

Streamlining Separation and Collection

Toshima City Environment and Public Sanitation Division

About Toshima City



Toshima Waste Collection Office

- No. of incinerators: 2
- Incineration capacity: 400 tons/day

■ Population:
267,623
(as of Jan. 1, 2012)

■ No. of households:
146,626
(as of Jan. 1, 2012)

■ Population density:
20,571 people/km²
(as of Jan. 1, 2012)

■ Land area:
13.01 km²

Characteristics of Toshima City

In a good location with the incineration plant centrally positioned.

Has a busy shopping and entertainment district.

Many narrow roads.

Many single-occupant households and apartment buildings.

Items to be separated in Toshima City

Waste

Combustibles

Collected twice per week

Example items: kitchen waste, plastic, paper, etc.

Incombustibles

Collected twice per month

Example items: metals, ceramics, glass, small appliances, etc.

Large-sized waste

Collected as needed

Example items: objects exceeding 30 cm

Recyclables

Paper/cloth

Collected once per week

Example items: newspaper, magazines, cardboard, etc.

Bottles, cans, PET bottles

Collected once per week

Example items: bottles, cans, PET bottle-type plastic, etc.

Volume of city-collected waste and recyclables

FY 2010

	Separated items	Collected volume (tons)
Waste	Burnable waste	58,037
	Metal, ceramic, glass waste	3,069
	Large-sized waste	1,798
	Total	62,903
Recyclables	Paper, cloth	7,030
	Bottles, cans	3,596
	PET bottles	1,234
	Trays/ bottle-type containers	278
	Group collection	4,130
	From collection spots	160
	Total	16,428

Waste stations

- No. of waste stations: approx. 16,000

(Within this, approx. 6,000 stations are per household unit.)

- Waste station characteristics

Locations are primarily decided by residents , and shared/managed by multiple households.

- Stations for waste and recyclables

As a general rule, recyclables are put out at the same station on different days in a week.

- Waste station



- Recyclables station (bottles, cans, PET bottles)



Collection vehicles



■ **New large special-purpose truck**
Mainly for collection on major roads and large condominium complexes.



■ **Small compression truck**
Used as the main force in collection



■ **Small special-purpose truck**
Collection in narrow alleys, etc.



■ **Small, lightweight freight truck**
Collection in the narrowest alleys and for picking up illegally dumped items.



■ **Normal freight truck for collecting recyclables**
Collection of recyclables

No. of collection vehicles (per day)



