



# What Free Fare Public Transport Liberates

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# Free Fare Public Transport, A Feasible Project

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The climate crisis and the circumstance of COVID-19 make transport, especially public transport, a critical issue.

‘Is public transport safe during COVID-19?’

‘Should conventional transport means be converted to personal mobility?’

‘Are electric and hydrogen cars effective means of transport to address the climate crisis?’

And

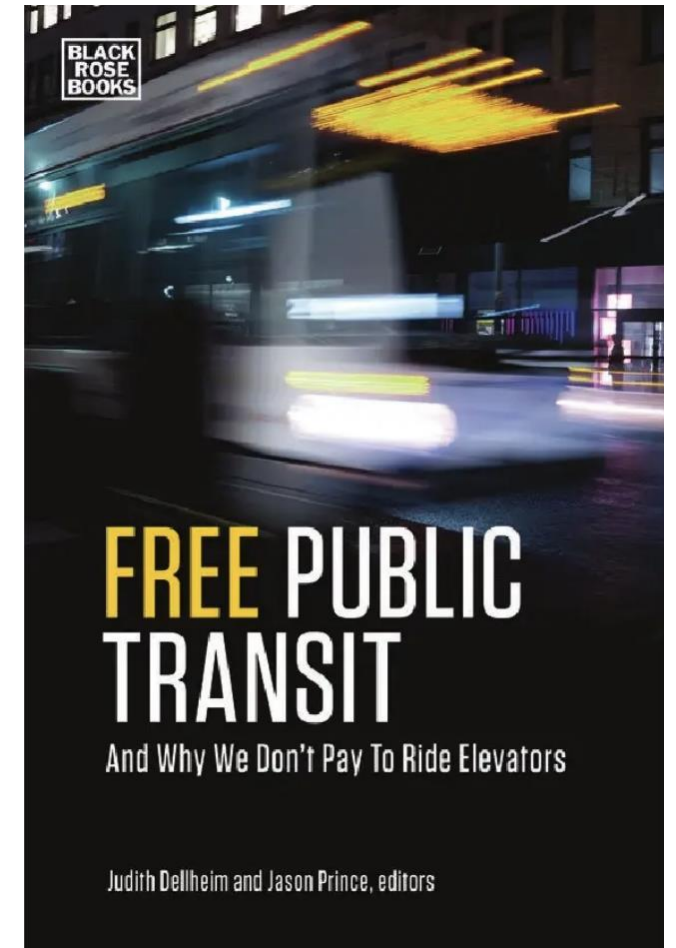
‘What does mobility mean to humans, and how should it be guaranteed?’

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"Why don't people pay for the elevator?"

- (1) Most of the mobility needs in cities are 'linked trip'
- (2) Mobility needs are compulsory (or obligatory) rather than being optional;
- (3) Mobility is the most important element in the operation of urban ecosystems and the essential element in which citizens lead their lives in cities.





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Free fare public transport policy in Korea is more of an innovative policy than a charitable one.

In the context of Korea, the following three aspects must be considered and addressed in the goals of free fare public transport policy.

