

## Appendix 1: GO Rail Parking and Station Access Plan Update

### Executive Summary

Metrolinx is currently updating its 2013 GO Rail Parking and Station Access Plan, as station access is critical to the success of Regional Express Rail (RER). Increased GO service needs to be supported by easy and convenient station access solutions in order to be successful. Sufficient and more sustainable station access and egress along with a reduced reliance on parking is critical to meeting GO RER ridership forecasts and provincial, Metrolinx, and municipal policies.

A Business Case Assessment (BCA) is being used to evaluate the impact of station access interventions at the network, corridor, and station-specific level in three scenarios: Business-As-Usual, Incremental Change, and Big Changes and Partnerships. This will help determine the preferred approach to meet the needs of current and future GO riders. A range of station access interventions are being evaluated, including improvements to active transportation, local transit, pick up and drop off (including on-demand services<sup>1</sup>), parking, and customer information.

### Timelines and Next Steps

This appendix provides an update on the progress to date and the scenarios being evaluated as part of the RER update. The assessment of benefits and impacts of each station access scenario is being finalized and a preferred scenario will be optimized. The optimized scenario should provide direction on the priority station access capital investments to the Capital Projects Group in the short and medium term to inform their procurement and station design work and meet current demands without precluding the success of long term station access interventions.

A draft of the updated Plan document will be shared with internal and external stakeholders for review. A revised draft plan will be presented the Board of Directors in September and following their feedback and further refinement and stakeholder review, the final plan will be presented to the Board in December for adoption.

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<sup>1</sup> On-demand services refers to range of current (e.g. taxi) and emerging ride-haul (e.g. Uber), dynamic carpooling, micro-transit services and technologies (e.g. autonomous vehicles).

## 1.0 Updating the 2013 GO Rail Parking and Station Access Plan

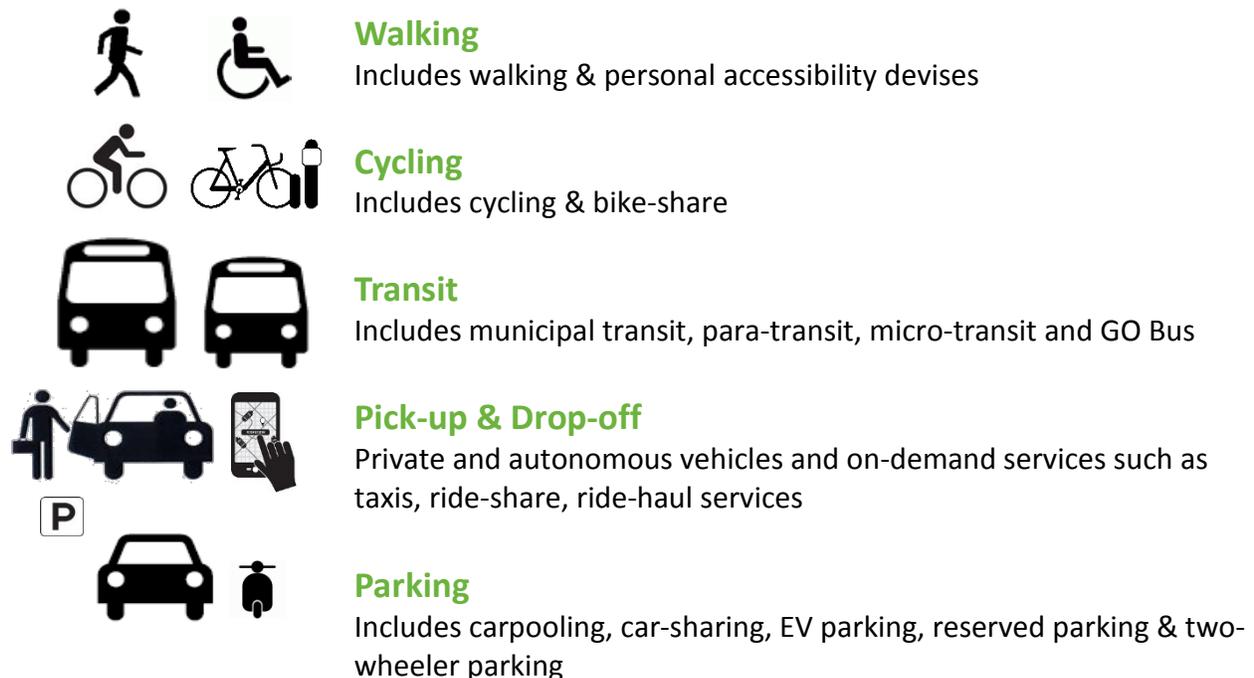
In 2013, Metrolinx released a GO Rail Parking and Station Access Plan, which included a vision and guiding principles for parking and station access, a policy statement and decision-making framework, strategies for new parking at a corridor-wide and station level and high level implementation plan. To date, it has been used to guide parking expansion and, to a more limited extent, other station access improvements at GO stations. The Plan gives station programmatic direction for each station, such parking expansion numbers, whether it is surface or structure, timeframe for implementation, etc.

