CTA and TCR: A Carbon Accounting Strategy for Transit

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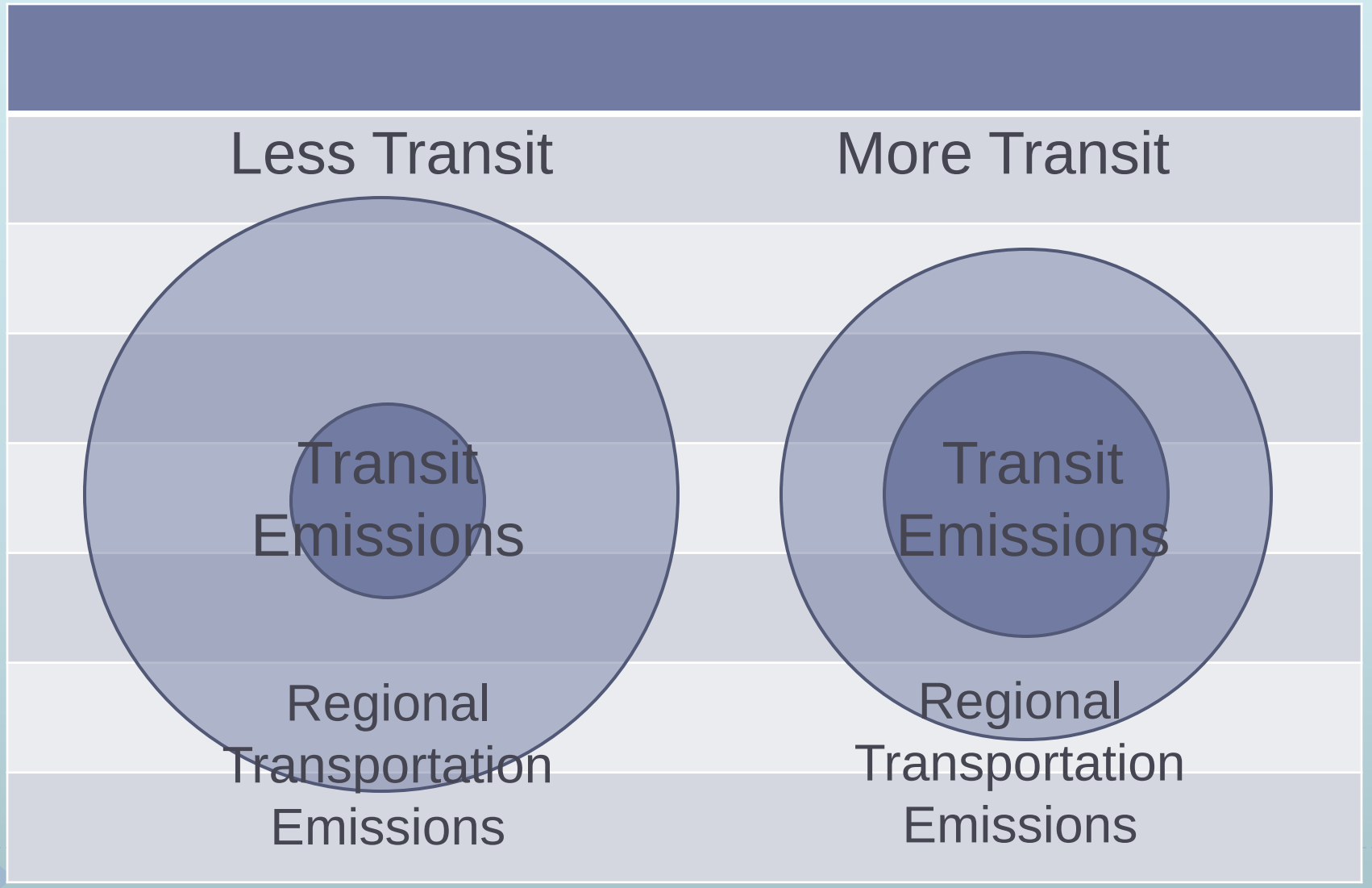
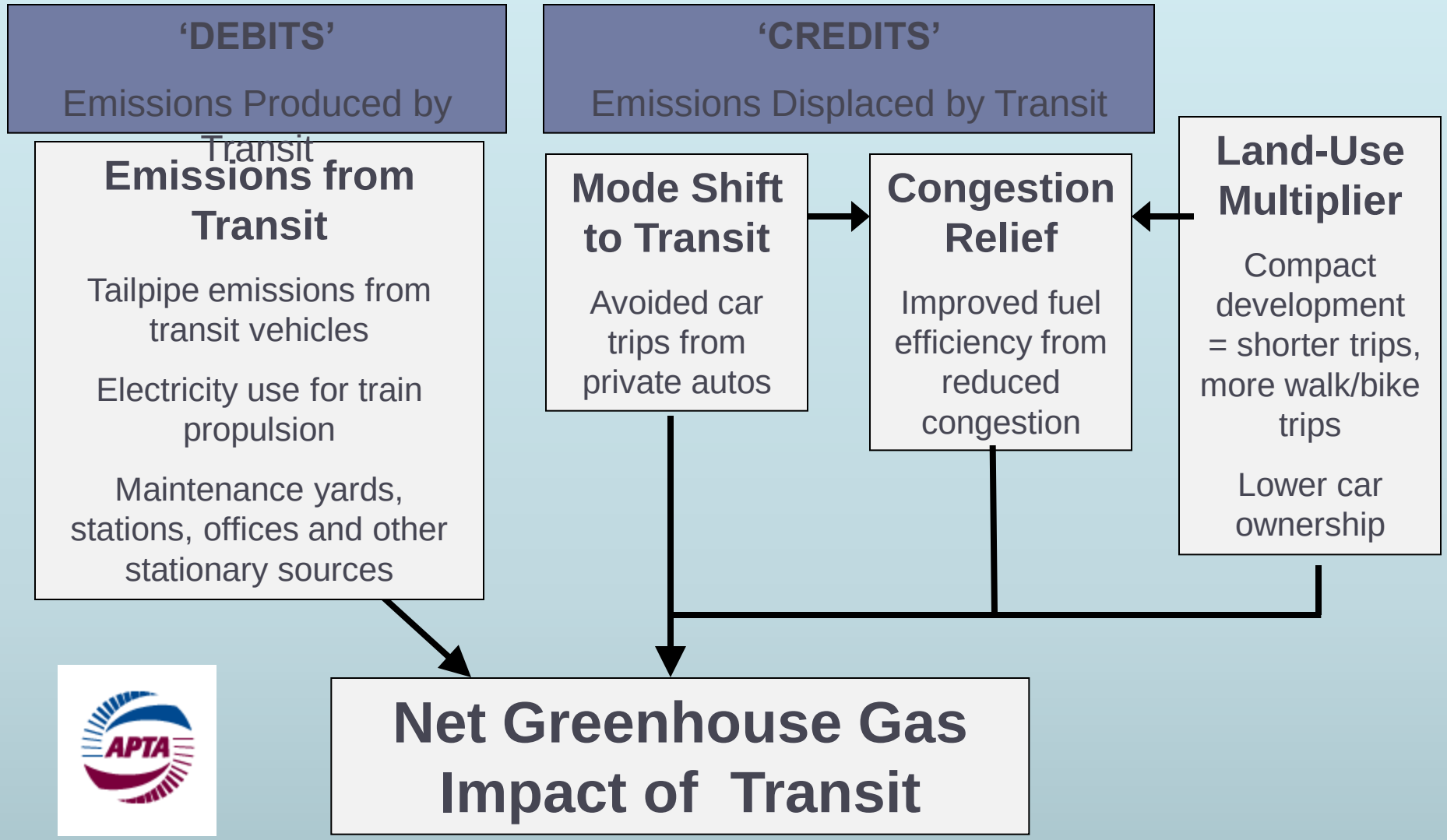
Why Measure Emissions from Public Transportation?

