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TRANSPORTATION
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RTIS Architecture

Volume II: RTIS Data Architecture

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List of Abbreviations and Acronyms

CMS	Content Management System
DIVA	A suite of data maintenance software for the MDV trip planner system.
ESRI	Environmental Systems Research Institute
ETP	Enhanced Trip Planner (see MMTP)
GDT	A schema in the RTD to hold basemap data
GIS	Geographic Information Systems
GML	Geography Markup Language
MDV	MentzDV software company
MMTP	Multi-Modal Trip Planner (see ETP)
MTC	Metropolitan Transportation Commission
RTD	Regional Transit Database
RTDNS	A schema in the RTD to hold non-spatial transit data
RTDS	A schema in the RTD to hold spatial data
RTDWEB	A schema in the RTD to hold web interface data
RTIS XML	An XML schema specification for transporting RTIS transit data
RTIS	Regional Transit Information System
SDE	A schema in the RTD to hold the ArcSDE (spatial) database
TAC	Technical Advisory Committee
TTP	Transit Trip Planner
WebDMS	Web Data Maintenance Suite
XML	Extensible Markup Language

List of Referenced Documents

RTIS Data Operations Manual

RTIS Data QA/QC Strategy

RTIS Developer's Manual

RTIS System Architecture Manual

RTIS System Operations Manual

1 INTRODUCTION

1.1 DOCUMENT PURPOSE

This document introduces the reader to the Regional Transit Information System (RTIS) by explaining the RTIS (aka '511 Transit') purpose, function, history, and role within the San Francisco Bay Area's traveler information system, commonly known as "511."

The document then describes the data architecture of the system. It describes the data flows and schema that make up the RTIS data, list of tables, and field and constraints for each data schema.

1.2 DOCUMENT USE AND INTENDED AUDIENCE

This document will primarily be used by MTC and the RTIS contractor as a technical reference for the RTIS data architecture. It may also be used by Bay Area transportation partners and other external public agencies to learn about the RTIS data structure. Additionally, it may be used in "request for proposal" solicitation process to help potential bidders gain knowledge about the system in order to prepare their proposal.

1.3 RTIS TECHNICAL MANUAL ORGANIZATION

This document is part of a series of technical manuals, shown in Table 1 that documents MTC's 511 Regional Transit Information System.

RTIS Manual Titles	Purpose
RTIS Architecture:	
Volume 1: RTIS System Architecture	Describe the system environments, the components that make up the system, and how the components are connected together, logically and physically. Documents how the components work together, how the system collects data and handles information requests, and how system's computing logic is structured.
Volume 2: RTIS Data Architecture – This document	Describes how data flows into and through the system, how it is managed within the system and how it is disseminated to the users. Describes the tools used to facilitate this data flow.
RTIS Operations:	

RTIS Manual Titles	Purpose
Volume 1: RTIS Systems Operations	Defines how to operate the public side of the system (i.e., configure, run, and administer the system in terms of the public delivery of all information).
Volume 2: RTIS Data Operations	Defines how data moves through the RTIS - from the transit agencies to the Regional Transit Database to the trip planner. Document covers all aspects of maintaining up to date and accurate data.
RTIS Developers' Manual	This document provides technical guidelines for developers to understand the logical tier of the system. After reading this document a new development team member should feel comfortable to maintain and/or enhance a system component.
RTIS Users' Guides:	
Volume 1: RTIS Data Provider Guide	Describes the processes and tools of the RTIS that facilitate the provision of data from the transit agencies to the system. It also includes a list of requirements that a transit agency must fulfill in providing the data to the RTIS system and the roles and responsibilities both transit agencies and MTC have in sharing and maintaining data.
Volume 2: RTIS Customer Service Representative Guide including Trip Planner Call Center Interface User Guide	Instructions for transit agencies on how to use 511 Transit website including the trip planner call center interface to provide transit service information such as service announcements and transit itineraries to their customers.
Volume 3: Trip Planner User Guide	"How-to" instructions for public users using the transit trip planner
Volume 4: Traveler Information Center (TIC) Users' Guide	Instructions for TIC staff on how to use the RTIS online Content Management System (CMS) tool manage transit service announcements.

Table 1 – RTIS Technical Manuals

Readers looking for information not contained in this document should consult the Table of Contents of the other manuals.

1.4 Document Contents

Volume II: RTIS Data Architecture includes the following contents:

1.4.1 Chapter 2: The RTIS Project History and Context

This chapter provides a background on the RTIS and how it relates to the broader San Francisco Bay Area 511 Traveler Information Services. It also describes RTIS stakeholder groups and agencies.

1.4.2 Chapter 3: The RTIS Features

This chapter describes the features and functions provided by the RTIS to the traveling public.

1.4.3 Chapter 4: Data Architecture

The RTIS data architecture is described in this chapter. The RTIS schemas, data dictionaries, indexes, constraints and sequences are documented here in order to provide a complete picture of the RTIS database. These elements together will provide the reader technical information about various different data elements maintained for the RTIS and how these data elements are related to each other. Please note that consumption of these data elements by various features and functionalities are beyond the scope of this document. That discussion will be included in the RTIS Developer's Manual.

1.4.4 Chapter 5: QA/QC Strategy

The QA/QC strategy for various RTD data elements is described in the RTIS data quality assurance and quality control document, "RTIS Data QA/QC Strategy."

2 RTIS BACKGROUND

2.1 HISTORY

In response to State legislation (Senate Bill 1474 [chapter 256, statutes 1996]), the Metropolitan Transportation Commission (MTC) adopted a Transit Coordination and Implementation Plan in February 1997 designed to improve the connections among over two dozen transit services in the San Francisco Bay Area. One of the projects in the Plan is to provide intra- and inter-agency trip planning information and maintain an accurate transit information database.

In July 1997, MTC signed a contract with GIS Trans, Ltd. (which later became bd Systems, then SAIC, and now Leidos) to design, develop, install, and provide maintenance for a database system to coordinate, collect, update, and disseminate transit data. MTC, in cooperation with the Bay Area's transit operators, developed the Regional Transit Information System (RTIS) to collect, organize, and disseminate transit schedule, route, and fare information and provide transit trip planning services across the Bay Area. Representatives from the transit agencies provide guidance to MTC on the RTIS project through the RTIS Technical Advisory Committee (TAC).

2.2 THE SAN FRANCISCO BAY AREA'S 511 TRAVELER INFORMATION PROGRAM

The RTIS is part of MTC's broader 511 Traveler Information Program, which provides transit, traffic, ridesharing, parking, and bicycling information to the public by telephone via the federally dedicated information phone number (5-1-1), the website at 511.org, through the mobile site at m.511.org, and through mobile applications for the iPhone and Android operating systems. The mission statement for the 511 Program is:

> "The 511 program must cost-effectively provide traveler information that customers both want and are prepared to act on, thereby enhancing the efficiency and maximizing the capacity of the Bay Area transportation system. This information should be accurate, reliable, multimodal, comprehensive and regional in scope. Responsibility for the gathering, processing and dissemination of 511 information should be regionally coordinated and rationally allocated to Bay Area transportation organizations — in both the public or private sectors — according to institutional interest, ability and wherewithal."

2.2.1 511 ORGANIZATION

Information provided through the 511 Program is organized by mode – transit, traffic, rideshare, bicycling, and parking. While the 511 program is presented to the customer as a single, comprehensive service, multiple projects and contractors provide content and operations and maintenance support. The RTIS Contract provides services offered through the 511 Transit program in the form of a website (http://transit.511.org), but other MTC contracts provide some transit features. 511 contracts beside RTIS include:

Traffic: The 511 Traffic contract includes the collection and dissemination of traffic information as well as real-time transit information. It also includes dissemination of traveler information services for all modes through the 511 telephone system. The traffic information provided by the Traffic Contractor through 511 includes driving times, traffic conditions (congestion, roadway incidents), construction activity and special events. Detail about the transit information provided by the Traffic Contractor through 511 is described in Section 2.2.2.2.

Rideshare: MTC has a Regional Rideshare Program contract as well as Funding Agreements with several Congestion Management Agencies to provide rideshare services, such as ridematching and employer outreach. The Rideshare Program uses the 511 phone number and a website (http://rideshare.511.org) to provide phone and web-based information about carpooling, vanpooling, park-and-ride lots, employer resources, incentive programs, and includes an internet-based ridematching system.

Bicycling: Bicycling information on the phone is provided through the Regional Rideshare Program contract. The 511 Bicycling website (http://bicycling.511.org) provides information about using bikes on transit, bike safety, local bicycling organizations and more. It also includes an interactive bike mapping tool.

Parking: MTC's 511 Parking program (http://parking.511.org) provides parking facility and pricing information as well as real-time information (select availability) throughout the Bay Area. Details on available parking, facility locations, pricing, hours, and near-by transit station hubs are made available for nearly 100 cities and communities. The 511 Parking program is provided under the 511 Traffic contract.

Marketing: Marketing services for MTC's regional operations programs, including 511, are provided through the Regional Ridesharing and Bicycling RRBP contract. It provides support for marketing, promotional activities, market research, and public relations/information assistance for the 511 Program.

Web Communication Services: This contract supports the web coordination and communications services for MTC's regional operations programs that include 511. It provides support for web design and maintenance guidelines for the 511 Program.

2.2.2 THE 511 TRANSIT PROGRAM

Transit is one of the critical components of the 511 system. Different aspects of the 511 Transit program are supported through a number of contracts.

2.2.2.1 RTIS CONTRACTOR

With coordination support from MTC, the RTIS Contractor provides the majority of services for the 511 Transit Program including:

- In cooperation with transit agencies, collection and processing of transit services data including routes, schedules, stops, fares, and other information for all Bay Area transit operators.
- Development, operation, and maintenance of the 511 Transit Website, http://transit.511.org.
- Development, operation, and maintenance of the mobile 511 Website, http://m.511.org. The mobile website allows for convenient, mobile device access to 511.org's most popular features including: Real-Time Transit Departures, the 511 Transit Trip Planner, the 511 Traffic Map, and Popular 511 Driving Times.
- Development, operation, and maintenance of the 511 Transit App. The Transit App is available for the iPhone and Android smartphones. The app provides door-to-door transit trip planning the more than 30 transit agencies in the region. It also provides scheduled departure times for transit stops and an interactive map where users can view and locate routes and stops.
- With technical support from the software vendor, management and operation of the online 511 Transit Trip Planner, which combines data from all transit agencies and allows the public to generate transit trip itineraries throughout the entire region.
- Management and operation of an online interface to the 511 Transit Trip Planner customized for the use of transit agency customer call centers.
- Management and operation of an online content management system that facilitates processing of user feedback, management of transit service alerts and announcements, and certain augmentation of transit data.
- Operation and upkeep of the system hardware and software.

2.2.2.2 511 TRAFFIC CONTRACTOR

The 511 Traffic Contractor is responsible for the development and operation of the regional Real-Time Transit system including real-time data collection and real-time information dissemination.

The 511 Traffic Contractor also operates the automated 511 Phone Service, which requires the 511 Traffic Contractor to:

- Make beat calls to transit agencies and monitor information outlets to find out about transit system delays.
- Record floodgates on the 511 phone system about transit system delays as appropriate.
- Manage critical transit service disruption information through the online 511 Transit content management system and online ticker messages.

- Provide personalized transit trip information through MY 511. Users can save favorite transit trips based on departure stops and then receive real-time departure predictions for all routes serving those stops.
- Maintain the 511 phone system that automatically routes 511 callers to transit agency customer service centers.
- Collect transit agency information about cash fares, transfers, pre-paid passes and hours of operation on a quarterly basis and make them available on the phone.

2.2.2.3 MARKETING CONTRACTOR

The 511 Marketing Contractor is responsible for the following activities related to the provision of transit service on 511:

- Overall 511 program marketing efforts including promotion of 511 Transit services.
- Assistance for 511 branding.
- Market research support for the 511 Transit program.

2.2.2.4 WEB & COMMUNICATION SERVICES CONTRACTOR

The 511 Web & Communications Services Contractor is responsible for the following activities related to the provision of transit service on 511:

- Management of the 511.org website that provides link to the 511 Transit website.
- Assistance for 511 branding and consistent website design support for all 511 websites that includes 511 Transit website.

2.3 PROJECT STAKEHOLDERS

2.3.1 MTC

The Metropolitan Transportation Commission (MTC) manages the San Francisco Bay Area's 511 Program including the Regional Transit Information System. MTC is the regional transportation planning agency and the Metropolitan Planning Organization (MPO) for the nine-county San Francisco Bay Area, with statutory responsibilities for coordinating transportation services in the region.

2.3.2 BAY AREA TRANSIT AGENCIES

Numerous agencies offer bus, rail, ferry, and shuttle services in the region. The systems' combined service area covers the nine Bay Area counties - San Francisco, Alameda, Contra Costa, Santa Clara, San Mateo, Marin, Sonoma, Napa, and Solano. Together, the Bay Area's transit services carry an average weekday ridership of more than 1.1 million; they provide 9,000 miles of bus routes, including 470 miles of rail transit.

2.3.3 The RTIS Contractor

MTC contracts out the operation, maintenance, and development of the RTIS system. With guidance from MTC, the RTIS contractor is responsible for delivering 511 Transit services satisfying set performance standards.

2.3.4 Outside Developers and Data Users

The 511 Transit data feed is valued by individuals, agencies and organizations that want to develop applications or conduct research related to transit services in the San Francisco Bay Area. RTIS provides the only comprehensive and integrated transit data repository and information services for all of Bay Area transit agencies. Those receiving the RTIS data feed range from individual students conducting research to private application developers to Google for inclusion in Google Transit.

The RTIS also offers a transit trip planner widget that can be easily plugged in to other websites allowing users of those websites plan transit trips. See Section 3.14 for more information about the Transit Trip Planner widget feature of the RTIS.

2.3.5 The Public

The RTIS exists to serve the traveling public. Its function is to provide comprehensive transit information to regular and occasional transit riders. Much of that transit information is available to the public via telephone services and through the web. In the month of December 2013, the system processed over 446,000 phone requests for departure times, Clipper information, All Nighter information, paratransit information, and information on specific transit agencies. The transit web services processed just shy of 1.4 million web requests in December 2013 for departure times, rail information, nearby routes and services, fares, popular destinations, transit schedules, and trip planner itineraries. Requests for trip planner itineraries accounted for 48% of all web requests in December 2013.

3 RTIS Features and Functions

The Regional Transit Information System provides transit schedule, route, fare, and other information for Bay Area public transit agencies. It also provides the Transit Trip Planner, which offers complete transit trip itineraries across the region with fares and inter-agency transfers. RTIS is the only source for most accurate, complete, and comprehensive public transit information in the region.

The primary dissemination channel for the RTIS is the transit web pages through the main 511 website at http://www.511.org or directly through the 511 Transit website at http://transit.511.org. In addition, transit trip planner is also available on handheld devices through the 511 Mobile website at http://m.511.org as well as the 511 mobile application available for both iOS and Android platforms. In 2013, the 511 Transit website experienced an average of 1.8 million user sessions per month.

511 also provides transit information on the phone (by calling 5-1-1). Callers can listen to recorded transit information or be transferred to transit agencies where a live operator can provide further information. As mentioned in Section 2.3.5, the 511 system processed over 446,000 phone requests relating to Transit information in December 2013. Transit phone requests have more than doubled since the end of 2009, in large part to departure time requests. Departure time phone requests alone normally constitute 75%-80% of all monthly transit phone requests. Requests for departure time information and information on specific transit agencies accounted for 99% of all transit phone requests in the month of December 2013.

3.1 The Transit Trip Planner and Associated Features

MTC uses customized transit trip planning software from mdv. Trip planning services are provided through the 511 Transit website, 511 Mobile website, and the 511 Mobile application. The transit trip planner was first launched on the Internet in July 2001. Over 30,000 trip itineraries are currently viewed on a daily basis and this number has grown by nearly 20% since 2008.

The trip planner also provides interfaces that can be embedded on external websites allowing those website users an easy way to plan transit trips.

The trip planner allows users to obtain inter-agency transit itineraries by entering their origin and destination addresses, intersections, landmarks, or finding the locations on the map. Users are provided multiple trip options optimized for least travel time, fewest transfers, least walking, or least cost. Figure 1 shows a sample generated trip plan.