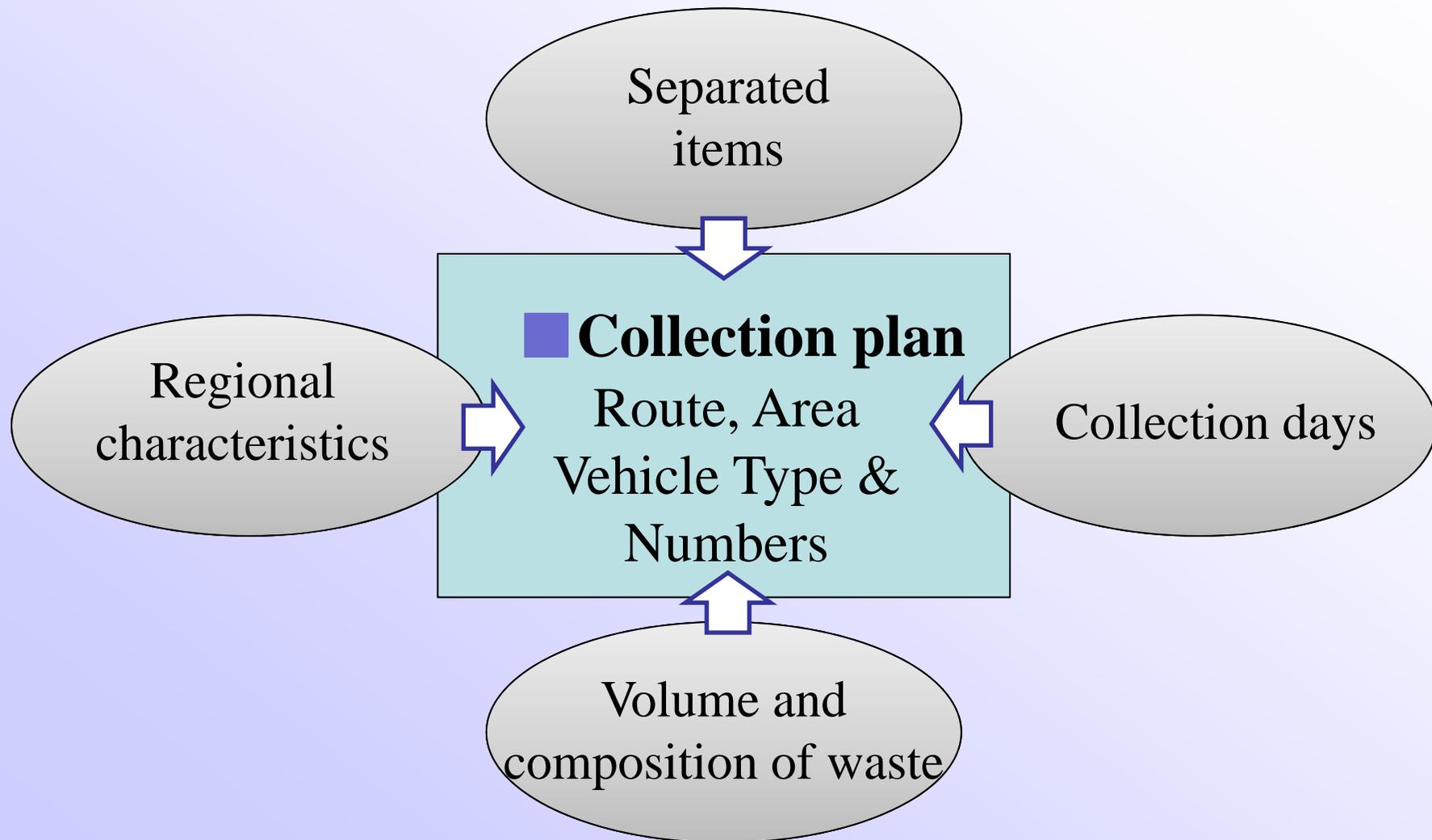
■ Waste

- New large special-purpose trucks: 2
- Small compressor trucks: 22
- Small special-purpose trucks: 3
- Small, lightweight freight trucks: 8

■ Recyclables

- Normal freight trucks for collecting recyclables: 24

Collection plan and changes in various factors



Formulation of collection plan

■ Collection operations for one day

Small special-purpose compressor truck

  **× 20 trucks × 6 trips**
2 workers 1.5 t/ truck

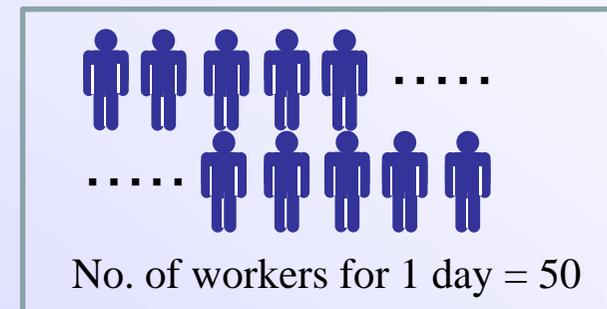
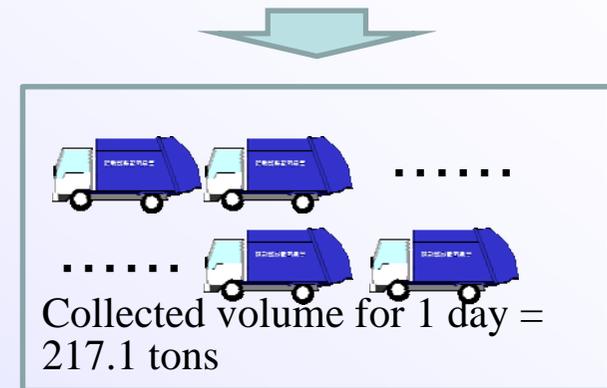
Small special-purpose trucks

