

ANNEXE B

Liste complète des indicateurs de la

“Millenium Cities Database for Sustainable Transport”

Complete list of indicators

Characteristics of the metropolitan area.

- Urban density.
- Job density.
- Proportion of jobs in CBD.
- Metropolitan gross domestic product per capita.

Supply indicators

Private Transport Infrastructure Indicators

- Length of road per 1000 people.
- Length of freeway per 1000 people.
- Length of road per urban hectare.
- Length of freeway per urban hectare.
- Parking spaces per 1000 CBD jobs.

Public Transport Infrastructure Indicators

- Total length of public transport lines per 1000 people.
- Total length of reserved public transport routes per 1000 people.
 - ° Bus reserved route length per 1000 people.
 - ° Minibus reserved route length per 1000 people.
 - ° Segregated tram network length per 1000 people.
 - ° Light rail network length per 1000 people.
 - ° Metro network length per 1000 people.
 - ° Suburban rail network length per 1000 people.
 - ° Heavy rail network length per 1000 people.
- Total length of reserved public transport routes per urban hectare.
 - ° Bus reserved route length per urban hectare.
 - ° Minibus reserved route length per urban hectare.
 - ° Segregated tram network length per urban hectare.
 - ° Light rail network length per urban hectare.
 - ° Metro network length per urban hectare.
 - ° Suburban rail network length per urban hectare.
 - ° Heavy rail network length per urban hectare.

Intermodal Transport Infrastructure Indicators.

- Number of park and ride facilities per kilometre of reserved public transport route.
- Number of park and ride spaces per kilometre of reserved public transport route.
- Number of park and ride facilities per 10,000 urban hectare.
- Car equivalents per number of park and ride spaces.

Private transport supply cars and motorcycles

- Passenger cars per 1000 people.
- Motor cycles per 1000 people.
- Total private passenger vehicles per 1000 people.
- Passenger car kilometres per car.
- Motor cycle kilometres per motor cycle.

Private collective transport supply taxis and shared taxis

- Taxis per million people.
- Shared taxis per million people.
- Taxi vehicle kilometres per capita.
- Shared taxi vehicle kilometres per capita.

Traffic Intensity Indicators

- Passenger cars per kilometre of road.
- Motor cycles per kilometre of road.
- Total private passenger vehicles per kilometre of road.
- Total single and collective private passenger vehicles per kilometre of road.
- Passenger car kilometres per kilometre of road.
- Motor cycle kilometres per kilometre of road.
- Total private passenger vehicle kilometres per kilometre of road.
- Total private and collective passenger vehicle kilometres per kilometre of road.
- Passenger car kilometres per urban hectare.
- Total private passenger vehicle kilometres per urban hectare.
- Total private and collective passenger vehicle kilometres per urban hectare.

Public Transport Supply and Service

- Total public transport vehicles per million people.
 - ° Buses per million people.
 - ° Minibuses per million people.
 - ° Tram units per million people.
 - ° Light rail units per million people.
 - ° Metro units per million people.
 - ° Heavy rail units per million people.
- Total public transport vehicle kilometres of service per capita.
 - ° Bus vehicle kilometres per capita.
 - ° Minibus vehicle kilometres per capita.
 - ° Tram wagon kilometres per capita.
 - ° Light rail wagon kilometres per capita.
 - ° Metro wagon kilometres per capita.
 - ° Suburban rail wagon kilometres per capita.
 - ° Heavy rail wagon kilometres per capita.
- Total public transport vehicle kilometres of service per urban hectare.
 - ° Bus vehicle kilometres per urban hectare.
 - ° Minibus vehicle kilometres per urban hectare.
 - ° Tram wagon kilometres per urban hectare.
 - ° Light rail wagon kilometres per urban hectare.
 - ° Metro wagon kilometres per urban hectare.
 - ° Suburban rail wagon kilometres per urban hectare.
 - ° Heavy rail wagon kilometres per urban hectare.
- Total public transport seat kilometres of service per capita.
 - ° Bus seat kilometres per capita.
 - ° Minibus seat kilometres per capita.
 - ° Tram seat kilometres per capita.
 - ° Light rail seat kilometres per capita.
 - ° Metro seat kilometres per capita.

- Suburban rail seat kilometres per capita.
 - Heavy rail seat kilometres per capita.
- Overall average speed of public transport.
 - Average speed of buses.
 - Average speed of minibuses.
 - Average speed of trams.
 - Average speed of light rail.
 - Average speed of metro.
 - Average speed of suburban rail.
 - Average speed of heavy rail.

Mobility Indicators

- Overall mobility
- Daily trips by foot per capita.
- Daily trips by mechanized, non motorised modes per capita.
- Daily public transport trips per capita.
- Daily private transport trips per capita.
- Total daily trips per capita.
 - Percentage of non motorised modes over all trips.
 - Percentage of motorised public modes over all trips.
 - Percentage of motorised private modes over all trips.
 - Percentage of mechanised, non motorised modes over mechanised trips.
 - Percentage of motorised public modes over mechanised trips.
 - motorised private modes.
- Overall average trip distance.
- Overall average trip distance by car.
- Overall average trip distance by public transport.
- Average distance of mechanised trips.
- Overall average distance of the journey-to-work.
- Average distance of the journey-to-work by mechanised modes.
- Average time of a car trip.
- Average time of a public transport trip.