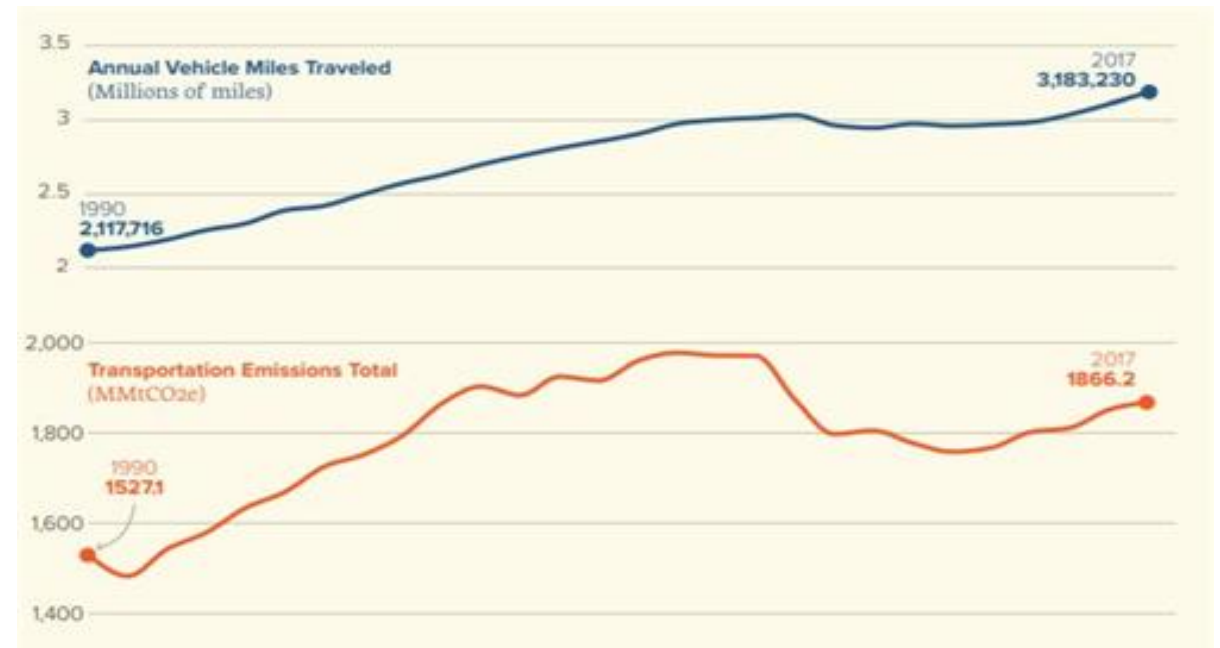
- 1) Presence of a Private License Right: The context in which a route - a shared property - is privatized under the law (the specificity that renewal procedure doesn't exist, while inheritance and trade are permitted).
- 2) Mobility Inequality and Disparity: The mobility gap between metropolitan and non-metropolitan areas, urban and rural areas
- 3) Passive response to the climate crisis: Transport planning is focused on fuel replacement (no specific orientation toward traffic demand management exists)

# Issue of the Climate Crisis and Transportation

Major cities presented a wide range of transportation policies to address climate crisis, with a combination of integrated measures.

- NYC 'effective mobility': improved public transportation networks, safer streets, reduced congestion and pollution, regional and global connectivity
- LA '2019 Sustainable Urban Plan': Mobility and Public Transportation, and Zero-Emission Mobility Measures
- Paris 'Declaration for Paris': Anti-pollution, anti-vehicle slogan. Limited speed to 30km/h across Paris, halving parking space in the urban core.

Overall Trend of Vehicle Miles Traveled and Total Carbon Emissions (US)]



# Issue of the Climate Crisis and Transportation

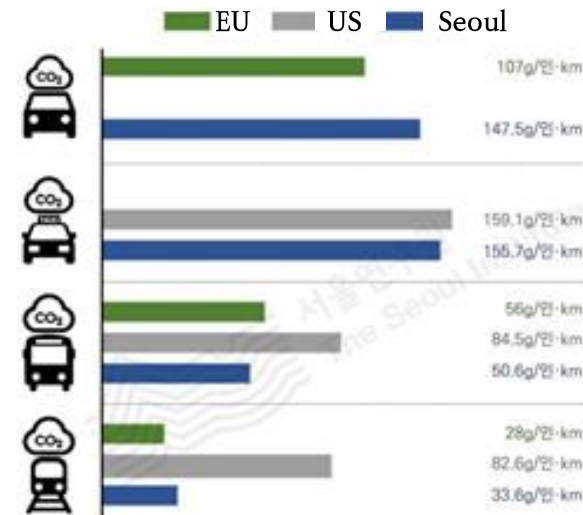
The Korean government's Green New Deal policy is focused on the replacement of fuel sources.

Cf. Seoul Metropolitan Government's case in Fuel Replacement / 2050 Mitigation Plan

- Due to air quality issues, natural gas conversion for buses and other vehicles in Seoul has been carried out for ten years since 2004, and it has shown some impacts in reducing the level of fine dust and greenhouse gases. However, it has faced limitations immediately.
- In accordance with C40's Deadline 2020 guidelines, the Seoul Metropolitan Government submitted a mitigation goal in December 2020. However, it only presented mitigation of '40%' by 2030 compared to the baseline year of '2005'.