Metrolinx is currently updating the Plan to:

- Assess impacts of GO Regional Express Rail (RER) on station access.
- Analyse station access mode use and potential.
- Identify station access investments to support GO RER.
- Develop strategies to operationalize station access policies.

## 2.0 The Importance of Station Access to RER Success

The “first mile” and “last mile” is how riders connect to and from GO, using a wide range of travel modes.



**Figure 1: Station access modes being considered in the Station Access Plan Update.**

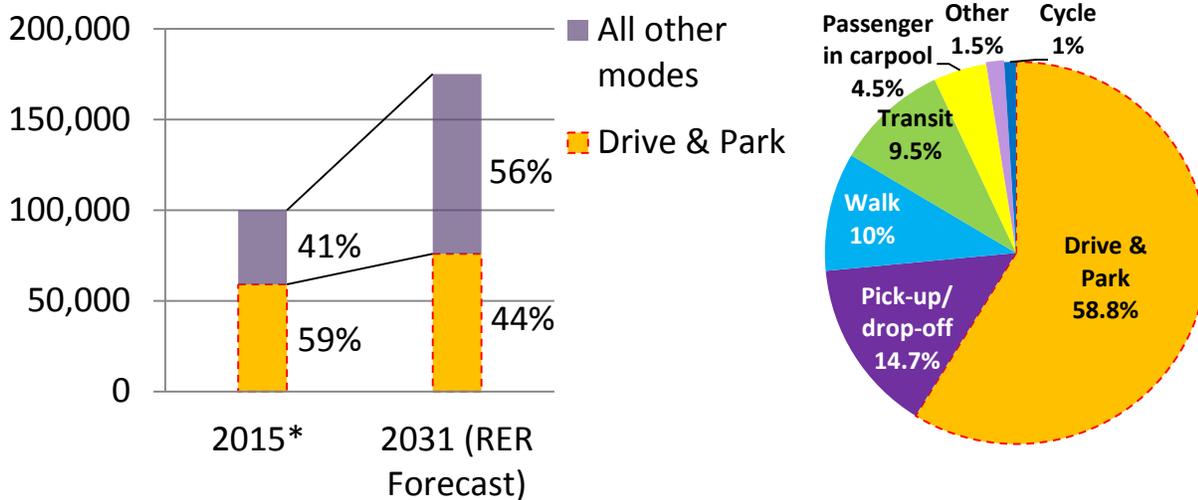
How we design stations should be guided by both the way riders travel today and our goals for growing use of more sustainable modes in the future. The Big Move provides the following direction on this:

- **Goal A.** Transportation Choices (Objective 1) Increased transportation options for accessing a range of destinations.
- **Goal B.** Comfort and Convenience (Objective 6) Improved information, including real-time information, available to people to plan their trips.
- **Goal C.** Active and Healthy Lifestyles (Objective 8) Increased share of trips by walking and cycling.
- **Goal G.** Reduced Dependence on Non-Renewable Resources (Objective 16) Increased proportion of trips taken by transit, walking and cycling.
- **Goal L.** Efficiency and Effectiveness (Objective 31) Increased productivity of the transportation system.
- **Goal M.** Fiscal Sustainability (Objective 36) Fair and effective fiscal treatment of various modes that better reflects the cost of transportation services in the prices paid by users.

