

## Toyama's Unique Compact City Management Strategy

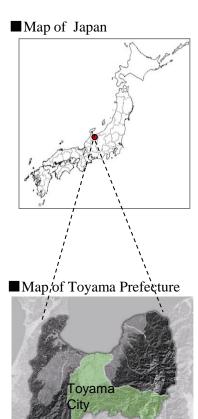
~ Creating a Compact City by Re-imagining and Restructuring Public Transportation ∼

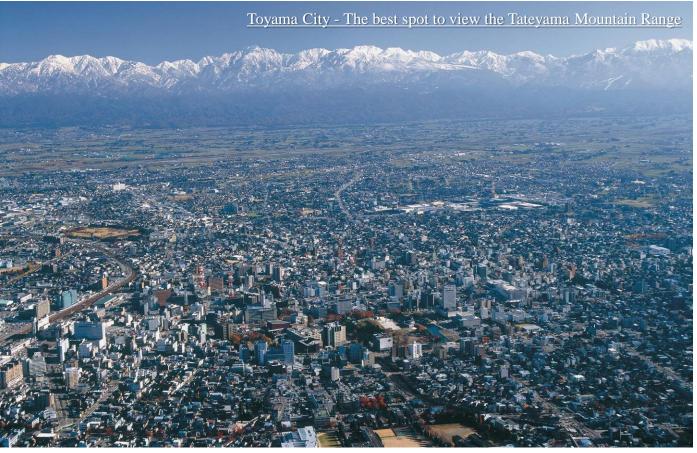
Masashi Mori, Mayor of Toyama City

## **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)





An aerial view of Toyama City

## 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
- ②Less attractive city with an emptying city center④ Higher administrative costs⑤ 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.

## **Basic Policy for the Creation of a Compact 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:

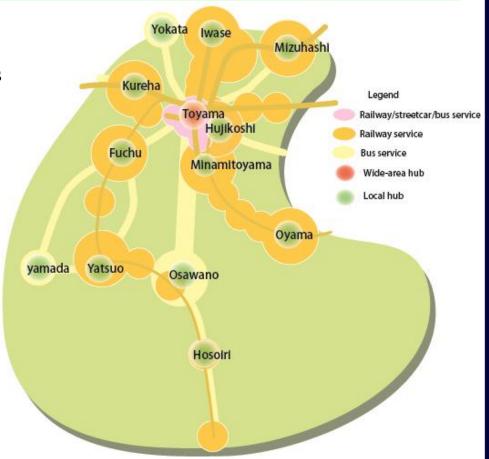
Public transport offering a higher level of service

### Dumplings:

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

<Three pillars for the Strategy>

- ① Revitalizing public transport
- Encouraging residents to relocate to zones along public transport lines
- **3** Revitalizing the city center



