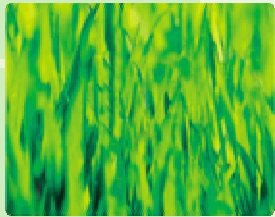




Buenos Aires “Best Cases from the view of Private Operating Companies”



The Case of the Company Cliba in
Buenos Aires City, Argentina

Citizens participation and a Taylor-Made
System of Collection

Atilio Savino
ISWA President

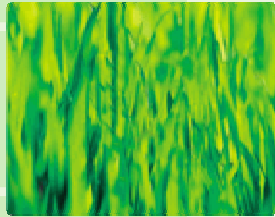


International Consultative Meeting on Expanding Waste
Management Services in Developing Countries

18-19 March 2010, Tokyo, Japan

CARTONEROS (cardboard workers)

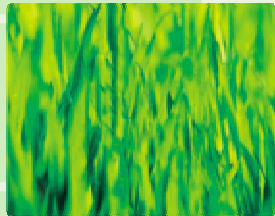
Consequence of the 2001 Economic and Political Crisis.



GRUPO
CLIBA

Cartonero's effects:

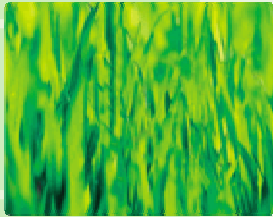
The Congress passed new laws to protect and regulate their activity.



GRUPO
CLIBA

Cartonero's effects:

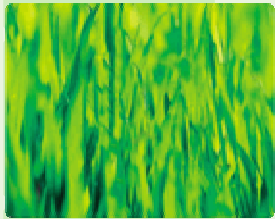
More than 10.000



GRUPO
CLIBA



Buenos Aires City Waste collection system was no longer effective.



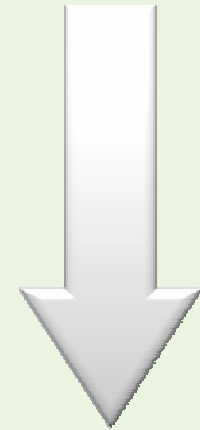
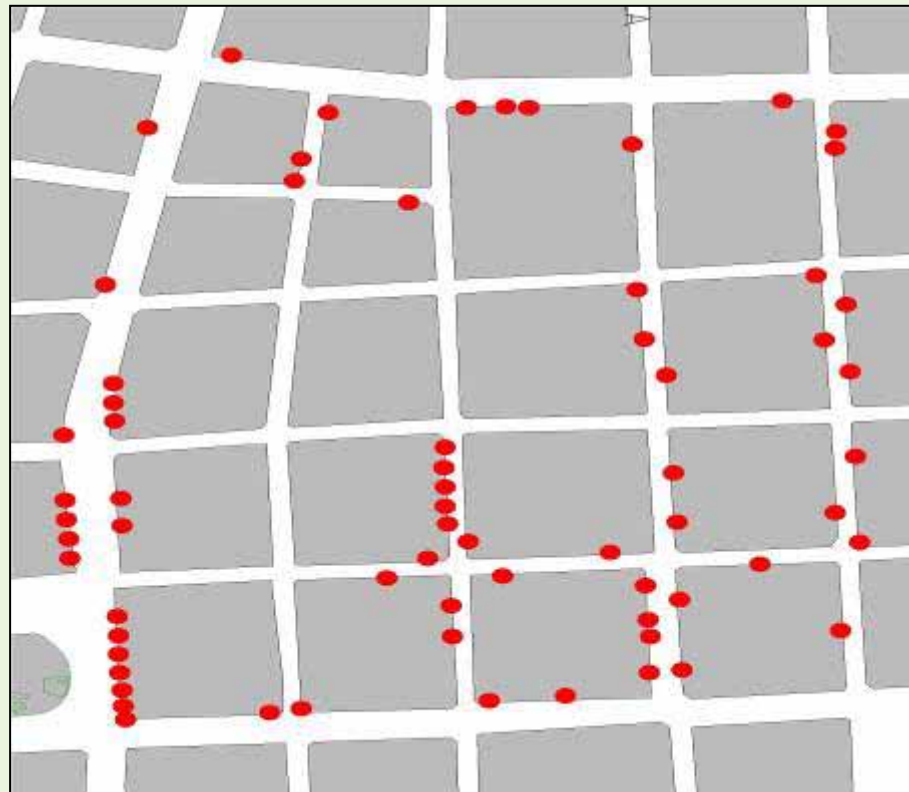
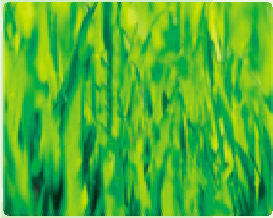
In order to find a solution and adjust the collection service,

a special research was made to study the citizenship's behavior and the cartonero's activity.