- Communicating the potential of transit to create a net negative regional carbon footprint
- Supporting internal agency efforts to reduce emissions
- Setting emissions targets in local/regional climate action plans
- Ensuring eligibility for new funding sources
- Reporting to carbon accounting and trading organizations

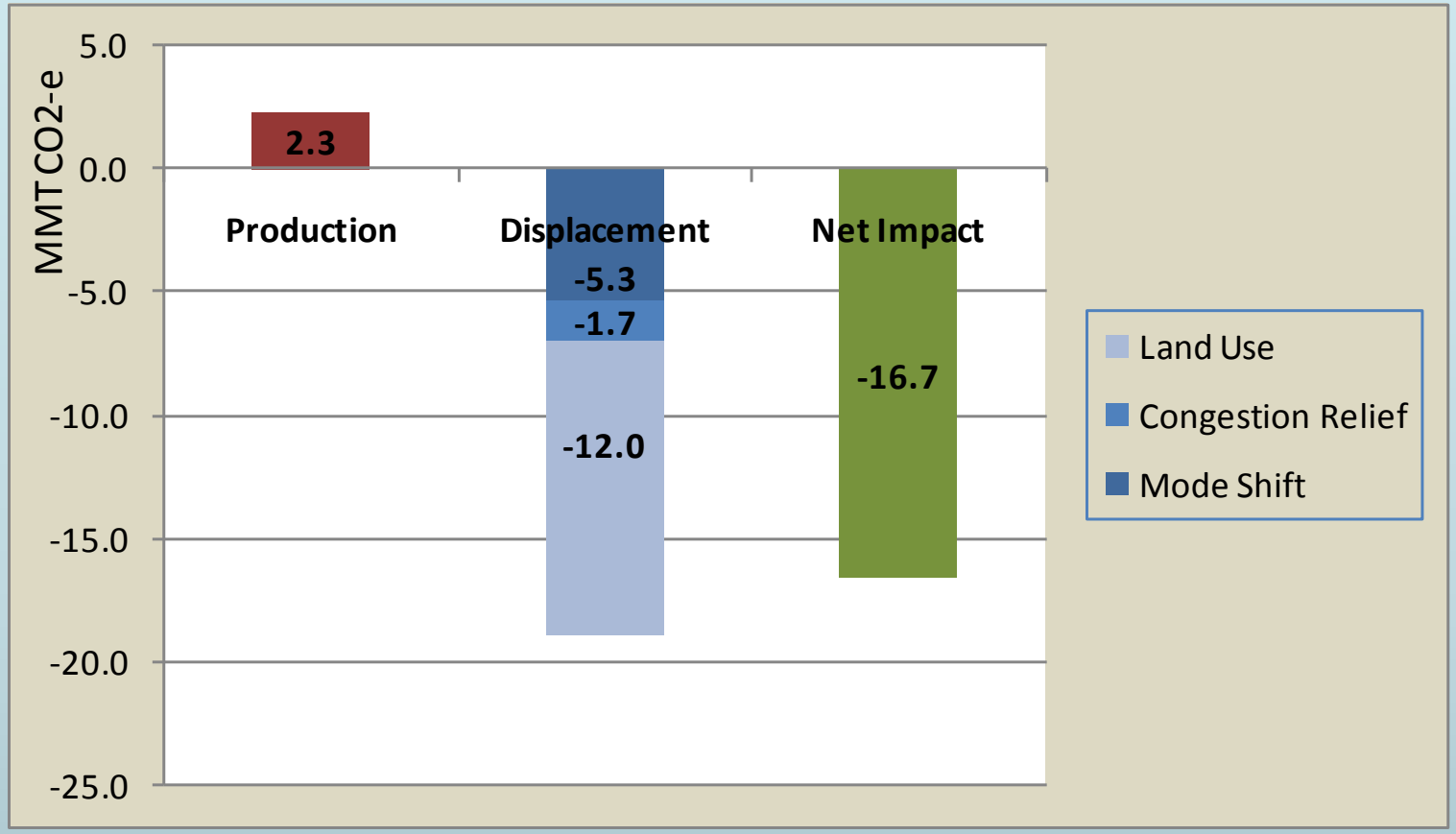
Public Transit and the Regional Transportation Carbon Footprint



