因為太貴的話就很少搭乘啊，因為騎車算比較，等於說比較快不要省油啊，那有就是有，票價票價貴重都是也是考量之一啦

有這種習慣的問題嗎？就是你比較習慣騎機車所以就很少去搭大眾運輸工具，有這種狀況嗎?

對也是習慣嘛，你一出去的話習慣就摩托車就到達目的地，只會交通，維持它，除非那個交通不方便的時候，那要搭乘交通工具啊，騎摩托車的時候不方便的時候，而且就知道機車停的話方便停，這樣子，那你公車的話你到達目的地，那時候你到達目的地不一樣的話你還要晚，還要再走，再走一段距離，我覺得是很方便性的

K: 但如果這些以上的問題都有辦法解決的話，我覺得轉到公共運輸應該不是什麼困難的點，如果你說那個我們要，現在地球狀況也是不是很好，當然相對的一些環保措施要開始做的時候，這些東西可能要再更更全面一點，就是當然人民一定會同意說，要環保愛地球什麼的，是可以讓以後的世界可以繼續存活下去，但這些東西有很多一些不太能改變， 就是有些東西可能是不太好做的，但我不太知道，但我相信這些東西是不好做啦，大概是這樣，所以我覺得最大的障礙嗎，都息息相關啦，以我上面講的來說，我覺得都息息相關，它應該就是一個最大的障礙了

L: 就是可能我要走到那個站點，對呀，就是又回到剛那個覆蓋率問題就是，對呀，我要，以我來講，最近的捷運站就要十到十五分鐘，所以我必須走個十到十五分鐘到捷運站，我才能再開始做這個， 再花一段時間再到公司，再花個十分鐘到公司，了解，這個花一個時間

就是時間對你來說是最重要的一個考量

18、您還有什麼想法要補充的嗎？

A: 我們可以去玩一個可能會有一些辦一些活動吧，我覺得說你可能，反正是什麼，公車的遊玩方式，就是說我們搭公車然後參加某些活動

但是是由大眾運輸工具公司去辦活動嗎?

對阿，比如說我們像是，應該說我們是一個變相推廣的，就是他去辦一些活動，假如說辦一些什麼樂團啊，或搭大眾運輸工具，可能票價的減少或什麼的，然後甚至說會辦個抽獎，或什麼的

就是比較類似說，可能周邊有一些藝文活動，然後你來到這些藝文活動，中間過程搭的公共運輸會有票價的減少，甚至說我們可以辦個抽獎，特別是抽獎，我認為說藝文活動可能是，年輕人參與度比較高，然後年輕人參與度高，之後可能可以慢慢推廣起來

B: 沒有

C: 如果就這一點，現有的捷運站的路線沿途的點我覺得是夠多，當然如果要他多設一些路線，我的建議就很多了，因為我去過台北，台北去哪裡都可以搭捷運，但高雄就不是，但是目前我知道市政府，高雄市政府有規劃，高雄捷運的紫線跟黃線，我很期待他趕快可以蓋好、通車，那樣就可以解決我要到部分地方去的困難跟不方便，因為我有了解過紫線跟黃線的路線、停等點，我覺得那些事我很期待可以看到他完工的部分

沒有 我沒有做這樣的比較，我去過美國但沒有搭他的地鐵，美國地鐵好像也滿髒的，然後滿有治安問題的，那是看新聞報導的，紐約地鐵就是問題滿多的，就是我看過那個報導，他們的車廂環境，還有那種管理我覺得比不上高雄捷運。我坦白說我看完那個我就說，怎麼會這樣，因為我那時候去美國的，其實台灣很多方面做得滿好的，如果以交通運輸來說，其實我在美國是要搭過公車的，我在美國那個時候，公車每天搭，但他的公車跟我們的公車，我覺得差不多，就公車司機來說，還是公車環境來說，然後他們也有學生的月票的票卡一樣，就是你拿學生票就搭到飽一天搭幾次都沒關係，就跟我們這邊很像，這點是一樣的，我們這方面沒有輸他，就公車。地鐵我不知道，因為我沒有去到紐約搭地鐵，但我所在的城市他的公車，應該美國的公車差不多都這樣吧，我覺得台灣的，比起美國的公車系統，是差不多的就一樣，都有那種優惠措施，對學生吃到飽的什麼什麼的，我那時候在那邊讀書讀碩士

