

## Transit Strategies – Connections and Network

# Better Information



To be able to use transit, people must first know that it exists and understand how to use it. It is extremely important for transit systems to provide clear and concise information on their available services. Transit typically serves a broad cross-section of an area’s residents, workers, and visitors. Because people access, use, and process information in different ways, transit systems must deliver information through a variety of means.

Most riders now obtain transit information via the internet, either via transit system websites, Google Transit, or mobile apps. However, some people are not web-literate, so telephone and printed information must be provided as well. For transit systems to reach all potential riders, it is essential that they provide effective information in different ways. Transit information provided by third parties is also expanding rapidly, which is creating many new ways to share information.

*Sign with Real-Time Information in Boston*



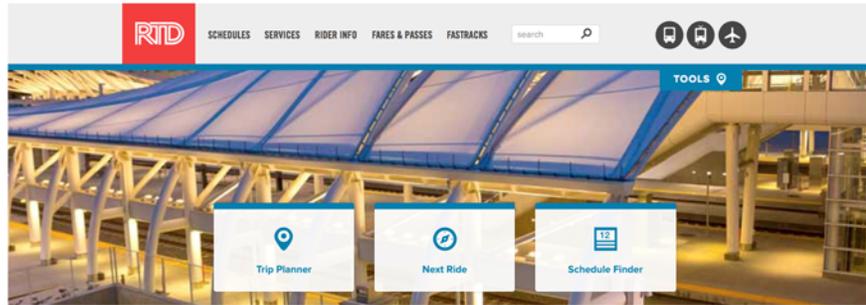
## Basic Information and Delivery Methods

Most large transit agencies provide a wide array of public information, telephone support, printed materials, full-featured websites, and real-time information. The predominant types of information that are widely distributed include:

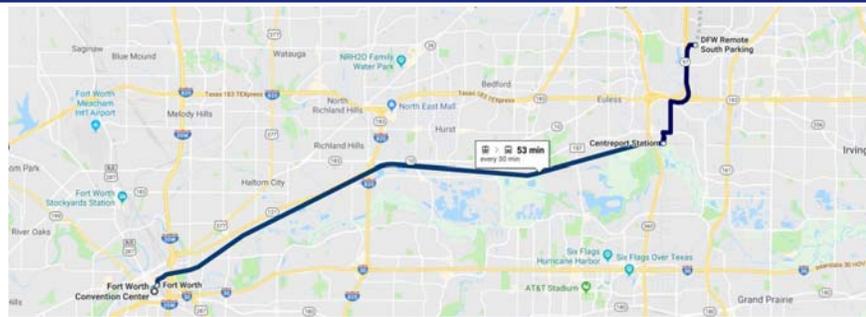
- **Websites**, which are the initial point of access for many people and provide complete information on available services
- **Mobile Apps** that provide trip planning and real-time schedule information
- **Text Messaging** as an alternate method of receiving schedule updates
- **Online Trip Planning** programs such as Google Maps and Apple Maps
- **Real-Time Information** via websites, mobile apps, and at stops
- **System maps** that provide an overview of available services
- **Route schedules and maps** that provide detailed information on a route-by-route basis