Citizenship's behavior: improper waste disposal
time (20:00 PM)

Area studied: 40 blocks, Microcentro



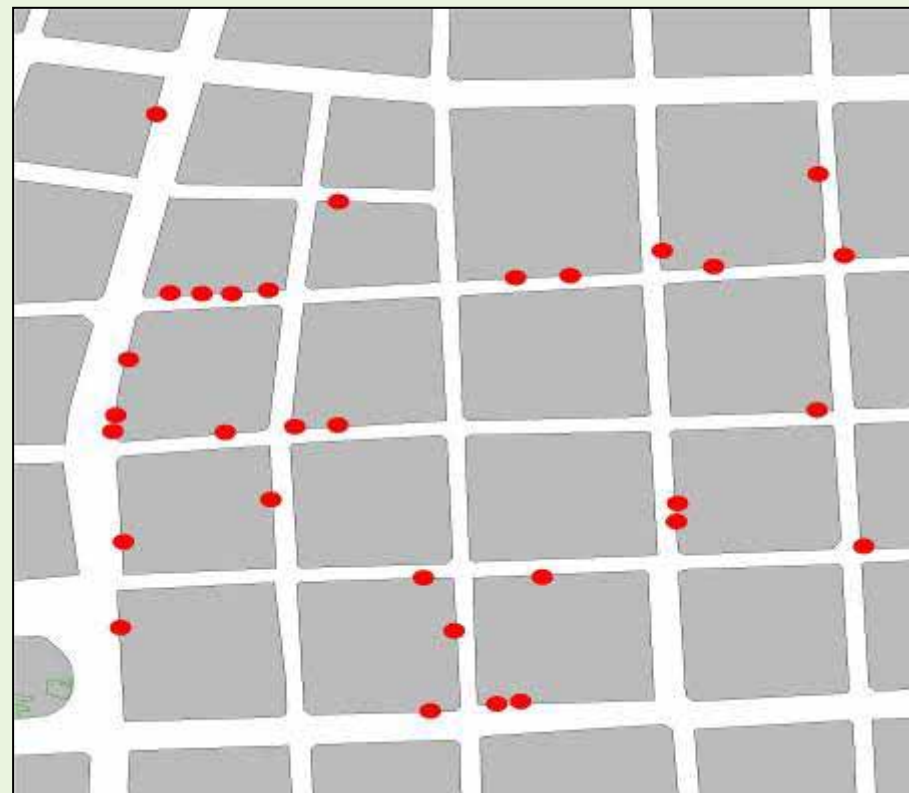
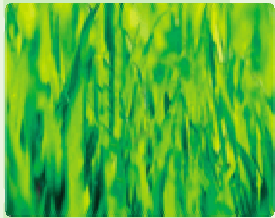
Service
intervention

22/06/06 Time: 6:00 am

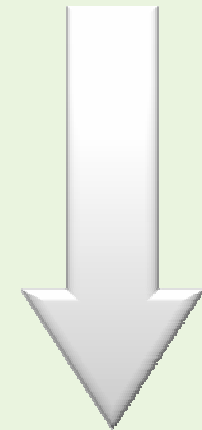
Time: 7:00 am

Citizenship's behavior: improper waste disposal
time (20:00 PM)