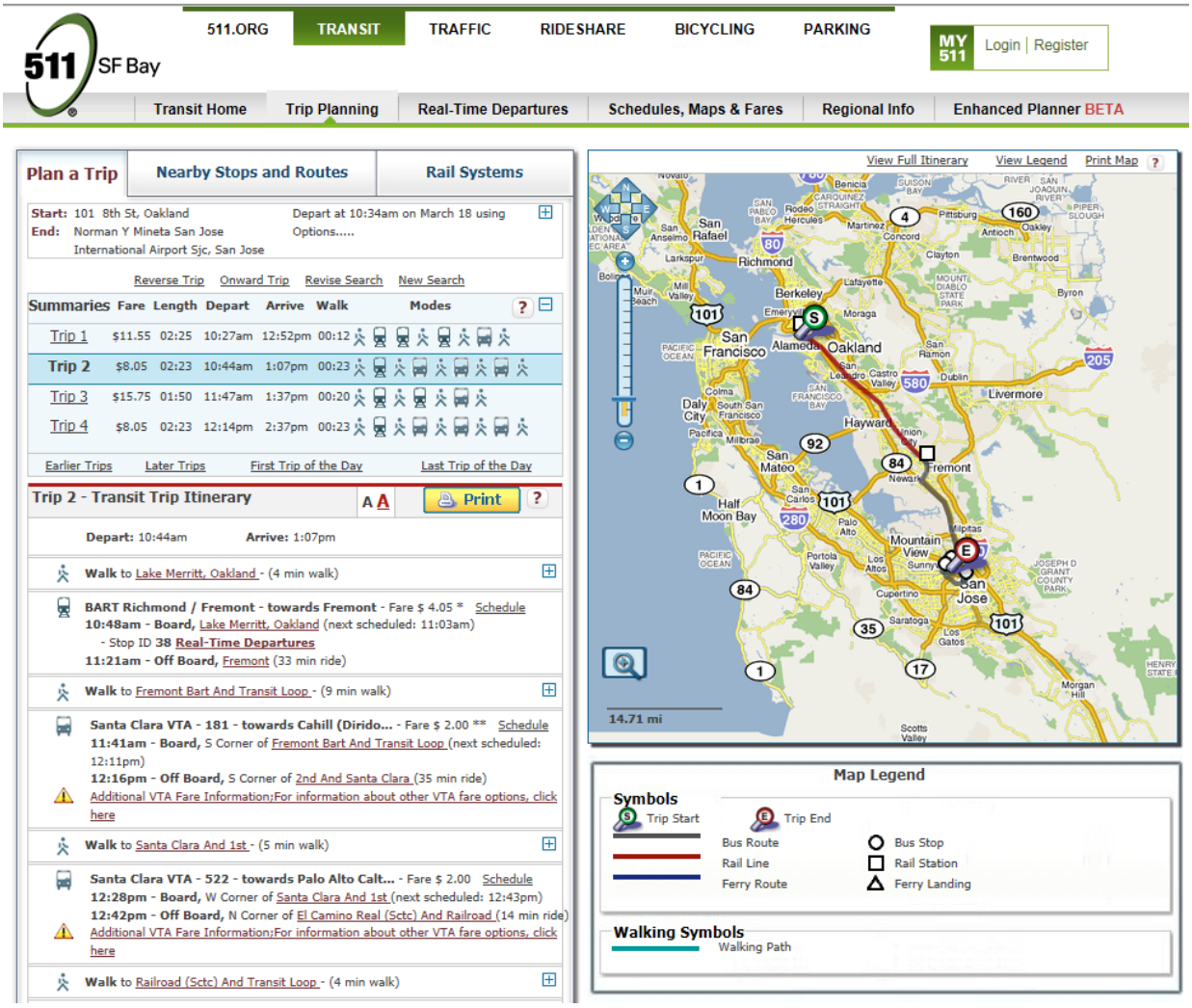


Figure 1 – Sample Transit Trip Itinerary Generated by 511 Transit

3.2 Nearby Stops and Routes

This feature allows users to view transit routes and stops near a user specified location. Routes and stops are filtered by user selected radius distance, time, and date. Users can then display on the map up to three of the nearby route patterns at a time from the list of routes, and view relevant and available information near these stops. Figure 2 shows a sample generated Nearby Stops and Routes map.

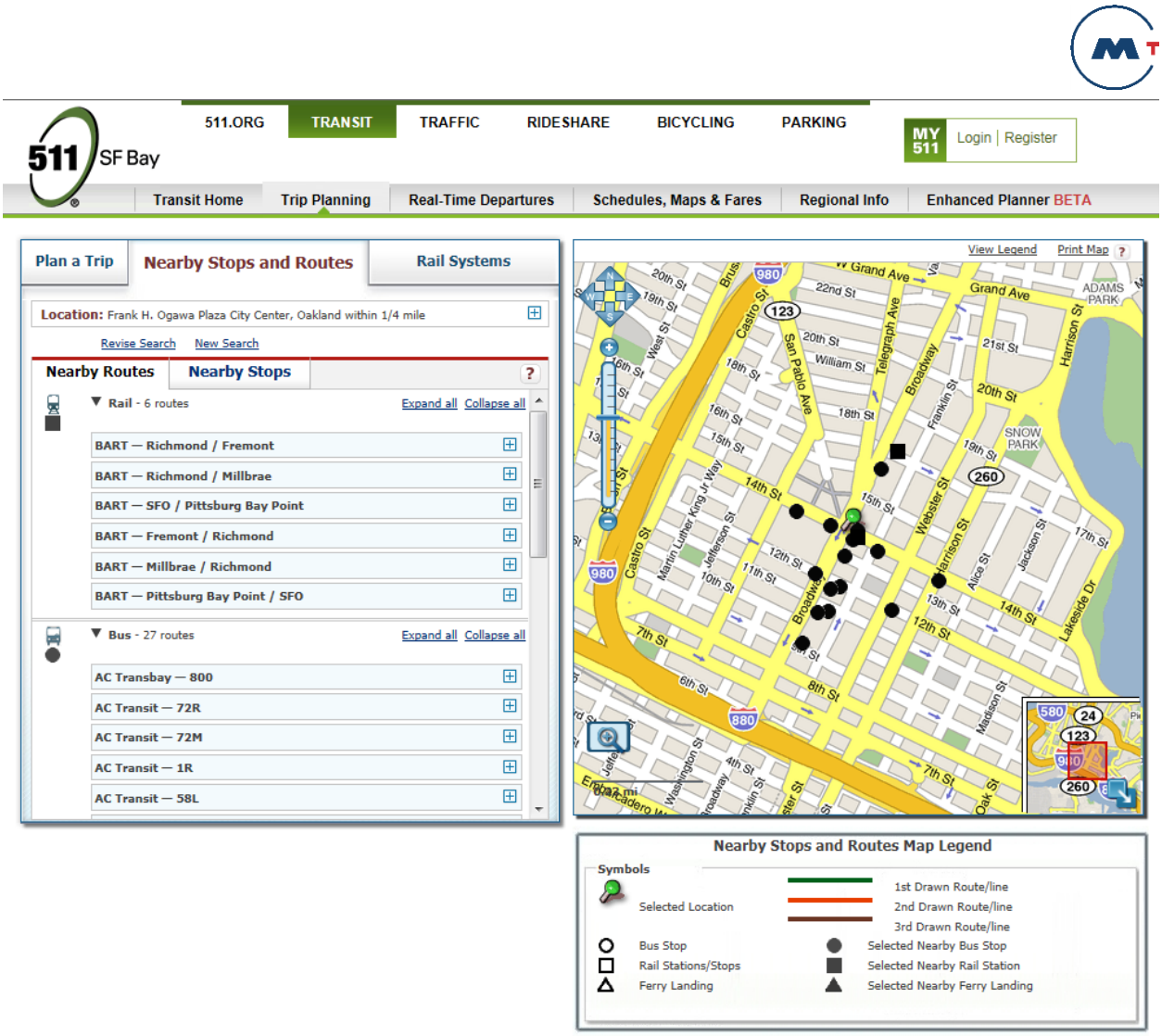


Figure 2 – Sample Nearby Stops and Routes Generated by 511 Transit

3.3 Rail Systems

This feature lists all rail services in the Bay Area in various logical groups. Users can select services by an individual rail routes, provider names, or a types of services and display on a map. From the map, users can click a station to see station details, plan a trip to or from the station and/or see scheduled departures for that station. Users can also view a schematic for a selected rail line stations with listing of various amenities.

3.4 Real-Time Departures

While the 511 Traffic contractor operates and maintains the 511 real-time transit system (a.k.a., 511 Departure Times) including collection and processing of all real-time data, both the 511 Traffic (primarily) and the RTIS Contractors help disseminate the real-time transit information. 511 Transit website hosts a Departure Times prediction tool along with a stop ID lookup tool for the real-time system. It also provides helpful information about real-time texting/SMS feature.

Once a query is submitted through the stop ID lookup tool, a numeric identification number for the desired stop is provided. This stop ID can then be used on the 511 phone system to receive real-time departure times for routes serving that stop.

3.5 Schedules and Route Maps

This feature provides timetables and maps of routes for transit services in the Bay Area. Service data for almost all Bay Area transit agencies is stored in the Regional Transit Database (RTD). To facilitate the user's ability to select an agency, the agencies are organized by the type of transit service they provide (e.g., bus, rail, ferry). This organization is very useful to all users including tourists who may want to ride the ferry or a cable car.

Upon selecting an agency, the map displays the service area of the agency and lists the agency's routes. Selection of a route will display the schedule for that route along with the route map. Users can also view static route maps created and uploaded by the transit agency.

3.6 Fares

The 511 Transit website categorizes Bay Area transit agencies by transit mode (e.g., rail, bus, ferry etc.). Within each category, a user can select an agency and see a map of the agency service area. The fares tab lists the cash fares by rider category (e.g., adult, senior, child, etc.) for the selected agency.

3.7 Agency Profiles

The 511 Transit website categorizes Bay Area transit agencies by transit mode (e.g., rail, bus, ferry etc.). Within each category, a user can select an agency and see a map of the agency's routes and service area. Another tab presents fare information for the selected agency. The Agency Profile tab provides a description of the service area and other basic information including contact information for a selected transit agency.

3.8 Clipper

Previously known as TransLink®, Clipper is the only regional smart card fare payment system for transit. This section of the website provides a brief overview of the Clipper smart card program and how it can be used. Also provided is a link to the Clipper website.

3.9 Transit Basics

This feature provides general information about transit services in the San Francisco Bay Area, regional transit highlights, basic know-how for planning a trip, and some background information about riding transit. This textual description includes many links to relevant internal and external information resources.

3.10 Popular Destinations

This feature categorizes popular destinations in the Bay Area into logical groups such as museums, transit hubs, parks & gardens, sports & events, etc. and provides a drop-down list of destinations within a category (e.g., Mount Tamalpais State Park under the "Parks & Gardens" category). When selected, location of the destination is shown on the map. Users can plan trips to or from the selected popular destination or display nearby routes and services using links provided in a map bubble attached to the destination location.

3.11 All Nighter Service

This feature provides consolidated information about the transit routes that provide critical connectivity throughout the region during late night/early morning hours when regular transit service is not available. Convenient links to timetables for All Nighter routes are provided.

3.12 Accessible and Senior Services

This feature provides information about accessible transportation options in the Bay Area and how to utilize accessible transportation services offered by various operators.

3.13 Announcements

Announcements provide useful alert messages about incidents, detours, and service disruption about transit services in the Bay Area. Announcements are categorized as "Priority Alerts," "Regional Announcements" or "Agency Announcements." Priority alerts containing important/emergency transit service disruption information may also appear as a 'Breaking News' scrolling/ticker message on the 511 Transit website linked to an announcement. Priority alerts include transit delays of 20 minutes or more on fixed-route services. Regional announcements are those that affect multiple Bay Area jurisdictions, while agency announcements pertain to just one transit agency. Both types of announcements are less time-critical than priority alerts. They include information such as route detours, construction updates, or holiday schedules. Announcements can be attached to specific route(s) which will make them appear on transit trip itineraries that include that route. An announcement or alert may also appear on timetable and agency profile pages if they pertain to the schedules of specific route or agency being viewed.

3.14 Trip Planner Widget

Trip planner widget, a.k.a. the Clean Interface is a user entry form that can be plugged into an external websites to provide quick access to the 511 transit trip planning software. External websites can integrate a code snippet provided by MTC that exposes the trip planner entry form and access to the 511 Transit trip planner. This feature allows any organization (e.g., an airport, sports/cultural venues) to provide transit trip planning services from its own website by taking advantage of the regional trip planning application and database.

3.15 Content Management System

The Content Management System (CMS) allows users to create and manage a number of items including transit service announcements, agency profile information, user accounts, popular destination information, etc. Transit agency users have the ability to manage basic transit route information and upload static transit maps.

3.16 Enhanced Trip Planner BETA

MTC currently has an Enhanced Trip Planner in the development BETA stage but is available to the public for use. It has all the same transit trip (including walking portion) features of the existing Transit Trip Planner; but the Enhanced Trip Planner also offers directions, pricing and time estimates for:

- transit-only,
- drive-to-transit,
- or drive-only trips.

The new Enhanced Trip Planner will enable users to compare a driving trip, a transit trip, and a trip of driving to transit facilities, parking or dropping off transit riders there, and continuing their trip using transit. Other features include the estimated pricing comparison for each trip, information (where available) about rates at adjacent major parking facilities and a carbon calculator for each trip and trip type. The enhanced trip planner is a more powerful and robust tool for travelers that desire specific itineraries that fit more specific travel needs.

The Enhanced Trip Planner is available through the 511 website by clicking on the "Enhanced Planner BETA" links on various pages of 511.org. Figure 3 shows a sample generated enhanced trip plan.

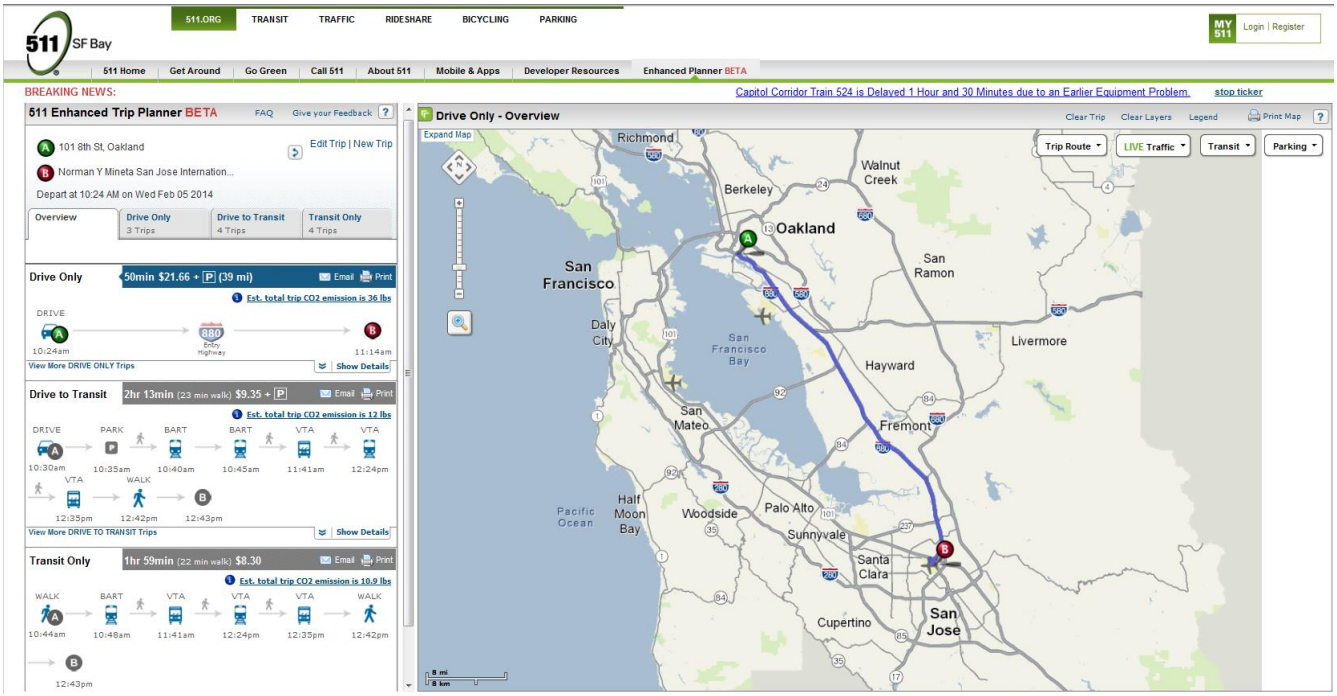


Figure 3 – Sample Trip Itinerary Generated by 511 Enhanced Transit Trip Planner BETA

4 RTIS DATA ARCHITECTURE OVERVIEW

This section provides overall summary of the RTIS Data Architecture with diagrams showing the logical flows of data within a database and between different databases within the system.

4.1 DATA FLOW AND TRANSFER

In this sub-section various data flow processes are introduced. They are further discussed in detail in the RTIS System Architecture document.

RTDNS (Regional Transit Database – Non-Spatial) data is collected from various agencies either in RTIS XML, GTFS+, or in other non-standard formats. When the data is collected in RTIS XML format, the XML data is loaded into a development database using a tool called "XML Engine". GTFS+ is a format that extends the General Transit Feed Specification (GTFS) by adding afew additional files in the same CSV format. Data received in GTFS+ format is also processed through a GTFS+ specific tool within the XML Engine application and loaded into the development database. Data collected in non-standard formats is manually updated directly on the development database using a variety of means (WebDMS, Oracle SQL Developer, and both predefined and ad hoc SQL/PL-SQL statements and scripts).

The data on the development database is reviewed for quality control based on the policies described in the "QA QC Strategy" document. If major flaws are found during XML data loading or quality control processes, transit agencies may be requested to rectify those data flaws and provide a fresh dataset. Once the data passes various quality tests, it is then transferred to the staging database. The staging database is a replica of the production database with respect to the data content. From the staging database, data is then exported in RTIS XML format and loaded into the trip planner maintenance environment and the production RTD databases. From the trip planner, data is transferred to the production (both transit and multi-modal) trip planner environments. As soon as the data is transfered to the production RTD and production trip planner, it immediately becomes available to the end user. Figure 1 describes the high level data flow for RTDNS.

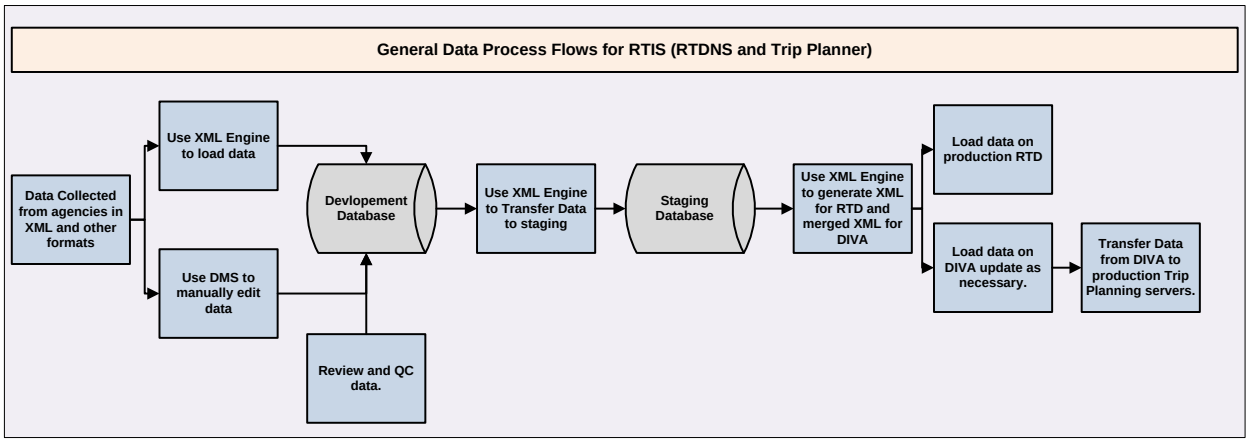


Figure 1 – Data Flow Diagram for RTDNS Data

Data for RTDWEB (Regional Transit Database - Web) schema is generated from two sources. First, it contains all of the web site usage data. Every click made on the 511 Transit website is stored as an event. These events are analyzed and summarized on a daily basis to generate daily, weekly, and monthly statistics. Detail statistics are then made available on the CMS (Content Management System) website at http://transit.511.org/cms. The second source of the data is the CMS users themselves. CMS users can create and manage transit service announcements, manage agency profile information, manage user accounts, manage popular destination information, review and respond to feedbacks, etc. Users from transit agencies can also manage certain information about transit routes and static transit service maps. Some of the user created data links back to RTDNS data, such as route descriptions, but most of the data created in RTDWEB is independent and has no direct connection with RTDNS data. Figure 2 describes the high level data flow for RTDWEB.