Public Information Examples

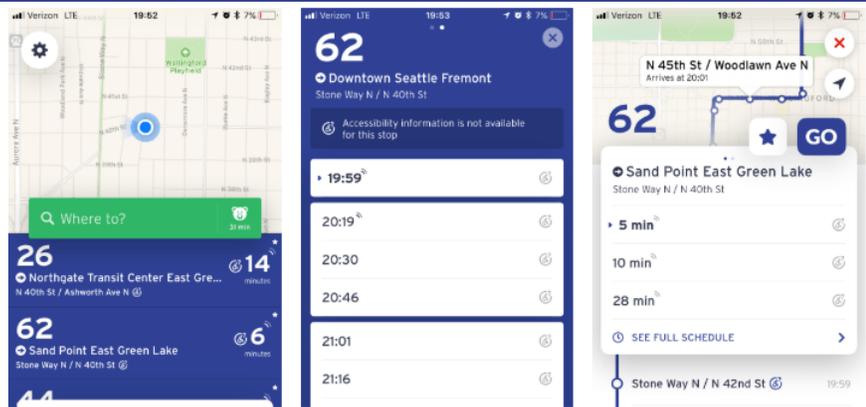
Website



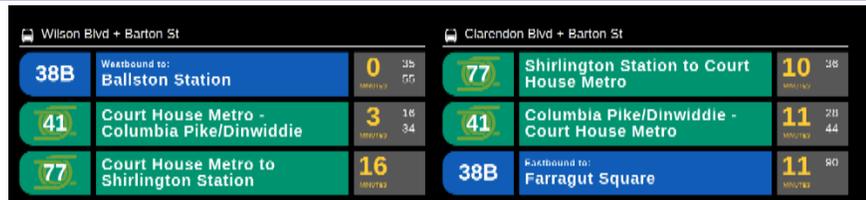
Google Transit



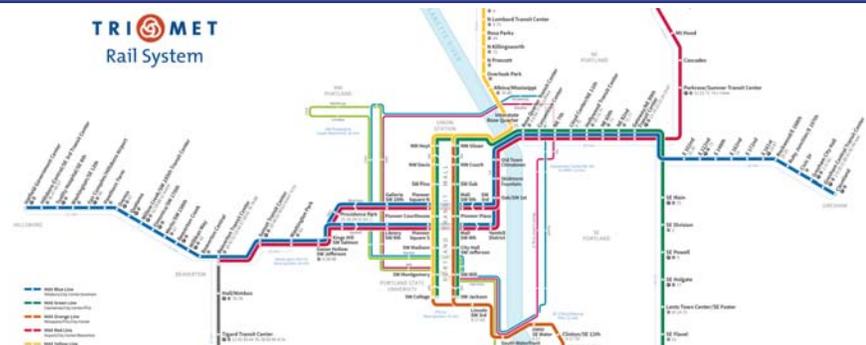
Mobile Apps



Real-Time Information at Stops



System Map



## Websites

The internet has become the primary source of information for most riders, and all transit systems have websites. The types of information that are provided include:

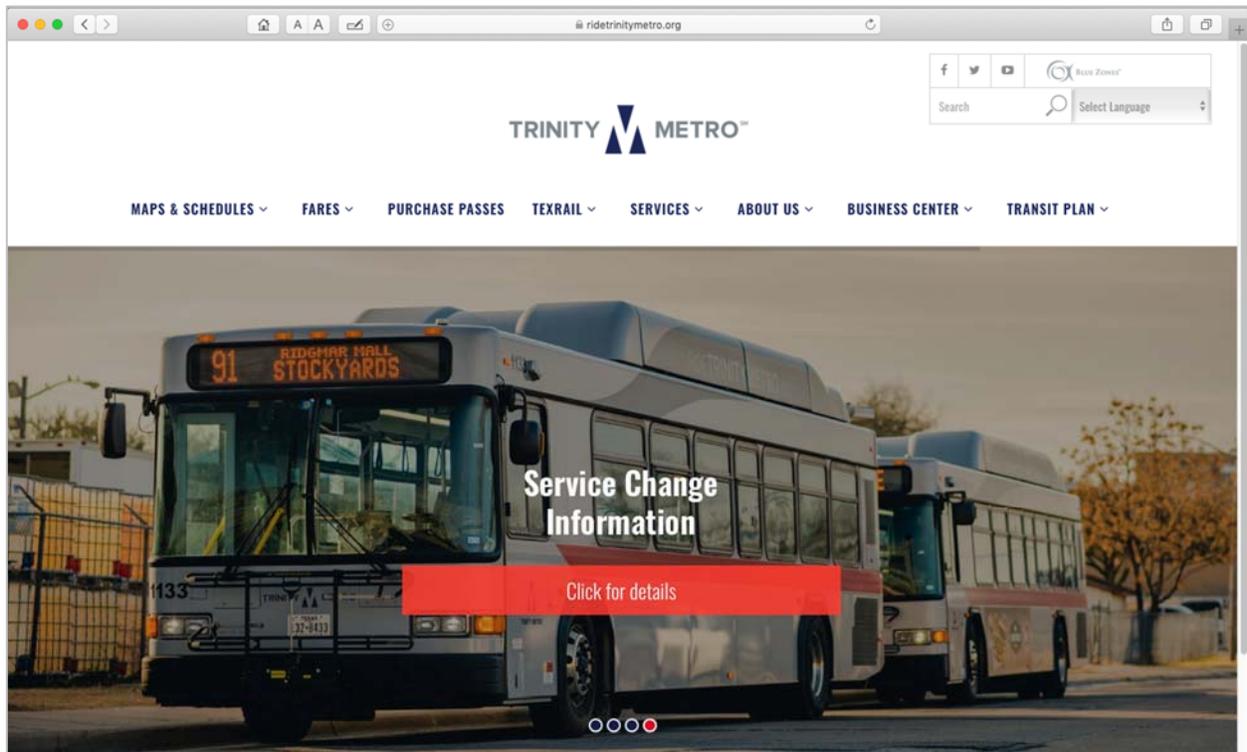
- **Trip planning**
- **System map**
- **Route-by-route schedule information and maps**
- **Service alerts**
- **Fare information**

