Toyama’s Unique Compact City Management Strategy
~ Creating a Compact City by Re-imagining and Restructuring Public Transportation ~

Masashi Mori, Mayor of Toyama City
Outline of Toyama City

- Population: Approx. 40% of Toyama Prefecture (421,953 people, 2010 census)
- Area: Approx. 30% of Toyama Prefecture (1,241.85 square km.)
- Topographical diversity: From sea level (Toyama Bay) to 2,986m (Suishodake.)
- 2013 Fiscal Year General Account Budget: 152.4 billion yen (1.55 billion dollars)
Plan for Environmentally-Friendly Future City of Toyama

Problems confronting Toyama City:

Some problems confronting Toyama City:
① Dwindling population and an aging society
② Too much dependence on automobiles and declining public transport use
③ Less attractive city with an emptying city center
④ Higher administrative costs
⑤ Increasing carbon dioxide emissions

Toyama City proposes some countermeasures against these problems.

1. Creation of a Compact City through the Renovation of Public Transport
   • Revitalizing public transport
   • Concentrating city amenities in the city center or areas along public transport lines

2. Creation of an Attractive and High Quality City Life
   • Revitalizing the city center
   • Concentrating city amenities within walking distance
   • Amassing social capital

3. Promotion of Local Industry
   • Making the most of the local pharmaceutical industry
   • Tapping recyclable sources of energy
   • Inviting companies into Toyama

A sustainable city should attract people, making it a vibrant city.
By revitalizing public transport, including railway track lines, and by concentrating various city functions such as residential, commercial, business and cultural buildings along public transport lines, we can create a compact city.

<Concept Illustration>
Targeted city structure - dumplings and skewers

Skewer:
Public transport offering a higher level of service

Dumplings:
Population centers connected by the skewers, allowing pedestrian access to various city amenities

<Three pillars for the Strategy>

① Revitalizing public transport

② Encouraging residents to relocate to zones along public transport lines

③ Revitalizing the city center
Distribution Map of Senior Citizens (2012)

- Toyama LRT
- City Tram Loop
- Aville
- Grand Plaza
- Kadokawa Care Prevention Center

The Number of Senior Citizens (2012) in a 250m x 250m area:

- 25 people or less
- 25 - 49 people
- 50 - 74 people
- 75 - 99 people
- 100 or more people

Railway network
Frequently operated bus route
City center
Zones along public transport lines promoting residence
Zones along public transport lines (unused areas)
Areas in use

- 25 people or less
- 25 - 49 people
- 50 - 74 people
- 75 - 99 people
- 100 or more people
By creating the LRT network, we hope to modify the current lifestyle of too much dependence on automobiles and realize a town with every city amenity within walking distance.
JR Toyama Port line (a local line), which had been suffering from declining numbers of passengers, was revitalized as the nation's first full-fledged LRT. This was achieved by adopting a two-tiered concept in which the public sector constructs the track while the private sector runs the business.

**Outline**

- **Inaugural Day:** April 29th, 2006
- **Extended Distance:** Approx. 7.6km
- **No. of Stations:** 13

- Former JR Toyama Port line

- Toyama LRT

**Construction of Toyama LRT – Reshaping JR Toyama Port Line into LRT –**
Toyama LRT - Operation and Service -

**Operation**

- **Former service**
  - Operation interval: 30 to 60 min.
  - First / Last Train: 5-6 / 21-22:00
  - No. of stations: 9
  - Vehicles: Railroad vehicles

- **New Service**
  - Operation interval: 15 min. (10 min. during rush hour)
  - First / Last Train: 5-6 / 23-24:00
  - No. of stations: 13
  - Vehicles: All super-low floor vehicles

*Fare is uniformly 200 yen.

**Low floor cars and barrier-free stations**

**Introduction of a unified design**

**IC card pass**

**Vibration-dampened, lawn-covered track**

**Light Rail attendants**
Toyama LRT and Cityscape

Side Reservation Section
Toyama LRT and Cityscape②
Effect of Toyama LRT

- **Weekdays:** 2.1 times as many passengers as before; **Weekends:** 3.6 times as many passengers using the new service.

- Increase in daytime use by senior citizens (Lifestyle Change)

【Number of Passengers by Time Zone (Weekday)】

【Number of Passengers by Age (Weekday)】
City Tram Loop Line Project

The extension of the tram line contributed to making the downtown area more appealing and making it easier for people to move around.

- Adoption of the first **two-tiered system** in Japan.
- Route construction was integrated with the road space and aimed at the creation of attractive **urban space**.

**Outline**

- **Inaugural Day**: December 23rd, 2009
- **Extended Distance**: Approx. 0.9km
  - (Loop Line approx. 3.4km)
- **No. of Stations**: 3 new stations were added along the extended route.
- **Vehicle**: 3 new low-floor cars were adopted.

The northern route and the southern route will be joined in the future.
Harmonious Blend of LRT and Cityscape
Results of City Tram Loop Line Project

- Revitalization of the entire city tram system: increased ridership, improvement of the city center image etc.
- The line has become established: increased ridership in the downtown area, increased ease of moving around in the area etc.

