

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