## Distribution Map of Senior Citizens (2012)



### Toyama LRT

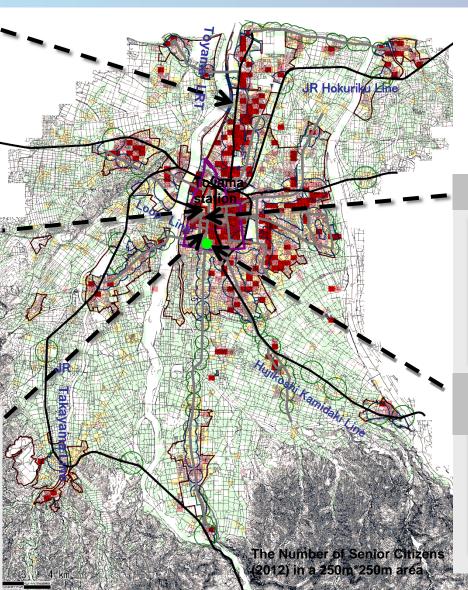


City Tram Loop



Aville





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

### Grand Plaza



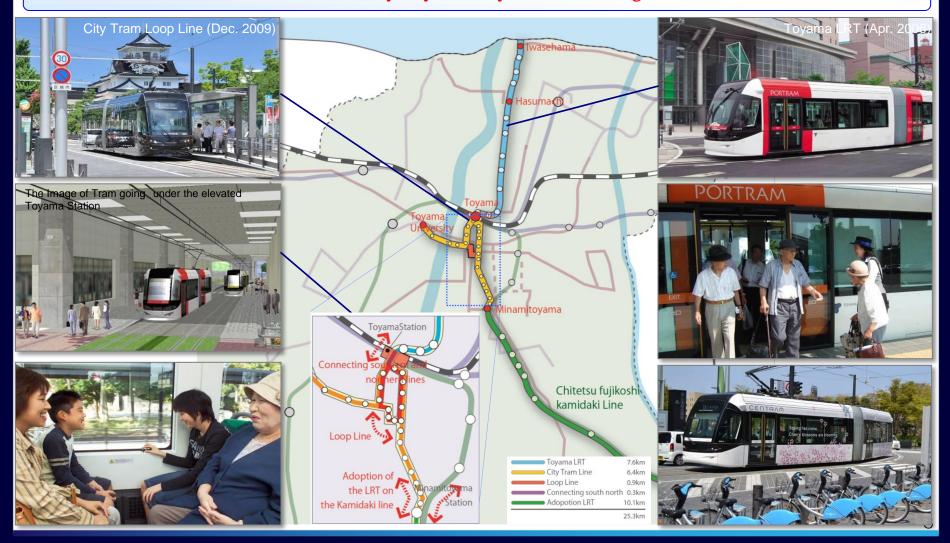
### Kadokawa Care **Prevention Center**



## **Revitalizing Public Transport - Formation of LRT Network**



By creating the LRT network, we hope to modify the current life style of too much dependence on automobiles and realize a town with every city amenity within walking distance.



### Construction of Toyama LRT - Reshaping JR Toyama Port Line into LRT -



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

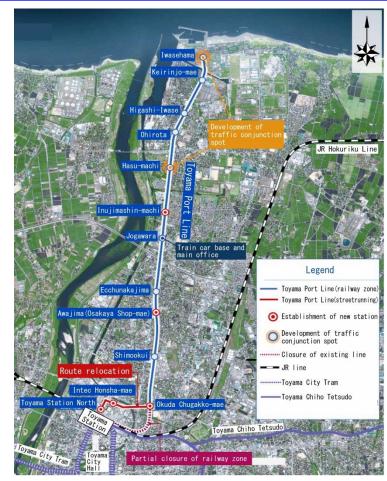


•Toyama LRT









## Toyama LRT - Operation and Service -



### ■ Operation

Former service			New Service
Operation interval	30 to 60 min.	$\rightarrow$	15 min. (10 min. during rush hour)
First / Last Train	5-6 / 21-22:00	$\rightarrow$	5-6 / 23-24:00
No. of stations	9	$\rightarrow$	13
Vehicles	Railroad vehicles	<b>→</b>	All super-low floor vehicles

\*Fare is uniformly 200 yen.

