**Section 4.3: Proposed Solution**

**4.3.1 Introduction**

In response to the critical operational, administrative, and strategic challenges faced by the Regional Transport Corporation (RTC), a comprehensive and scalable solution was proposed: the development of a **Salesforce-based CRM platform** tailored to manage public transportation services. This solution aimed not only to digitize current manual processes but also to unify them under a single, intelligent system capable of evolving alongside the organization's growth and governance needs.

The proposed system was designed to act as a digital command center—handling everything from trip assignments and fare tracking to staff scheduling and performance analytics.

**4.3.2 Solution Goals**

The solution was conceptualized with clear, measurable goals in mind:

* **Centralization**: Unify all critical transport operations—buses, schedules, routes, employees, and revenue—under one digital platform.
* **Automation**: Eliminate manual paperwork and redundant tasks using flows, validations, and Apex triggers.
* **Accountability**: Introduce role-based permissions, approval processes, and audit trails.
* **Real-Time Reporting**: Enable decision-makers to act on up-to-date metrics via dynamic dashboards and reports.
* **Scalability**: Support growth in employee count, fleet size, and route coverage with flexible data architecture.

**4.3.3 Key Features of the Proposed Solution**

| **Feature** | **Description** |
| --- | --- |
| **Custom Objects** | Designed to represent RTC-specific entities like Trips, Buses, Conductors, Fares, and Stations. |
| **Lightning App** | A role-based application offering a curated tab structure, branding, and accessibility from both desktop and mobile. |
| **Flow Automation** | Used for shift allocation, trip generation, leave approvals, and fare validation. |
| **Validation Rules** | Ensure all data entered meets RTC's business logic, reducing downstream errors. |
| **Reports & Dashboards** | Offer executives instant access to KPIs such as revenue trends, trip delays, and employee efficiency. |
| **Profile-Based Access** | Ensures drivers only see their trips, while managers have broader data access and reporting rights. |
| **Approval Processes** | Implemented for critical workflows like fare discrepancies, trip cancellations, or leave requests. |

**4.3.4 Stakeholder Benefits**

**Operations Team:**  
Can assign trips, plan routes, and monitor trip status in real time.

**HR/Admin Department:**  
Manages complete employee lifecycle digitally—from onboarding and shift allocation to leave tracking and role assignment.

**Finance Team:**  
Monitors fare collections, identifies discrepancies, and generates real-time revenue reports.

**Field Staff (Drivers & Conductors):**  
Receives real-time updates on trip assignments, can log start/end of duty from mobile devices, and submit reports without physical forms.

**Executive Leadership:**  
Uses dashboards for strategic decision-making—analyzing trends, forecasting revenue, and optimizing workforce distribution.

**4.3.5 Transformation Overview Table**

| **Before (Manual)** | **After (Salesforce CRM)** |
| --- | --- |
| Paper-based trip logs | Digitally logged with automation |
| Static employee records | Centralized and searchable |
| No real-time fare monitoring | Instant dashboards by station and route |
| No performance KPIs | Dynamic employee and route-based metrics |
| Delayed audits | Audit-ready logs and history tracking |

**4.3.6 Visual Aid: Proposed Digital Workflow**

📌 *Suggested Diagram:*  
A system flowchart showing:

1. Input from drivers/staff →
2. Data validation via Flows →
3. Logging into Objects →
4. Triggered calculations →
5. Data flowing into Dashboards and Reports

(Design using draw.io or Lucidchart.)

**4.3.7 Conclusion**

The proposed Salesforce CRM solution was not merely a software implementation—it was a strategic initiative to digitize the public transport ecosystem. By eliminating manual bottlenecks, providing real-time oversight, and scaling with minimal effort, this system aimed to transform RTC into a modern, transparent, and efficient organization.