

Stakeholder Analysis

1. Introduction

This stakeholder analysis identifies all parties involved in, affected by, or influencing the Smart Transportation System. It outlines their roles, needs, influence levels, and engagement strategies to ensure clear communication and smooth project delivery.

2. Stakeholder Identification

The primary stakeholders include:

- Project Sponsor / Admin
- System Administrators
- Drivers
- Passengers (Students)
- Development Team
- Payment Gateway Provider
- Institution / Organization (e.g., University/School)

3. Stakeholder Analysis Table

| Stakeholder | Role in the System | Needs / Expectations | Influence on Project | Impact from Project | Engagement Approach / Frequency |
|--|--|--|----------------------|---------------------|---|
| Project Sponsor / Admin | Provides resources, makes key decisions, ensures project alignment | System reliability, timely delivery, scalability, cost control | High | High | Weekly progress meetings, milestone reviews |
| System Administrators | Manage routes, notifications, users, and system operations | Efficient admin panel, full control, easy monitoring | High | High | Requirement workshops, admin testing sessions |
| Drivers | Publish trips, manage schedules, transport passengers | Simple UI, real-time updates, fair earnings, reliability | Medium | High | Surveys, beta testing, feedback collection |
| Passengers | Book trips, view routes, rely on service | Fast booking, search trips, safety, low waiting time | Medium | High | UX testing, satisfaction surveys |
| Development Team | Build, test, deploy, and maintain the system | Clear requirements, stable scope, realistic deadlines | High | Medium | Daily standups, sprint reviews |
| Payment Gateway Provider | Enables secure online transactions | Correct integration, stable connection, API compliance | Low | Medium | Technical communication as needed |
| Institution / Organization (Optional) | Oversees transportation and student experience | Improved mobility, reduced issues, safety | Medium | Medium | Monthly updates, requirement approvals |

RACI Table

| Project Tasks / Activities | Project Sponsor / Admin | System Admin | Drivers | Passengers (Students) | Development Team | Payment Gateway Provider | Institution / Organization |
|---------------------------------------|-------------------------|--------------|-------------------|-----------------------|------------------|--------------------------|----------------------------|
| Requirements Gathering | A | C | C | C | R | I | C |
| System Architecture & Database Design | I | C | I | I | A/R | I | I |
| UI/UX Design | I | C | C | C | A/R | I | I |
| Back-End Development | I | C | I | I | A/R | C | I |
| Front-End / Web App Development | I | C | I | I | A/R | I | I |
| Driver Trip Management Module | I | C | R (process input) | I | A/R | I | I |
| Booking & Passenger Module | I | I | I | C | A/R | I | I |
| Payment Integration | I | I | I | I | R | A/C | I |
| Testing & QA | I | C | C | C | A/R | I | I |
| Deployment | A | I | I | I | R | I | I |
| System Administration Setup | I | A/R | I | I | C | I | I |
| Training (Drivers & Users) | A | R | C | C | I | I | I |
| Monitoring & Maintenance | A | R | I | I | C | I | I |