Area studied: 40 blocks, Microcentro



Time: 10:00 am

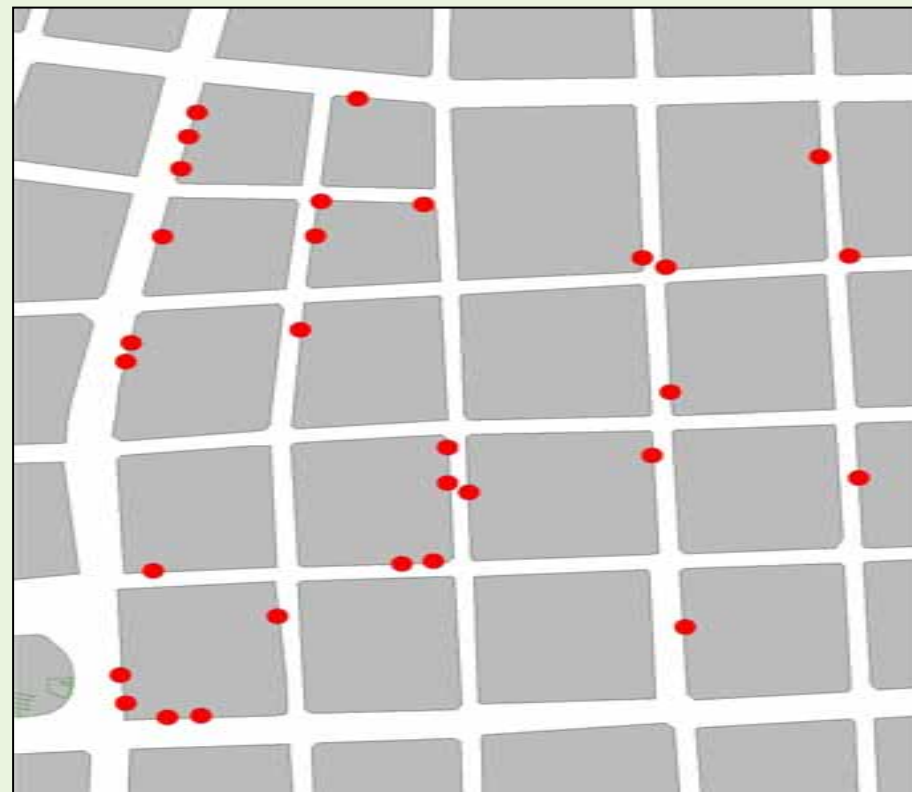
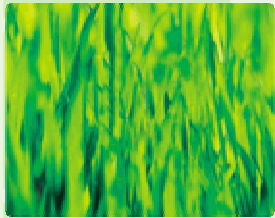


Service
intervention

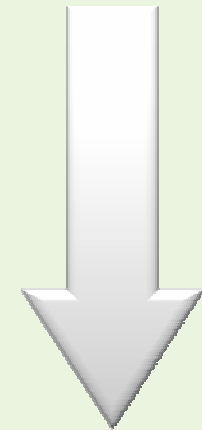
Time: 12:00 pm

Citizenship's behavior: improper waste disposal
time (20:00 PM)

Area studied: 40 blocks, Microcentro



Time: 14:00 pm

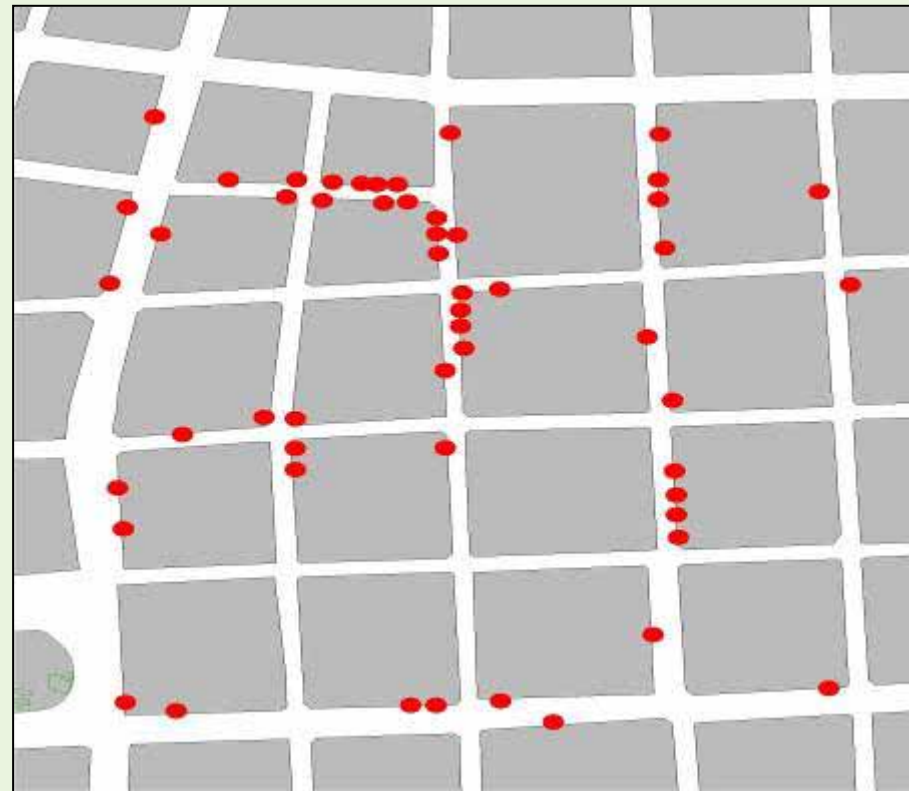
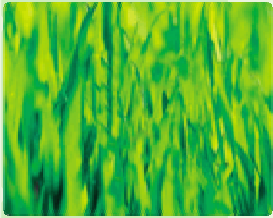