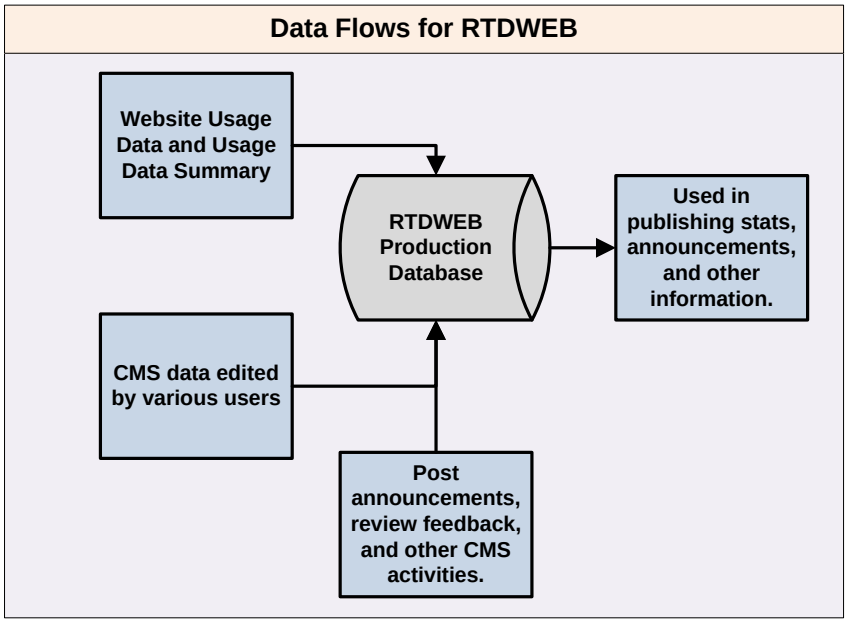


Figure 2 – Data Flow Diagram for RTDWEB Data

RTDS (Regional Transit Database - Spatial) schema contains spatial data that does not change as frequently as the RTDNS data. Data in this schema is primarily created and managed by the RTIS contractor. This schema contains spatial data layers for route geometry, agency service area boundaries, agency fare zone boundaries, center points, and pattern stops. Most of the elements in RTDS schema have relationships to relevant data elements with the RTDNS data. The data from RTDS is presented on dynamic online maps whenever associated non-spatial data is accessed. For example, when a user requests route schedules, a route map of the selected route is also presented. The RTDS data is updated whenever the underlying data elements are changed. For example, route geometry for a given route is updated by the RTIS contractor when

the route undergoes structural, or pattern, changes. These changes are done manually using a GIS-based data management software and loaded on the database manually using ESRI ArcCatalog. RTDS data is managed by a spatial database management engine called ArcSDE, a product of ESRI.

4.2 RTIS DATABASES

The Regional Transit Database (RTD) is a collection of databases (or schemas) which satisfy the data storage and retreival requirements of the RTIS system. The following subsections provide additional detail and references for all six schemas in the RTD.

4.2.1 RTDNS DATA

The RTDNS schema entity relationship diagram is attached as Appendix A. The diagram shows various tables representing the non-spatial transit data elements and relationships among them. A detailed breakdown of the significant objects in the RTDNS schema such as tables, triggers, sequences, indices are included in Appendix D.

4.2.2 RTDWEB DATA

The RTDWEB schema entity relationship diagram is attached as Appendix B. The schema shows various tables representing the transit data elements and relationships among various data elements. Details of all objects in the RTDWEB schema such as tables, triggers, sequences, indices are included in Appendix E.

4.2.3 RTDS DATA

The RTDS schema contains many tables that are added and used by ArcSDE software for management of spatial data related to RTDNS data. The actual numbers of tables created and used for the purpose of 511 Transit website are relatively small, and because they are created and managed by ESRI GIS software tools, such as ArcCatalog, an entity relationship diagram for RTDS is not provided. Details of many objects in the RTDS schema such as tables, triggers, sequences, indices are included in Appendix F.

4.2.4 SDE DATA

The SDE schema contains many tables that are added and used by ArcSDE software for management of spatial data. This schema acts as the central SDE database and a repository that keeps track of all other spatial data across the entire database. Because this schema is created and managed by ESRI GIS software tools, such as ArcCatalog, no entity relationship diagram or object detail will be provided.

4.2.5 GDT DATA

MTC maintains and shares a regional license for TeleAtlas MultiNet basemap data used to support all 511 Transit website mapping and spatial data management needs. RTIS contractor updates the basemap data when MTC provides a new TeleAtlas dataset. The data dictionary for TeleAtlas MultiNet dataset is maintained by MTC GIS unit and can be made available on request. This is a licensed dataset, so no entity relationship diagram or object detail will be provided.

4.2.6 TRAFFIC DATA

The TRAFFIC schema holds a street network link dictionary that consists of roadways for the traffic map features of the Multi-Modal Trip Planner. Data is fed real-time into incident capture tables for open construction and highway incidents. Links are also updated every few minutes with current speed data. Incidents and color-coded links representing highway congestion can then be overlaid directly on the MMTP map.

The TRAFFIC schema entity relationship diagram is attached as Appendix C. The schema shows various tables representing the traffic data elements and relationships among various data elements. Details of all objects in the TRAFFIC schema such as tables, triggers, sequences, indices are included in Appendix G.

4.2.7 CROSS SCHEMA RELATIONSHIPS

The following table describes how the schemas are connected to each other.

RTDNS Object	Related Schema	Related Object	How the relationship is used
Route	RTDS	RouteGeometry	When a route timetable is viewed on the 511 Transit website the geometry of that route from the RouteGeometry table becomes available to the user.
	RTDWEB	AgencyRoute	When a route schedule is viewed on the 511 Transit website, a counter in the AgencyRoute table is incremented to account for the usage of that route in the daily statistics.
	RTDWEB	AnnouncementRoute	Transit service announcements can be linked to routes. When scheule for a route is viewed or the route appears in a trip itinerary, associated announcements in the AnnouncementRoute table are displayed.
	Trip Planner database	RouteIDs	Trip planner can link to the detailed schedules of a route from within an itinerary. The RouteIDs are used for that purpose.

RTDNS Object	Related Schema	Related Object	How the relationship is used
Agency	RTDWEB	TransitProvider	CMS data associated with a transit agency such as agency profile, contact information, agency website URLs for various information, etc. are stored in the TransitProvider table and displayed on 511 Transit website based on the association with the Agency table through agency ID.
	RTDS	ServiceArea Maps	When an agency is selected on the 511 Transit website associated service area maps are displayed through agency ID association.
	RTDS	Fare Zone maps	When fares of an agency withzone fares are viewed on 511 Transit website, associated fare zone map layer from RTDS is displayed.
Landmark	RTDWEB	Popular Destination	Popular destination information in RTDWEB is associated to Landmarks in RTDNS through the landmark ID. When a user on 511 Transit website chooses to generate an itinerary to or from a popular destination, location information of the associated landmark is used.
Stop	Trip Planner	StopIDs	To maintain stop interchanges and clusters in the trip planner persistent StopIDs are maintained in RTDNS and provided with the trip planner XML data export.
PatternStop	RTDS	PatternStop layer	When patternstop table in RTDNS is changed, a new patternstop layer in RTDS is generated. PatternStop layer is used to display stops on the map in 511 Transit website.

Table 2 – Cross-schema Dependencies

4.3 TRIP PLANNER DATA

The majority of trip planner data is loaded from the RTIS XML file that is generated by XML Engine from RTDNS data. For data already active, the effective date is in the past, the XML file is generated from the staging database. However, if the effective date is still in the future, a merged XML is created that contains current data from the staging database plus future data from the maintenance database. In addition to the XML data, the trip planner creates some data necessary for generating more accurate itineraries. These data elements include clusters of stops where a number of stops from the RTD are treated as one stop. Routes, stops, patterns, daytypes and timetables are generated during the XML import, plus a few support files which cross-reference trip planner route and stop IDs to their RTD equivalent IDs. Other data features are maintained by the RTIS contractor manually using the DIVA software suite such as agency definitions, walking distance/time calculation, stop-to-stop interchanges facilitating transfers,

stop tariff zones, holiday daytypes, fares, timed transfers, pick-up and drop-off restrictions, and basemap and route geometry. Landmarks, called Points of Interest, and parking data (for MMTP) have separate data and loading requirements. Details of various objects that are maintained using DIVA are described in RTIS Data Operations manual.

As the MDV data is proprietary, the schema will not be discussed. The details of the data maintained through DIVA will be discussed in the RTIS Data Operations manual.

4.4 RTIS XML SCHEMA

The RTIS XML schema is the foundation for exchanging RTD data. RTIS data maintenance and import/export tool, XML Engine, uses the XML schema to extract, transfer and load data from various sources to and from RTD. Note that the RTIS XML schema contains elements primarily from RTDNS. The relationships among various data elements are the same as they are in the database. For example, the agency is the master node which has routes, stops, fares, etc. as children. Some elements from RTDS are also included. For example, PatternGeometry and RouteGeometry from RTDS are supported using GML. The XML schema is presented in Appendix H.

5 DATA QA/QC STRATEGY AND PROCESSES

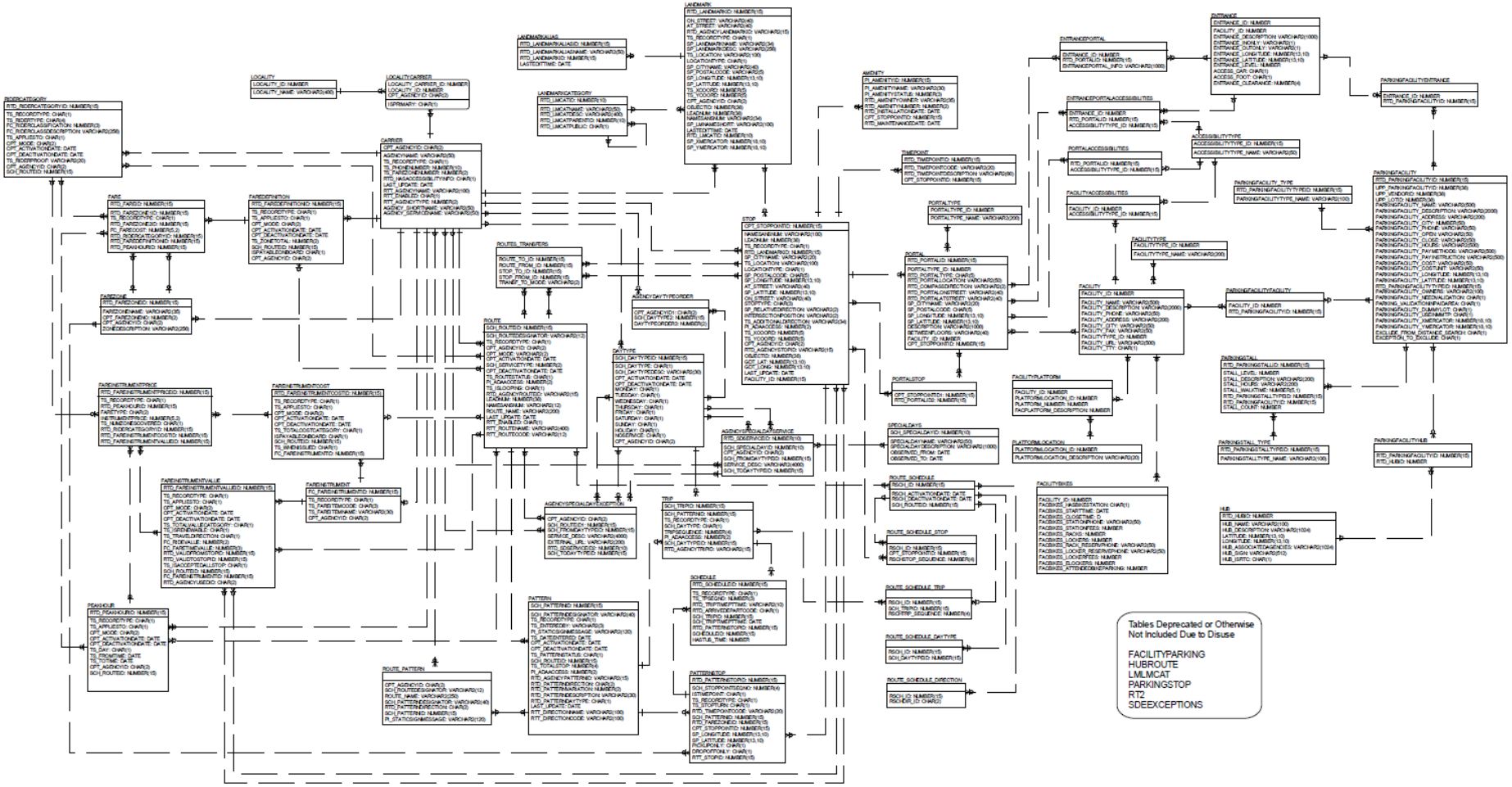
Please refer to the document RTIS Data QA/QC Strategy for more information. The QA/QC Strategy document is used to check the data quality in terms of data completeness, data accuracy and data timeliness.

6 Data Performance Standards and Monitoring

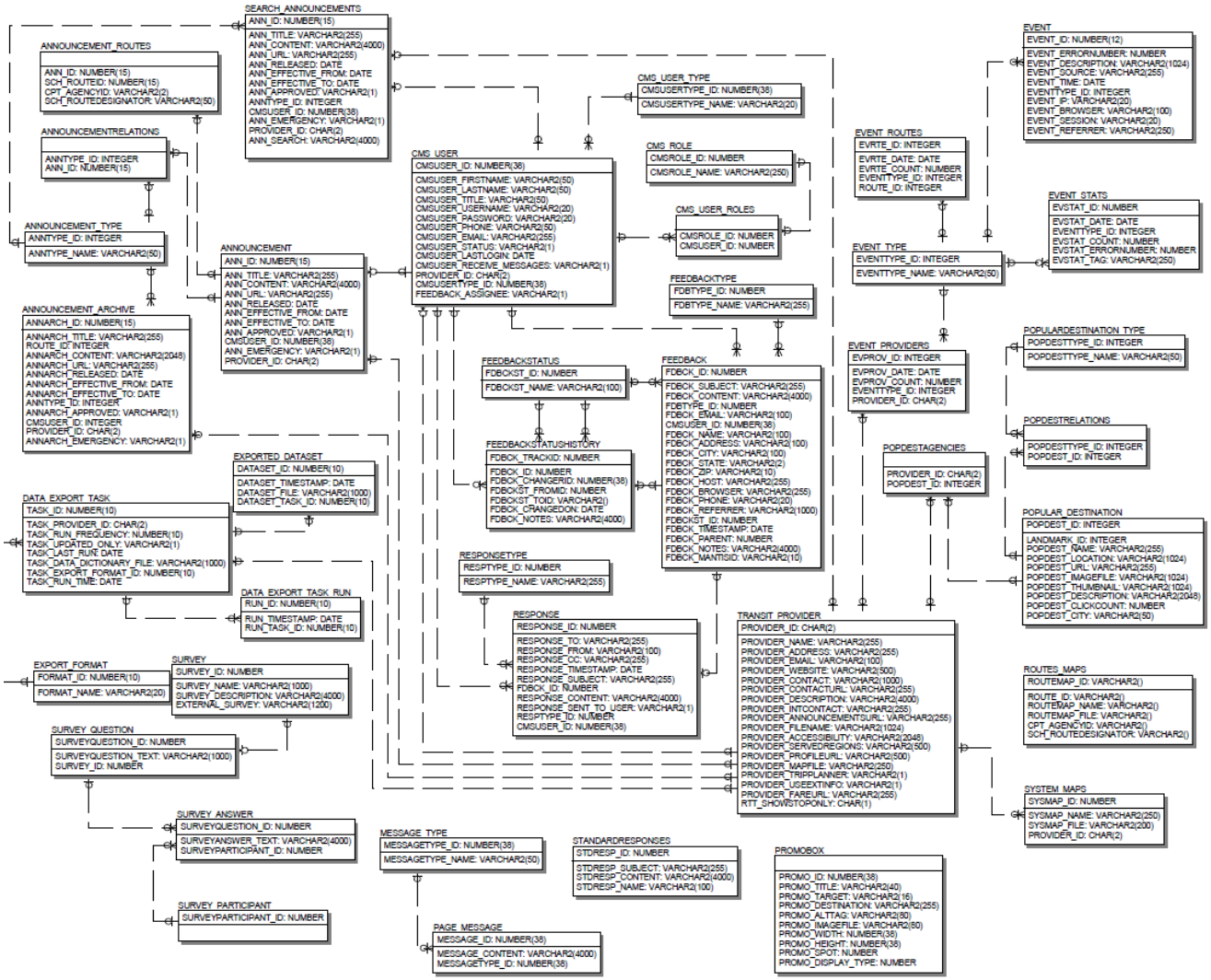
Please refer to the performance monitoring section of the RTIS Data Operations manual.