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



### ■Introduction of a unified design



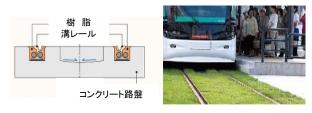




#### **■ IC card pass**



#### ■Vibration-dampened, lawn-covered track



#### **■**Light Rail attendants



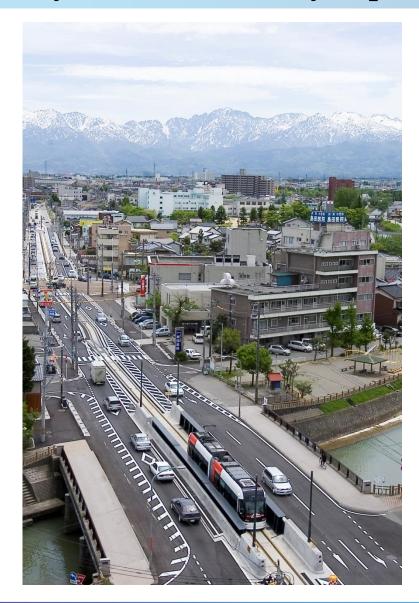
## **Toyama LRT and Cityscape** ①





## **Toyama LRT and Cityscape**<a>2</a>









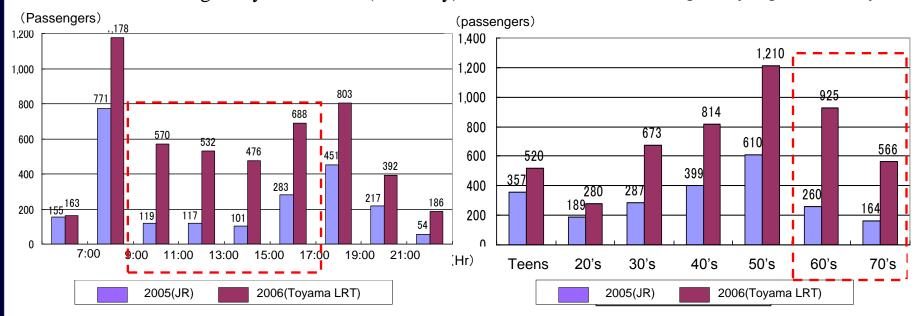
## **Effect of Toyama LRT**



- 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

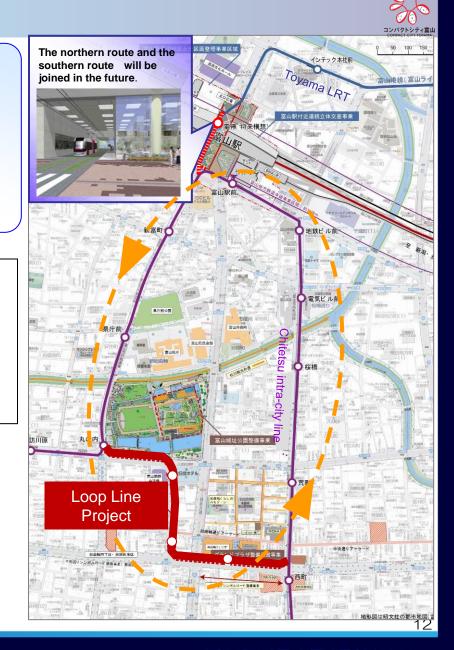
(Loop Line approx. 3.4km)

No. of Stations: 3 new stations were added along

the extended route.

Vehicle: 3 new low-floor cars were adopted.





## **Harmonious Blend of LRT and Cityscape**





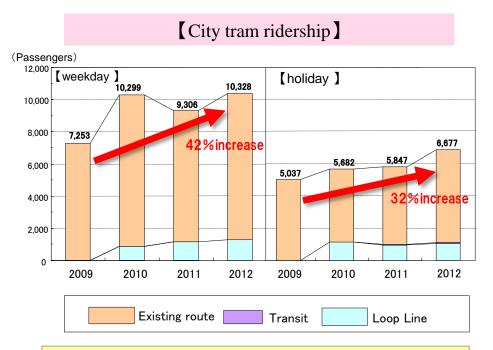




## **Results of City Tram Loop Line Project**

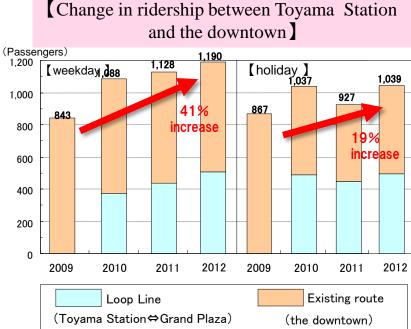


- Revitalization of the entire city tram system: increased ridership, improvement of the city center image etc.
- The line has become established: increased ridership in the downtown area, increased ease of moving around in the area etc.



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%)

# Improvements around Toyama Station with the Inauguration of the Hokuriku Shinkansen Line - Connecting the North and South Tram Lines