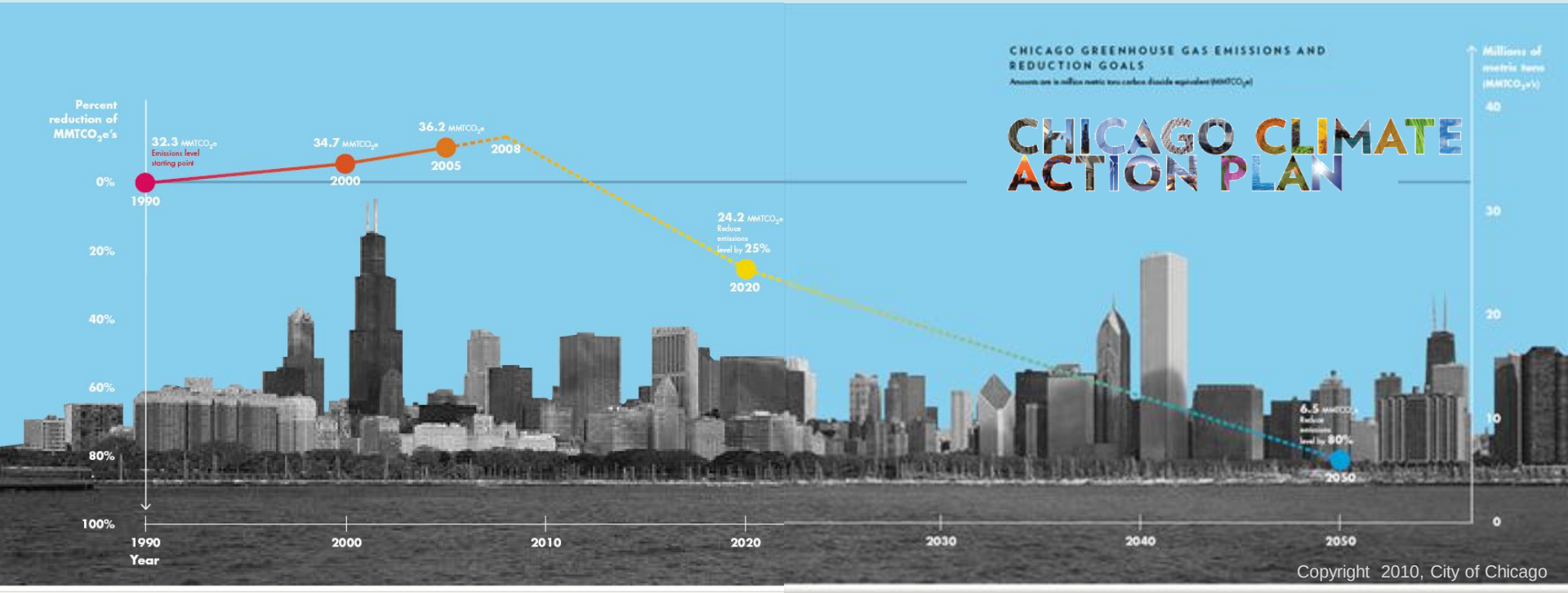
APTA Climate Change Working Group Transit GHG Emissions Protocol



New York MTA Net Carbon Impact



Chicago Climate Action Plan: GHG Reduction Targets



- 25% reduction from 1990 levels by 2020
- 80% reduction from 1990 levels by 2050

CCAP Transportation Sector GHG Reduction Targets

Recommended Actions

1. Invest More in Transit
2. Expand Transit Incentives
3. Promote Transit-Oriented Development
4. Make Walking and Bicycling Easier
5. Car Share and Carpool
6. Improve Fleet Efficiency
7. Achieve Higher Fuel Efficiency Standards
8. Switch to Cleaner Fuels
9. Support Intercity Rail
10. Improve Freight Movement

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CTA Sustainability Initiatives

- Sustainable transport
- Clean vehicles
- Multimodal connections
- Efficient facilities
- Resource recycling