Appendix A RTDNS Schema Entity Relationship Diagram

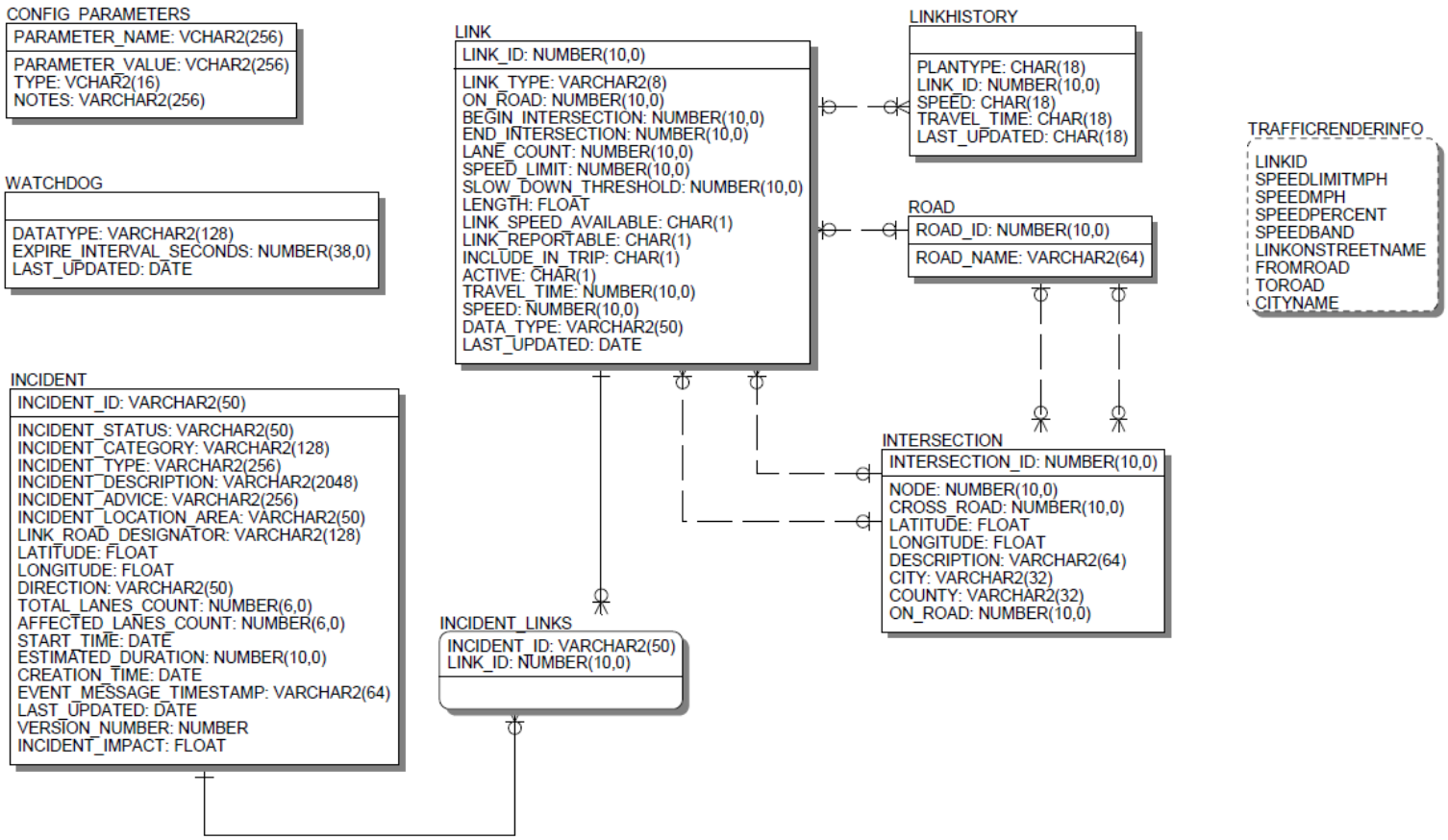
The RTDNS schema is large and complex, a PDF copy of the schema E-R diagram can be furnished upon request.



Appendix B RTDWEB SCHEMA ENTITY RELATIONSHIP DIAGRAM



Appendix C TRAFFIC SCHEMA ENTITY RELATIONSHIP DIAGRAM



Appendix D SCHEMA DESCRIPTIONS - RTDNS

RTDNS: List of All Tables

Table Name	# of Cols	# of Indexes	Tablespace	Buffer Pool	Comment
ACCESSIBILITYTYPE	2	1	USERS	DEFAULT	Defines human physical access requirements for ADA compliance
AGENCYDAYTYPEORDER	3	3	USERS	DEFAULT	Numerically orders daytypes
AGENCYSPECIALDAYEXCEPTION	7	5	USERS	DEFAULT	Links specialdays with daytype service for routes (route-only observances)
AGENCYSPECIALDAYSERVICE	6	4	USERS	DEFAULT	Links specialdays with daytype service for carriers (agency-wide observances)
AMENITY	8	2	USERS	DEFAULT	Defines all physical features that may appear at any stop
BARTRTTPARTIALROUTES	3	1	USERS	DEFAULT	Holds partial route information for BART routes, for use with RTT/CDP
BARTRTTPARTIALROUTESTOPS	6	0	USERS	DEFAULT	Holds partial route information for BART stops, for use with RTT/CDP
CARRIER	12	1	USERS	DEFAULT	Defines all available public transit agencies
DAYTYPE	15	1	USERS	DEFAULT	Defines logical grouping of days of week during which transit is operational
ENTRACEPORTALACCESSIBILITIES	3	6	USERS	DEFAULT	Defines ADA accessibility features of an entrance portal
ENTRANCE	10	1	USERS	DEFAULT	Defines a one-way or two-way entrance to a facility
ENTRANCEPORTAL	3	4	USERS	DEFAULT	Links entrances to portals
FACILITY	10	2	USERS	DEFAULT	Defines a facility, structure, or station and its business information
FACILITYACCESSIBILITIES	2	4	USERS	DEFAULT	Links facilities with their accessibility accomodation types
FACILITYBIKES	13	1	USERS	DEFAULT	Defines bicycle accomodation availability for facilities
FACILITYENTRANCE	2	2	USERS	DEFAULT	Defines many-to-many relationship between Facility and Entrance tables
FACILITYPARKING	9	1	USERS	DEFAULT	[**Deprecated**] Defines automobile parking availability for facilities
FACILITYPLATFORM	4	4	USERS	DEFAULT	Defines multilevel passenger boarding platforms

FACILITYTYPE	2	1	USERS	DEFAULT	Defines types of facilities
FARE	8	6	USERS	DEFAULT	Controls faredefinition usage, activation dates, carrier-wide or route-level
FAREDEFINITION	10	3	USERS	DEFAULT	Defines flat and zone-to-zone fare costs based on ridercategory
FAREINSTRUMENT	5	2	USERS	DEFAULT	Defines mediums that carry fare value (tickets, passes, transfers, etc)
FAREINSTRUMENTCOST	11	3	USERS	DEFAULT	Defines cost to purchase fareinstrument
FAREINSTRUMENTPRICE	9	5	USERS	DEFAULT	Combines cost/value information of a fare instrument
FAREINSTRUMENTVALUE	17	5	USERS	DEFAULT	Defines value amount of fareinstrument as applied toward transfer boarding fare
FAREZONE	5	2	USERS	DEFAULT	Describes and numbers fare zone areas used by carriers
HUB	8	4	USERS	DEFAULT	Defines "Hubs" – principle points of transfer where multiples routes coincide
HUBROUTE	2	2	USERS	DEFAULT	Links hubs with routes (currently unused)
LANDMARK	25	8	USERS	DEFAULT	Provides a name relationship to common geographic sites
LANDMARKALIAS	4	3	USERS	DEFAULT	Defines alternate names belonging to a common landmark
LANDMARKCATEGORY	5	2	USERS	DEFAULT	Provides popular categories under which landmarks are grouped
LMLMCAT	2	0	USERS	DEFAULT	[**Deprecated**] Links landmarks with appropriate landmark categories
LOCALITY	2	1	USERS	DEFAULT	Defines a list of localities (eg. city or census designated place)
LOCALITYCARRIER	4	1	USERS	DEFAULT	Links carriers with the localities each serves
PARKINGFACILITY	28	4	USERS	DEFAULT	Defines a parking facility where patrons may park a car
PARKINGFACILITYENTRANCE	2	2	USERS	DEFAULT	Defines an entrance for a parking facility
PARKINGFACILITYFACILITY	2	2	USERS	DEFAULT	Links a parking facility with a facility
PARKINGFACILITYHUB	2	2	USERS	DEFAULT	Links a parking facility with a hub
PARKINGFACILITY_TYPE	2	1	USERS	DEFAULT	Defines the allowed types of parking facilities
PARKINGSTALL	8	1	USERS	DEFAULT	Defines a group of parking stalls
PARKINGSTALL_TYPE	2	1	USERS	DEFAULT	Defines the allowed types of parking stalls
PARKINGSTOP	2	2	USERS	DEFAULT	Links a parking facility with a stop (currently unused)

PATTERN	20	8	USERS	DEFAULT	Defines one unique stop sequence in a given route_pattern
PATTERNSTOP	15	11	USERS	DEFAULT	Links sequenced stops with patterns
PEAKHOUR	11	3	USERS	DEFAULT	Defines periods of time during a 24 hour day to describe peak/off-peak hours
PLATFORMLOCATION	2	1	USERS	DEFAULT	Descriptor for platform's position relative to groundlevel
PORTAL	15	4	USERS	DEFAULT	Defines facility access means
PORTALACCESSIBILITIES	2	4	USERS	DEFAULT	Links portals with their accessibility accomodation types
PORTALSTOP	2	4	USERS	DEFAULT	Links portals with stops
PORTALTYPE	2	1	USERS	DEFAULT	Defines portal types
RIDERCATEGORY	12	3	USERS	DEFAULT	Defines fare categories for riders
ROUTE	19	6	USERS	DEFAULT	Defines one or more route patterns that make up each carrier's route(s)
ROUTE_PATTERN	7	0	USERS	DEFAULT	Defines basic elements of a pattern belonging to a route
ROUTE_SCHEDULE	4	1	USERS	DEFAULT	Defines basic element of a time schedule
ROUTE_SCHEDULE_DAYTYPE	2	2	USERS	DEFAULT	Links route_schedules to daytypes
ROUTE_SCHEDULE_DIRECTION	2	2	USERS	DEFAULT	Defines patterns direction of a route_schedule
ROUTE_SCHEDULE_STOP	3	3	USERS	DEFAULT	Defines a sequence of stops belonging to a route_schedule
ROUTE_SCHEDULE_TRIP	3	3	USERS	DEFAULT	Defines a sequence of trips belonging to a route_schedule
ROUTES_TRANSFERS	5	6	USERS	DEFAULT	Establishes pairs of stops that are nearby one another
RT2	5	0	USERS	DEFAULT	[**Deprecated**] See "routes_transfers"
SCHEDULE	10	7	USERS	DEFAULT	Describes a sequence of trips that combine to create a schedule
SPECIALDAYS	5	3	USERS	DEFAULT	Defines holidays by name and date
STOP	29	13	USERS	DEFAULT	Defines physical locations where riders board/disembark vehicles
TIMEPOINT	4	2	USERS	DEFAULT	Identifies pattern stops used for scheduling vehicle time, reflect public schedules
TRIP	8	5	USERS	DEFAULT	Defines daytype, sequence of time values ascribed to timepoints in a pattern

ACCESSIBILITYTYPE

Column Name	Data Type	Not Null?	Data Def.	Comments
ACCESSIBILITYTYPE_ID	NUMBER	Y		[PK] Primary Key
ACCESSIBILITYTYPE_NAME	VARCHAR2(50)			Description of available accessibility

AGENCYDAYTYPEORDER

Column Name	Data Type	Not Null?	Data Def.	Comments
CPT_AGENCYID	CHAR(2)	Y		[FK] Two-character code representing a carrier
SCH_DAYTYPE	CHAR(1)	Y		Single-character alphanumeric code representative of a daytype
DAYTYPEORDER	NUMBER(2)	Y		Numeric value for ordering SCH_DAYTYPE2

AGENCYSPECIALDAYEXCEPTION

Column Name	Data Type	Not Null?	Data Def.	Comments
CPT_AGENCYID	CHAR(2)	Y		[FK] Two-character code representing a carrier
SCH_ROUTEID	NUMBER(10)	Y		[FK] ID of route to which an exception is applied
SCH_FROMDAYTYPEID	NUMBER(10)	Y		[FK] Daytype of original service
SERVICE_DESC	VARCHAR2(4000)			Text description of the special day exception
EXTERNAL_URL	VARCHAR2(200)			Text of URL where more information about this exception can be found
RTD_SDSERVICEID	NUMBER(10)	Y		Special Day service ID value
SCH_TODAYTYPEID	NUMBER(10)	Y		[FK] Daytype of service to substitute for original service

AGENCYSPECIALDAYSERVICE

Column Name	Data Type	Not Null?	Data Def.	Comments
SCH_SPECIALDAYID	NUMBER(10)	Y		[PK] Primary Key

CPT_AGENCYID	CHAR(2)	Y		[FK] Two-character code representing a carrier
SCH_FROMDAYTYPEID	NUMBER(10)	Y		[FK] Daytype key - original service daytype
SERVICE_DESC	VARCHAR2(4000)			Text description of the special day service
RTD_SDSERVICEID	NUMBER(10)	Y		[FK] Special Day service key
SCH_TODAYTYPEID	NUMBER(10)	Y		[FK] Daytype key - daytype to substitute for original service

AMENITY

Column Name	Data Type	Not Null?	Data Def.	Comments
PI_AMENITYID	NUMBER(15)	Y		[PK] Primary Key
PI_AMENITYNAME	VARCHAR2(30)			Text description of the amenity
PI_AMENITYSTATUS	NUMBER(3)		2	Status code of the amenity
RTD_AMENITYOWNER	VARCHAR2(35)			Text amenity's owner
RTD_AMENITYNUMBER	NUMBER(2)			Amenity number
RTD_INSTALLATIONDATE	DATE			Date amenity installed
CPT_STOPPOINTID	NUMBER(15)	Y		[FK] ID of stop record with which this amenity is associated
RTD_MAINTENANCEDATE	DATE			Date and time amenity record last updated

BARTRTTPARTIALROUTES

Column Name	Data Type	Not Null?	Data Def.	Comments
RTTROUTECODE	VARCHAR2(20)	Y		[PK] Primary Key
RTTROUTENAME	VARCHAR2(100)	Y		Route name
SCH_ROUTEID	NUMBER(15)			[FK] ID of a route from the ROUTE table

BARTRTTPARTIALROUTESTOPS

Column Name	Data Type	Not Null?	Data Def.	Comments
RTTROUTECODE	VARCHAR2(12)	Y		[FK] Route code from real-time transit system
RTTDIRECTIONCODE	VARCHAR2(100)	Y		[FK] Direction code from real-time transit system
RTTDIRECTIONNAME	VARCHAR2(100)	Y		[FK] Direction name from real-time transit system
RTTSTOPCODE	VARCHAR2(12)	Y		[FK] Stop code from real-time transit system
RTTSTOPNAME	VARCHAR2(100)	Y		[FK] Stop name from real-time transit system
RTTSTOPSHORTNAME	VARCHAR2(100)			[FK] Stop short name from real-time transit system

CARRIER

Column Name	Data Type	Not Null?	Data Def.	Comments
CPT_AGENCYID	CHAR(2)	Y		[PK] Primary Key - Two-character code representing a carrier
AGENCYNAME	VARCHAR2(50)			Text spelling of carrier name
TS_RECORDTYPE	CHAR(1)		'C'	[Deprecated]
TS_PHONENUMBER	NUMBER(10)			[Deprecated]
TS_FAREZONENUMBER	NUMBER(2)			[Deprecated]
RTD_HASACCESSIBILITYINFO	CHAR(1)			Boolean (Y / N) if accessibility info is available from this carrier
LAST_UPDATE	DATE		sysdate	Date and time carrier record last updated
RTT_AGENCYNAME	VARCHAR2(100)			Agency name from real-time transit system
RTT_ENABLED	CHAR(1)			Boolean (Y / N) if carrier is real-time enabled
RTT_AGENCYTYPE	NUMBER(2)			A value declaring how RTT data is configured
AGENCY_SHORTNAME	VARCHAR2(50)			Short name of agency for alternative interfaces
AGENCY_SERVICENAME	VARCHAR2(50)			Service name of agency for alternative interfaces

DAYTYPE

Column Name	Data Type	Not Null?	Data Def.	Comments
SCH_DAYTYPEID	NUMBER(15)	Y		[PK] Primary Key
SCH_DAYTYPE	CHAR(1)	Y		Single-character alpha-numeric code representing a daytype
SCH_DAYTYPEDESC	VARCHAR2(30)	Y		Text description of daytype service
CPT_ACTIVATIONDATE	DATE			Date this daytype becomes active
CPT_DEACTIVATIONDATE	DATE			Date this daytype becomes inactive
MONDAY	CHAR(1)			Boolean (Y / N) if service is permitted on Mondays
TUESDAY	CHAR(1)			Boolean (Y / N) if service is permitted on Tuesdays
WEDNESDAY	CHAR(1)			Boolean (Y / N) if service is permitted on Wednesdays
THURSDAY	CHAR(1)			Boolean (Y / N) if service is permitted on Thursdays
FRIDAY	CHAR(1)			Boolean (Y / N) if service is permitted on Fridays
SATURDAY	CHAR(1)			Boolean (Y / N) if service is permitted on Saturdays
SUNDAY	CHAR(1)			Boolean (Y / N) if service is permitted on Sundays
HOLIDAY	CHAR(1)			Boolean (Y / N) if service is permitted on holidays
NOSERVICE	CHAR(1)			Boolean (Y / N) if no service is permitted
CPT_AGENCYID	CHAR(2)			[FK] Carrier key