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



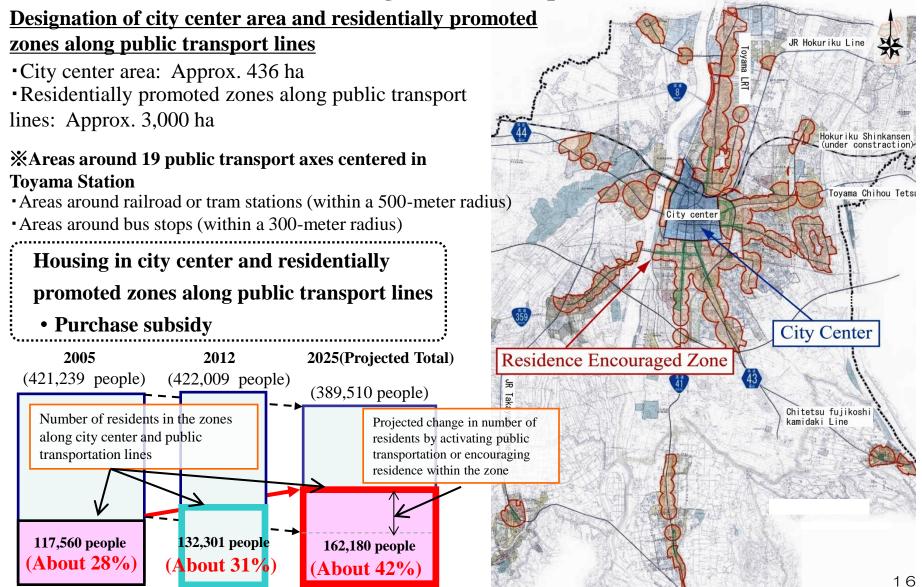


▲Tram stop under the elevated Toyama Station

▲New Shinkansen station and trams running north and south

Promotion of Residence in the City Center and in Zones along Public Transport Lines





## 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. 1,400m<sup>2</sup>(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 The City Center

<How to use the pass>

- ①Hours 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) -



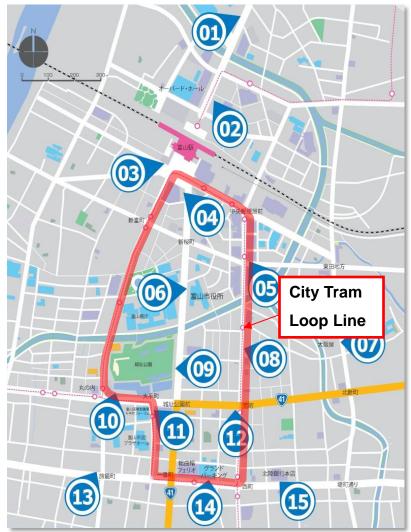
### A New Transport Option for Citizens Going Downtown without Automobiles

- 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





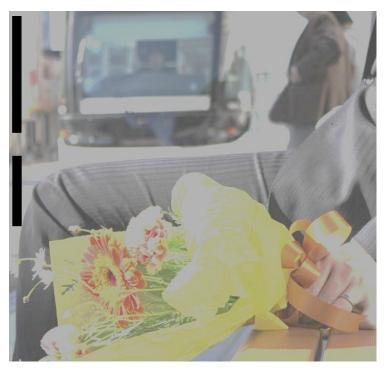


## Revitalizing the City Center - Flower Tram Model Project



### ≪Flower Tram Model Project≫

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



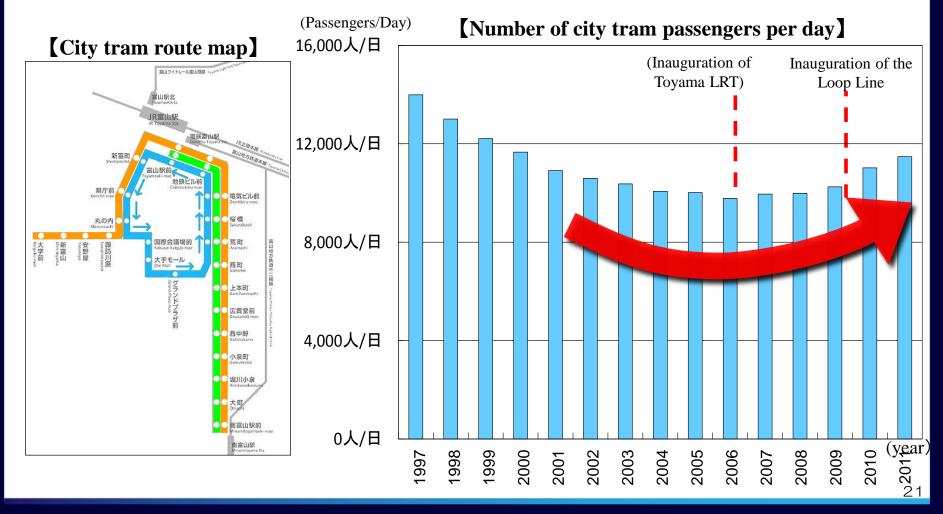




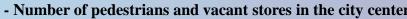
## Results of Compact City Policy - City Tram Usage



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.