www.transitchicago.com/goinggreen

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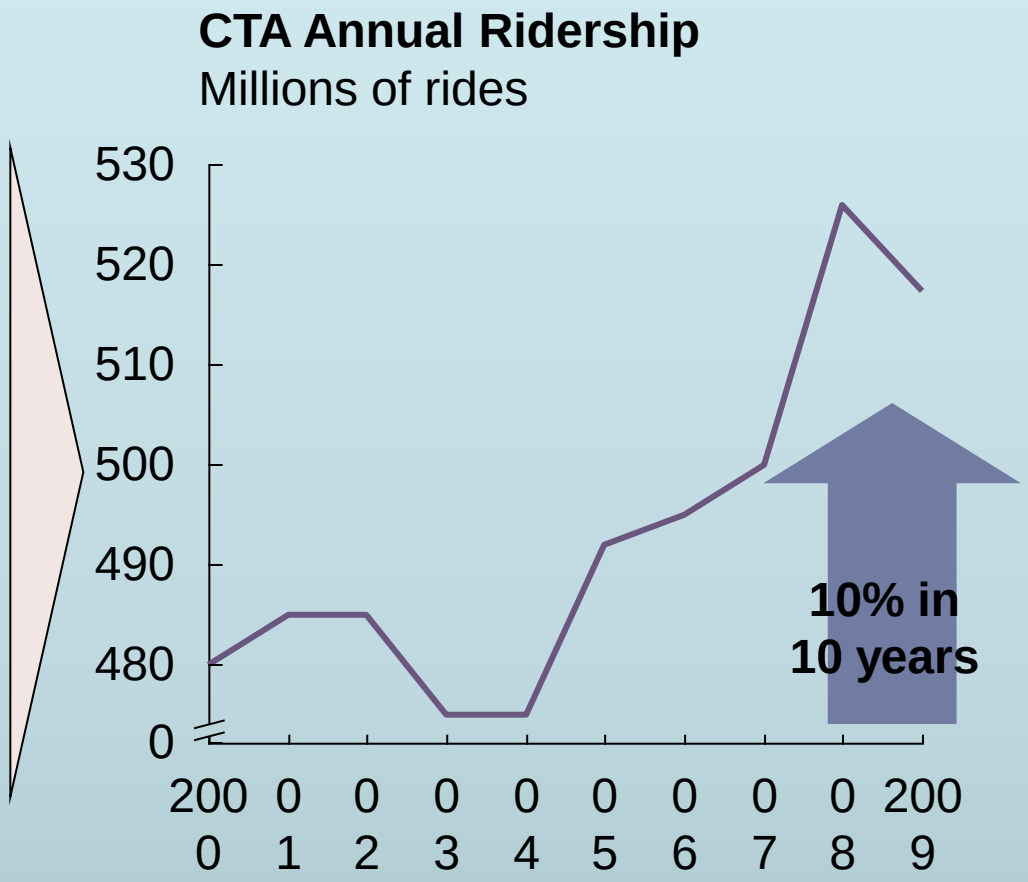
CTA Ridership Growth

Public transportation is vital to having an alternative to driving, thus reducing emissions

In the past ten years, the CTA has increased ridership by more than 10%

This growth is currently in danger though as budget cuts have forced service reductions:

- 18% of bus service
- 9% of rail service

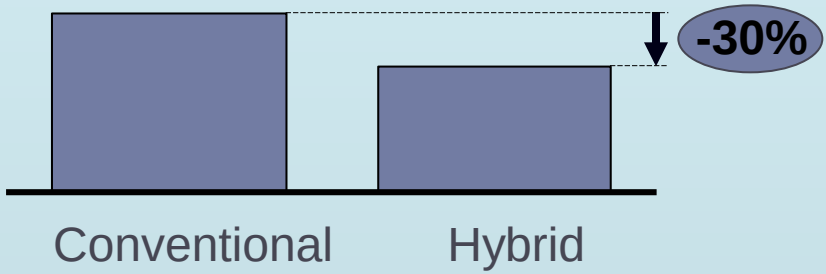


CTA Hybrid Bus Fleet

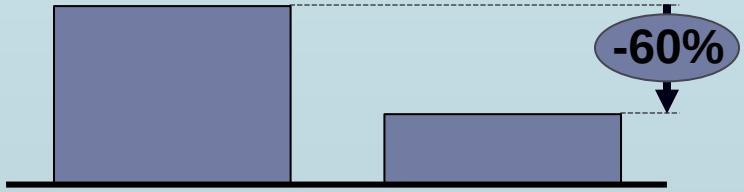
Since 2006, the CTA has introduced 228 hybrid buses comprising nearly 13% of fleet:

- 20 40-foot standard buses
- 208 60-foot articulated buses

Fuel consumption
In regular use



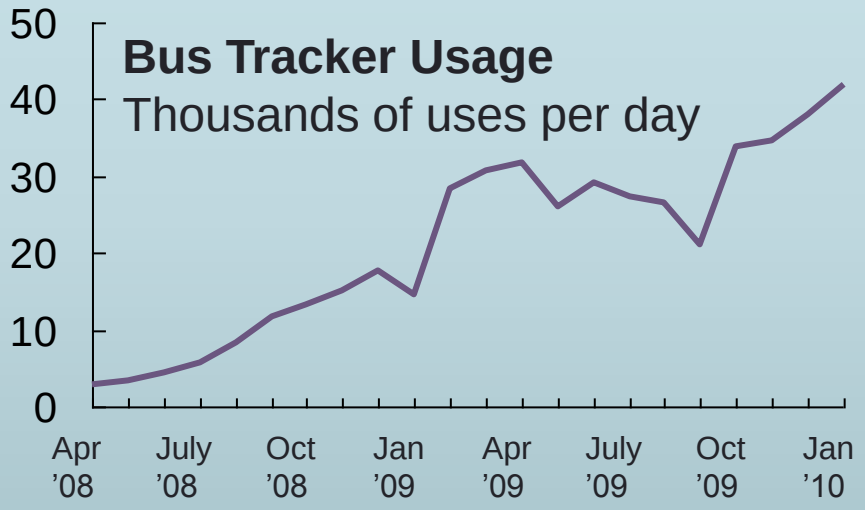
Emissions
In regular use



Saves CTA more than $7 million annually

CTA Bus Tracker Technology

- Bus Tracker provides real-time bus arrival information through GPS technology
- Arrival predictions can be accessed from both web-enabled and text-based mobile devices
- Bus Tracker use has grown rapidly since systemwide rollout



Quantifying CTA's GHG Offset Potential

- CTA provides more than 500 million rides per year
- CTA services replace about 400,000 cars on regional roadways each day
- Chicago region congestion yields nearly 130 million gallons of excess fuel consumption annually

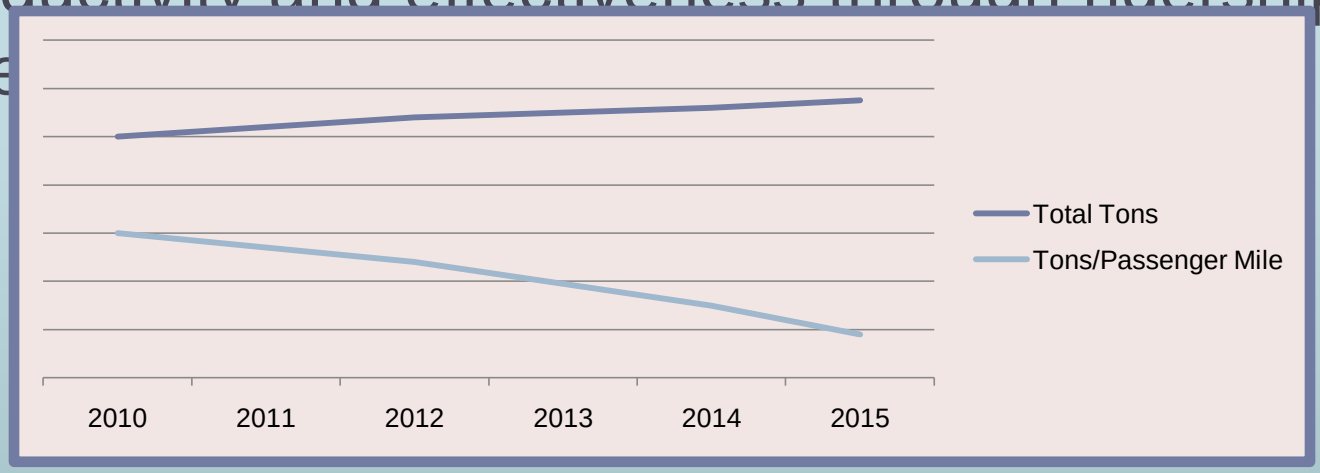
TCR Benefits to the Transit Industry

- Improve climate action planning for transit agencies
- Benchmark agencies of different sizes/service areas
- Improve climate action planning for Climate Registry member regions
- Compare carbon efficiency of transit to other modes (e.g. single occupancy vehicles, car pools)

The Climate Registry

TCR Proposed Metrics for Transit

- **Emissions per vehicle mile:** Captures switches to higher energy efficiency facilities and lower carbon fuels
- **Emissions per revenue vehicle hour:** Captures reduced inefficiencies through planning changes
- **Emissions per passenger mile:** Captures service productivity and effectiveness through ridership leve



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