ENTRANCE

Column Name	Data Type	Not Null?	Data Def.	Comments
ENTRANCE_ID	NUMBER	Y		[PK] Primary Key
ENTRANCE_DESCRIPTION	VARCHAR2(1000)			Text description of entrance
ENTRANCE_INONLY	VARCHAR2(1)			Boolean (Y / N) if one-way entrance
ENTRANCE_OUTONLY	VARCHAR2(1)			Boolean (Y / N) if one-way exit
ENTRANCE_LONGITUDE	NUMBER(13,10)	Y		WGS84 Longitude of entrance

ENTRANCE_LATITUDE	NUMBER(13,10)	Y		WGS84 Latitude of entrance
ENTRANCE_LEVEL	NUMBER			Entrance level (0=gound level, >0 above ground, <1 below ground
ACCESS_CAR	CHAR(1)	Y		Boolean (Y / N) if entrance is accessible to cars
ACCESS_FOOT	CHAR(1)	Y		Boolean (Y / N) if entrance is accessible to pedestrians
ENTRANCE_CLEARANCE	NUMBER(4)			Clearance height of entrance in inches

ENTRANCEPORTAL

Column Name	Data Type	Not Null?	Data Def.	Comments
ENTRANCE_ID	NUMBER	Y		[FK] ID of entrance
RTD_PORTALID	NUMBER(15)	Y		[FK] ID of portal
ENTRANCEPORTAL_INFO	VARCHAR2(1000)			Description of entrance portal

ENTRACEPORTALACCESSIBILITIES

Column Name	Data Type	Not Null?	Data Def.	Comments
ENTRANCE_ID	NUMBER	Y		[FK] ID of entrance
RTD_PORTALID	NUMBER(15)	Y		[FK] ID of portal
ACCESSIBILITYTYPE_ID	NUMBER	Y		ADA accessibility code

FACILITY

Column Name	Data Type	Not Null?	Data Def.	Comments
FACILITY_ID	NUMBER	Y		[PK] Primary Key
FACILITY_NAME	VARCHAR2(500)			Name of facility
FACILITY_DESCRIPTION	VARCHAR2(2000)			Description of facility
FACILITY_PHONE	VARCHAR2(50)			Telephone number

FACILITY_ADDRESS	VARCHAR2(200)			Street address
FACILITY_CITY	VARCHAR2(50)			City
FACILITY_FAX	VARCHAR2(50)			Fax number
FACILITYTYPE_ID	NUMBER	Y		[FK] Facility type key
FACILITY_URL	VARCHAR2(500)			Facility website URL
FACILITY_TTY	CHAR(1)	Y	'N'	Is TTY available

FACILITYACCESSIBILITIES

Column Name	Data Type	Not Null?	Data Def.	Comments
FACILITY_ID	NUMBER	Y		[FK] Facility key
ACCESSIBILITYTYPE_ID	NUMBER	Y		[FK] Accessibility key

FACILITYBIKES

Column Name	Data Type	Not Null?	Data Def.	Comments
FACILITY_ID	NUMBER	Y		[FK] Facility key
FACBIKES_HASBIKESTATION	CHAR(1)			Is bicycle storage/rack available
FACBIKES_STARTTIME	DATE			Time bicycle access becomes accessible
FACBIKES_CLOSETIME	DATE			Time bicycle access becomes inaccessible
FACBIKES_STATIONPHONE	VARCHAR2(50)			Telephone number for bicycle access information
FACBIKES_STATIONFEES	NUMBER			Daily cost to rent bicycle storage/rack
FACBIKES_RACKS	NUMBER	Y		Are bicycle racks available
FACBIKES_LOCKERS	NUMBER	Y		Are bicycle lockers available
FACBIKES_RACK_RESERVPHONE	VARCHAR2(50)			Telephone number for bicycle rack reservations
FACBIKES_LOCKER_RESERVPHONE	VARCHAR2(50)			Telephone number for bicycle locker reservations

FACBIKES_LOCKERFEES	NUMBER			Daily cost to rent bicycle locker
FACBIKES_ELOCKERS	NUMBER			[currently unused]
FACBIKES_ATTENDEDBIKEPARKING	NUMBER			[currently unused]

FACILITYPLATFORM

Column Name	Data Type	Not Null?	Data Def.	Comments
FACILITY_ID1	NUMBER	Y		[FK] ID of facility within which this platform is located
PLATFORMLOCATION_ID	NUMBER	Y		Indicates position of platform relative to ground level
PLATFORM_NUMBER2	NUMBER	Y		Platform number
FACPLATFORM_DESCRIPTION	NUMBER	Y		[currently unused]

FACILITYTYPE

Column Name	Data Type	Not Null?	Data Def.	Comments
FACILITYTYPE_NAME	VARCHAR2(200)	Y		Text description of facility type
FACILITYTYPE_ID	NUMBER	Y		[PK] Primary Key

FARE

Column Name	Data Type	Not Null?	Data Def.	Comments
RTD_FAREID	NUMBER(15)	Y		[PK] Primary Key
RTD_FAREZONE1ID	NUMBER(15)			[FK] Farezone key - Zone number in which trip or leg originates
TS_RECORDTYPE	CHAR(1)		'M'	[Deprecated]
RTD_FAREZONE2ID	NUMBER(15)			[FK] Farezone key - Zone number in which trip or leg terminates
FC_FARECOST	NUMBER(5,2)			Dollar cost of this trip or leg travel
RTD_RIDERCATEGORYID	NUMBER(15)			[FK] Ridercategory key

RTD_FAREDEFINITIONID	NUMBER(15)	Y		[FK] Faredefinition key
RTD_PEAKHOURID	NUMBER(15)			[FK] Peakhour key

FAREDEFINITION

Column Name	Data Type	Not Null?	Data Def.	Comments
RTD_FAREDEFINITIONID	NUMBER(15)	Y		[PK] Primary Key
TS_RECORDTYPE	CHAR(1)		'W'	[Deprecated]
TS_APPLIESTO	CHAR(1)	Y		Defines fare definition application (carrier-wide, route, or mode)
CPT_MODE	CHAR(2)			Transit service type category
CPT_ACTIVATIONDATE	DATE			Date fare definition becomes active
CPT_DEACTIVATIONDATE	DATE			Date fare definition becomes deactive
TS_ZONETOTAL	NUMBER(2)			[Deprecated]
SCH_ROUTEID	NUMBER(15)			[FK] ID of route to which fare definition is applied
ISPAYABLEONBOARD	CHAR(1)			Boolean (Y / N) if rider pays fare when boarding vehicle
CPT_AGENCYID	CHAR(2)	Y		[FK] Carrier key

FAREINSTRUMENT

Column Name	Data Type	Not Null?	Data Def.	Comments
FC_FAREINSTRUMENTID	NUMBER(15)	Y		[PK] Primary Key
TS_RECORDTYPE	CHAR(1)			[Deprecated]
TS_FAREITEMCODE	CHAR(3)			[Deprecated]
TS_FAREITEMNAME	VARCHAR2(30)			Name of fare instrument
CPT_AGENCYID	CHAR(2)	Y		[FK] Carrier key

FAREINSTRUMENTCOST

Column Name	Data Type	Not Null?	Data Def.	Comments
RTD_FAREINSTRUMENTCOSTID	NUMBER(15)	Y		[PK] Primary Key
TS_RECORDTYPE	CHAR(1)			[Deprecated]
TS_APPLIESTO	CHAR(1)	Y		Defines fare definition application (carrier-wide, route, etc)
CPT_MODE	CHAR(2)			Transit service type category
CPT_ACTIVATIONDATE	DATE			Date fare definition becomes active
CPT_DEACTIVATIONDATE	DATE			Date fare definition becomes deactive
TS_TOTALCOSTCATEGORY	CHAR(1)			[Deprecated]
ISPAYABLEONBOARD	CHAR(1)			Boolean (Y / N) if rider pays fare when boarding vehicle
SCH_ROUTEID	NUMBER(15)			[FK] ID of route to which fare instrument cost is applied (if route based)
TS_WHENISSUED	CHAR(1)			Is fare instrument issued when boarding, disembarking, or other
FC_FAREINSTRUMENTID	NUMBER(15)	Y		[FK] ID of fare instrument

FAREINSTRUMENTPRICE

Column Name	Data Type	Not Null?	Data Def.	Comments
RTD_FAREINSTRUMENTPRICEID	NUMBER(15)	Y		[PK] Primary Key
TS_RECORDTYPE	CHAR(1)		'M'	[Deprecated]
RTD_PEAKHOURID	NUMBER(15)			[FK] ID of peak hour definition
FARETYPE	CHAR(2)			Type of fare instrument
INSTRUMENTPRICE	NUMBER(5,2)			Dollar price of fare instrument
TS_NUMZONESCOVERED	CHAR(1)	Y	'U'	[Deprecated]
RTD_RIDERCATEGORYID	NUMBER(15)			[FK] ID of rider category
RTD_FAREINSTRUMENTCOSTID	NUMBER(15)			[FK] ID of fare instrument cost

RTD_FAREINSTRUMENTVALUEID	NUMBER(15)			[FK] ID of fare instrument value

FAREINSTRUMENTVALUE

Column Name	Data Type	Not Null?	Data Def.	Comments
RTD_FAREINSTRUMENTVALUEID	NUMBER(15)	Y		[PK] Primary Key
TS_RECORDTYPE	CHAR(1)			[Deprecated]
TS_APPLIESTO	CHAR(1)	Y		Defines fare definition application (carrier-wide, route, etc)
CPT_MODE	CHAR(2)			Transit service type category
CPT_ACTIVATIONDATE	DATE			Date fare definition becomes active
CPT_DEACTIVATIONDATE	DATE			Date fare definition becomes deactive
TS_TOTALVALUECATEGORY	CHAR(1)			[Deprecated]
TS_ISRENEWABLE	CHAR(1)		NULL	[Deprecated]
TS_TRAVELDIRECTION	CHAR(1)			[Deprecated]
FC_RIDEVALUE	NUMBER(2)			Number of uses permited by fare instrument
FC_FARETIMEVALUE	NUMBER(3)			Number of minutes from issue before expiration of fare instrument
RTD_VALIDFROMSTOPID	NUMBER(15)			[Deprecated]
RTD_VALIDTOSTOPID	NUMBER(15)			[Deprecated]
TS_ISACCEPTEDALLSTOP	CHAR(1)		NULL	[Deprecated]
SCH_ROUTEID	NUMBER(15)			[FK] ID of route to which fare instrument value is applied (if route based)
FC_FAREINSTRUMENTID	NUMBER(15)	Y		[FK] ID of fare instrument
RTD_AGENCYUSEDID	CHAR(2)			[FK] Carrier key - agency accepting fare instrument

FAREZONE

Column Name	Data Type	Not Null?	Data Def.	Comments

RTD_FAREZONEID	NUMBER(15)	Y		[PK] Primary Key
FAREZONENAME	VARCHAR2(35)			Name of fare zone
CPT_FAREZONENO	NUMBER(2)			Fare zone number
CPT_AGENCYID	CHAR(2)	Y		[FK] Two-character code representing a carrier
ZONEDESCRIPTION	VARCHAR2(256)			Description of fare zone

HUB

Column Name	Data Type	Not Null?	Data Def.	Comments
RTD_HUBID	NUMBER	Y		[PK] Primary Key
HUB_NAME	VARCHAR2(100)	Y		Name of hub
HUB_DESCRIPTION	VARCHAR2(1024)			Description of hub
LATITUDE	NUMBER(13.10)	Y		WGS84 latitude of hub
LONGITUDE	NUMBER(13,10)	Y		WGS84 longitude of hub
HUB_ASSOCIATEDAGENCIES	VARCHAR2(1024)			Comma separated list of agencies using this hub
HUB_SIGN	VARCHAR2(512)			[currently unused]
HUB_ISRTC	CHAR(1)			Boolean (Y / N) if hub is a Regional Transit Center

HUBROUTE

Column Name	Data Type	Not Null?	Data Def.	Comments
RTD_HUBID	NUMBER	Y		[FK] Hub key
SCH_ROUTEID	NUMBER(15)	Y		[FK] Route key

LANDMARK

Column Name	Data Type	Not Null?	Data Def.	Comments
ON_STREET	VARCHAR2(40)			Street name upon which landmark is situated
AT_STREET	VARCHAR2(40)			Street name of nearest cross-street to landmark
RTD_AGENCYLANDMARKID	VARCHAR2(15)			Optional agency specific numeric ID
RTD_LANDMARKID	NUMBER(15)	Y		[PK] Primary Key
TS_RECORDTYPE	CHAR(1)	Y	'L'	[Deprecated]
SP_LANDMARKNAME	VARCHAR2(1024)			Name of landmark

SP_LANDMARKDESC	VARCHAR2(2048)			Description of landmark
TS_LOCATION	VARCHAR2(100)			Location of landmark
LOCATIONTYPE	CHAR(1)			Indicates whether location is a stop, address, or landmark
SP_CITYNAME	VARCHAR2(60)			City in which landmark resides
SP_POSTALCODE	VARCHAR2(5)			Zip code in which landmark resides
SP_LONGITUDE	NUMBER(13,10)			WGS84 longitude of landmark
SP_LATITUDE	NUMBER(13,10)			WGS84 latitude of landmark
TS_XCOORD	NUMBER(5)			[Deprecated]
TS_YCOORD	NUMBER(5)			[Deprecated]
CPT_AGENCYID	CHAR(2)	Y		[FK] Carrier key
RTD_LANDMARKPARENTID	NUMBER(15)			[Deprecated]
OBJECTID	NUMBER(38)			Unique feature record ID issued by ArcSDE
LEADNUM	NUMBER(38)			Leading non-alphabetic (ie- numeric) part of landmark name
NAMESANSNUM	VARCHAR2(1024)			Name of landmark without leading numerals
SP_LMNAMESHORT	VARCHAR2(100)			[currently unused]
LASTEDITTIME	DATE			Date and time landmark record last updated
RTD_LMCATID	NUMBER(10)			[FK] Landmarkcategory key
SP_XMERCATOR	NUMBER(18,10)			Mercator X coordinate
SP_YMERCATOR	NUMBER(18,10)			Mercator Y coordinate

LANDMARKALIAS

Column Name	Data Type	Not Null?	Data Def.	Comments
RTD_LANDMARKALIASID	NUMBER(15)	Y		[PK] Primary Key
RTD_LANDMARKALIASNAME	VARCHAR2(1024)			Alternate name for landmark
RTD_LANDMARKID	NUMBER(15)	Y		[FK] ID of original landmark
LASTEDITTIME	DATE			Date and time landmarkalias record last updated

LANDMARKCATEGORY

Column Name	Data Type	Not Null?	Data Def.	Comments
RTD_LMCATID	NUMBER(10)	Y		[PK] Primary Key
RTD_LMCATNAME	VARCHAR2(50)	Y		Name of landmark category
RTD_LMCATDESC	VARCHAR2(400)			Description of landmark category
RTD_LMCATPARENTID	NUMBER(10)			[FK] Landmarkcategory key - subcategory link to parent category
RTD_LMCATPUBLIC	CHAR(1)			BOOLEAN (Y / N) if landmark category should be shown to public

LOCALITY

Column Name	Data Type	Not Null?	Data Def.	Comments
LOCALITY_ID	NUMBER	Y		[PK] Primary Key
LOCALITY_NAME	VARCHAR2(400)	Y		Text of locality name (city, census designated place, or county)

LOCALITYCARRIER

Column Name	Data Type	Not Null?	Data Def.	Comments
LOCALITY_CARRIER_ID	NUMBER	Y		[PK] Primary Key

LOCALITY_ID	NUMBER	Y		[FK] Locality key
CPT_AGENCYID	CHAR(2)	Y		[FK] Carrier key
ISPRIMARY	CHAR(1)		'N'	Boolean (Y / N) if locality is a primary service area for carrier

PARKINGFACILITY

Column Name	Data Type	Not Null?	Data Def.	Comments
RTD_PARKINGFACILITYID	NUMBER(15)	Y		[PK] Primary Key
UPP_PARKINGFACILITYID	NUMBER			[FK] key for UPP parking facility
UPP_VENDORID	NUMBER			[FK] key for UPP vendor ID
UPP_LOTID	NUMBER			[FK] key for UPP lot ID
PARKINGFACILITY_NAME	VARCHAR2(500)	Y		Name of parking facility
PARKINGFACILITY_DESCRIPTION	VARCHAR2(2000)			Description
PARKINGFACILITY_ADDRESS	VARCHAR2(200)			Street Address
PARKINGFACILITY_CITY	VARCHAR2(50)			City
PARKINGFACILITY_PHONE	VARCHAR2(50)			Phone number
PARKINGFACILITY_OPEN	VARCHAR2(50)			Open time
PARKINGFACILITY_CLOSE	VARCHAR2(50)			Close time
PARKINGFACILITY_HOURS	VARCHAR2(500)			Parking facility hours
PARKINGFACILITY_PAYMETHODS	VARCHAR2(500)			Payment methods
PARKINGFACILITY_PAYINSTRUCTION	VARCHAR2(500)			Payment instructions
PARKINGFACILITY_COST	VARCHAR2(50)			Primary cost
PARKINGFACILITY_COSTUNIT	VARCHAR2(50)			Unit of cost
PARKINGFACILITY_LONGITUDE	NUMBER(13,10)			WGS84 longitude of parking facility
PARKINGFACILITY_LATITUDE	NUMBER(13,10)			WGS84 latitude of parking facility

RTD_PARKINGFACILITYTYPEID	NUMBER(15)	Y		[FK] Parkingfacility type key
PARKINGFACILITY_OWNERS	VARCHAR2(100)			Comma separated list of agencies using parking facility
PARKINGFACILITY_NEEDVALIDATION	CHAR(1)			Boolean (Y / N) if validation required for parking
PARKING_VALIDATIONINPAIDAREA	CHAR(1)			Boolean (Y / N) if validation is only available within paid area
PARKINGFACILITY_DUMMYLOT	CHAR(1)			Boolean (Y / N) if prescribed a virtual parking lot
PARKINGFACILITY_USEINMMTP	CHAR(1)			Boolean (Y / N) if for use in MMTP
PARKINGFACILITY_XMERCATOR	NUMBER(18,10)			Mercator x coordinate
PARKINGFACILITY_YMERCATOR	NUMBER(18,10)			Mercator y coordinate
EXCLUDE_FROM_DISTANCE_SEARCH	CHAR(1)			Boolean (Y / N) if site to be excluded from long distance search
EXCEPTION_TO_EXCLUDE	CHAR(1)			Boolean (Y / N) if exception allowed when no other sites can be found