[Carbon emissions per vehicle per year(unit: g/vehicle, km)]

Classification	Passenger Car	Taxi	Bus
2006	233.7	249.4	1,024.8
2010	230.8	242.2	966.5
2016	209.5	228.8	975.5



[Comparison of greenhouse gas emission per person]

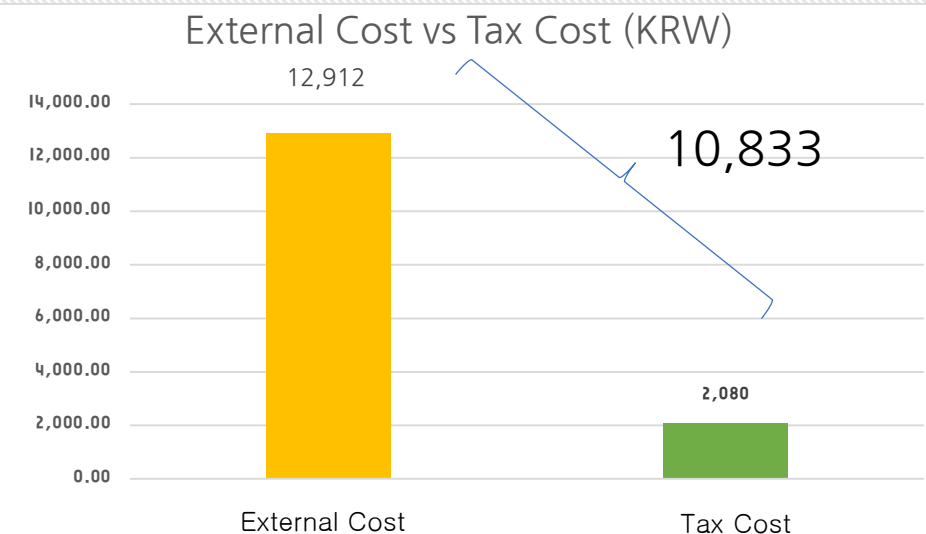
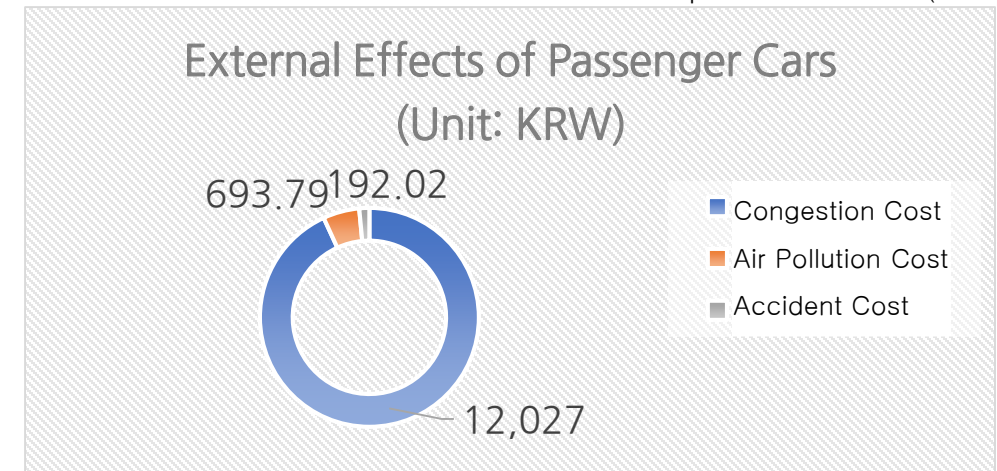
# A Question that Free Fare Public Transport Raises

A key to transportation policy in the era of the climate crisis is to develop a solution to the issue of how to reduce the need for individual movement.

Although there is no evidence found that public transport is a major factor in the spread of infectious diseases, the policy is putting too much focus on the promotion of personal mobility and the use of private cars.

In Korea, only 16 percent of the external cost incurred by private car users is retrieved as taxes.

Public Transportation Network (2018)