Service
intervention

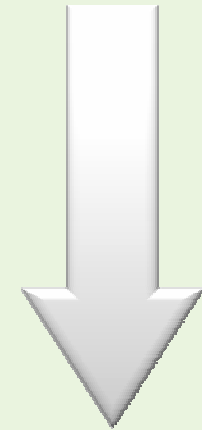
Time: 14:30 pm

Citizenship's behavior: improper waste disposal
time (20:00 PM)

Area studied: 40 blocks, Microcentro



Time: 16:00 pm



Service
intervention

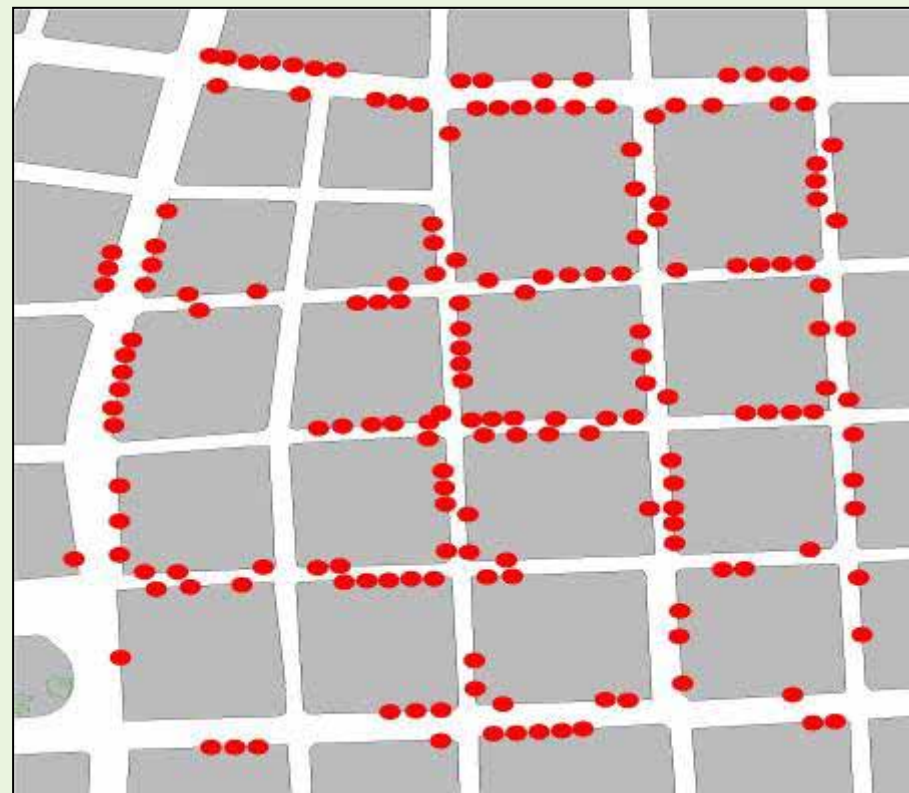
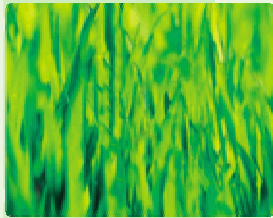
Time: 17:00 pm



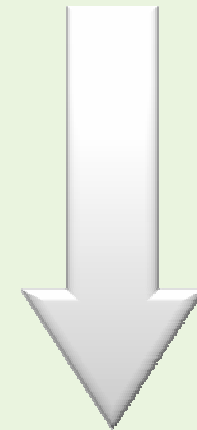
GRUPO
CLIBA

Citizenship's behavior: improper waste disposal time (20:00 PM)