  **× 2 trucks × 6 trips**
2 workers 0.85 t/ truck

New large special-purpose truck

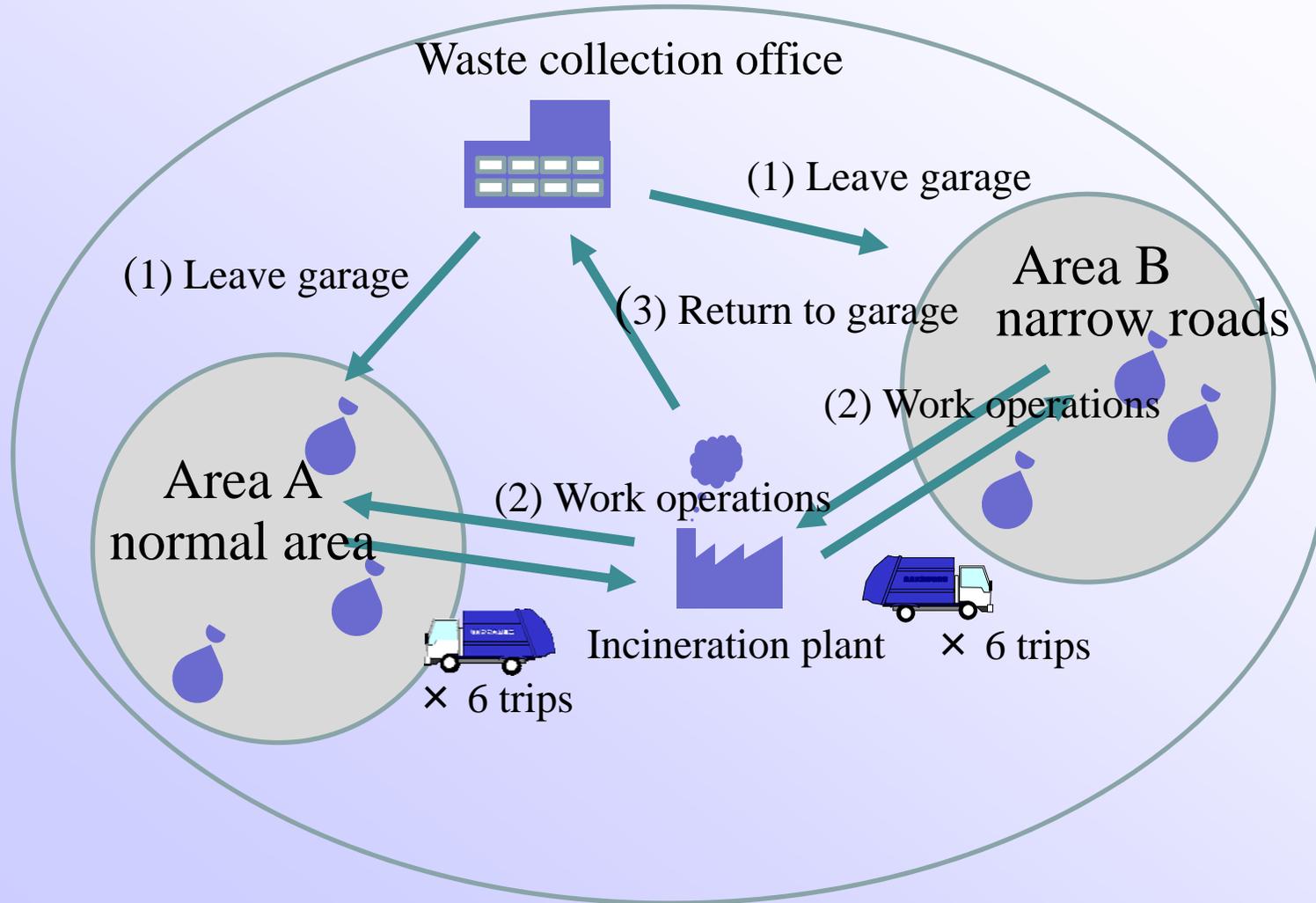
  **× 2 trucks × 6 trips**
3 workers 2.24 t/ truck

