# Municipal Infrastructure Workshop Performance Report: July 2024

## **Executive Summary:**

This report analyzes the performance of municipal infrastructure workshops during July 2024. Overall, workshops demonstrated positive financial performance (₹50,000 profit, 20% ROI) and high safety compliance (100%). However, areas for improvement exist, including reducing downtime (currently impacting public services significantly), improving labor utilization, and addressing employee attrition. Recommendations focus on optimizing resource allocation, enhancing employee training, and implementing preventative maintenance strategies to minimize downtime.

#### 1. Cost Analysis:

Total Estimated Cost: ₹1750
Total Actual Cost: ₹1300
Cost Savings: ₹450 (26%)

The cost analysis reveals significant cost savings across both workshops. The "Vehicle Servicing" task achieved a 23% cost saving (₹150), while "Street Lamp Installation" saved 36% (₹300). Further analysis of individual expense categories ("workers" and "raw material") within each task is needed to identify specific areas of cost efficiency.

#### 2. Performance Metrics:

- Efficiency: Workshops largely met their estimated timelines, with an overall on-time completion rate of 90%. Average task duration was slightly over the estimated 4 hours at 4.2 hours.
- **Quality:** High customer satisfaction (4.5/5) and low defect (2%) and rework (5%) rates indicate good quality control.
- **Productivity:** While task completion rate (20 tasks/month) seems adequate considering the employee count, labor utilization could be improved (75%). Employee productivity (5 tasks/employee) suggests potential for further optimization through training or process improvement.
- **Resource Utilization:** Equipment utilization (80%) is good, however, labor utilization (75%) could be improved, potentially through better scheduling or workforce optimization.

### 3. Top Performing and Underperforming Areas:

- **Top Performing:** Street Lamp Installation demonstrated a higher cost saving percentage (36%) than Vehicle Servicing (23%). Customer satisfaction was high across both workshops.
- **Underperforming:** High downtime (5 hours/month) leading to significant public disruption (10 days) is a major concern. Employee attrition (one employee lost during the month) also requires attention.

## 4. Insights and Recommendations:

• **Downtime Reduction:** Investigate the root causes of downtime (5 hours/month). Implement preventative maintenance programs for equipment and infrastructure to minimize unexpected disruptions. This will significantly improve public service

delivery.

- Labor Utilization Improvement: Analyze task scheduling and employee allocation to optimize labor utilization. Consider cross-training employees to enhance flexibility and efficiency.
- Employee Retention: Investigate the reasons for employee attrition and implement strategies to improve employee satisfaction and retention. Increased training hours or improved working conditions could be considered.
- **Resource Optimization:** Analyze raw material costs for both workshops to identify potential areas for cost savings (e.g., sourcing, bulk purchasing).
- Data Tracking and Analysis: Implement a more robust data tracking system to capture granular data on workshop performance, allowing for more precise analysis and targeted improvements.

#### 5. Financial Metrics:

The workshops generated a significant profit (₹50,000) and a healthy ROI (20%), indicating efficient financial management. However, correlating this financial performance with operational efficiency metrics (downtime, resource utilization) is crucial for long-term sustainable success.

#### 6. Environmental Metrics:

The 80% waste reduction rate indicates a commitment to environmental sustainability. Further analysis of energy consumption (2000 kWh) is needed to identify areas for potential energy efficiency improvements.

## 7. Repurchasing Metrics:

The 20% resource repurchase rate suggests potential opportunities to optimize material usage and reduce waste further.

This report provides a comprehensive overview of the municipal infrastructure workshop performance in July 2024. By addressing the identified areas for improvement, the municipal corporation can enhance efficiency, reduce costs, improve public service delivery, and ensure the long-term sustainability of its infrastructure maintenance operations.