On both weekdays and weekends, city tram ridership has increased after the inauguration of the Loop Line (Fiscal year 2009).
(On weekdays +42%, on weekends +32%)

Ridership between Toyama Station and the downtown has increased after the inauguration of the Loop Line.
(On weekdays +41%, on weekends +19%)
Inauguration of the Hokuriku Shinkansen line in spring 2015
Connecting north and south tram lines (Toyama LRT and the Loop Line)
based on the subsequent JR Hokuriku line elevation
Promotion of Residence in the City Center and in Zones along Public Transport Lines

Designation of city center area and residentially promoted zones along public transport lines

- City center area: Approx. 436 ha
- Residentially promoted zones along public transport lines: Approx. 3,000 ha

※Areas around 19 public transport axes centered in Toyama Station
- Areas around railroad or tram stations (within a 500-meter radius)
- Areas around bus stops (within a 300-meter radius)

Housing in city center and residentially promoted zones along public transport lines

- Purchase subsidy

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Residents</th>
<th>Projected Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>421,239</td>
<td>117,560</td>
</tr>
<tr>
<td>2012</td>
<td>422,009</td>
<td>132,301</td>
</tr>
<tr>
<td>2025</td>
<td>389,510</td>
<td>162,180</td>
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</tbody>
</table>

Number of residents in the zones along city center and public transportation lines

Projected change in number of residents by activating public transportation or encouraging residence within the zone

(About 28%)

(About 31%)

(About 42%)
Revitalizing the City Center - The Grand Plaza

- All-weather multi-purpose square, attracting many people even when it is cold or snowy
- Glass roofed and equipped with a huge screen and an elevating stage
- More than 100 events are held here annually.

(Outline of the facility)
Size: Approx. 1,400㎡ (65m × 21m)  
Height to the ceiling: Approx. 19m  
Screen: Approx. 277 inches
Revitalizing the City Center - Special Pass Project

Citizens over 65 years old can receive a 100 yen public transportation discount fare to the city center from any station or stop in Toyama City, a collaborative project with private transportation companies. **30% of senior citizens hold the special pass;** each day an average of 2,370 people use it.

**＜Special Pass＞**
Citizens over 65 years old, ¥1,000

**＜How to use the pass＞**
① Hours of usage: 9:00 a.m. to 5:00 p.m
② Pass can be used:
  * Anywhere between the city center and within Toyama City
  * Inside the city center area
  * Anywhere between Toyama Municipal Hospital and within Toyama City
Revitalizing the City Center  - Bicycle Sharing System for Toyama Citizens (Aville) -

A New Transport Option for Citizens Going Downtown without Automobiles

- Project Purpose:
  1. Reduce CO2 emissions
  2. Revitalize the city center and make it more convenient to move around

- Project Operator: Cyclocity Inc.

- No. of Bicycle Stations: 15 stations in the city center

- No. of Bicycles: 150

City Tram Loop Line
Revitalizing the City Center - Flower Tram Model Project

The city tram fare is free when customers purchase a bouquet from a designated flowershop.

Something good happened that day so I bought flowers and rode the tram. Again something good happened.
Results of Compact City Policy - City Tram Usage

Until fiscal year 2006, the number of the city tram passengers had decreased, but the number increased beginning in fiscal year 2007 due to the opening of Toyama LRT and the Loop Line, the introduction of an IC card system, and low floor cars.

【City tram route map】

【Number of city tram passengers per day】

(Passengers/Day)

0人/日
4,000人/日
8,000人/日
12,000人/日
16,000人/日

(H9 H10 H11 H12 H13 H14 H15 H16 H17 H18 H19 H20 H21 H22 H23)

(Inauguration of Toyama LRT)
Inauguration of the Loop Line

Results of Compact City Policy - Number of pedestrians and vacant stores in the city center -

- Number of pedestrians in the city center steadily increased by 56.2% during 2006–2011
- Vacant stores in the city center decreased by 2.3% during 2009-2011

Shift in the number of pedestrians (Weekends)

- Grand Plaza opening (2007)
- 56.2% Increase

Shift in percentage of vacant stores

- 20.9% in Apr. 2009
- 20.5% in Jan. 2011
- 18.6% in Dec. 2011
- 2.3% decrease
Results of Compact City Policy - Stimulation of Private Investment -

Stimulating of private investment in urban redevelopment projects induced by public investments

City Tram Loop Line

Area scheduled for urban redevelopment project

New tram station

Area scheduled for urban redevelopment project

Nishi-cho South Area Type 1 Urban Redevelopment Project
Scheduled for completion in 2015

Sogawa 4-chome and Hatago-machi Area Commercial and Residential Building

Sogawa Shopping Street South Area Commercial Building

Grand Plaza

Nishi-cho and Sogawa Area Parking Structure

Chuo Shopping Street f Area Commercial and Residential Building

Nishi-cho Southeast f Area Commercial and Residential Building
Revitalization projects and residential promotion projects have made zones along public transport lines more attractive. Since 2012, more people have moved into the city center and residentially promoted zones along public transport lines than have moved out.

Results of Compact City Policy - Increase in Incoming Population -

Shift in population (Number of people moving into the city center and residentially promoted zones along public transport lines minus number of people moving out)
Results of Compact City Policy - Increase in Number of Elementary School Children in the City Center

- Increase of 106 elementary school children (12.6%) in the city center (2007-2012).
- In the entire city, the rate of elementary school children in the city center increased by 0.6 points. (2007-2012).

【Change in the number of children in Toyama municipal elementary schools and the number of elementary school children in the city center】

![Graph showing the change in the number of children](chart.png)
In the 2012 OECD report on “Compact City Policies” which looked at countries around the world, Toyama City's compact city policy was recognized as one of five cities with advanced policies: Melbourne, Vancouver, Paris, Portland and Toyama.

OECD report, "Compact City Policies"


OECD Website  http://www.oecd.org/document/22/0,3746,en_2649_37429_50321238_1_1_1_37429,00.html
Realizing a sustainable society through the creation of highly desirable living conditions that achieve a harmony between quality of life and environmental concerns.