While we need to invest to support all travel modes, we should prioritize those needed to serve the most riders while shifting towards more sustainable modes. Growing GO ridership by providing free parking is in conflict with the direction provided by The Big Move and the Growth Plan for the Greater Golden Horseshoe and is not financially or environmentally sustainable:

- Subsidizing and not managing parking demand makes other modes uncompetitive with driving.
- Local transit cannot compete without improving transit priority on station sites and surrounding municipal roads, addressing discrepancies in service frequency, and aligning schedules.
- Existing traffic congestion around stations makes growing the use of auto-oriented modes challenging and further highlights the need for transit priority measures.
- Expanding parking at GO stations at current rates is not in alignment with Provincial and municipal intensification policies around transit.
- Walking and cycling facilities and connections around stations need to be improved to address comfort and safety concerns.
- Increasing parking does not provide an effective solution for many off-peak riders.

Increased GO service does not help riders if they cannot connect to the service. Sufficient station access and egress is critical to meeting RER ridership forecasts, as the forecasts assume unrestricted access, that is, customers could get to the station by their preferred travel mode (e.g. unhampered by limited parking). We need to rapidly grow use of other travel modes to serve the forecasted GO ridership, if planned parking expansion remains at levels set by the 2013 GO Rail Parking and Station Access Plan.



**Figure 2: LEFT - Average weekday peak direction boardings (excluding Union) showing how other travel mode use will need to grow to meet ridership forecasts, if planned parking expansion remains at levels set by the 2013 GO Rail Parking and Station Access Plan. RIGHT - Riders travelling to GO stations by mode**  
 \* Source: 2015 Cordon Count & 2015 GO Rail Passenger Survey

## 2.0 Station Access Scenarios

Following a background review period, where we engaged internal and municipal stakeholders and conducted research on various travel modes, we initiated a Business Case Assessment (BCA). The BCA is evaluating the impact of station access interventions at the network, corridor, and station-specific level in three scenarios to determine the preferred approach to meet the needs of current and future GO riders.

1. Business-As-Usual
2. Incremental Change
3. Big Changes and Partnerships

The BCA will identify which scenarios maximize ridership and it is yet to be determined if any scenario can meet unhindered ridership forecasts. The BCA is taking a conservative, realistic approach for each scenario.

### 2.1 Business-As-Usual - Prioritize long term parking expansion while nominally supporting other modes.

This scenario is intended to evaluate the impact of significant parking growth (approximately 25-30k more spaces across the network) mostly through structures (in particular, along the Barrie and Stouffville corridors) with some improvements for walking, cycling, transit, etc. (e.g. pedestrian routes and plazas in key locations, bike parking and routes, bus loops/terminals on GO sites, etc.). The impact of station access trips on the surrounding road networks and

communities would be significantly greater than it is today and the operating costs of maintaining stations would grow significantly with the addition of large parking facilities (e.g. \$150-200 per space per year, not including preventative maintenance). Metrolinx is encountering increasing resistance from municipalities to new parking structures, and there are diminishing mitigation options.

This scenario is somewhat easy to deliver, however, because:

- the GO RER budget provides access to capital investment dollars
- Metrolinx staff are well equipped to deliver and maintain more parking, and
- most of the station access interventions are with Metrolinx lands and control
- it meets existing GO customer expectations of free parking supply

As well, by concentrating parking in structures there would be more opportunities to redevelop, lease, or sell surplus station lands.

**2.2 Incremental Change** - *Limit parking expansion and incrementally shift focus to growing other modes.*

This scenario is intended to evaluate the impact of modest parking growth (approximately 12-15k more spaces across the network) mostly through surface and leased options, and substantial improvements to facilities for walking, cycling, and transit (e.g. comfortable, attractive pedestrian routes and new bridges, transit priority lanes, secure bike parking, etc.) It aggressively grows carpool and reserve parking and expands the co-fare subsidy to all GO stations in the absence of fare integration and subsidize micro transit and other ride-haul services. The impact of station access trips on the surrounding road network and community would remain high. The costs of maintaining GO stations would grow at a lower rate than Business-As-Usual and could be offset by increase in reserved parking revenues. This scenario would require cooperation and consensus building across a wide range of public and private stakeholders to make the improvements to facilities and services that are not completely within Metrolinx control and would increase operating costs associated with these new facilities and services.

