Metroville Urban Rail Expansion Project - KPI Development Template

# Technical Feasibility KPIs

## KPI 1:

**KPI Name:** Construction timeline rate against plan

**Definition (What it measures):** Progress of track completion by comparing actual performance of track laying vs. planned expected performance during construction phase

**Measurement Method (How data will be gathered and calculated):** Tracking actual completion of tracks in a given time against expected track activity as per proposed plan

Percentage = (Actual track layout completed / Planned track layout to be completed) \* 100

**Rationale (Why this KPI is important):** This ensures and enables us to monitor how effective the track construction is progressed through time to take necessary actions in case of delay, to ensure timely completion and adherence to schedule

## KPI 2:

**KPI Name:** Rail Integration Preparation

**Definition (What it measures):** All activities carried out after track layout such as integration of signals, barricades, enclosures, signs, and integration with existing track monitoring systems and infrastructure

**Measurement Method (How data will be gathered and calculated):** Quantitative analysis by percentage taken by performance all the relevant departments by the technical heads on weekly basis to ensure completion of project on time as construction phase is done

**Rationale (Why this KPI is important):** This ensures smooth integration into the existing rail network and having the extension project ready for use by the public as per schedule and on time

# Environmental Sustainability KPIs

## KPI 1:

**KPI Name:** Eco-friendly infrastructure usage

**Definition (What it measures):** To measure implementation and use of eco-friendly green sources of energy such as solar power, vegetation, heat control, etc.

**Measurement Method (How data will be gathered and calculated):** By comparing percentage of eco-friendly infrastructure against constructed facilities and how well use of eco-friendly units and environment is integrated by reviewing reports, site inspection and survey immediately upon completion of a facility, one by one

Percentage = (No. of eco-friendly units / Total no. of units constructed) \* 100

**Rationale (Why this KPI is important):** To ensure conformance to the city’s environmental sustainability and commitment towards implementing same

## KPI 2:

**KPI Name:** CO2 Emissions

**Definition (What it measures):** Measuring number of rails implemented and passenger capacity against the city’s public transport data of greenhouse gas emission rate

**Measurement Method (How data will be gathered and calculated):** By calculating Emission Rates with the passenger capacity of the new upgraded rail network against the public transport emission rates

Rate = Total Public CO2 emission rate / (Total passenger capacity \* total kilometers covered by rail network)

**Rationale (Why this KPI is important):** This shows the factor of efficiency of rail network upgradation against the city’s existing greenhouse gas emission data, outlining the project’s commitment towards the city’s sustainability plans

# Community Acceptance KPIs

## KPI 1:

**KPI Name:** Acceptance Rate

**Definition (What it measures):** Measures the community’s acceptance rate of the newly implemented extended rail network and no. of passengers taking the routes and improved rate of use

**Measurement Method (How data will be gathered and calculated):** No. of passengers utilizing the rail network after new project vs. no. of passengers utilizing the rail network previously

Rate = No. of passengers using rail network after project / No. of passengers using rail network in previous years

**Rationale (Why this KPI is important):** This shows the effectiveness of the implemented project’s scope towards the city’s use of public transportation system and how this has helped improve the public’s acceptance of the new project

## KPI 2:

**KPI Name:** Impact of coverage of rail network

**Definition (What it measures):** Assessing whether the newly extended rail network has effectively aided in various infrastructures of the city such as schools, hospitals, public facilities, use for commute by students, workers, and public

**Measurement Method (How data will be gathered and calculated):** By gathering essential data from various geographic sources and demographic data, evaluating different personnel using the public rail network and how effective it is

**Rationale (Why this KPI is important):** Outlines the project’s impact on public and understanding key areas of improvement and promoting necessary actions to be taken to take full use of the completed project.