Multi-Modal Hub
Case Studies
Case Studies: Station Vehicular Operations

30th Street Station
Philadelphia, Pennsylvania

Station Summary
The 30th Street Station is the main railroad station in Philadelphia, Pennsylvania and one of the seven stations in south-eastern Pennsylvania Transportation Authority’s Center City fare zone.

30th Street Station is undergoing major incremental improvements as a result of the ‘Philadelphia 30th Street Station District Plan’ which focuses on the station and facilities, transportation infrastructure, potential rail yard overbuild and commercial opportunities. Some of the near-term improvements immediately surrounding the station have already been completed.

Key Facts
Types of service: Amtrak, commuter rail, regional rail, trolley, bus, subway, car rental

3rd busiest Amtrak station in the United States with approximately 16,662 passengers on an average weekday
Key Takeaways for Wynkoop Street

Formalized vehicular and pedestrian zones with partitioned and categorized areas for a range of parking options

Comprehensive, iconic wayfinding that directs multitude of vehicular types

Adaptive reuse of ‘leftover’ spaces and under-performing asphalt as signature pedestrian spaces

Extensive use of one-way vehicular circulation

Maximization of primary vehicular loop around the station and secondary vehicular loops flanking the east and west sides of the station
**Kings Cross**
*Inner City London, UK*

**Station Summary**
King’s Cross (also Kings Cross) is an inner city area of London, England, 2.5 miles (4.8 km) north of Charing Cross. It is the location and namesake of King’s Cross railway station, one of the major gateways into London from the North.

One of the largest regeneration schemes in Europe, attracting £2.2bn of private investment and allowing the ongoing development of more than 60 acres of brown-field land into offices and retail space and the construction of 2,000 new homes.

**Key Facts**
Types of service: national rail, commuter rail, regional rail, intercity bus, local bus, subway (tube), car rental.

Directly across from St. Pancras Station, adding to the complexity of the traffic operations.

9th busiest station in the U.K. with approximately 82,190 passengers as a daily average.
Key Takeaways for Wynkoop Street

Designated bus lanes and boulevard

Physical barriers erected in street to direct pedestrian flow

Limited space is used creatively-- off-street kiss n’ rides are squeezed into key high-volume areas

Variety right-of-way allocation-- parking/loading types dispersed rather than concentrated

Heavy focus on pedestrians with large areas of designated urban park and plaza space

From left:
King’s Cross Plaza
Recently completed, this plaza is the front doorstep of Kings Cross

Kings Cross Masterplan
The ambitious masterplan shows the build-out for the area north of Kings Cross Station
Station Summary
Union Station is a major train station, transportation hub, and leisure destination in Washington, D.C. It is the headquarters of Amtrak.

The station has undergone some near-term improvements recently—the first stages of the station’s 20-year master plan.

Key Facts
- Types of service: Amtrak, subway, intercity buses, tourist buses, local buses
- 2nd busiest Amtrak station in the United States with approximately 32,465 passengers on an average weekday
- Recent near term changes (2013) to roadway layout and median upgrades
- 180 bicycle facilities as well as a bike share station
Key Takeaways for Wynkoop Street

Integration of bicycle infrastructure
Auto-court to accommodate large volumes and types of vehicular traffic
Designated loop for taxis only
Ample park space
Circular flow of traffic around auto court

From left:
Station Area build-out*
20-year master plan
Metro lines
connected to DC’s vast metro network

Nørreport Station
Copenhagen, DK

Station Summary

Nørreport Station, Copenhagen’s busiest transportation hub, holds a vast underground rail network underground with extensive bus service and outdoor public space at street level.

The station has undergone extensive renovations from 2011 to 2014. The open areas provide space for street life with seating, shops and cafés and restaurants with outdoor service.

Key Facts

Types of service: intercity train, subway, intercity buses, local buses.

Busiest station in Copenhagen with a total of 250,000 passengers daily

2,500 bicycle parking stalls in sunken ‘bike beds’ as well as a bike share station
Key Takeaways for Wynkoop Street

Extensive bicycle infrastructure (wide well-marked bike lanes and enormous formalized 'bike beds'--parking)

Extensive bus-only areas

Minimal formalized right-of-way allocation for automobiles/taxis (including no designated kiss n’ ride)

Ample street-level public space--station has minimal surface footprint

Towers used for underground ventilation provide iconic place-making elements at the street level

Heavily pedestrianized space that extends to surrounding streets

From left:

Birds eye of station in city context

View of station showing ventilation tubes and ‘bike beds’
Case Studies: Short-Term Demonstrations

Market Street Prototyping Festival

Location: San Francisco, CA

Extent of Project: 5 separate blocks from 10th to Steuart on Market Street

Date: April 9th-15th, 2015

Duration: 3 day festival

Project Partners: The San Francisco Planning Department and the Yerba Buena Center for the Arts (YBCA)

Funding/Sources: $225,000 from the John S. and James L. Knight foundation

Competition with the goal of fostering both community engagement and allowing it to be an incubator for ideas. The idea was to nurture “important and innovative ideas” with the goal of “taking many of them further into the public realm, and promote the festival as a model for cross-city learning and development.”*

The team looked for proposals that fostered connection + social interaction. $2000 stipend for materials; teams were assisted with design review and scheduling.*

From top: ‘Ghost Arroyos’ entry*  
‘Guerilla Street Museum’ entry*  
‘Shimmering Stars’ entry*  
‘Tree Sitting’ entry*  

*source: http://marketstreetprototyping.org/
Case Studies: Short-Term Demonstrations

Broadway Dress Rehearsal

Location: Los Angeles, CA

Extent: 10 blocks of Broadway, from Third to just past 11th streets

Date: 2014 (ongoing)

Duration: semi-permanent

Project Partners: LADOT and The City of Los Angeles

Funding/Sources: $1.5 million for short term improvements from LADOT. Permanent improvements estimated at $5 million-$6 million per block; $5 has been funded by the Metropolitan Transit Authority.

The Broadway Dress Rehearsal is the first phase of the Broadway Streetscape Master Plan. It uses quick-to-install and cost-efficient materials to create traffic calming pedestrian enhancements while funding is secured to achieve the permanent build-out of the full-scale Broadway Streetscape Master Plan.

The current work is billed as a “dress rehearsal” which will allow city officials to see what works and what doesn’t.

The goal is to create more of a pedestrian-oriented space for gathering and public activities along the street.
NYC Plaza Program

**Location:** NYC

**Extent:** Multiple Projects (campaign)

**Date:** 2008 (ongoing)

**Duration:** one day, interim, permanent

**Project Partners:** NYCDOT and selected not-for-profit organizations

**Funding/Sources:** NYCDOT; approximately 1% of NYCDOT’s annual budget

NYC Plaza Program is an ongoing initiative to transform underused streets into vibrant, social public spaces throughout the city. The NYC Plaza Program is a key part of the City’s effort to ensure that all New Yorkers live within a 10-minute walk of quality open space.

Eligible not-for-profit organizations can propose new plaza sites for their neighborhoods through a competitive application process. DOT prioritizes sites that are in neighborhoods that lack open space, and partners with community groups that commit to operate, maintain, and manage these spaces so they are vibrant pedestrian plazas.*


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Case Studies

Short-Term Demonstrations

From left:

One Day plaza (1st Phase)*

Temporary Plaza (2nd Phase)*

Permanent Plaza (3rd Phase)*

Case Studies: Scale Comparisons

Denver Union Station

Alexanderplatz, Berlin, DE
Gare du Nord, Paris, FR

Kings Cross, London, UK
Union Station, Washington, D.C.

Vancouver, BC