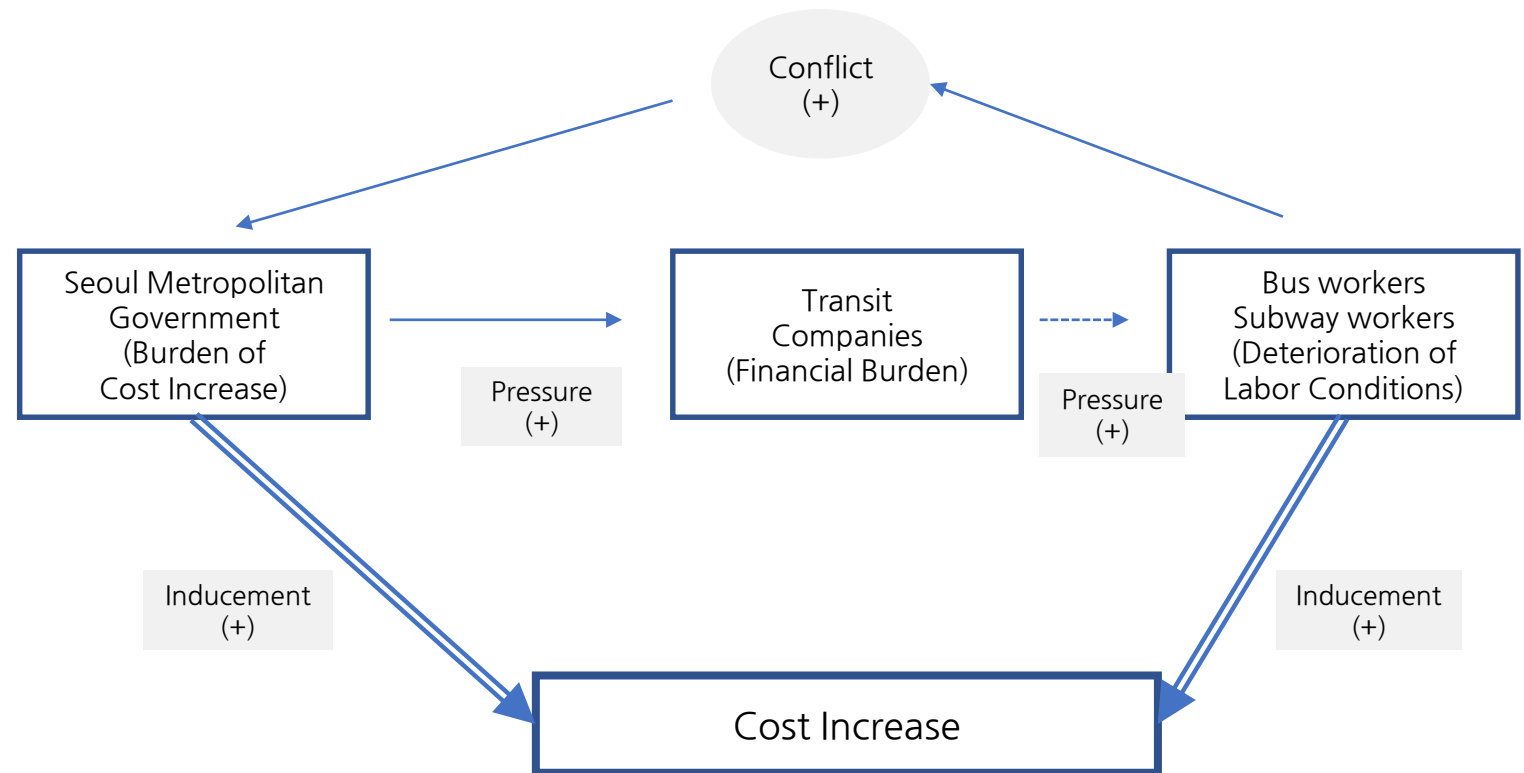


# A Question that Free Fare Public Transport Raises

공공교통네트워크  
(2018)

Fragile publicity that the current public transport system possesses is manifested in the way of punitive transportation costs imposed on users.

Cf. In the case of semi-public public transport system or private investment projects as a subsidiary system to support the operation cost of private transit companies;