Estimated waste volume

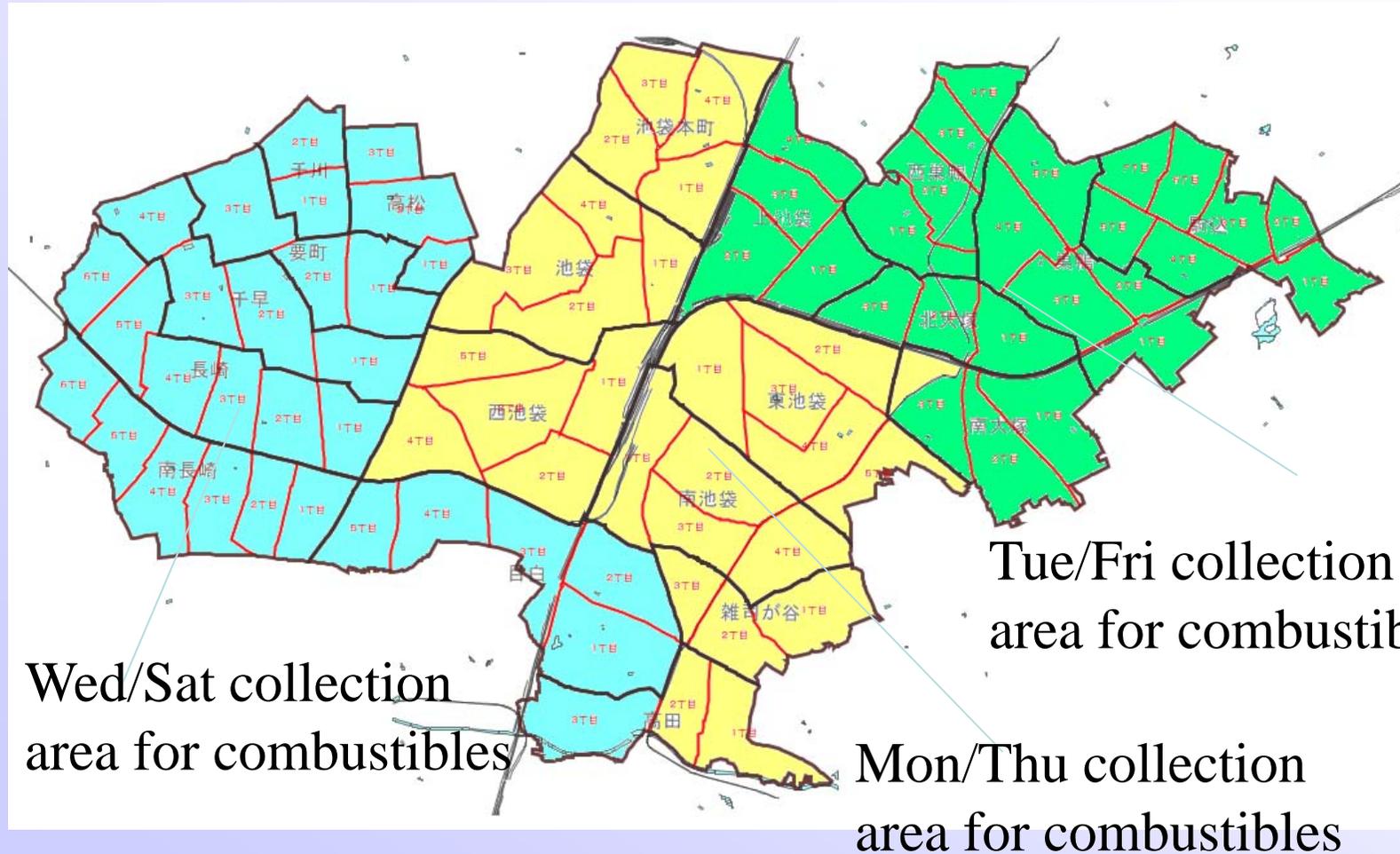


No. of employed staff

Collection diagram



Collection areas by day



Necessary for efficient collection

Cooperation from residents including thorough separation.

Good location for processing facilities, etc.

Technology for purpose-built vehicles, etc.

Establishment of an efficient organization and chain of command.

Thank you for your attention