**2.3 Big Changes and Partnerships** - *Restrict parking expansion and aggressively shift the focus to growing other modes.*

This scenario was intended to evaluate the impact of limited parking growth (approximately 5-7k more spaces across the network) mostly through leased options and assumes new parking management measures across the network to incent use of other modes, which are given priority. The impact of station access trips on the surrounding road network and community would be curtailed. The costs of maintaining GO stations will grow at a significantly lower rate than the other two scenarios.

Similar to the Incremental Change scenario, this scenario would also require increased allocation of operating resources and alignment across all levels of government and high degree of coordination across wide range of public and private stakeholders, given its reliance on

potential new funding models that may be required to direct investment in municipal infrastructure and to improve local transit service.

## 2.4 Scenarios Summary

The three distinct scenarios have been chosen for comparison purposes. Each scenario represents a position on a continuum of the pace of change, the amount and type of interventions, how much it will cost to build and maintain, how easy it is to deliver, and how it strategically meets Provincial, Metrolinx, and municipal policy. However, each scenario addresses the individual station context; so for example, the Business-As-Usual Scenario does not propose a blanket expansion of parking across the network, such as at urban stations where there is no existing parking. The scenarios evaluation helps define which broad direction Metrolinx should choose, but the preferred one needs to be optimized and refined by station to address the local context and any gaps. While the scenarios are still being evaluated using the Business Case Assessment tool, the following is a preliminary qualitative evaluation to identify key risks and rewards associated with each scenario.

	Strategic	Economic	Financial	Deliverability	
Scenario 1: Business-as-Usual					
Scenario 2: Incremental Change					
Scenario 3: Big Changes & Partnerships					

 *Poor*  
  *Mixed*  
  *Good*  
  *Pace of change*

Figure 3: Preliminary summary Business Case Assessment of the three scenarios being evaluated

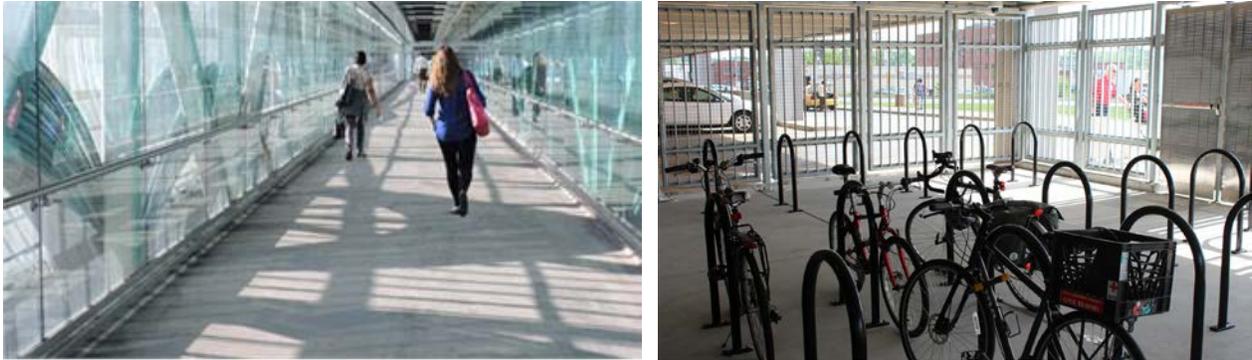
## 3.0 Station Access Interventions

The station access interventions being evaluated in the three business case scenarios are described below.

### 3.1 Active Transportation Interventions

Adding multi-use paths, sidewalks, pedestrian bridges and tunnels on the station site and/or on adjacent municipal lands improves and increase access to the station by foot or bike. For example, in strategic locations at some stations, a bridge or tunnel across rail corridors, at grade separations along the rail corridors or other major barriers (e.g. highway corridors) significantly expand the walkshed (the area within approximately 800m or a 10 minute walk to the station). Continuing to provide sheltered bike racks and adding secure bike parking and repair rooms makes it more attractive to ride a personal bike to the station. Providing bike

share bikes in and around GO stations encourages more customers ride to and from GO without having to use their own bike and offers the flexibility of using different modes for different legs of a trip (e.g. bike share to the station in the morning but take local transit home in the evening). Furthermore, bike share provides a compelling last-mile solution at a number of stations for passengers to travel to their destination from the station.