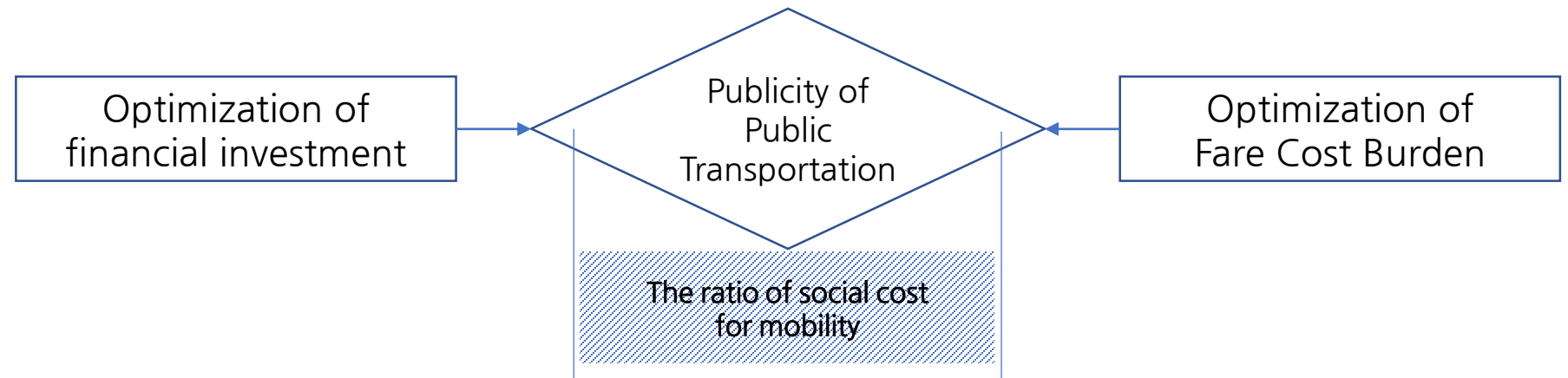
# Free Fare Public Transport, The Most Powerful Means of Transition

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According to the cases of different countries, the use of private cars and public transportation has increased just by employing a free fare public transport system. Additional measures such as adjustments of existing roads and putting congestion charges can dramatically reduce the use of private cars.

In addition, the cost burden of free fare public transport - both in terms of transport fare or finance - is on the citizens, and more importantly, it is about to whom to put more burden on.

In other words, free fare public transport is not a technical approach to transport system but rather a social approach.

