

MobiliseYourCity

Core Indicators and Monitoring Framework

INTRODUCTION TO THE
MONITORING FRAMEWORK

HOW TO USE? HOW TO
COMMUNICATE?

THE 6 CORE INDICATORS
of MobiliseYourCity

OUR AMBITION IN NUMBERS

YOUR QUESTIONS

The MobiliseYourCity Partnership contributes to develop low-carbon, inclusive, safe, resilient and sustainable cities

Core Indicators are a limited set of indicators to be used commonly by all partners preparing or supporting a SUMP

Sustainable Mobility Core Indicators allow to:

- Assess the current situation (**baseline**) and to compare business-as-usual (**BAU**) and **SUMP** scenario
- Core indicators ensure that your city is on the right track to sustainable mobility, additionally to answering to specific issues identified in the diagnosis

Why partnership level core indicators linked with global agenda?

- **Get political support** by **showcasing the positive impact** of sustainable mobility on the lives of your citizen
- **Leverage further resources** from **climate finance**, **development finance**, and other sources
- Allow your city to report and communicate better about achievement
- Allow aggregating, reporting and communicating achievement at partnership level.
Not for comparison between cities

MobiliseYourCity Core Indicators

1

Transport-related GHG emissions

Reduction of yearly GHG emissions in a SUMP scenario compared to a BAU scenario

2

Access to public transport

Proportion of the population living within 500 meters of a public transport stop with a minimum average 20-minute service

3

Road safety

Traffic fatalities by all transport accidents (road, rail, etc.), per 100.000 inhabitants, per year

4

Air quality

Mean annual urban air pollution of fine particulate matter (in $\mu\text{g PM 2.5}$) at road-based monitoring stations

5

Modal share of non-motorised transport and public transport

The proportion of trips travelled with non-motorized modes and public transport as a share of total trips travelled with all modes

6

Affordability of public transport

Percentage, of disposable household income spent on public transport for users part of the second quintile household group

SUMP diagnosis, *ex-ante* and *ex-post* impact assessment

Core Impact indicators are necessary at 3 stages

1. Diagnosis

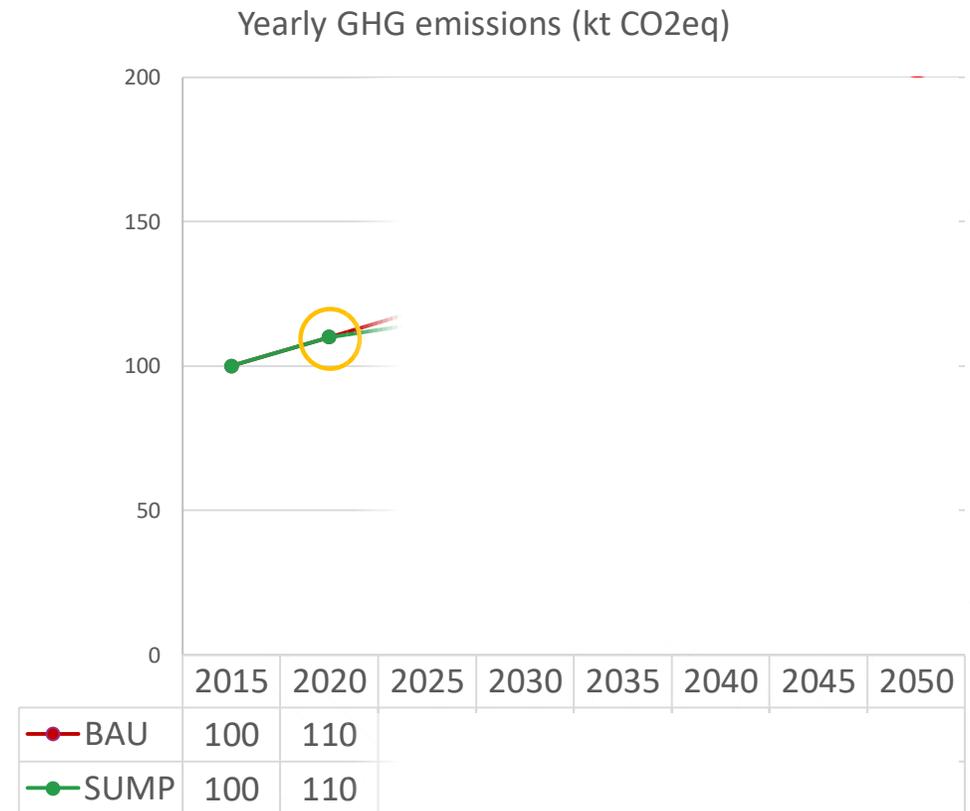
- Important to anticipate setting **BASELINE** for indicators
- Contribution to the diagnosis

2. Vision setting and action-plan

- **Ex-Ante assessment** **projection of the future impact**
- **Comparing scenarios** **BAU** business-as-usual vs **SUMP**
- **Milestones years:** 2030 and 2050