PARKINGFACILITYENTRANCE

Column Name	Data Type	Not Null?	Data Def.	Comments
ENTRANCE_ID	NUMBER	Y		[FK] Entrance key
RTD_PARKINGFACILITYID	NUMBER(15)	Y		[FK] Parking Facility key

PARKINGFACILITYFACILITY

Column Name	Data Type	Not Null?	Data Def.	Comments
RTD_PARKINGFACILITYID	NUMBER(15)	Y		[FK] Parking Facility key
FACILITY_ID	NUMBER	Y		[FK] Facility key

PARKINGFACILITYHUB

Column Name	Data Type	Not Null?	Data Def.	Comments
RTD_HUBID	NUMBER	Y		[FK] Hub key

RTD_PARKINGFACILITYID	NUMBER	Y		[FK] Parking Facility key

PARKINGFACILITY_TYPE

Column Name	Data Type	Not Null?	Data Def.	Comments
RTD_PARKINGFACILITYTYPEID	NUMBER(15)	Y		[PK] Primary Key
PARKINGFACILITY_NAME	VARCHAR2(100)			Name of parking facility type

PARKINGSTALL

Column Name	Data Type	Not Null?	Data Def.	Comments
RTD_PARKINGSTALLID	NUMBER(15)	Y		[PK] Primary Key
STALL_LEVEL	NUMBER			Level where stalls are located within parking facility
STALL_DESCRIPTION	VARCAR2(200)			Description of parking stalls
STALL_HOURS	VARCHAR2(200)			Hours stalls are available
STALL_WALKTIME	NUMBER(5,1)			Average walk time from stalls to entrance
RTD_PARKINGSTALLTYPEID	NUMBER(15)	Y		[FK] Parking stall type key
RTD_PARKINGFACILITYID	NUMBER(15)	Y		[FK] Parking facility key
STALL_COUNT	NUMBER	Y		Number of stalls

PARKINGSTALL_TYPE

Column Name	Data Type	Not Null?	Data Def.	Comments
RTD_PARKINGSTALLTYPEID	NUMBER(15)	Y		[PK] Primary Key
PARKINGSTALLTYPE_NAME	VARCHAR2(100)			Name of parking stall type

PARKINGSTOP

Column Name	Data Type	Not Null?	Data Def.	Comments
CPT_STOPPOINTID	NUMBER(15)	Y		[FK] Stop key
RTD_PARKINGFACILITYID	NUMBER(15)	Y		[FK] Parking facility key

PATTERN

Column Name	Data Type	Not Null?	Data Def.	Comments
SCH_PATTERNID	NUMBER(15)	Y		[PK] Primary Key
SCH_PATTERNDESIGNATOR	VARCHAR2(40)			Secondary pattern name identification
TS_RECORDTYPE	CHAR(1)		'R'	[Deprecated]
TS_ENTEREDBY	VARCHAR2(3)			[Deprecated]
PI_STATICSIGNMESSAGE	VARCHAR2(120)			Primary pattern name identification, also vehicle headsign
TS_DATEENTERED	DATE			Date pattern entered into database
CPT_ACTIVATIONDATE	DATE			Date pattern is activated
CPT_DEACTIVATIONDATE	DATE			Date pattern is deactivated
TS_PATTERNSTATUS	CHAR(1)			[Deprecated]
SCH_ROUTEID	NUMBER(15)	Y		[FK] ID of route to which pattern belongs
TS_TOTALSTOP	NUMBER(4)			[Deprecated]
PI_ADAACCESS	NUMBER(2)			ADA accessibility information
RTD_AGENCYPATTERNID	VARCHAR2(15)			Agency specific pattern identifier
RTD_PATTERNDIRECTION	CHAR(2)	Y		Pattern running direction
RTD_PATTERNVARIATION	NUMBER(2)			[Deprecated]
RTD_PATTERNDESCRIPTION	VARCHAR2(30)			Short pattern description
RTD_PATTERNDAYTYPE	CHAR(1)			[currently unused]
LAST_UPDATE	DATE			Date and time pattern record last updated

RTT_DIRECTIONNAME	VARCHAR2(100)			[FK] Direction name from real-time transit system
RTT_DIRECTIONCODE	VARCHAR2(100)			[FK] Direction code from real-time transit system

PATTERNSTOP

Column Name	Data Type	Not Null?	Data Def.	Comments
RTD_PATTERNSTOPID	NUMBER(15)	Y		[PK] Primary Key
SCH_STOPPOINTSEQNO	NUMBER(4)	Y		Sequence number of stop within this pattern
ISTIMEPOINT	CHAR(1)		'N'	Is stop a timepoint
TS_RECORDTYPE	CHAR(1)		'S'	[Deprecated]
TS_STOPTURN	CHAR(1)			Flag whether site is a physical stop or a turning point
RTD_TIMEPOINTCODE	VARCHAR2(20)			Timepoint schedule code
SCH_PATTERNID	NUMBER(15)	Y		[FK] ID of pattern to which this patternstop belongs
RTD_FAREZONEID	NUMBER(15)			[FK] ID of zone within which this patternstop resides
CPT_STOPPOINTID	NUMBER(15)	Y		[FK] ID of stop with which this patternstop is associated
SP_LONGITUDE	NUMBER(13,10)			WGS84 longitude of patternstop
SP_LATITUDE	NUMBER(13,10)			WGS84 latitude of patternstop
PICKUPONLY	CHAR(1)			Flag if vehicle will not drop-off passengers at this patternstop
DROPOFFONLY	CHAR(1)			Flag if vehicle will not pick-up passengers at this patternstop
RTT_STOPID	NUMBER(15)			[FK] ID of stop in real time transit (RTT) system
OBJECTID	NUMBER	Y		Unique feature record ID issued by ArcSDE

PEAKHOUR

Column Name	Data Type	Not Null?	Data Def.	Comments
RTD_PEAKHOURID	NUMBER(15)	Y		[PK] Primary Key

TS_RECORDTYPE	CHAR(1)		'P'	[Deprecated]
TS_APPLIESTO	CHAR(1)			Defines fare definition application (carrier-wide, route, etc)
CPT_MODE	CHAR(2)			Transit service type category
CPT_ACTIVATIONDATE	DATE			Date fare definition becomes active
CPT_DEACTIVATIONDATE	DATE			Date fare definition becomes deactive
TS_DAY	CHAR(1)			[Deprecated]
TS_FROMTIME	DATE			Date/time peak hour interval begins
TS_TOTIME	DATE			Date/time peak hour interval ends
CPT_AGENCYID	CHAR(2)	Y		[FK] Carrier key
SCH_ROUTEID	NUMBER(15)			[FK] Route key

PLATFORMLOCATION

Column Name	Data Type	Not Null?	Data Def.	Comments
PLATFORMLOCATION_ID	NUMBER	Y		[PK] Primary key
PLATFORMLOCATION_DESCRIPTION	VARCHAR2(20)			Description of platform location

PORTAL

Column Name	Data Type	Not Null?	Data Def.	Comments
RTD_PORTALID	NUMBER(15)	Y		[PK] Primary Key
PORTALTYPE_ID	NUMBER	Y		[FK] ID of portal type
RTD_PORTALTYPE	CHAR(5)			[currently unused]
RTD_PORTALLOCATION	VARCHAR2(100)			Text description of portal's general location
RTD_COMPASSDIRECTION	VARCHAR2(2)			Observer's direction facing portal from exterior
RTD_PORTALONSTREET	VARCHAR2(40)			Name of street where portal is

RTD_PORTALATSTREET	VARCHAR2(40)			Name of cross street where portal is
SP_CITYNAME	VARCHAR2(20)			Name of city where portal is
SP_POSTALCODE	CHAR(5)			Zip code where portal is
SP_LONGITUDE	NUMBER(13,10)			Longitude of portal location
SP_LATITUDE	NUMBER(13,10)			Latitude of portal location
DESCRIPTION	VARCHAR2(1000)			Text description of portal
BETWEENFLOORS	VARCHAR2(40)			Indicate floor levels at each end of portal
FACILITY_ID	NUMBER(10)			ID of facility to which this portal is attached
CPT_STOPPOINTID	NUMBER(10)			ID of stop to which this portal is related

PORTALACCESSIBILITIES

Column Name	Data Type	Not Null?	Data Def.	Comments
RTD_PORTALID1	NUMBER(15)	Y		[FK] ID of portal
ACCESSIBILITYTYPE_ID2	NUMBER	Y		[FK] ID of portal accessibility type

PORTALSTOP

Column Name	Data Type	Not Null?	Data Def.	Comments
CPT_STOPPOINTID1	NUMBER(15)	Y		[FK] ID of stop
RTD_PORTALID2	NUMBER(15)	Y		[FK] ID of portal

PORTALTYPE

Column Name	Data Type	Not Null?	Data Def.	Comments
PORTALTYPE_ID	NUMBER	Y		[PK] ID of portal type
PORTALTYPE_NAME	VARCHAR2(200)			Text description of portal type

RIDERCATEGORY

Column Name	Data Type	Not Null?	Data Def.	Comments
RTD_RIDERCATEGORYID	NUMBER(15)	Y		[PK] Primary key
TS_RECORDTYPE	CHAR(1)			[Deprecated]
TS_RIDERTYPE	CHAR(4)			[Deprecated]
FC_RIDERCLASSIFICATION	NUMBER(3)			ID of rider category classification
FC_RIDERCLASSDESCRIPTION	VARCHAR2(256)			Description of rider category classification
TS_APPLIESTO	CHAR(1)	Y		Defines fare definition application (carrier-wide, route, etc)
CPT_MODE	CHAR(2)			Transit service type category
CPT_ACTIVATIONDATE	DATE			Date fare definition becomes active
CPT_DEACTIVATIONDATE	DATE			Date fare definition becomes deactive
TS_RIDERPROOF	VARCHAR2(20)			Description of proof for eligibility of rider category
CPT_AGENCYID	CHAR(2)	Y		[FK] Two-character code representing a carrier
SCH_ROUTEID	NUMBER(15)			[FK] ID of route to which rider category is applied

ROUTE

Column Name	Data Type	Not Null?	Data Def.	Comments
SCH_ROUTEID	NUMBER(15)	Y		[PK] Primary Key
SCH_ROUTEDESIGNATOR	VARCHAR2(12)	Y		Agency internal route name
TS_RECORDTYPE	CHAR(1)		'R'	[Deprecated]
CPT_AGENCYID	CHAR(2)	Y		[FK] Two-character code representing a carrier
CPT_MODE	VARCHAR2(2)			Transit service type category
CPT_ACTIVATIONDATE	DATE			Date route becomes activated

SCH_SERVICETYPE	NUMBER(2)			Type of transit service provided
CPT_DEACTIVATIONDATE	DATE			Date routes becomes deactivated
TS_ROUTESTATUS	CHAR(1)			[Deprecated]
PI_ADAACCESS	NUMBER(2)			ADA accessbility information
TS_ISLOOPING	CHAR(1)			Does route loop back to its beginning?
RTD_AGENCYROUTEID	VARCHAR2(15)			Agency specific route ID number
LEADNUM	NUMBER(38)			Leading numeric portion of route name
NAMESANSNUM	VARCHAR2(12)			Route name without leading numeric portion
ROUTE_NAME	VARCHAR2(250)			Full route name
LAST_UPDATE	DATE			Date and time route record last updated
RTT_ENABLED	CHAR(1)			Flag = 'Y' if route is real time transit (RTT) enabled
RTT_ROUTENAME	VARCHAR2(100)			[FK] Route name from real-time transit system
RTT_ROUTECODE	VARCHAR2(12)			[FK] Route code from real-time transit system

ROUTE_PATTERN

Column Name	Data Type	Not Null?	Data Def.	Comments
CPT_AGENCYID	CHAR(2)	Y		[FK] Two-character code representing a carrier
SCH_ROUTEDESIGNATOR	VARCHAR2(12)	Y		Agency internal route name
ROUTE_NAME	VARCHAR2(250)			Agency public route name
SCH_PATTERNDESIGNATOR	VARCHAR2(40)			Pattern name
RTD_PATTERNDIRECTION	CHAR(2)			Pattern direction
SCH_PATTERNID	NUMBER(15)	Y		[FK] ID of pattern
PI_STATICSIGNMESSAGE	VARCHAR2(120)			Vehicle headsign text

ROUTE_SCHEDULE

Column Name	Data Type	Not Null?	Data Def.	Comments
RSCH_ID	NUMBER(15)	Y		[FK] ID of route schedule
RSCH_ACTIVATIONDATE	DATE			Date of activation
RSCH_DEACTIVATIONDATE	DATE			Date of deactivation
SCH_ROUTEID	NUMBER(15)	Y		[FK] ID of route

ROUTE_SCHEDULE_DAYTYPE

Column Name	Data Type	Not Null?	Data Def.	Comments
RSCH_ID2	NUMBER(15)	Y		[FK] ID of route schedule
SCH_DAYTYPEID1	NUMBER(15)	Y		[FK] ID of day type

ROUTE_SCHEDULE_DIRECTION

Column Name	Data Type	Not Null?	Data Def.	Comments
RSCH_ID1	NUMBER(15)	Y		[FK] ID of route schedule
RSCHDIR_ID2	CHAR(2)	Y		Route direction

ROUTE_SCHEDULE_STOP

Column Name	Data Type	Not Null?	Data Def.	Comments
RSCH_ID1	NUMBER(15)	Y		[FK] ID of route schedule
CPT_STOPPOINTID2	NUMBER(15)	Y		[FK] ID of stop
RSCHSTOP_SEQUENCE3	NUMBER(4)	Y		Sequence number of stop

ROUTE_SCHEDULE_TRIP

Column Name	Data Type	Not Null?	Data Def.	Comments
RSCH_ID1	NUMBER(15)	Y		[FK] ID of route schedule
SCH_TRIPID3	NUMBER(15)	Y		[FK] ID of trip
RSCHTRP_SEQUENCE2	NUMBER(4)	Y		Sequence number of trip

ROUTES_TRANSFERS

Column Name	Data Type	Not Null?	Data Def.	Comments
ROUTE_TO_ID	NUMBER	Y		[FK] ID of route transferring to
ROUTE_FROM_ID	NUMBER	Y		[FK] ID of route transferring from
STOP_FROM_ID	NUMBER	Y		[FK] ID of stop transferring from
STOP_TO_ID	NUMBER	Y		[FK] ID of stop transferring to
TRANSF_TO_MODE	VARCHAR2(2)			Transfer mode

SCHEDULE

Column Name	Data Type	Not Null?	Data Def.	Comments
RTD_SCHEDULEID	NUMBER(15)	Y		[PK] Primary Key
TS_RECORDTYPE	CHAR(1)		'N'	[Deprecated]
TS_TPSEQNO	NUMBER(3)	Y		Trip sequence number
RTD_TRIPTIMEPTTIME	VARCHAR2(10)			Text of trip timepoint value
RTD_ARRIVEDEPARTCODE	CHAR(1)		NULL	Indicates whether time indicates arrival or departure
SCH_TRIPID	NUMBER(15)	Y		[FK] ID of trip
SCH_TRIPTIMEPTTIME	DATE	Y		Trip timepoint date/time value
RTD_PATTERNSTOPID	NUMBER(15)	Y		[FK] ID of pattern stop
SCHEDULEID	NUMBER(15)			[currently unused]

HASTUS_TIME	NUMBER			[currently unused]

SPECIALDAYS

Column Name	Data Type	Not Null?	Data Def.	Comments
SCH_SPECIALDAYID	NUMBER(10)	Y		[PK] Primary Key
SPECIALDAYNAME	VARCHAR2(50)	Y		Name of special day service
SPECIALDAYDESCRIPTION	NVARCHAR2(1000)	Y		Description of special day service
OBSERVED_FROM	DATE	Y		Date special day begins
OBSERVED_TO	DATE	Y		Date special day ends

STOP

Column Name	Data Type	Not Null?	Data Def.	Comments
NAMESANSNUM	VARCHAR2(100)			Name of stop without leading numerals
LEADNUM	NUMBER(38)			Leading non-alphabetic (ie- numeric) part of stop name
CPT_STOPPOINTID	NUMBER(15)	Y		[PK] Primary Key
TS_RECORDTYPE	CHAR(1)		'S'	[Deprecated]
RTD_LANDMARKID	NUMBER(15)			[FK] ID of landmark, if referenced by stop
SP_CITYNAME	VARCHAR2(60)			City name in which stop resides
TS_LOCATION	VARCHAR2(100)			Location of stop
LOCATIONTYPE	CHAR(1)			Indicates whether location is an intersection, address, or landmark
SP_POSTALCODE	CHAR(5)			Zip code in which stop resides
SP_LONGITUDE	NUMBER(13,10)			Stop's longitude
AT_STREET	VARCHAR2(40)			Street name upon which stop is situated
SP_LATITUDE	NUMBER(13,10)			Stop's latitude

ON_STREET	VARCHAR2(40)			Steet name of nearest cross-street to stop
STOPTYPE	CHAR(3)			Indicates type of transit vehicle served by stop (bus, train, ferry, etc)
SP_RELATIVEDIRECTION	VARCHAR2(2)			Direction to stop from center of street
INTERSECTIONPOSITION	VARCHAR2(2)		NULL	Position of stop relative to intersection
TS_ADDITIONALDIRECTION	VARCHAR2(34)			[Deprecated]
PI_ADAACCESS	NUMBER(2)			ADA access information
TS_XCOORD	NUMBER(5)			[Deprecated]
TS_YCOORD	NUMBER(5)			[Deprecated]
CPT_AGENCYID	CHAR(2)	Y		[FK] Two-character code representing a carrier
RTD_AGENCYSTOPID	VARCHAR2(15)			[Deprecated]
OBJECTID	NUMBER(38)			Unique feature record ID issued by ArcSDE
GDT_LAT	NUMBER(13,10)			Stop's latitude in GDT map
GDT_LONG	NUMBER(13,10)			Stop's longitude in GTD map
LAST_UPDATE	DATE			Date/time stop last updated in database
FACILITY_ID	NUMBER(15)			[FK] ID of facility
SP_XMERCATOR	NUMBER(18,10)			Mercator x coordinate
SP_YMERCATOR	NUMBER(18,10)			Mercator y coordinate

