

# Use Case Scenarios

## Metro Ticket Booking System – ServiceNow

### Purpose

This section outlines practical metro ticket booking use cases and explains how the ServiceNow-based system processes each request, from ticket submission and fare calculation to QR code creation, payment confirmation, and user notification.

### 1. Use Case: Single Trip Metro Ticket Booking

#### Overview

A commuter books a metro ticket for a one-way journey using the ServiceNow portal.

#### Flow Steps

##### 1. Request Initiation

- The passenger opens the Service Catalog and selects **Metro Ticket Booking**.
- Required journey details are entered:
  - Boarding station
  - Destination station
  - Passenger category
  - Number of tickets

## **2. Automated Fare Processing**

- The system computes the ticket fare automatically based on:
  - Travel distance or zone
  - Passenger type
  - Quantity of tickets

## **3. Digital Ticket Creation**

- A unique booking reference is generated.
- The system creates a QR-code-enabled digital ticket.

## **4. Confirmation & Notification**

- Ticket details and QR code are sent via email and ServiceNow notification.
- The booking status is updated in the user portal.

## **2. Use Case: Group Ticket Booking**

### **Overview**

A passenger books multiple metro tickets for traveling as a group.

### **Flow Steps**

#### **1. Request Submission**

- The user selects the Metro Ticket Booking option in the Service Catalog.
- Inputs include:
  - Source and destination stations
  - Passenger category

- Number of travelers

## **2. Fare Calculation**

- The system calculates the combined fare.
- Any applicable passenger-type or group discounts are applied automatically.

## **3. Ticket Generation**

- The system generates either:
  - Separate QR codes for each traveler, or
  - A single QR code covering the entire group

## **4. Ticket Delivery**

- Digital tickets are sent through email/ServiceNow notifications.
- Booking records are saved for future reference.

## **3. Use Case: Concession / Student Ticket Booking**

### **Overview**

A student or eligible passenger books a metro ticket at a discounted fare.

### **Flow Steps**

#### **1. Form Submission**

- Passenger selects **Student** (or concession type) as the passenger category.
- Required student or concession identification details are provided.

## **2. Validation & Fare Adjustment**

- The system verifies eligibility.
- Discounted fare is calculated automatically.

## **3. Ticket Creation**

- A QR-based digital ticket is generated with concession tagging.

## **4. Notification & Audit**

- Confirmation and QR code are delivered to the passenger.
- Ticket information is stored for compliance and auditing purposes.

## **4. Use Case: Viewing Ticket History**

### **Overview**

A passenger wants to access previously booked metro tickets.

### **Flow Steps**

#### **1. Portal Access**

- User logs into the ServiceNow portal.
- Navigates to **My Tickets** or **Booking History**.

#### **2. Ticket Retrieval**

- The system displays past bookings, including:
  - Journey details
  - Ticket status

- Associated QR codes

### **3. Optional Re-notification**

- The passenger can resend the ticket QR code via email if required.

## **5. Use Case: High-Traffic Peak Hour Booking**

### **Overview**

Large numbers of passenger's book tickets simultaneously during peak hours.

### **Flow Steps**

#### **1. Concurrent Requests**

- Multiple users submit metro ticket requests at the same time.

#### **2. System Processing**

- Flow Designer handles requests in parallel.
- SLA monitoring ensures performance targets are met.

#### **3. Ticket Generation**

- QR-code tickets are generated without delay.
- No manual intervention is required.

#### **4. Notification Delivery**

- All users receive instant booking confirmations and digital tickets.

## **Conclusion**

These use case scenarios highlight the complete workflow of the Metro Ticket Booking System implemented in ServiceNow, covering request submission, automated fare calculation, QR code generation, and digital ticket distribution.

- Enables fast, paperless metro ticketing
- Enhances passenger convenience and experience
- Improves transparency and operational control
- Scales efficiently for future extensions such as mobile applications and WhatsApp-based booking