Other types of information that are common include:

- **Real-time information on vehicle locations and predicted arrivals**
- **Ticket and pass purchases**
- **Customizable e-mail or text alerts for service disruptions, agency news, etc.**
- **Integration with social media, such as Twitter and Facebook, to provide service alerts and updates on transit initiatives**

The quality of transit system websites varies greatly—some are very attractive and easy to use, while others are dated and difficult to use. Key elements in making websites attractive, useful, and easy to use include good visual design, the ability to quickly find basic information, placement of service alerts, and compatibility with mobile devices. Trinity Metro has a full featured website.

### *Trinity Metro Website*



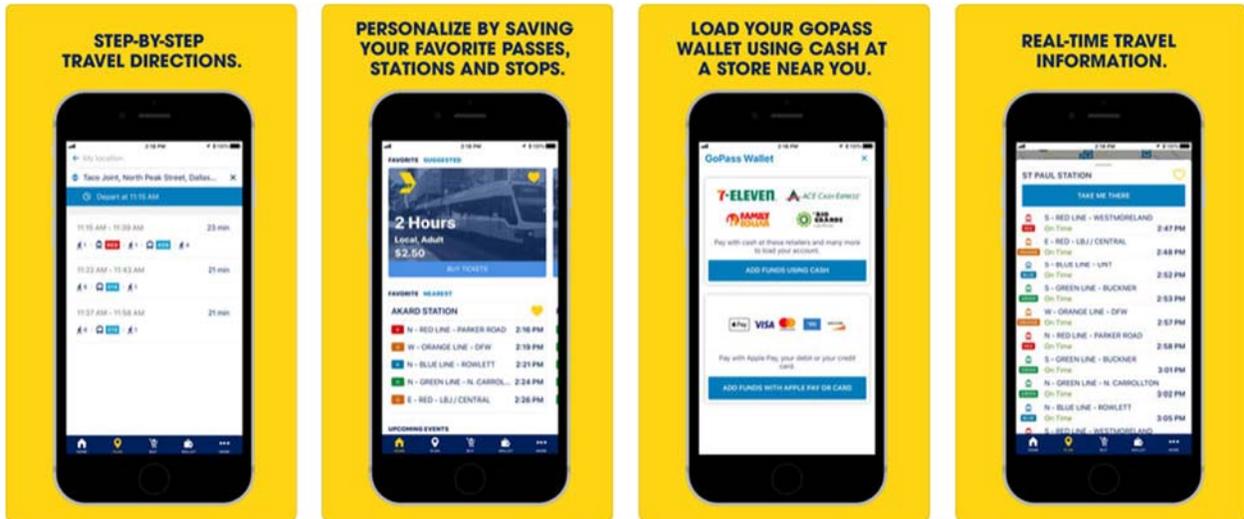
## Mobile Apps

The use of mobile apps to provide transit information has become prevalent and is now expected by many riders. There are two types of apps: (1) third party apps that aggregate information for multiple transit systems, and (2) agency-specific apps. In either case, the apps use the GTFS data that transit systems