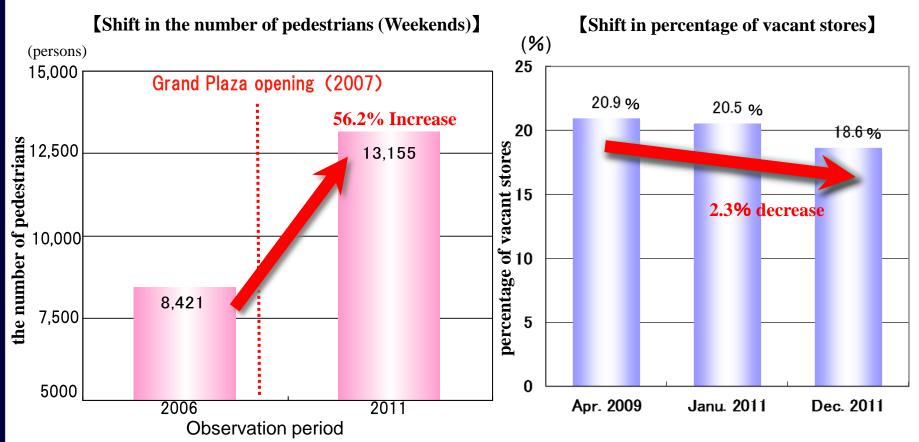


### Results of Compact City Policy - Number of pedestrians and vacant stores in the city center





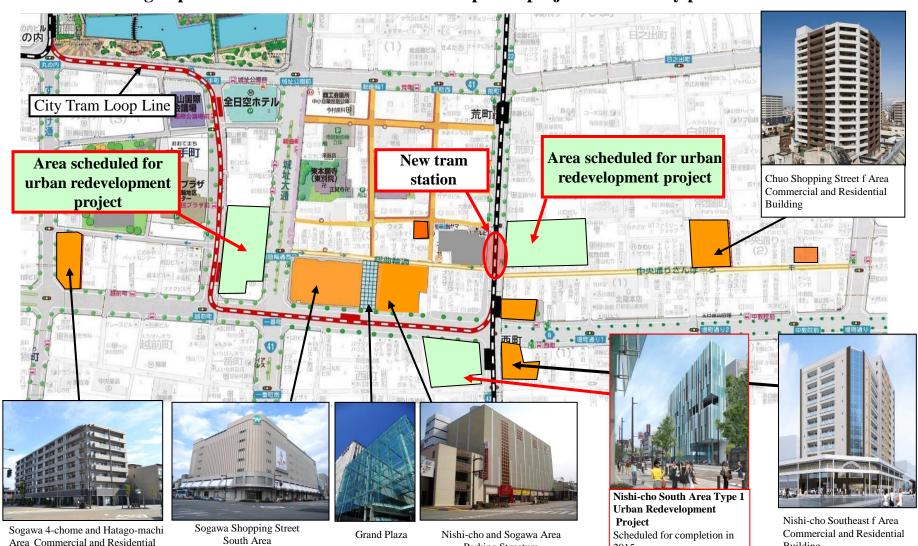
- Number of pedestrians in the city center steadily increased by 56.2 % during 2006 - 2011
- Vacant stores in the city center decreased by 2.3 % during 2009-2011