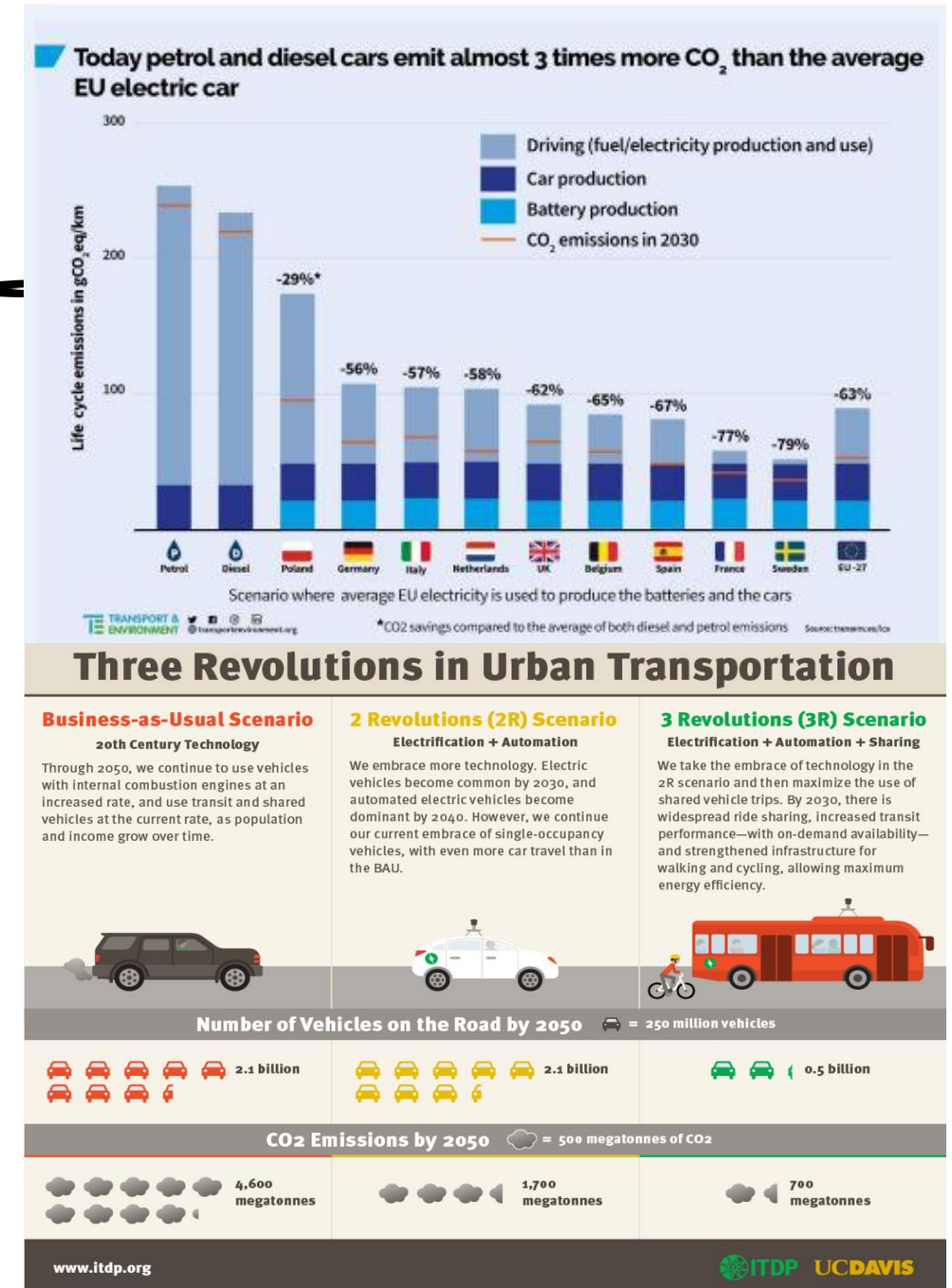


# Free Fare Public Transport, The Most Powerful Means of Transition

The goal of achieving carbon neutrality by 2020 is not achievable just by replacing the fuel source. The meaningful change will be possible when the transition in transport modal share is realized.

- According to the Life Cycle Assessment assessing the whole procedure of fuel source replacement, it is estimated to reduce 63% of carbon emission compared to that of fossil fuel, based on the EU average. (How clean are electric cars? T&E's analysis of electric car lifecycle CO2 emission, 2020)
- It is pointed out that if the transition toward shared transportation and public transportation is not carried out, it will be difficult to achieve the 2020 carbon neutrality goal. (<https://3rev.ucdavis.edu/>)

Free fare public transport provides the most powerful motivation for the transition of the public transport system and effectively complements the transportation sector of current green new deal policies being pursued by the Korean government.



# [Survey] How do you think about free fare public transport?

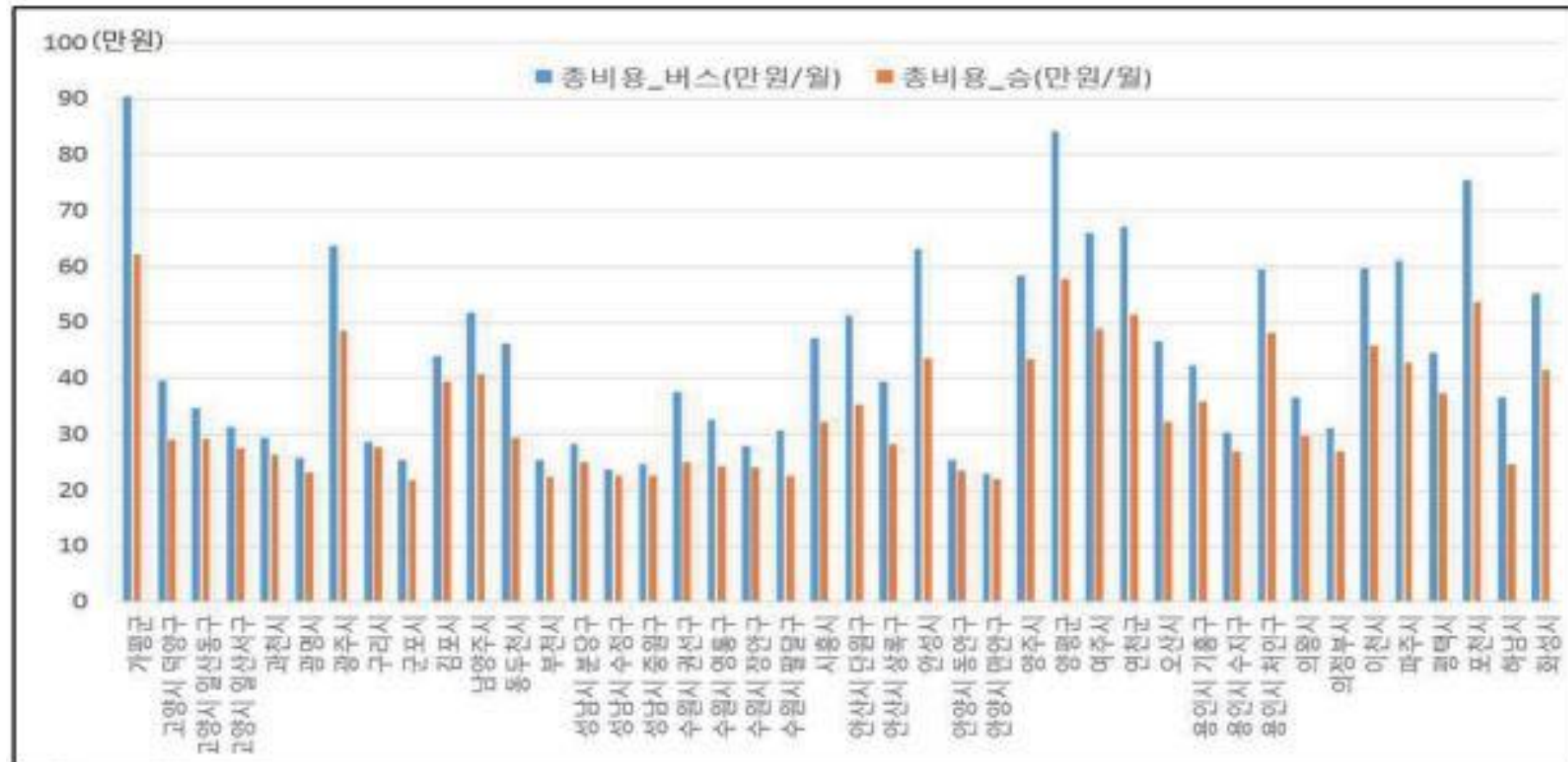
[The reason for not giving up driving] Why can't you stop driving your own car even if public transport fare becomes free of charge?							
	Case s	Due to the complexity of using public transportation	No public transport routes to destination s exists	It takes a lot of time for commuting	Private car is required due to the nature of work, being handicapped , etc.	Others	Total
		%	%	%	%	%	%
	132	30.3	22.7	21.2	21.2	4.5	100.0