Private Mobility Indicators cars and motorcycles

- Passenger car kilometres per capita.
- Motor cycle kilometres per capita.
- Total private passenger vehicle kilometres per capita.
- Passenger car passenger kilometres per capita.
- Motor cycle passenger kilometres per capita.
- Total private passenger kilometres per capita.

Private Mobility Indicators taxis and shared taxis

- Taxi passenger kilometres per capita.
- Shared taxi passenger kilometres per capita.
- Taxi trips per capita.
- Shared taxi trips per capita.

Public Transport Mobility Indicators

- Total public transport boardings per capita.
 - Bus boardings per capita.

- Tram boardings per capita.
- Light rail boardings per capita.
- Metro boardings per capita.
- Suburban rail boardings per capita.
- Heavy rail boardings per capita.
- Total public transport passenger kilometres per capita.
 - Bus passenger kilometres per capita.
 - Minibus passenger kilometres per capita.
 - Tram passenger kilometres per capita.
 - Light rail passenger kilometres per capita.
 - Metro passenger kilometres per capita.
 - Heavy rail passenger kilometres per capita.

User cost of transport

- Average user cost of a car trip.
- Average user cost of a public transport trip.
- Price of fuel per km.
- User cost of private transport per passenger kilometre.
- User cost of public transport per passenger kilometre.
- Maximum charge for on-street parking in the CBD.
- Maximum charge for off-street parking in the CBD.
- Average of the maximum parking charges in the CBD.
- Fine for parking in no parking zone.
- Fine for obstructing public transport.
- Fine for exceeding parking time in a paying parking place.

Public transport productivity.

- Overall public transport vehicle occupancy.
 - Bus vehicle occupancy.
 - Minibus vehicle occupancy.
 - Tram wagon occupancy.
 - Light rail wagon occupancy.
 - Metro wagon occupancy.
 - Suburban rail wagon occupancy.
 - Heavy rail wagon occupancy.
- Overall public transport seat occupancy.
 - Bus seat occupancy.
 - Minibus seat occupancy.
 - Tram seat occupancy.
 - Light rail seat occupancy.
 - Metro seat occupancy.
 - Suburban rail seat occupancy.
 - Heavy rail seat occupancy.
- Public transport operating cost recovery.
- Average public transport farebox revenue per boarding.
- Average public transport farebox revenue per passenger kilometre.
- Average public transport farebox revenue per vehicle kilometre.

Transport Financial Cost

Public Transport Cost

- Percentage of metropolitan GDP spent on public transport investment.
- Public transport investment per capita.
- Public transport operating cost per vehicle kilometre.
- Public transport operating cost per passenger kilometre.
- Public transport operating cost per capita.
- Percentage of metropolitan GDP spent on public transport operating costs.

Private Transport Cost

- Percentage of metropolitan GDP spent on road investment.
- Road investment per capita.
- Annual road investment per kilometre of road.
- Private transport operating cost per vehicle kilometre.
- Private transport operating cost per passenger kilometre.
- Private transport operating cost per capita.
- Percentage of metropolitan GDP spent on private transport operating costs.

Overall Transport Cost

- Overall transport cost per passenger kilometre.
- Overall private transport cost per passenger kilometre.
- Overall public transport cost per passenger kilometre.
- Total passenger transport cost per capita.
- Total private passenger transport cost per capita.
- Total public passenger transport cost per capita.
- Total passenger transport cost as percentage of metropolitan GDP.
- Total private passenger transport cost as percentage of metropolitan GDP.
- Total public passenger transport cost as percentage of metropolitan GDP.
- Private passenger transport energy use per capita.

Transport Externalities Indicators

Transport Energy Indicators

- Public transport energy use per capita.
- Total transport energy use per capita.
- Energy use per private passenger vehicle kilometre.
- Energy use per public transport vehicle kilometre.
 - Energy use per bus vehicle kilometre.
 - Energy use per minibus vehicle kilometre.
 - Energy use per tram wagon kilometre.
 - Energy use per light rail wagon kilometre.
 - Energy use per metro wagon kilometre.
 - Energy use per suburban rail wagon kilometre.
 - Energy use per heavy rail wagon kilometre.
- Energy use per private passenger kilometre.
- Energy use per public transport passenger kilometre.
 - Energy use per bus passenger kilometre.
 - Energy use per minibus passenger kilometre.
 - Energy use per tram passenger kilometre.
 - Energy use per light rail passenger kilometre.
 - Energy use per metro passenger kilometre.

- Energy use per suburban rail passenger kilometre.
- Energy use per heavy rail passenger kilometre.
- Overall energy use per passenger kilometre.

Transport Externalities Indicators

Air Pollution Indicators

- Total emissions per capita
 - Emissions of CO per capita.
 - Emissions of SO₂ per capita.
 - Emissions of VHC per capita.
 - Emissions of NO_x per capita.
- Total emissions per urban hectare.
- Total emissions per total hectare.

Transport Externalities Indicators

Transport Fatalities Indicators

- Total transport deaths per million people.
- Total transport deaths per billion vehicle kilometres.
- Total transport deaths per billion passenger kilometres.

Public/Private Transport Balance Indicators

- Proportion of total motorised passenger kilometres on public transport.
- Ratio of annual investment in public transport versus private transport infrastructure.
- Ratio of segregated public transport infrastructure versus expressways.
- Ratio of public versus private transport energy use per passenger kilometre.
- Ratio of public vs private transport total cost.
- Ratio of public versus private transport user cost per passenger kilometre.