Area studied: 40 blocks, Microcentro



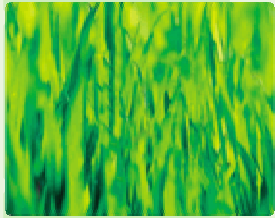
Time: 19:00 pm



Service
intervention

Time: 21:00 pm

Citizenship's behavior: improper waste disposal time



Conclusion:

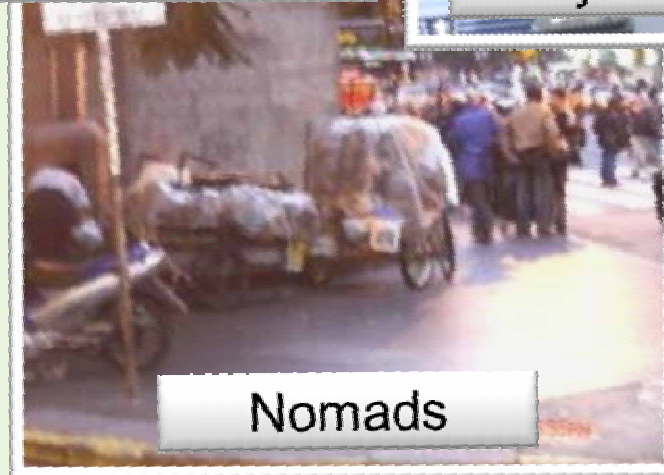
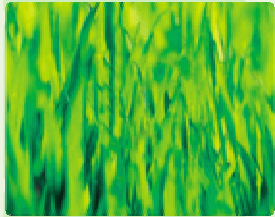
There is a strong correlation between improper waste disposal and the cartonero's activity.

The research explained why the cartoneros start working heavily at 19:00 pm.



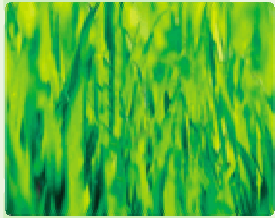
Cartonero's activity

Different types of cartoneros:



Development of the taylor made solution

Selected critical area: 746 blocks, Micro and Macro Centro of Buenos Aires City.



Target: Cartonero's families and recycler's employees

Instalation of 1000 liter containers to discard non recyclable waste



GRUPO
CLIBA

Development of the taylor made solution

Main questions to be answered:

- Would the free willing “cartoneros” accept to use 1000 liter containers to discard non recyclable waste in them?
- How could it be possible to place containers on the narrow and crowded streets of the Microcentro?

