

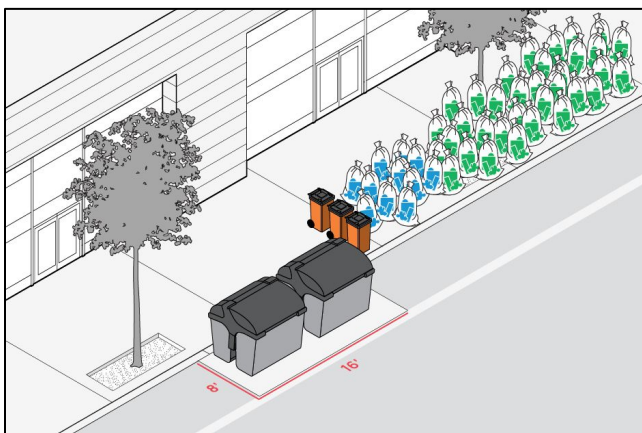
Recommendations to Improve Waste Containerization in NYC

We recommend the following adjustments to NYC's plans to containerize waste for large buildings with chutes, to incorporate best practices seen in London, Paris, Copenhagen and Dubai.

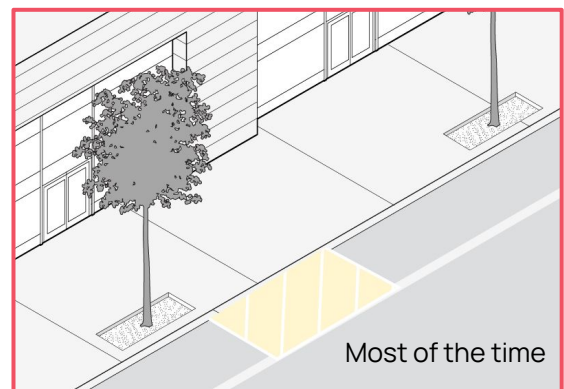
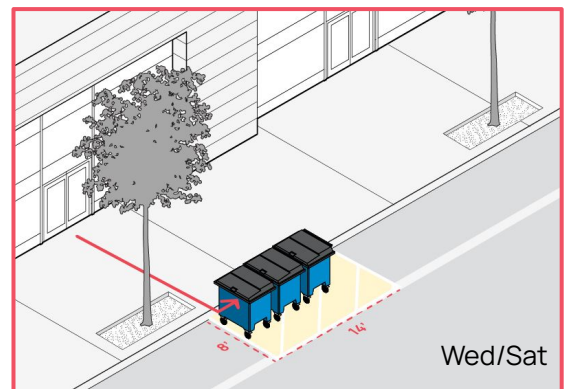
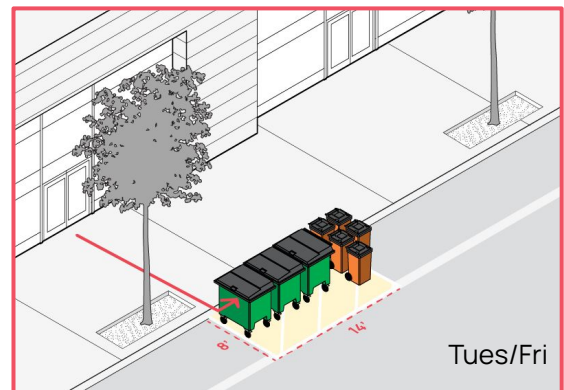
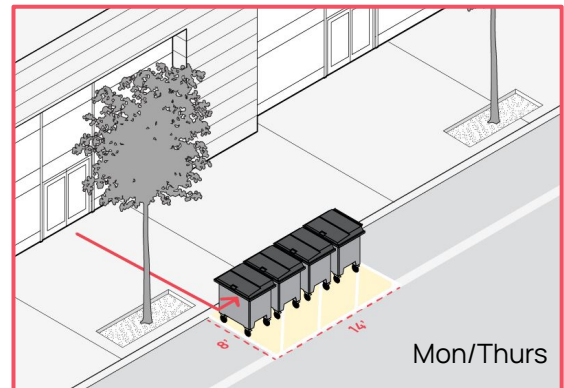
Large buildings : Use temporary bins at the curb instead of permanent containers

DSNY plans to containerize trash for large buildings using permanent 4 cubic yard containers in the street, for trash only.

CfZWD's suggests that it would be better for large buildings with chutes to use wheeled bins (1100 liter / 1.4 cubic yard) and stage them temporarily in the curb lane. DSNY would need to adjust collection frequency slightly so that different waste types would be collected on different days. These 4-wheeled bins could be collected by their current rear-load trucks with the installation of a [lifting mechanism](#), which would also be able to lift two 2-wheeled bins.



DSNY's proposal for a building with 100 dwelling units would permanently block 16 feet of curb access and set out recycling and organics temporarily on the sidewalk



CfZWD's proposal for a 100 unit building stages 4-wheeled bins temporarily, within 14 feet, allowing for deliveries, passenger pick-up and other curbside uses at other times.



Chute compactors in NYC feed into a long plastic tube, and building staff need to cut and tie them into “sausage bags”.