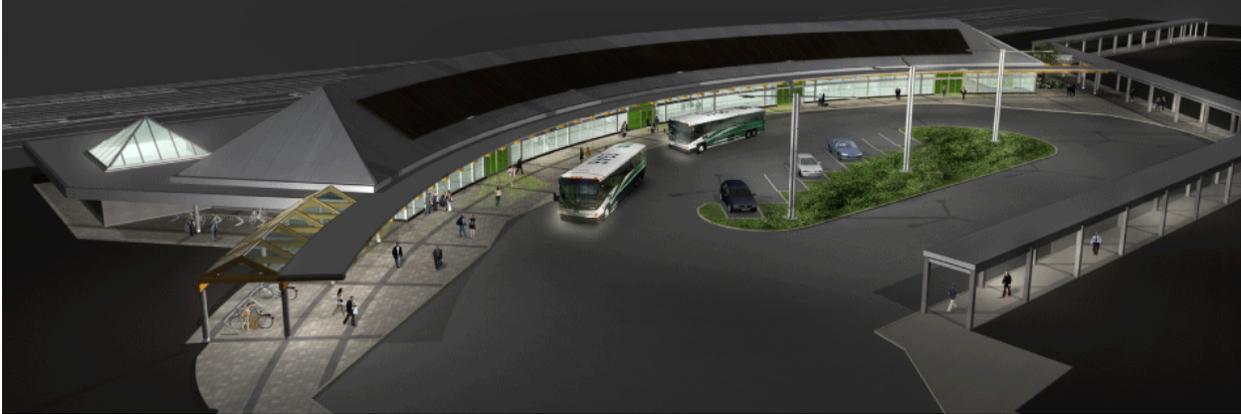


**Figure 4: LEFT - The GO Pickering pedestrian bridge spans Highway 401 and the Lakeshore East Rail Corridor. RIGHT - secure bike parking in a Washington D.C. Metro parking structure**

### 3.2 Local Transit Interventions

Providing facilities such as customer waiting areas, bus bays, bus loops, priority access lanes, and operator facilities allows transit agencies to provide better service and gives customers using transit an improved experience, with purpose-built facilities catered to them and faster access/egress into the station. A number of our stations have some or all of these facilities, but there are a number of places where they can be improved and expanded. Priority access over other vehicles is the number one request we hear from local transit providers to help them get customers quickly into the station.

Locating the bus stops close to the platform access points helps shorten time and distances for customers when transferring between services. On the surrounding municipal road network, transit priority measures, such as transit signals, transit-only lanes etc. helps bus riders bypass traffic congestion. Increasing the frequency of service and improving scheduling alignment on routes that are high use, and/or have the potential to be high use, enhances the attractiveness of transit to GO as an option for customers, as it reduces their wait times.



**Figure 5: Rendering of new bus loop under construction at Burlington GO station for local and GO Transit**

### 3.3 Pick-up/Drop-off Interventions

Continuing to provide pick-up and drop-off (PUDO) facilities close to the station building and platform access, particularly with dedicated access lanes from the municipal road network, helps customers get to their trains faster if being dropped off by private vehicle and the growing/emerging market of on demand services<sup>2</sup>. The analysis completed indicates that there is demand for expanded facilities at the following GO stations: Allandale Waterfront, Newmarket, Guelph, Etobicoke North, Erindale, Mimico, Rouge Hill, Pickering, Ajax, Agincourt, Milliken, Unionville, Centennial, Markham, Oriole and Richmond Hill.

In addition to the current queuing style of PUDO facilities, short term parking (e.g. 10 minute limit) provides another alternative for customers using PUDO at peak times when the high frequency of trains means the conventional PUDO may result in people being delayed in queue.



**Figure 6: LEFT – Current queuing-style of PUDO with taxi lane at Oakville GO/VIA Station. RIGHT – Short term parking style of PUDO at Kipling TTC east station entrance.**

<sup>2</sup> On-demand services refers to range of current (e.g. taxi) and emerging ride-haul (e.g. Uber), dynamic carpooling, micro-transit services and technologies (e.g. autonomous vehicles).

### 3.4 Parking

Managing parking provides a range of options for customers who drive and park and helps make the other access modes more competitive. This includes expanding the proportion of parking that is reserved, so regular customers who are willing to pay have greater certainty on parking availability. Likewise, expanding the amount of carpool parking provides more carpooling customers certainty of a parking space, and a priority location close to the platform.