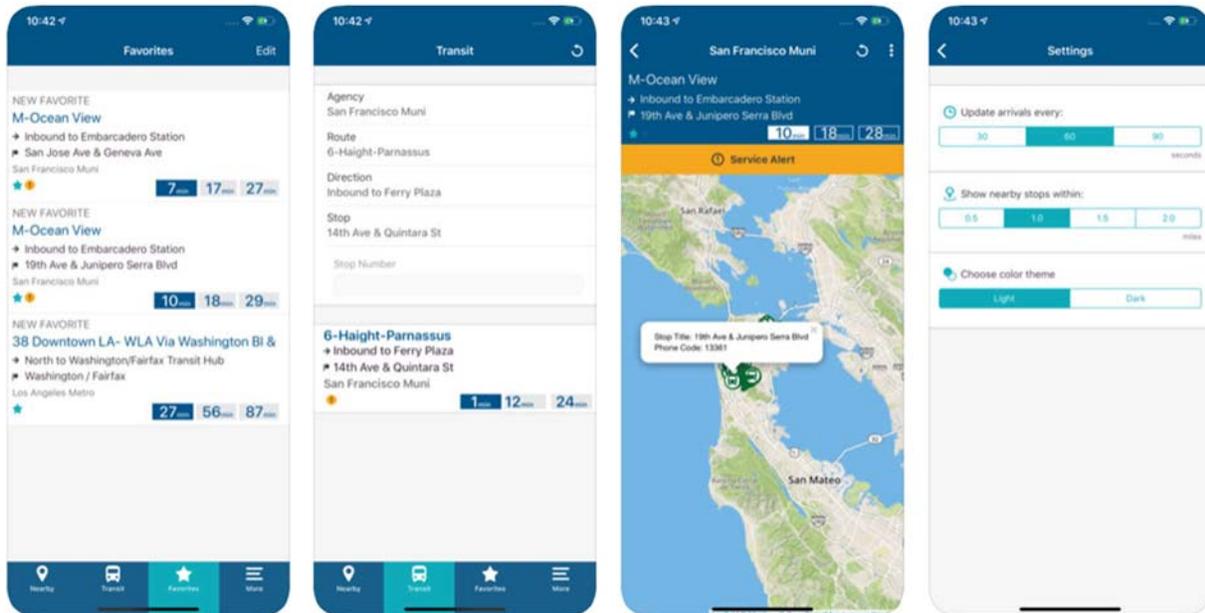
produce for Google Maps. In the case of third party apps, beyond the ongoing provision of GTFS data, the development of these apps does not require any involvement by the transit agencies. Trinity Metro provides information via two apps:

- The GoPass app, which provides trip planning and fare payment for Trinity Metro, DART, and DCTA
- NextBus, which provides real-time information

*Trinity Metro/DART/DCTA GoPass*



*NextBus App*



**Text Messaging**

Schedule information can also be provided by text messaging. With these systems, the transit rider texts the stop number to the transit system and receives a text in response that provides the scheduled arrival times of the next bus or series of buses.



### Orange County Transportation Authority Real-Time Information via Text Messaging



TEXT: 628246

TYPE: bus.[your stop number]and[your route number]Example: bus 3563 71

GET: the next 3 bus arrival times for that stop, based on the time the text message was sent.

RESULT:

\*959a route 071

\*1034a route 071

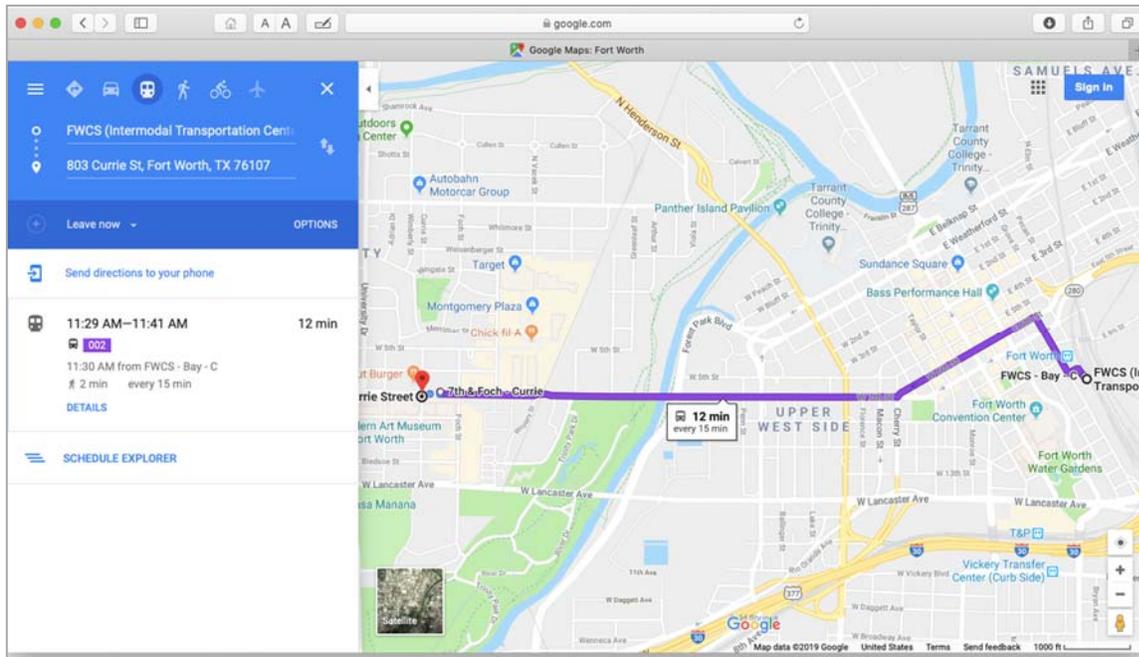
1109a route 071

\*asterisk indicates real-time info

## Online Trip Planners

Online trip planners are now common. The two most dominant are Google Maps and Apple Maps. Both of which provide transit directions, although Google Maps has better coverage. Trinity Metro provides information on both apps.

### Google Maps Transit Directions



Many transit systems, including Trinity Metro, also include trip planners on their websites or links to Google Maps. The trip planners included are typically more difficult to use than Google Maps or Apple Maps. Although not advertised as such, Trinity Metro does both. It includes its own trip planner for trips in its service area (which is more difficult to use than Google Maps) and a link to Google Maps for regional trips that can also be used for local trips.



## Schedules

Schedules are a basic type of information provided by transit systems. Some transit systems, especially larger ones, produce individual “schedule cards” for each route; other transit systems, most often smaller ones, include these on their system maps. Schedule information is delivered to riders:

- ➔ **Via transit agency websites**
- ➔ **Via trip planners such as Google Maps**
- ➔ **Via third-party websites**
- ➔ **Via third-party smartphone apps**
- ➔ **Via text messages**
- ➔ **At stations and stops, both in paper and electronic form**
- ➔ **Onboard transit vehicles and at key transit locations**

Trinity Metro produces traditional schedules that are available in print and on Trinity Metro’s website. As described above, schedule information is also available via Google Maps and Apple Maps, and via its GoPass app.

## Real-Time Information

Real-time information uses GPS-based Automatic Vehicle Location (AVL) technology to track and predict the locations of transit vehicles in real time. This provides information on estimated arrival/departure times, vehicle locations, and service disruption or delay alerts. Once the back-end system has been installed to track vehicles and deliver the information, the information is presented to riders in basically the same ways as for schedule information.

Real-time information is most frequently presented to users via smartphone apps, and as described above, Trinity Metro presents real-time information on its services via the NextBus app.

Real-time information is also frequently presented at stations and stops via dynamic displays. This is most common at rail stations, Bus Rapid Transit (BRT) stations, Rapid Bus stations, and transit centers. Real-time information is also often provided at higher volume bus stops. The most commonly used signs provide information on the next few arriving buses, while more elaborate displays provide information on all or many services, along with maps of bus locations. Trinity Metro provides real-time information at TEXRail stations and its bus transfer centers.

*Real-Time Passenger Information  
Albany, NY*



*Fort Worth, TX*



## Potential Improvements for Fort Worth

Overall, Trinity Metro does an excellent job in providing transit information – both in the quality of its information and the many ways in which it is presented. However, there are two areas in which improvements could be made.

### Provide Information via a Single App

At present, trip planning and fare payment is available via the GoPass app and real-time information is presented in the NextBus app. It would be better for passengers if this information were presented in a single app. DART has developed the GoPass app in conjunction with Trinity Metro and DCTA, an in collaboration with those two agencies, could add real-time information to that app. However, the NextBus is a single purpose app developed by NextBus, which is the vender of Trinity Metro’s real-time information equipment, specifically to display real-time information and does not provide for the addition of other functions.

### Expand Real-Time Information at Bus Stops

Trinity Metro provides real-time information at TEXRail stations, its bus transfer centers, along the SPUR and at Molly the Trolley and Burnett Plaza Lunch Line stops in downtown. Real-time information could also be expanded to Central Station and high ridership bus stops.

*Spur\* Stop Real-Time Information*



*Multiple Route Real-Time Information (Chapel Hill, NC)*