TIMEPOINT

Column Name	Data Type	Not Null?	Data Def.	Comments
RTD_TIMEPOINTID	NUMBER	Y		[PK] Primary Key
RTD_TIMEPOINTCODE	VARCHAR2(20)	Y		Agency specific timepoint reference
RTD_TIMEPOINTDESCRIPTION	VARCHAR2(60)			Full spelling description of timepoint
CPT_STOPPOINTID	NUMBER(15)	Y		[FK] ID of stop with which this timepoint is associated

TRIP

Column Name	Data Type	Not Null?	Data Def.	Comments
SCH_TRIPID	NUMBER(15)	Y		[PK] Primary Key
SCH_PATTERNID	NUMBER(15)	Y		[FK] ID of pattern with which this trip is associated
TS_RECORDTYPE	CHAR(1)		'N'	[Deprecated]
SCH_DAYTYPE	CHAR(1)	Y		Service day daytype code
TRIPSEQUENCE	NUMBER(4)			Sequence number of trip in pattern
PI_ADAACCESS	NUMBER(2)			ADA access information
SCH_DAYTYPEID	NUMBER(15)			[FK] ID of service daytype
RTD_AGENCYTRIPID	VARCHAR2(15)			Agency provided trip ID

RTDNS: List of All Views

View Name	Status	# of Columns	Text Length	# of Dependencies
DRIVE_TO_TRANSIT_LIST	VALID	27	4125	6
DROPOFF_LIST	VALID	11	3256	8
FULL_FACILITY	VALID	30	229	3
MDV_DRIVE_TO_TRANSIT_EXPORT	VALID	25	1063	1
MDV_DROPOFF_EXPORT	VALID	25	723	1
ROUTEPATTERNSTOP_WITHRTT	VALID	13	1328	4
TERMINALSTOPS	VALID	5	1871	2
UPP_PARKING_EXPORT	VALID	20	3356	5
VIEW_PATTSTOP_EXT	INVALID	15	630	4

RTDNS: List of All Check Constraints

CONSTRAINT_NAME	TABLE_NAME	SEARCH_CONDITION
SYS_C0034191	ACCESSIBILITYTYPE	ACCESSIBILITYTYPE_ID IS NOT NULL
SYS_C0022632	AGENCYDAYTYPEORDER	CPT_AGENCYID IS NOT NULL
SYS_C0022633	AGENCYDAYTYPEORDER	SCH_DAYTYPE IS NOT NULL
SYS_C0022634	AGENCYDAYTYPEORDER	DAYTYPEORDER IS NOT NULL
SYS_C001168549	AGENCYSPECIALDAYEXCEPTION	CPT_AGENCYID IS NOT NULL
SYS_C001168550	AGENCYSPECIALDAYEXCEPTION	SCH_ROUTEID IS NOT NULL
SYS_C001168551	AGENCYSPECIALDAYEXCEPTION	RTD_SDSERVICEID IS NOT NULL
SYS_C001342119	AGENCYSPECIALDAYEXCEPTION	SCH_FROMDAYTYPEID IS NOT NULL
SYS_C001342120	AGENCYSPECIALDAYEXCEPTION	SCH_TODAYTYPEID IS NOT NULL
SYS_C001168546	AGENCYSPECIALDAYSERVICE	SCH_SPECIALDAYID IS NOT NULL
SYS_C001168547	AGENCYSPECIALDAYSERVICE	CPT_AGENCYID IS NOT NULL
SYS_C001168548	AGENCYSPECIALDAYSERVICE	RTD_SDSERVICEID IS NOT NULL
SYS_C001342117	AGENCYSPECIALDAYSERVICE	SCH_FROMDAYTYPEID IS NOT NULL
SYS_C001342118	AGENCYSPECIALDAYSERVICE	SCH_TODAYTYPEID IS NOT NULL
SYS_C0022635	AMENITY	PI_AMENITYID IS NOT NULL
SYS_C0022636	AMENITY	CPT_STOPPOINTID IS NOT NULL
SYS_C003403325	BARTRTTPARTIALROUTES	RTTROUTECODE IS NOT NULL
SYS_C003403326	BARTRTTPARTIALROUTES	RTTROUTENAME IS NOT NULL
SYS_C003403327	BARTRTTPARTIALROUTES	SCH_ROUTEID IS NOT NULL
SYS_C003403330	BARTRTTPARTIALROUTESTOPS	RTTROUTECODE IS NOT NULL
SYS_C003403331	BARTRTTPARTIALROUTESTOPS	RTTDIRECTIONCODE IS NOT NULL
SYS_C003403332	BARTRTTPARTIALROUTESTOPS	RTTDIRECTIONNAME IS NOT NULL

SYS_C003403333	BARTRTTPARTIALROUTESTOPS	RTTSTOPCODE IS NOT NULL
SYS_C003403334	BARTRTTPARTIALROUTESTOPS	RTTSTOPNAME IS NOT NULL
CHECK_BOOLEAN3028	CARRIER	RTD_HasAccessibilityInfo IN ('Y', 'N')
CHECK_RECORDTYPE15628	CARRIER	TS_RecordType IN ('C', 'I', 'H', 'L', 'R', 'S', 'A', 'T', 'N', 'F', 'Z', 'G', 'Y', 'P', 'W', 'M', 'E', 'O', 'V')
SYS_C0022637	CARRIER	CPT_AGENCYID IS NOT NULL
DAYTYPE_FRIDAY_CK	DAYTYPE	friday IN ('Y', 'N')
DAYTYPE_HOLIDAY_CK	DAYTYPE	holiday IN ('Y', 'N')
DAYTYPE_MONDAY_CK	DAYTYPE	monday IN ('Y', 'N')
DAYTYPE_NOSERVICE_CK	DAYTYPE	noservice IN ('Y', 'N')
DAYTYPE_SATURDAY_CK	DAYTYPE	saturday IN ('Y', 'N')
DAYTYPE_SCHDAYTYPEDESC_NN	DAYTYPE	SCH_DAYTYPEDESC IS NOT NULL
DAYTYPE_SCHDAYTYPE_NN	DAYTYPE	SCH_DAYTYPE IS NOT NULL
DAYTYPE_SUNDAY_CK	DAYTYPE	sunday IN ('Y', 'N')
DAYTYPE_THURSDAY_CK	DAYTYPE	thursday IN ('Y', 'N')
DAYTYPE_TUESDAY_CK	DAYTYPE	tuesday IN ('Y', 'N')
DAYTYPE_WEDNESDAY_CK	DAYTYPE	wednesday IN ('Y', 'N')
SYS_C0034193	ENTRACEPORTALACCESSIBILITIES	ENTRANCE_ID IS NOT NULL
SYS_C0034194	ENTRACEPORTALACCESSIBILITIES	RTD_PORTALID IS NOT NULL
SYS_C0034195	ENTRACEPORTALACCESSIBILITIES	ACCESSIBILITYTYPE_ID IS NOT NULL
CK_ENTRANCE_ACCESSCAR	ENTRANCE	ACCESS_CAR IN ('Y','N','y','n')
CK_ENTRANCE_ACCESSFOOT	ENTRANCE	ACCESS_FOOT IN ('Y','N','y','n')
SYS_C003369929	ENTRANCE	ENTRANCE_LONGITUDE IS NOT NULL
SYS_C003369930	ENTRANCE	ENTRANCE_LATITUDE IS NOT NULL
SYS_C003369931	ENTRANCE	ACCESS_CAR IS NOT NULL
SYS_C003369932	ENTRANCE	ACCESS_FOOT IS NOT NULL

SYS_C0034198	ENTRANCE	ENTRANCE_ID IS NOT NULL
SYS_C0034200	ENTRANCEPORTAL	ENTRANCE_ID IS NOT NULL
SYS_C0034201	ENTRANCEPORTAL	RTD_PORTALID IS NOT NULL
SYS_C0034203	FACILITY	FACILITY_ID IS NOT NULL
SYS_C0034204	FACILITY	FACILITYTYPE_ID IS NOT NULL
SYS_C0042638	FACILITY	FACILITY_TTY IS NOT NULL
SYS_C0034206	FACILITYACCESSIBILITIES	FACILITY_ID IS NOT NULL
SYS_C0034207	FACILITYACCESSIBILITIES	ACCESSIBILITYTYPE_ID IS NOT NULL
SYS_C0034209	FACILITYBIKES	FACILITY_ID IS NOT NULL
SYS_C0034211	FACILITYBIKES	FACBIKES_RACKS IS NOT NULL
SYS_C0034212	FACILITYBIKES	FACBIKES_LOCKERS IS NOT NULL
SYS_C003369935	FACILITYENTRANCE	ENTRANCE_ID IS NOT NULL
SYS_C003369936	FACILITYENTRANCE	FACILITY_ID IS NOT NULL
SYS_C0034224	FACILITYPLATFORM	FACILITY_ID IS NOT NULL
SYS_C0034225	FACILITYPLATFORM	PLATFORMLOCATION_ID IS NOT NULL
SYS_C0034226	FACILITYPLATFORM	PLATFORM_NUMBER IS NOT NULL
SYS_C0034227	FACILITYPLATFORM	FACPLATFORM_DESCRIPTION IS NOT NULL
SYS_C0034229	FACILITYTYPE	FACILITYTYPE_NAME IS NOT NULL
SYS_C0034230	FACILITYTYPE	FACILITYTYPE_ID IS NOT NULL
SYS_C0022640	FARE	RTD_FAREID IS NOT NULL
SYS_C0022641	FARE	RTD_FAREDEFINITIONID IS NOT NULL
SYS_C0022642	FAREDEFINITION	RTD_FAREDEFINITIONID IS NOT NULL
SYS_C0022643	FAREDEFINITION	TS_APPLIESTO IS NOT NULL
SYS_C0022644	FAREDEFINITION	CPT_AGENCYID IS NOT NULL
CHECK_RECORDTYPE1528	FAREINSTRUMENT	TS_RecordType IN ('C', 'I', 'H', 'L', 'R', 'S', 'A', 'T', 'N', 'F', 'Z', 'G', 'Y', 'P', 'W', 'M', 'E', 'O', 'V')

SYS_C0022645	FAREINSTRUMENT	FC_FAREINSTRUMENTID IS NOT NULL
SYS_C0022646	FAREINSTRUMENT	CPT_AGENCYID IS NOT NULL
CHECK_FAREAPPLIESTO228	FAREINSTRUMENTCOST	TS_AppliesTo IN ('C', 'T', 'R')
CHECK_RECORDTYPE1338	FAREINSTRUMENTCOST	TS_RecordType IN ('C', 'I', 'H', 'L', 'R', 'S', 'A', 'T', 'N', 'F', 'Z', 'G', 'Y', 'P', 'W', 'M', 'E', 'O', 'V')
CHECK_TRANSITTYPE26	FAREINSTRUMENTCOST	CPT_MODE IN ('AG', 'CC', 'CR', 'DR', 'F', 'HR', 'IP', 'JT', 'LR', 'B', 'MO', 'PB', 'TB', 'TR', 'VP', 'OR', 'DM', 'MM', 'RT', 'T')
CHECK_WHENISSUED68	FAREINSTRUMENTCOST	TS_WhenIssued IN ('B', 'L', 'O')
SYS_C0022647	FAREINSTRUMENTCOST	RTD_FAREINSTRUMENTCOSTID IS NOT NULL
SYS_C0022648	FAREINSTRUMENTCOST	TS_APPLIESTO IS NOT NULL
SYS_C0022649	FAREINSTRUMENTCOST	FC_FAREINSTRUMENTID IS NOT NULL
CHECK_FARETYPE68	FAREINSTRUMENTPRICE	FareType IN ('IC', 'IV')
CHECK_RECORDTYPE1318	FAREINSTRUMENTPRICE	TS_RecordType IN ('C', 'I', 'H', 'L', 'R', 'S', 'A', 'T', 'N', 'F', 'Z', 'G', 'Y', 'P', 'W', 'M', 'E', 'O', 'V')
SYS_C0022650	FAREINSTRUMENTPRICE	RTD_FAREINSTRUMENTPRICEID IS NOT NULL
SYS_C0022651	FAREINSTRUMENTPRICE	TS_NUMZONESCOVERED IS NOT NULL
CHECK_BOOLEAN15	FAREINSTRUMENTVALUE	TS_ISRENEWABLE IN ('Y', 'N')
CHECK_BOOLEAN16	FAREINSTRUMENTVALUE	TS_ISACCEPTEDALLSTOP IN ('Y', 'N')
CHECK_FAREAPPLIESTO218	FAREINSTRUMENTVALUE	TS_AppliesTo IN ('C', 'T', 'R')
CHECK_RECORDTYPE1328	FAREINSTRUMENTVALUE	TS_RecordType IN ('C', 'I', 'H', 'L', 'R', 'S', 'A', 'T', 'N', 'F', 'Z', 'G', 'Y', 'P', 'W', 'M', 'E', 'O', 'V')
CHECK_TRANSITTYPE27	FAREINSTRUMENTVALUE	CPT_MODE IN ('AG', 'CC', 'CR', 'DR', 'F', 'HR', 'IP', 'JT', 'LR', 'B', 'MO', 'PB', 'TB', 'TR', 'VP', 'OR', 'DM', 'MM', 'RT', 'T')
CHECK_TRAVELDIRECTION8	FAREINSTRUMENTVALUE	TS_TRAVELDIRECTION IN ('O', 'A', 'R')
SYS_C0022652	FAREINSTRUMENTVALUE	RTD_FAREINSTRUMENTVALUEID IS NOT NULL
SYS_C0022653	FAREINSTRUMENTVALUE	TS_APPLIESTO IS NOT NULL
SYS_C0022654	FAREINSTRUMENTVALUE	FC_FAREINSTRUMENTID IS NOT NULL
SYS_C0022655	FAREZONE	RTD_FAREZONEID IS NOT NULL

SYS_C0022656	FAREZONE	CPT_AGENCYID IS NOT NULL
SYS_C003369972	HUB	RTD_HUBID IS NOT NULL
SYS_C003369973	HUB	HUB_NAME IS NOT NULL
SYS_C003369974	HUB	LATITUDE IS NOT NULL
SYS_C003369975	HUB	LONGITUDE IS NOT NULL
SYS_C003369981	HUBROUTE	RTD_HUBID IS NOT NULL
SYS_C003369982	HUBROUTE	SCH_ROUTEID IS NOT NULL
SYS_C0022657	LANDMARK	RTD_LANDMARKID IS NOT NULL
SYS_C0022658	LANDMARK	TS_RECORDTYPE IS NOT NULL
SYS_C0022659	LANDMARK	CPT_AGENCYID IS NOT NULL
SYS_C0022660	LANDMARKALIAS	RTD_LANDMARKALIASID IS NOT NULL
SYS_C0022661	LANDMARKALIAS	RTD_LANDMARKID IS NOT NULL
SYS_C0035796	LANDMARKCATEGORY	RTD_LMCATID IS NOT NULL
SYS_C0035797	LANDMARKCATEGORY	RTD_LMCATNAME IS NOT NULL
SYS_C0035799	LMLMCAT	RTD_LANDMARKID IS NOT NULL
SYS_C0035800	LMLMCAT	RTD_LMCATID IS NOT NULL
SYS_C001456037	LOCALITY	LOCALITY_ID IS NOT NULL
SYS_C001456038	LOCALITY	LOCALITY_NAME IS NOT NULL
SYS_C001456040	LOCALITYCARRIER	LOCALITY_CARRIER_ID IS NOT NULL
SYS_C001456041	LOCALITYCARRIER	LOCALITY_ID IS NOT NULL
SYS_C001456042	LOCALITYCARRIER	CPT_AGENCYID IS NOT NULL
SYS_C003369942	PARKINGFACILITY	RTD_PARKINGFACILITYID IS NOT NULL
SYS_C003369943	PARKINGFACILITY	PARKINGFACILITY_NAME IS NOT NULL
SYS_C003369944	PARKINGFACILITY	RTD_PARKINGFACILITYTYPEID IS NOT NULL
SYS_C003369947	PARKINGFACILITYENTRANCE	ENTRANCE_ID IS NOT NULL

