Toward a Sustainable Eco-Mobility City!

Public Transportation Innovation Policy in Dangjin City
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1. **Current Status of Dangjin City**

**Location**: Midwest of South Korea

**Area**: 704 km² (Similar to Seoul and Singapore)

**Population**: 171,699 (Growing city in terms of economy and population)

77,661 Households

**Industrial Structure**
- **Manufacturing**: 31%
- **Agriculture**: 24%
- **Service**: 11%
## Transportation Conditions

### The number of car registrations

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>84,175</td>
<td>88,442</td>
<td>91,501</td>
<td>94,513</td>
<td>96,521</td>
</tr>
<tr>
<td><strong>Passenger Car</strong></td>
<td>61,507</td>
<td>65,280</td>
<td>67,930</td>
<td>70,506</td>
<td>72,404</td>
</tr>
<tr>
<td><strong>Van</strong></td>
<td>3,315</td>
<td>3,249</td>
<td>3,200</td>
<td>3,177</td>
<td>3,133</td>
</tr>
<tr>
<td><strong>Freight</strong></td>
<td>18,485</td>
<td>18,994</td>
<td>19,415</td>
<td>19,821</td>
<td>19,970</td>
</tr>
<tr>
<td><strong>Special Purpose Vehicle</strong></td>
<td>868</td>
<td>919</td>
<td>956</td>
<td>1,009</td>
<td>1,014</td>
</tr>
</tbody>
</table>

**Overall registration ratio of passenger cars: 75.0%**

### Transportation Modal Share

- **Passenger Car: 52.27%**
- **Bus: 14.76%**
- **Walking/Bicycling: 28.86%**
- **Special Purpose Vehicle: 4.11%**

**Bus Modal Share: 14.76%**
### 3. Background of Transportation Policy

<table>
<thead>
<tr>
<th>1. The Small Number of Buses</th>
<th>2. Large area and population</th>
<th>3. Modal Share of Bus Transportation</th>
<th>4. Actions on Zero Carbon</th>
</tr>
</thead>
<tbody>
<tr>
<td>The number of buses per population: 0.39 Units/1,000 People (Chungcheongnam-do Average: 0.52 Units/1,000)</td>
<td>3rd largest area in Chungcheongnam-do</td>
<td>The modal share of Bus is 14.76%, which is about 1/3 of passenger cars (52.27%). The share of passenger cars tend to increase every year.</td>
<td>Environmental Problems: The largest amount of air pollutant emitting city Social exclusion of women, young people, and the elderly in the process of compressed growth.</td>
</tr>
</tbody>
</table>

New Transport Policy Are Needed to Revitalize Public Transportation
3. Public Transportation Policy

Increased Accessibility to Public Transportation

- Expanding Lines: Expanding Downtown Circulating Buses (10 Units)
- Happy Bus: Demand Responsive Happy Bus (58 Units)
- Special Transportation: Operation of happy taxis and special transportation means

Current Status of Use:
- Circulation Bus: 249,000 people/year
- Happy Bus: 117,000 people/year
- Happy Taxi, Special Transportation: 26,000 people/year

Eco-friendly Operation of Public Transportation

Project Period: 2021~

Project Cost: 500 billion won

Project Details:
- Establishing charging stations for electric vehicles and hydrogen vehicles
- Supply of electric buses and eco-friendly vehicles

Project Goals:
- 2,500 eco-friendly cars
- 100 charging stations
- Conversion to Eco-Friendly Buses (by 2035)
## Public Transportation Policy

### Research Project on Introducing Free Fare Public Transportation and Public Bus System

<table>
<thead>
<tr>
<th>Period</th>
<th>2020 ~</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; Phase</td>
</tr>
<tr>
<td></td>
<td>Physically Handicapped Person, Veterans</td>
</tr>
</tbody>
</table>

### Goals

- Gradual expansion of free fare public transportation
- Introduction of a public bus system

사진출처: news.naver.com
4. Realizing Free Fare Public Transportation

1st Phase
July 2019: 75-year-old seniors can take buses for free
- The Number of People Served: 15,000 people
- Limits: No limits on the number of uses
- Application method: Offline application through local community centers (easy to apply)
- Required amount of budget: KRW 3.5 billion
- Number of application: 12,000 people (80%)

2nd Phase
August 2020: Veterans and their families, handicapped people can take buses for free
- The Number of People Served: 8,300 people
- Limits: No limit on number of uses
- Application method: Offline application through local community centers (qualification confirmation needed)
- Required amount of budget: KRW 400 million
- Number of application: 1,000 people (12%)
March 2021. Young people aged 6 to 18 can take buses for free
- The Number of People Served: 21,000 people
- Limits: 3 times a day (+ one transfer)
- Application method: Online application
- Required amount of budget: KRW 2.1 billion
- Number of application: 9,000 people (42.9%)
5. Results

Expanding groups of people served by free fare public transport system
Benefits more than 45,000 citizens (26.73% of the total population)

Increased Bus Ridership
Bus ridership of the people eligible for free fare public transportation system increased by about 30% year-on-year.

Reducing Economic Burden of Households
A monthly average of KRW93,000 and an annual average of KRW1,120,000 in transportation costs are reduced to ease the economic burden on households.
6. Expected Outcome and Future Plan

**Expanding Free Fare Public Transportation System**
- Students attending schools in the jurisdiction and foreign students
- Senior citizens over 65 years old

**Introduction of eco-friendly buses**
- Introduction of electric buses and hydrogen buses every year
- Conversion to Eco-friendly buses by 2035

**Promoting Public Bus System**
- Conduct preliminary research and assessment
- Reaching civic consensus
- Strengthening public functions of buses

Enhancing Urban Competitiveness
Guaranteeing mobility rights of citizens
Resolution of Urban Environmental and Traffic Problems
### Positive responses

- I will take a bus more frequently.
- It supports households by saving bus fare.
- It will be good for student mobility and learning.

### Mixed responses

- It will adversely affect the city’s financial status.
- I have concerns about the overlap between welfare services.
- It doesn’t help to relieve traffic congestion.

### Transit Company

*<The free ride allowed for children when they are along with adults>*

Children under the age of six are free of charge when they are accompanied with one adult under the ‘Passenger Transport Business Act’.

But Dangjin City offers free rides for all children under 6 years of age.
We will establish a sustainable transportation system.

Thank you