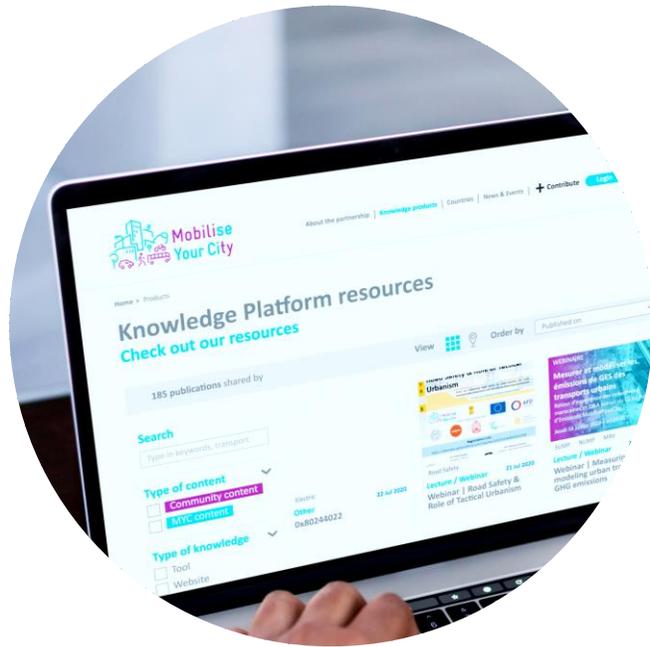
3. Monitoring implementation

- **Ex-Post assessment** monitoring the effects of the plan as they happen
- Continuous monitoring through mobility observatory



Example from a fictional city

Tools and resources at your disposal



... and more presentations, recorded webinars and examples from other cities and countries

Core Indicators and Monitoring Framework

Guidelines for Core Indicators available here:

<https://mobiliseyourcity.net/core-indicator-and-monitoring-framework>

MobiliseYourCity Emissions Calculator

Tool translating your mobility data in an estimation of transport-related GHG emissions.

Tool, guidance and tutorials available here:

<https://mobiliseyourcity.net/mobiliseyourcity-emissions-calculator>

MobiliseYourCity Monitoring and Reporting (MRV) Approach for GHG Emissions

<https://mobiliseyourcity.net/mobiliseyourcity-monitoring-and-reporting-approach-ghg-emissions>

1. GHG Emissions reduction

Justification MobiliseYourCity contributes to the mitigation of transport related emissions through planning for better and more sustainable urban mobility. Partner cities aim for ambitious GHG reductions by implementing their SUMP and are required to report on projected impact.



United Nations
Climate Change

Definition

Reduction of yearly GHG emission (in tCO₂e) in a SUMP scenario compared to a business-as-usual scenario

Measuring and reporting

- * Use available resources: MRV guidance and GHG emissions calculator
- * Report full information with unit to allow for aggregation

	Baseline 2020	BAU 2030	SUMP 2030	SUMP vs BAU
Per capita	... kg CO _{2eq}	... kg CO _{2eq}	... kg CO _{2eq}%
Total emissions Mt CO _{2eq} Mt CO _{2eq} Mt CO _{2eq}%

Aggregation at Partnership level: * **Sum** of reduction of yearly GHG emissions in 2030

2. Access to public transport

Justification Access to public transport is the backbone of sustainable mobility. The indicator allows to understand how well the transport system enables economic and social inclusion by providing access to the highest share of population possible

Definition

Proportion of the population living within 500 meters or less (birds'-eye distance) of a public transport stop with a minimum average 20-minute service in any direction during peak hours

and

Number of additional people living within 500 meters or less of a public transport stop (alternative for SUMP impact assessment)

Measuring and reporting

- * Conducting a cartographic analysis using buffers of data on population and public transport lines and stops.

Aggregation at Partnership level:

- * **Number of cities increasing proportion** of population with access by 0-3% / 3-5% / 5-10% / 10-20% / 20+%
- * **Sum of additional people** with access

Target indicator 11.2.1
Proportion of population that has convenient access to public transport, by sex, age, and persons with disabilities

11 SUSTAINABLE CITIES AND COMMUNITIES



Impact 3. Road safety

Justification Safety in transport is often mentioned as a priority issue in surveys and the indicator gives some important insights on traffic safety. Also, reliable ex-post data are usually easier to get than for other indicators

Definition

Number of traffic fatalities by all transport accidents (road, rail, etc.) **per 100.000 inhabitants**, per year disaggregated by transport mode, gender, age group and disabilities

Measuring and reporting

- * Data probably already available
- * Dividing the sum of reported traffic fatalities by the population.

Aggregation at Partnership level: by

- * **Number of cities reducing yearly fatality rate per 100 000 inhabitant**
0-5 / 5-10 / 10-15 / 15+

Target indicator 3.6.1
Death rate due to road
traffic injuries

3 GOOD HEALTH
AND WELL-BEING



4. Air pollution

Justification Air pollution affects all groups of population and is a major health issues in many partner cities. Mobility activities are responsible for a significant share of emissions of fine particulate matters, especially PM 2.5.