那你對於就是像高雄捷運，最近有在報說是他的那個捷運的有些站沒有開冷氣所以很熱有甚麼看法？

那個在排隊的時候很熱，我沒有體驗到有不開捷運，不開冷氣的捷運站，就可能比較冷門的，這我倒沒注意，因為我搭的都是，都是那個紅線，紅線就是巨浪小港這一線的，然後還有就是到西子灣的，我好像沒有遇過西子灣大寮這一線，

所以你沒有遇過就是，很熱的情況下沒有冷氣

那應該是偶爾吧，我從來沒遇過。我常搭但我沒有遇過，他是定期性的不開冷氣嗎？

就是有些冷氣不會那麼涼，偶爾冷氣不夠涼

因為我沒遇過，我都覺得會冷，就大家捷運包括很多人的時候，在外面就排隊的時候，就是在車上，車廂內或者站體，我覺得都 ok

D: 沒有

E: 主要就是公車跟捷運兩個系統，我會覺得說常常在新聞媒體上面都會看到說民眾可攜帶什麼不可攜帶什麼，這個我覺得這個部分是民眾比較不知道的啦，這個或許我覺得政府也是要做這樣的那個，所以應該說是要做更積極的宣導， 對啊對啊不然常常都會在電視上面看到民眾攜帶什麼，尤其是像寵物的部分這個也都是到底光是禽鳥類各種不同的交通運輸工具就有不同的解讀，有的可以攜帶禽鳥有的就不行，所謂的禽鳥是有寵物鳥這個，所以這個很妙啦就是說一樣是交通運輸，為什麼這些規則有的時候都沒有統一跟整合?，主要還是執行上面會有認領到的問題

F: 其實我覺得整合方面，就是不是只有捷運跟公車，可以整合輕軌方面，你也可以做就是，進一步的整合現在輕軌是環狀，就是已經形成一個閉環的狀態，那如果說他今天不只是一個閉環的狀態，比如說他那個圈他可以往右延伸一條線或左邊延伸一條線然後去接到比較偏遠一點的比如說南岡山或者是小港機場，甚至草芽道那邊，我覺得如果輕軌可以接到 這兩個地方對於很南或是很北高雄的居民或者是大眾會比較方便一些，

那這樣的路線拓展跟捷運會有衝突嗎？跟捷運會有衝突，他就是連到捷運

如果連到捷運的話，可以連的到捷運是最好

那這樣子站點的擴展，你覺得如果是捷運，或是輕軌的方式，你覺得有差嗎？

他就只是速度的問題而已啊，只是就是因為可能你，好我今天從草芽站，假設我今天我要到里斯內，那我要從草芽 ，或是我要到美術館，也可以就是我要從草芽，達到凱旋站，然後我再轉輕軌，然後再搭到里斯內，那如果是美術館的話，就雖然說凹子底也可以到，但是凹子底是還要再搭公車，或是我要轉輕軌，對啊

但總體來說就是，有更多的路網就有更多的轉乘的選擇嗎？

對啊

G: 捷運來講就台北，台北比較方便，

那你有去過台中的嗎你知道台中只有一條

我知道他只有一條而已，以後台南也會有捷運，但是目前它還在建設或規劃階段，主要想法是效仿像台北和高雄這樣的捷運系統，大概就這樣

H: 沒有

I: 我覺得針對大眾運輸工具就差不多了，我覺得前面問的蠻詳細的

J: 當然當然台北捷運是比較方便，因為我們在捷運的話呢，因為像高雄的話只做到，當然上面要延伸到外圍，但如果到延伸到外圍的話，那就更方便了，整個高雄市行應該最好，這比較便利性的

K: 沒有

L: 沒有

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