The National Assembly's Green New Deal Research Group (2020),  
A public survey.

According to a recent survey, 57.9% of respondents said they would take public transportation if it is free of charge, and 51% said that the complexity of using public transportation and no presence of public transport routing to the final destinations make them stick to private cars.

# Things that free fare public transport needs to consider

[Monthly Transportation Costs by the means of transport in cities and counties in Gyeonggi-do]



# Things that free fare public transport needs to consider

The connection with the wider metropolitan transport system must be considered. In the case of the rail network - one of the most important transport networks in Korea - it was identified that the metropolitan transport network and suburban/rural transport network are not effectively connected.

Status of linked service levels by train stations in major metropolitan areas [Unit: minutes]

	Weighted average travel time		Level of Service	
	KTX	Regional railway	KTX	Regional railway
Urban	62.8	33.9	E	D
Daejeon-Chungcheong region	55.7	49.1	D	E
Daegu-Gyeongbuk region	51.9	37.2	D	D
Busan, Ulsan, Gyeongnam region	80.7	148.6	F	F
Jeonbuk region	67.8	-	E	-
Gwangju - Jeonnam region	65.4	111.3	E	F
Gangwon region	-	40.9	-	E
Average of Nation	64.1	70.2	E	F



# Things that free fare public transport needs to consider

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If the participation of workers in the transport service sector and citizens using transport services is not guaranteed in the process of making decisions on transportation policies, it will be difficult to forge a social consensus that enables free transportation policies.

- Additionally, it is critical to have enough discussion about changes that workers and citizens feel sensitive about, such as routing and ways of operation of public transport. Through this process, free fare public transport will be considered as a community commons that needs to be co-managed and maintained, rather than a unilateral service.

# Mobility matters

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While there is an argument that the emergence of bicycles and new personal mobility empowered by technological advances might end the era of public transportation, not everyone can ride a bike or can operate personal mobility easily.

Free fare public transport should be meaningful not just in terms of eliminating costs but in terms of providing effective mobility choices for everyone, especially the vulnerable population while ensuring universal mobility.



# Things that free fare public transport needs to consider

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Free fare public transport policy is the most effective and direct question of what transport is and should be compared to existing temporary measures.

It gives us the opportunity to think about the fare and cost structure that we have taken for granted and the operating system and transportation policy. And it also allows us to consider how public transportation can function from the perspective of the entire city.

In particular, transportation policy, which has long been subordinate to the interests of private companies and controlled by technocrats, is becoming the most important experiment to make it as a social policy to address the climate crisis and inequality.