**Figure 7: GO Transit offers carpool parking at almost every station where there is GO parking.**

Cordoning off some parking during the peak morning period and opening it after the peak ensures there is parking available for off-peak customers. This is of particular use at stations where they may not be adequate off-peak local transit service to the station.

Where parking expansion is warranted, there are a number of ways to provide additional parking:

**Peer-to-Peer:** There is an emerging peer-to-peer market akin to Airbnb where private parking providers, from individual home owners to commercial landlords, can rent out their spaces using an online tool. The promotion of this type of service provides another parking option for customers that does not require Metrolinx to build more spaces.

**Shared Parking:** Sharing parking with other facilities, particularly those that have complementary and not competing parking needs, such as movie theatres, is another way to provide additional customer parking without overbuilding.

**Remote Surface Parking:** In some places, where land for parking at the station is not available or it is not the highest and best use, a remote lot may be a solution for customers wanting to drive and park. These lots are served by shuttles or where applicable, by a rapid transit line, such as an LRT or BRT.

**Surface parking:** Surface parking is simple and relatively quick and easy to build, so it can satisfy short term customer demand without significantly compromising or precluding a more sustainable longer term use for the land, such as transit oriented development. It is also something that be provided easily provided on leased land. Its sprawling nature means that it tends to have multiple access points, allowing for faster egress for customers when compared to a parking structure. That said, adding new surface parking does result in increased negative environmental and aesthetic impacts and longer, less comfortable walks to the station for customers.

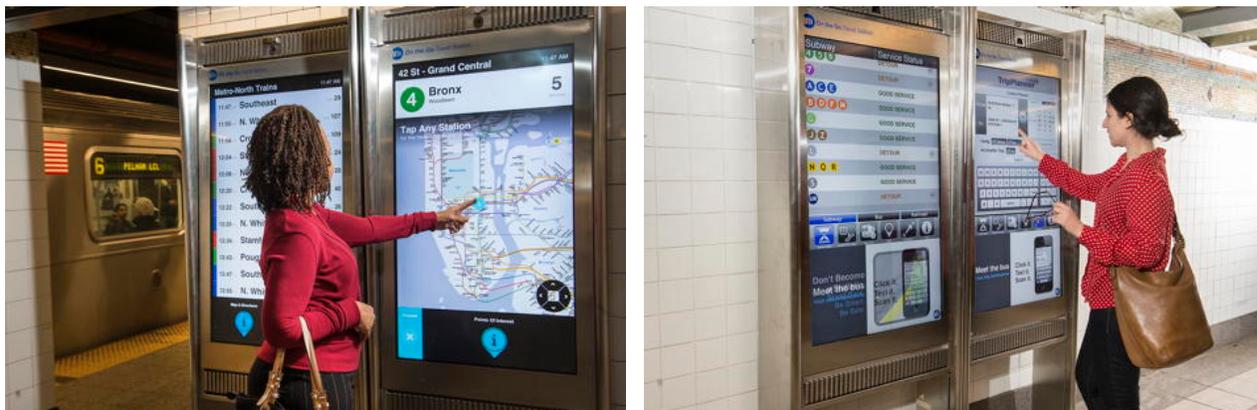
**Structured parking:** In addition to the negative urban form and traffic impacts (large parking garages structures can be overpowering in smaller communities) structured parking is very expensive (construction costs: \$35-40K per space) and takes significant time to build, making its construction disruptive for customers. With a large number of cars and limited access points, egress can much slower when compared to surface parking.

The current practice of locating structures adjacent to the station building and/or platform offers customers who drive and park direct, weather-protected access to the platform; but in locations where space is tight, this can come at the expense of bringing other modes close to platform. Parking structures do tend to provide enough capacity that offers driving and parking customers more certainty of availability.

Structures can limit flexibility for future transit oriented redevelopment, which can offer new customers walk-in access and an improved walking environment; but it also uses land more efficiently, which can allow for the redevelopment of surface parking.

### 3.5 Customer Information Interventions

Providing integrated information in mobile applications as well as at the station in digital displays and kiosks on the full range of modes serving the station lets customers know all of their options and make informed choices on the best one for them. It also allows services such as reserved parking, carpool parking, and secure bike parking to be delivered in an integrated and customer-focused manner.



**Figure 8: Customer information screens at Grand Central (left) and Penn (right) Stations in New York City let subway customers with information about their complete trip, from planning and service status to information about nearby destinations.**