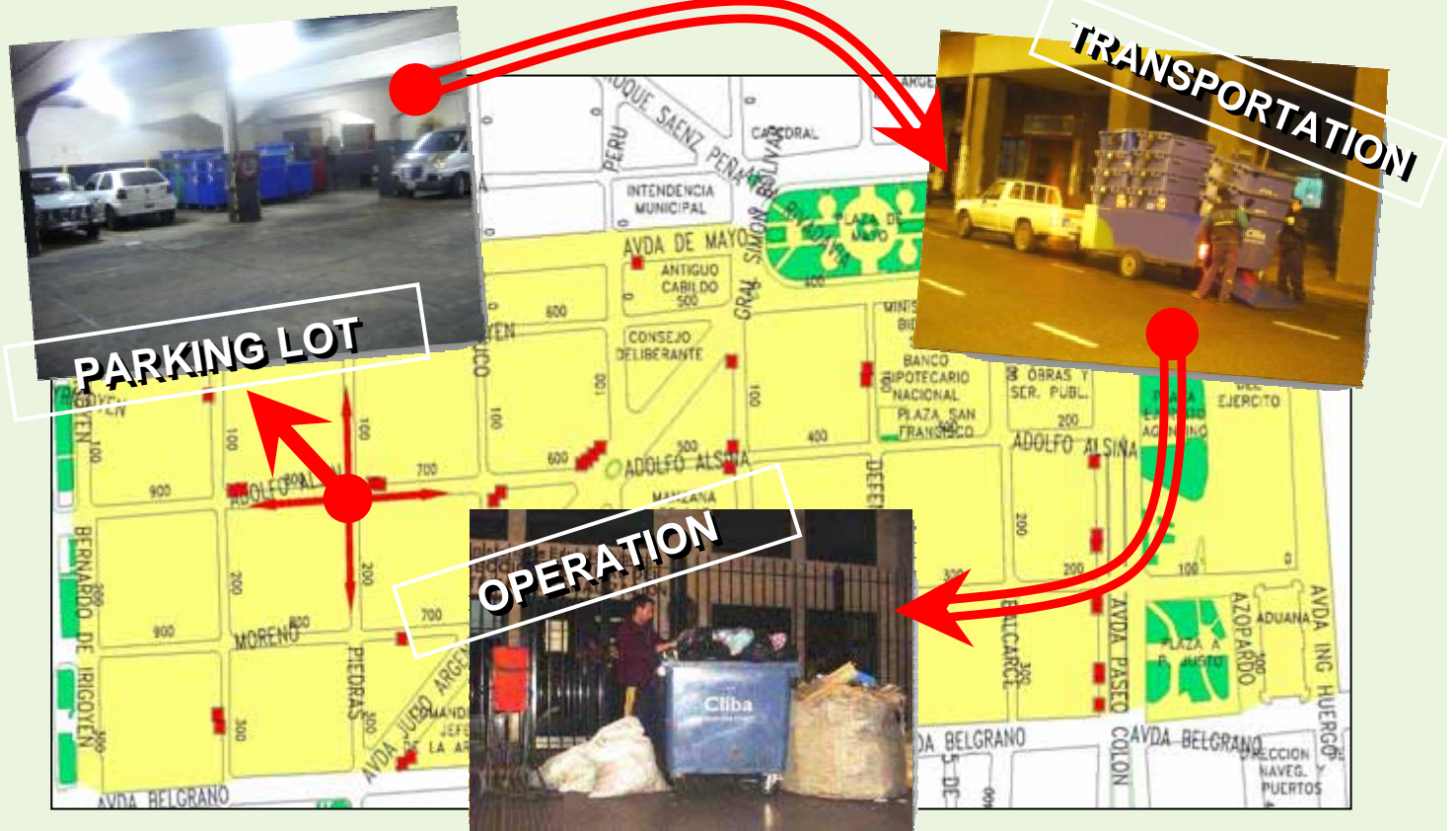


Development of the taylor made solution

- The selected area was divided in 6 sectors, bearing in mind the amount of cartoneros.
- In each sector containers are placed and stored in at least two parking lots.
- From 19:00 pm to 01:00 am containers are placed on the fixed working spots of the cartoneros.



Development of the taylor made solution

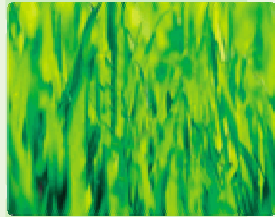


At 19:00 pm. containers are transported to the “cartoneros” fixed working spots by street cleaners.

Development of the taylor made solution

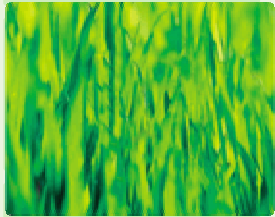
Needed resources in each sector:

- Two Collection trucks
- Four Street cleaners
- One Supervisor



GRUPO
CLIBA

Development of the taylor made solution

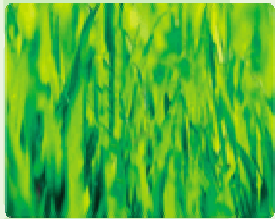


At 1:00 am. containers are taken back to the parking lots by the street sweepers.



GRUPO
CLIBA

Results of the taylor made solution

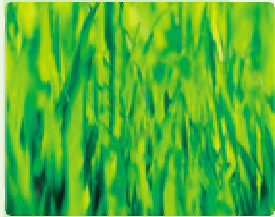


The joint work of the twelve trucks used in the “Pre-Recolección” system allows more than 60 tons of waste which was previously loose on streets to be now efficiently collected in containers, thus improving Buenos Aires City’s hygiene.



GRUPO
CLIBA

Results of the taylor made solution



Results of the taylor made solution

Pre Recolección's achievements allowed Buenos Aires City to:

- Diminish the cardboard worker's negative impact on streets, making non recyclable waste to be directly disposed in containers.
- Reduce the effects of having containers in narrow streets by placing them only when they are used.
- Make cardboard worker's activity a cleaner one.



Questions?

Shortcut to: Improper Waste Disposal time

Shortcut to: Different Types of Cartoneros

Shortcut to: Development of the TMS

Shortcut to: Conclusions

Thank you.



GRUPO
CLIBA