Target indicator 11.6.2
Annual mean levels of fine particulate matter in cities
(e.g. PM 2.5 and PM 10)

11 SUSTAINABLE CITIES AND COMMUNITIES



Definition

Mean annual urban air pollution of fine particulate matter (in $\mu\text{g PM 2.5}$) at road-based monitoring stations

Measuring and reporting

* road based monitoring stations, positioned according to specific rules

Aggregation at Partnership level:

* **Number of cities** achieving a mean urban air pollution level of PM 2.5 below $10 \mu\text{g}/\text{m}^3$ (WHO guidelines proportion)

5. Modal share of non-motorised and public transport

Justification Data on the modal split are technically important for the development of the SUMP. It is also a prerequisite for the calculation of GHG emissions using the MobiliseYourCity Emissions Calculator. The indicator refers to the 'SHIFT' strategy in the sustainable mobility Avoid-Shift-Improve paradigm.

Definition

The sum of trips travelled with non-motorized modes and public transport as a share of total trips travelled with all modes. The main mode of a trip is that used for the longest stage of the trip by distance.

Measuring and reporting

- * **Count and report** modal shares of **all modes of transport listed** in the guidance
- * Non-Motorised Transport include walking, cycling but also wheelchair, push scooters, etc... E-bikes can be included.
- * Informal public transport are included.
- * Use modal split *by trips*. Modal split also exist *by distance travelled* or *by trip stage*

Aggregation at Partnership level motorised

- * **Number of cities** achieving an increase of modal share of non-motorised and public transport of 0-5% / 5-10% / 10-15% / 15+

Target 11.2

By 2030, provide access to safe, affordable, accessible, and sustainable transport systems for all

11 SUSTAINABLE CITIES AND COMMUNITIES



6. Affordability of Public transport

Justification Monitoring and reporting on the affordability of public transport ensures the development of these services benefits to the majority of the population, and helps detecting and avoiding increasing inequalities. It is also linked to the SDG target 11.2.

Target 11.2
By 2030, provide access to safe, affordable, accessible, and sustainable transport systems for all

11 SUSTAINABLE CITIES AND COMMUNITIES



Definition

Fare affordability is the percentage of disposable household income spent on public transport for the second quintile household group.

Measuring and reporting separately

- * Assess average public transport fare and average income
- * Divide the amount for 440 time the average fare by average income

Aggregation at Partnership level affordability

- * **Number of cities** that achieve to improve their index by 0-5% / 5-10% / 10-15% / 15+%



Investment indicators

-  Km of sidewalks built or improved
-  Km of cycle lanes built or improved
-  Km of mass rapid transit built or improved
-  Number of city centre parking space subjected to new management
-  Amount of mobilised public and private funding



Our current ambition for MobiliseYourCity SUMP and NUMP projected impact at global level

1

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Road safety

Traffic fatalities by all transport accidents (road, rail, etc.), per 100.000 inhabitants, per year

Projected reduction of **15 MtCO₂eq** of yearly GHG emissions in 2030

15 million additional people with access to public transport

25 cities that achieve a reduction of 50% of traffic fatalities rates

4

Air quality

Mean annual urban air pollution of fine particulate matter (in $\mu\text{g PM 2.5}$) at road-based monitoring stations

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Modal share of non-motorised transport and public transport

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Affordability of public transport

Percentage, of disposable household income spent on public transport for users part of the second quintile household group

25 cities with mean urban air pollution of fine particulate matter below WHO limit

10 cities achieve a projected increase of the modal share by **5-10%**.

5 cities achieve an increase of **over 10%**

Target not yet available

Thank you for your attention.

Keep in touch. Your questions and comments are welcome.



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MobiliseYourCity Core Indicators



Transport-related GHG emissions

Reduction of yearly GHG emissions in a SUMP scenario compared to a BAU scenario



Access to public transport

Proportion of the population living within 500 meters of a public transport stop with a minimum average 20-minute service



Road safety

Traffic fatalities by all transport accidents (road, rail, etc.), per 100.000 inhabitants, per year



Air quality

Mean annual urban air pollution of fine particulate matter (in $\mu\text{g PM 2.5}$) at road-based monitoring stations



Modal share of sustainable transport modes

The proportion of trips travelled with non-motorized modes and public transport as a share of total trips travelled with all modes



Affordability of public transport

Percentage, of disposable household income spent on public transport for users part of the second quintile household group

Tools and resources at your disposal

Core Indicators and Monitoring Framework

- Published guide produced with contributions of implementing partners of MobiliseYourCity
- <https://mobiliseyourcity.net/core-indicator-and-monitoring-framework>

MobiliseYourCity Emissions Calculator

- Tool that translates your current data on urban mobility or future projections in an estimate of transport related GHG emissions
- Tool, guidance and tutorials
- <https://mobiliseyourcity.net/mobiliseyourcity-emissions-calculator>

MobiliseYourCity (MRV) Monitoring and Reporting Approach for GHG Emissions

- <https://mobiliseyourcity.net/mobiliseyourcity-monitoring-and-reporting-approach-ghg-emissions>

... and more presentations, recorded webinars and examples from other partner cities and countries

Available on the **knowledge platform [INSERT LOGO]**

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NOVEMBER
2020