## Results of Compact City Policy - Stimulation of Private Investment -



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



Parking Structure

Commercial Building

Building

2015

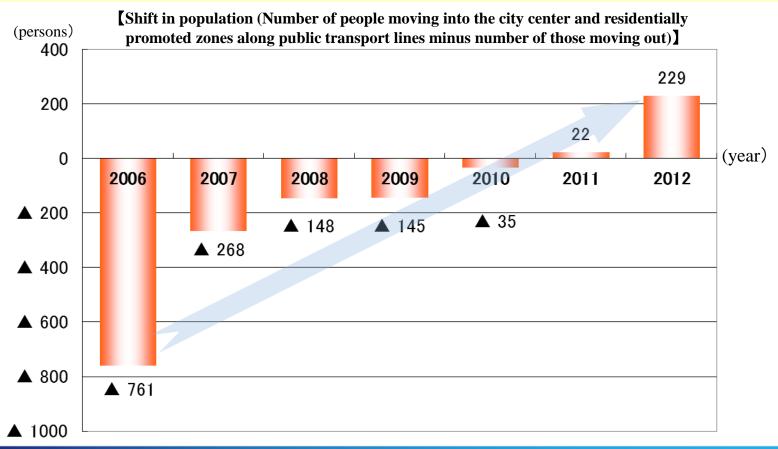
Building

## 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)

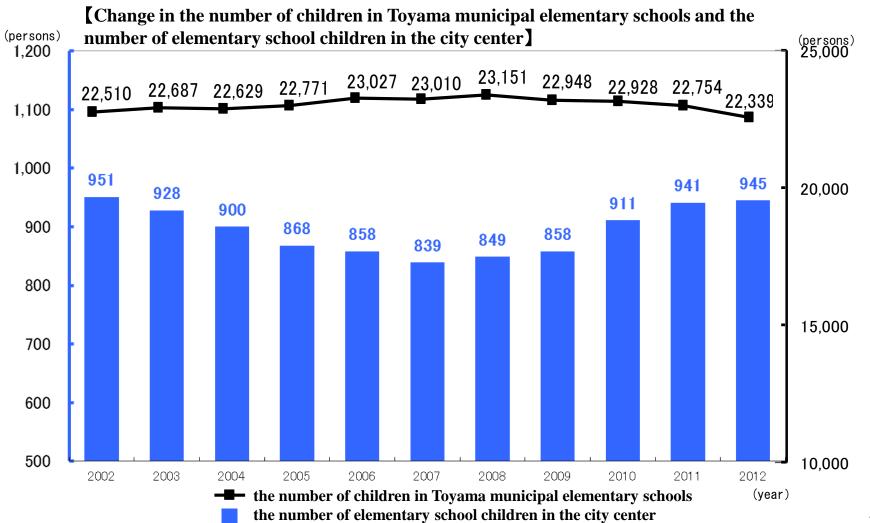
Revitalization projects and residential promotion projects have made zones along public transport lines more attractive. Since 2012, more people have moved into the city center and residentially promoted zones along public transport lines than have moved out.



### Results of Compact City Policy - Increase in 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).



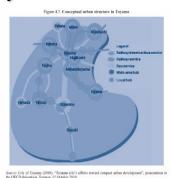
## **International Assessment of Toyama's Compact City Policy**



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"







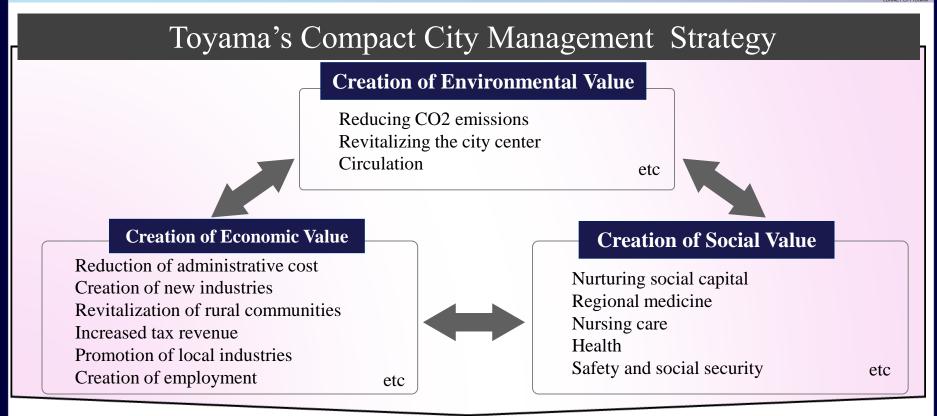
■ OECD meeting at OECD Headquarters in Paris, June 13, 2012.



**©ECD** Website http://www.oecd.org/document/22/0,3746,en\_2649\_37429\_50321238\_1\_1\_1\_37429,00.html

## Toyama City Management - A Unique Compact City Strategy





Toward a city open to the future through innovation in the environment, society, and economy

Realizing a sustainable society through the creation of highly desirable living conditions that achieve a harmony between quality of life and environmental concerns