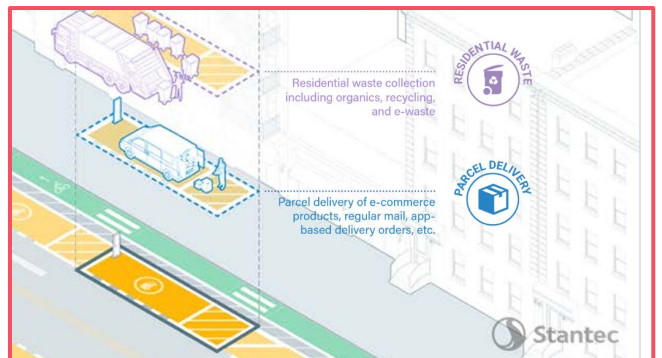
Chute compactors in London and elsewhere feed directly into wheeled bins. System shown above in London, by Hardall, see [case study](#). NYC’s existing chute compactors can be retrofitted to feed into the same type of bins.



DSNY’s solution will require porters from a 100 unit building bring 15 bags up to street every day, and lift bags, weighing up to 40 lbs each, 4’ high into permanent containers on the street, like these pictured below in Barcelona.



CfZWD’s solution will require porters from a 100 unit building to roll 4 wheeled bins (1100 liter = 1.4 cubic yard) to the street twice a week. This is much easier and more ergonomic for building staff.



The reserved on-street spot could be used for parcel delivery and passenger pick-up at other times of day, see [AIA report](#).

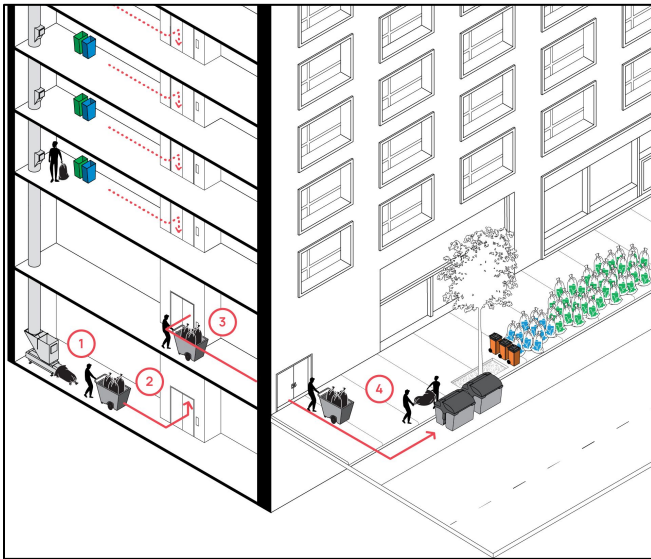
Large buildings : 4-wheeled bins improve efficiency, safety and labor

Chute compactors that currently feed into bags can be easily modified to feed into galvanized steel 4-wheeled bins. These are lightweight, easy to move and fit within elevators.

Advantages:

- Better labor conditions
- No handling of bags
- Streetscape aesthetic improvement
- Reduced cleaning and maintenance requirements
- Higher compaction rate (more than double)

Building Waste Movement:



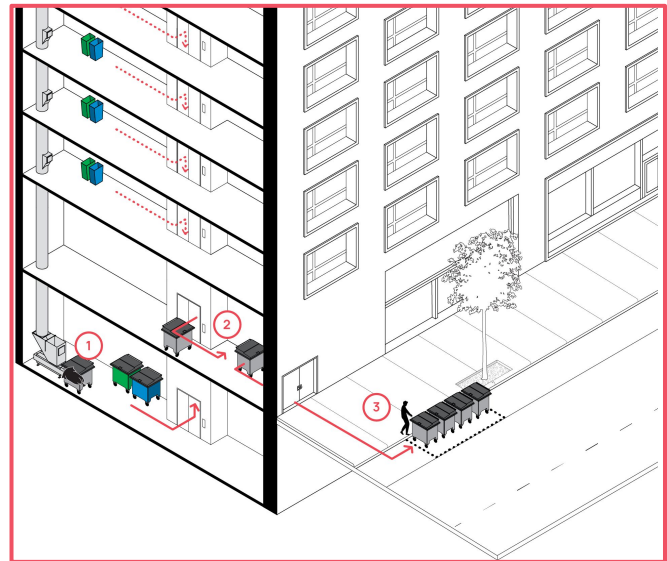
DSNY proposal: Staff move garbage bags from compactor to containers in the street

1. Garbage from chute is compacted into bags, 1.6:1 compaction rate
2. Bags are cut to length, tied and transferred from compactor to hamper
3. Hamper wheeled up in elevator to street
4. Bags lifted 48" high into permanent curbside container for collection

With the increased compaction and slight changes to DSNY collection frequency, space requirements for waste storage within buildings will be similar, especially for those that recycle well.

In Brooklyn, [Avalon Fort Greene](#) uses chute compactors with 2 cubic yard dumpsters which are wheeled out for collection. They consider the additional costs for private carter collection worth it, because of the improvements to operations and reduced labor costs. Our suggested wheeled bins are much easier to move within buildings.

Since any waste collection in public space encourages misuse and illegal dumping, and street sweepers will be unable to access the curb at container locations, DSNY's solution will also require substantial cleaning and maintenance.



CfZWD proposal: Staff push wheeled bins from compactor to street, improving ergonomics and safety:

1. Garbage compacted directly into containers, 4:1 compaction rate.
2. Containers wheeled to trash room for staging
3. Containers wheeled to sidewalk for collection