Metroville Urban Rail Expansion Project - KPI Development Template

# Technical Feasibility KPIs

## KPI 1:

KPI Name: Network Expansion Milestone Completion Rate

Definition (What it measures): The percentage of key milestones in the rail network expansion (e.g., track laying, station construction) completed on time.

Measurement Method (How data will be gathered and calculated): Data will be gathered through project management tools and weekly reports from construction teams. The completion rate will be calculated as the number of completed milestones divided by the total planned milestones, expressed as a percentage.

Rationale (Why this KPI is important): This KPI ensures the project stays on track and meets critical deadlines, which is essential for the overall feasibility and timely delivery of the rail expansion.

## KPI 2:

KPI Name: System Operational Readiness Score

Definition (What it measures): The percentage of operational systems (e.g., signaling, communication, train control) that are tested and ready for deployment before project completion.

Measurement Method (How data will be gathered and calculated): Data will be collected from system testing reports, with readiness calculated by dividing the number of systems successfully tested and ready by the total number of systems planned for deployment.

Rationale (Why this KPI is important): This KPI ensures that all technical systems are fully operational and integrated before the rail network becomes functional, minimizing the risk of post-launch issues.

# Environmental Sustainability KPIs

## KPI 1:

KPI Name: Carbon Emission Reduction Per Passenger

Definition (What it measures): The reduction in carbon emissions per passenger using the new rail system compared to traditional modes of transport.

Measurement Method (How data will be gathered and calculated): Data will be gathered from environmental impact assessments and transportation studies, calculating the difference in emissions between rail and other transport modes on a per-passenger basis.

Rationale (Why this KPI is important): This KPI directly measures the project's contribution to reducing urban carbon emissions, aligning with broader environmental sustainability goals.

## KPI 2:

KPI Name: Sustainable Materials Usage Rate

Definition (What it measures): The percentage of construction materials used that are sustainable or eco-friendly (e.g., recycled materials, low-carbon concrete).

Measurement Method (How data will be gathered and calculated): Procurement and inventory data will be used to track the quantity of sustainable materials purchased and used, divided by the total materials used in the project.

Rationale (Why this KPI is important): This KPI reflects the project's commitment to reducing its environmental footprint by prioritizing sustainable construction practices.

# Community Acceptance KPIs

## KPI 1:

KPI Name: Public Satisfaction Index

Definition (What it measures): The level of public satisfaction with the project, particularly in terms of its impact on traffic congestion, accessibility, and environmental benefits.

Measurement Method (How data will be gathered and calculated): Surveys will be conducted in key urban areas affected by the project, and responses will be scored to create an index ranging from 0 to 100, where higher scores indicate greater satisfaction.

Rationale (Why this KPI is important): This KPI measures community support for the project, which is crucial for its long-term success and social license to operat

## KPI 2:

KPI Name: Stakeholder Engagement Rate

Definition (What it measures): The effectiveness of engagement with key stakeholders, including local government, environmental groups, and community leaders.

Measurement Method (How data will be gathered and calculated): Data will be collected from meeting records, feedback forms, and stakeholder surveys. The engagement rate is calculated by the number of successful interactions or meetings divided by the total planned engagements.

Rationale (Why this KPI is important): Active and positive stakeholder engagement ensures that the project aligns with the interests and concerns of those impacted, reducing resistance and fostering cooperation.