SYS_C003369948	PARKINGFACILITYENTRANCE	RTD_PARKINGFACILITYID IS NOT NULL
SYS_C003369957	PARKINGFACILITYFACILITY	RTD_PARKINGFACILITYID IS NOT NULL
SYS_C003369958	PARKINGFACILITYFACILITY	FACILITY_ID IS NOT NULL
SYS_C003369977	PARKINGFACILITYHUB	RTD_HUBID IS NOT NULL
SYS_C003369978	PARKINGFACILITYHUB	RTD_PARKINGFACILITYID IS NOT NULL
SYS_C003369940	PARKINGFACILITY_TYPE	RTD_PARKINGFACILITYTYPEID IS NOT NULL
CK_PARKINGSTALL_STALLCOUNT	PARKINGSTALL	stall_count > 0
SYS_C003369964	PARKINGSTALL	RTD_PARKINGSTALLID IS NOT NULL
SYS_C003369965	PARKINGSTALL	RTD_PARKINGSTALLTYPEID IS NOT NULL
SYS_C003369966	PARKINGSTALL	RTD_PARKINGFACILITYID IS NOT NULL
SYS_C003369967	PARKINGSTALL	STALL_COUNT IS NOT NULL
SYS_C003369962	PARKINGSTALL_TYPE	RTD_PARKINGSTALLTYPEID IS NOT NULL
SYS_C003369952	PARKINGSTOP	CPT_STOPPOINTID IS NOT NULL
SYS_C003369953	PARKINGSTOP	RTD_PARKINGFACILITYID IS NOT NULL
CHECK_ADAACCESS287	PATTERN	PI_ADAAccess IN (0,1, 2, 3, 4, 5, 6, 7, 8)
CHECK_RECORDTYPE1497	PATTERN	TS_RecordType IN ('C', 'I', 'H', 'L', 'R', 'S', 'A', 'T', 'N', 'F', 'Z', 'G', 'Y', 'P', 'W', 'M', 'E', 'O', 'V')
CHECK_ROUTEPATTERNSTATUS117	PATTERN	TS_PatternStatus IN ('N', 'R', 'I', 'F', 'T', 'E')
SYS_C0022662	PATTERN	SCH_PATTERNID IS NOT NULL
SYS_C0022663	PATTERN	SCH_ROUTEID IS NOT NULL
SYS_C0022664	PATTERN	RTD_PATTERNDIRECTION IS NOT NULL
CHECK_STOPTURN7	PATTERNSTOP	TS_STOPTURN IN ('S', 'T')
SYS_C0022665	PATTERNSTOP	RTD_PATTERNSTOPID IS NOT NULL
SYS_C0022666	PATTERNSTOP	SCH_STOPPOINTSEQNO IS NOT NULL
SYS_C0022667	PATTERNSTOP	SCH_PATTERNID IS NOT NULL
SYS_C0022668	PATTERNSTOP	CPT_STOPPOINTID IS NOT NULL

SYS_C003400759	PATTERNSTOP	OBJECTID IS NOT NULL
CHECK_FAREAPPLIESTO237	PEAKHOUR	TS_AppliesTo IN ('C', 'T', 'R')
CHECK_RECORDTYPE1457	PEAKHOUR	TS_RecordType IN ('C', 'I', 'H', 'L', 'R', 'S', 'A', 'T', 'N', 'F', 'Z', 'G', 'Y', 'P', 'W', 'M', 'E', 'O', 'V')
CHECK_TRANSITTYPE28	PEAKHOUR	CPT_MODE IN ('AG', 'CC', 'CR', 'DR', 'F', 'HR', 'IP', 'JT', 'LR', 'B', 'MO', 'PB', 'TB', 'TR', 'VP', 'OR', 'DM', 'MM', 'RT', 'T')
SYS_C0022669	PEAKHOUR	RTD_PEAKHOURID IS NOT NULL
SYS_C0022670	PEAKHOUR	CPT_AGENCYID IS NOT NULL
SYS_C0034232	PLATFORMLOCATION	PLATFORMLOCATION_ID IS NOT NULL
CHECK_COMPASSPOSITION116	PORTAL	RTD_CompassDirection IN ('N', 'S', 'E', 'W', 'NW', 'SW', 'NE', 'SE')
CHECK_COMPASSPOSITION119	PORTAL	RTD_CompassDirection IN ('N', 'S', 'E', 'W', 'NW', 'SW', 'NE', 'SE')
SYS_C0034184	PORTAL	RTD_PORTALID IS NOT NULL
SYS_C0034185	PORTAL	PORTALTYPE_ID IS NOT NULL
SYS_C0034234	PORTALACCESSIBILITIES	RTD_PORTALID IS NOT NULL
SYS_C0034235	PORTALACCESSIBILITIES	ACCESSIBILITYTYPE_ID IS NOT NULL
SYS_C0034237	PORTALSTOP	CPT_STOPPOINTID IS NOT NULL
SYS_C0034238	PORTALSTOP	RTD_PORTALID IS NOT NULL
SYS_C0034240	PORTALTYPE	PORTALTYPE_ID IS NOT NULL
CHECK_FAREAPPLIESTO246	RIDERCATEGORY	TS_AppliesTo IN ('C', 'T', 'R')
CHECK_RECORDTYPE1466	RIDERCATEGORY	TS_RecordType IN ('C', 'I', 'H', 'L', 'R', 'S', 'A', 'T', 'N', 'F', 'Z', 'G', 'Y', 'P', 'W', 'M', 'E', 'O', 'V')
CHECK_RIDERCLASS66	RIDERCATEGORY	FC_RIDERCLASSIFICATION in (0,1,2,3,4,5,6,7,8, 9, 10, 11)
CHECK_TRANSITTYPE29	RIDERCATEGORY	CPT_MODE IN ('AG', 'CC', 'CR', 'DR', 'F', 'HR', 'IP', 'JT', 'LR', 'B', 'MO', 'PB', 'TB', 'TR', 'VP', 'OR', 'DM', 'MM', 'RT', 'T')
SYS_C0022674	RIDERCATEGORY	RTD_RIDERCATEGORYID IS NOT NULL
SYS_C0022675	RIDERCATEGORY	TS_APPLIESTO IS NOT NULL
SYS_C0022676	RIDERCATEGORY	CPT_AGENCYID IS NOT NULL

CHECK_ADAACCESS2926	ROUTE	PI_ADAAccess IN (0,1, 2, 3, 4, 5, 6, 7, 8)
CHECK_BOOLEAN2926	ROUTE	TS_IsLooping IN ('Y', 'N')
CHECK_RECORDTYPE15026	ROUTE	TS_RecordType IN ('C', 'I', 'H', 'L', 'R', 'S', 'A', 'T', 'N', 'F', 'Z', 'G', 'Y', 'P', 'W', 'M', 'E', 'O', 'V')
CHECK_ROUTEPATTERNSTATUS1226	ROUTE	TS_RouteStatus IN ('N', 'R', 'I', 'F', 'T', 'E')
CHECK_SERVICETYPE626	ROUTE	SCH_ServiceType IN (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17)
CHECK_TRANSITTYPE3026	ROUTE	CPT_Mode IN ('AG', 'CC', 'CR', 'DR', 'F', 'HR', 'IP', 'JT', 'LR', 'B', 'MO', 'PB', 'TB', 'TR', 'VP', 'OR', 'DM', 'MM', 'RT', 'T')
SYS_C0022677	ROUTE	SCH_ROUTEID IS NOT NULL
SYS_C0022678	ROUTE	SCH_ROUTEDESIGNATOR IS NOT NULL
SYS_C0022679	ROUTE	CPT_AGENCYID IS NOT NULL
ROUTES_TRANSFERS_TRANSITTYPE	ROUTES_TRANSFERS	TRANSF_TO_MODE IN ('AG', 'CC', 'CR', 'DR', 'F', 'HR', 'IP', 'JT', 'LR', 'B', 'MO', 'PB', 'TB', 'TR', 'VP', 'OR', 'DM', 'MM', 'RT', 'T')
SYS_C0037390	ROUTES_TRANSFERS	ROUTE_TO_ID IS NOT NULL
SYS_C0037391	ROUTES_TRANSFERS	ROUTE_FROM_ID IS NOT NULL
SYS_C0037392	ROUTES_TRANSFERS	STOP_FROM_ID IS NOT NULL
SYS_C0037393	ROUTES_TRANSFERS	STOP_TO_ID IS NOT NULL
SYS_C0022680	ROUTE_PATTERN	CPT_AGENCYID IS NOT NULL
SYS_C0022681	ROUTE_PATTERN	SCH_ROUTEDESIGNATOR IS NOT NULL
SYS_C0022682	ROUTE_PATTERN	SCH_PATTERNID IS NOT NULL
SYS_C0022865	ROUTE_SCHEDULE	RSCH_ID IS NOT NULL
SYS_C0022866	ROUTE_SCHEDULE	SCH_ROUTEID IS NOT NULL
SYS_C0022861	ROUTE_SCHEDULE_DAYTYPE	RSCH_ID IS NOT NULL
SYS_C0022862	ROUTE_SCHEDULE_DAYTYPE	SCH_DAYTYPEID IS NOT NULL
SYS_C0022869	ROUTE_SCHEDULE_DIRECTION	RSCH_ID IS NOT NULL
SYS_C0022870	ROUTE_SCHEDULE_DIRECTION	RSCHDIR_ID IS NOT NULL

SYS_C0022873	ROUTE_SCHEDULE_STOP	RSCH_ID IS NOT NULL
SYS_C0022874	ROUTE_SCHEDULE_STOP	CPT_STOPPOINTID IS NOT NULL
SYS_C0022875	ROUTE_SCHEDULE_STOP	RSCHSTOP_SEQUENCE IS NOT NULL
SYS_C0022878	ROUTE_SCHEDULE_TRIP	RSCH_ID IS NOT NULL
SYS_C0022879	ROUTE_SCHEDULE_TRIP	SCH_TRIPID IS NOT NULL
SYS_C0022880	ROUTE_SCHEDULE_TRIP	RSCHTRP_SEQUENCE IS NOT NULL
SYS_C00241935	RT2	ROUTE_TO_ID IS NOT NULL
SYS_C00241936	RT2	ROUTE_FROM_ID IS NOT NULL
SYS_C00241937	RT2	STOP_FROM_ID IS NOT NULL
SYS_C00241938	RT2	STOP_TO_ID IS NOT NULL
CHECK_RECORDTYPE1476	SCHEDULE	TS_RecordType IN ('C', 'I', 'H', 'L', 'R', 'S', 'A', 'T', 'N', 'F', 'Z', 'G', 'Y', 'P', 'W', 'M', 'E', 'O', 'V')
CHECK_TPARRIVEDEPART26	SCHEDULE	RTD_ArriveDepartCode IN ('A', 'D')
SYS_C0022683	SCHEDULE	RTD_SCHEDULEID IS NOT NULL
SYS_C0022684	SCHEDULE	TS_TPSEQNO IS NOT NULL
SYS_C0022685	SCHEDULE	SCH_TRIPID IS NOT NULL
SYS_C0022686	SCHEDULE	SCH_TRIPTIMEPTTIME IS NOT NULL
SYS_C0022687	SCHEDULE	RTD_PATTERNSTOPID IS NOT NULL
SYS_C001168541	SPECIALDAYS	SCH_SPECIALDAYID IS NOT NULL
SYS_C001168542	SPECIALDAYS	SPECIALDAYNAME IS NOT NULL
SYS_C001168543	SPECIALDAYS	SPECIALDAYDESCRIPTION IS NOT NULL
SYS_C001168544	SPECIALDAYS	OBSERVED_FROM IS NOT NULL
SYS_C001168545	SPECIALDAYS	OBSERVED_TO IS NOT NULL
CHECK_ADAACCESS3126	STOP	PI_ADAAccess IN (0,1, 2, 3, 4, 5, 6, 7, 8)
CHECK_COMPASSPOSITION6	STOP	INTERSECTIONPOSITION IN ('N', 'S', 'E', 'W', 'NW', 'SW', 'NE', 'SE')
CHECK_LOCATIONTYPE1726	STOP	LocationType IN ('S', 'I', 'L')

CHECK_RECORDTYPE15126	STOP	TS_RecordType IN ('C', 'I', 'H', 'L', 'R', 'S', 'A', 'T', 'N', 'F', 'Z', 'G', 'Y', 'P', 'W', 'M', 'E', 'O', 'V')
SYS_C0022688	STOP	CPT_STOPPOINTID IS NOT NULL
SYS_C0022689	STOP	CPT_AGENCYID IS NOT NULL
SYS_C0022690	TIMEPOINT	RTD_TIMEPOINTID IS NOT NULL
SYS_C0022691	TIMEPOINT	RTD_TIMEPOINTCODE IS NOT NULL
SYS_C0022692	TIMEPOINT	CPT_STOPPOINTID IS NOT NULL
CHECK_ADAACCESS276	TRIP	PI_ADAAccess IN (0,1, 2, 3, 4, 5, 6, 7, 8)
CHECK_RECORDTYPE1486	TRIP	TS_RecordType IN ('C', 'I', 'H', 'L', 'R', 'S', 'A', 'T', 'N', 'F', 'Z', 'G', 'Y', 'P', 'W', 'M', 'E', 'O', 'V')
SYS_C0022693	TRIP	SCH_TRIPID IS NOT NULL
SYS_C0022694	TRIP	SCH_PATTERNID IS NOT NULL
SYS_C0022695	TRIP	SCH_DAYTYPE IS NOT NULL

RTDNS: List of All Indexes

Index Name	Unique	Table Name	Columns
XPKACCESSIBILITYTYPE	Y	ACCESSIBILITYTYPE	ACCESSIBILITYTYPE_ID
CON_PRIMARYKEY	Y	AGENCYDAYTYPEORDER	CPT_AGENCYID, SCH_DAYTYPE, DAYTYPEORDER
IDX_ROUTESERVICEID_PK	Y	AGENCYSPECIALDAYEXCEPTION	SCH_ROUTEID, RTD_SDSERVICEID
CONST_SDSID_PK	Y	AGENCYSPECIALDAYSERVICE	RTD_SDSERVICEID
IDX_SPECIALDAYFROMDAYTODAY		AGENCYSPECIALDAYSERVICE	SCH_SPECIALDAYID, SCH_FROMDAYTYPEID, SCH_TODAYTYPEID
IDX_AMENITY_IF40		AMENITY	CPT_STOPPOINTID
IDX_AMENITY_PK	Y	AMENITY	PI_AMENITYID
BARTRTTPARTIALROUTES_PK	Y	BARTRTTPARTIALROUTES	RTTROUTECODE
IDX_CARRIER_PK	Y	CARRIER	CPT_AGENCYID
DAYTYPE_SCHDAYTYPEID_PK	Y	DAYTYPE	SCH_DAYTYPEID

XIF1ENTRACEPORTALACCESSIBILITI		ENTRACEPORTALACCESSIBILITIES	ENTRANCE_ID, RTD_PORTALID
XIF2ENTRACEPORTALACCESSIBILITI		ENTRACEPORTALACCESSIBILITIES	ACCESSIBILITYTYPE_ID
XPKENTRACEPORTALACCESSIBILITIE	Y	ENTRACEPORTALACCESSIBILITIES	ENTRANCE_ID, RTD_PORTALID, ACCESSIBILITYTYPE_ID
XPKENTRANCE	Y	ENTRANCE	ENTRANCE_ID
XIF1ENTRANCEPORTAL		ENTRANCEPORTAL	ENTRANCE_ID
XIF2ENTRANCEPORTAL		ENTRANCEPORTAL	RTD_PORTALID
XPKENTRANCEPORTAL	Y	ENTRANCEPORTAL	ENTRANCE_ID, RTD_PORTALID
XIF2FACILITY		FACILITY	FACILITYTYPE_ID
XPKFACILITY	Y	FACILITY	FACILITY_ID
XIF1FACILITYACCESSIBILITIES		FACILITYACCESSIBILITIES	FACILITY_ID
XIF2FACILITYACCESSIBILITIES		FACILITYACCESSIBILITIES	ACCESSIBILITYTYPE_ID
XPKFACILITYACCESSIBILITIES	Y	FACILITYACCESSIBILITIES	FACILITY_ID, ACCESSIBILITYTYPE_ID
XPKFACILITYBIKES	Y	FACILITYBIKES	FACILITY_ID
SYS_C003369937	Y	FACILITYENTRANCE	ENTRANCE_ID, FACILITY_ID
XPKFACILITYPARKING	Y	FACILITYPARKING	FACILITY_ID
XIF1FACILITYPLATFORM		FACILITYPLATFORM	PLATFORMLOCATION_ID
XIF2FACILITYPLATFORM		FACILITYPLATFORM	FACILITY_ID
XPKFACILITYPLATFORM	Y	FACILITYPLATFORM	FACILITY_ID, PLATFORM_NUMBER
XPKFACILITYTYPE	Y	FACILITYTYPE	FACILITYTYPE_ID
IDX_FARE_IF3		FARE	RTD_FAREDEFINITIONID
IDX_FARE_IF45		FARE	RTD_RIDERCATEGORYID
IDX_FARE_IF54		FARE	RTD_PEAKHOURID
IDX_FARE_IF65		FARE	RTD_FAREZONE1ID
IDX_FARE_IF66		FARE	RTD_FAREZONE2ID
IDX_FARE_PK	Y	FARE	RTD_FAREID

IDX_FAREDEFINITION_IF26		FAREDEFINITION	SCH_ROUTEID
IDX_FAREDEFINITION_IF31		FAREDEFINITION	CPT_AGENCYID
IDX_FAREDEFINITION_PK	Y	FAREDEFINITION	RTD_FAREDEFINITIONID
IDX_FAREINSTRUMENT_IF50		FAREINSTRUMENT	CPT_AGENCYID
IDX_FAREINSTRUMENT_PK	Y	FAREINSTRUMENT	FC_FAREINSTRUMENTID
IDX_FAREINSTRUMENTCOST_IF28		FAREINSTRUMENTCOST	SCH_ROUTEID
IDX_FAREINSTRUMENTCOST_IF48		FAREINSTRUMENTCOST	FC_FAREINSTRUMENTID
IDX_FAREINSTRUMENTCOST_PK	Y	FAREINSTRUMENTCOST	RTD_FAREINSTRUMENTCOSTID
IDX_FAREINSTRUMENTPRICE_IF51		FAREINSTRUMENTPRICE	RTD_RIDERCATEGORYID
IDX_FAREINSTRUMENTPRICE_IF52		FAREINSTRUMENTPRICE	RTD_FAREINSTRUMENTCOSTID
IDX_FAREINSTRUMENTPRICE_IF53		FAREINSTRUMENTPRICE	RTD_FAREINSTRUMENTVALUEID
IDX_FAREINSTRUMENTPRICE_IF55		FAREINSTRUMENTPRICE	RTD_PEAKHOURID
IDX_FAREINSTRUMENTPRICE_PK	Y	FAREINSTRUMENTPRICE	RTD_FAREINSTRUMENTPRICEID
IDX_FAREINSTRUMENTVALUE_IF100		FAREINSTRUMENTVALUE	RTD_VALIDTOSTOPID
IDX_FAREINSTRUMENTVALUE_IF27		FAREINSTRUMENTVALUE	SCH_ROUTEID
IDX_FAREINSTRUMENTVALUE_IF49		FAREINSTRUMENTVALUE	FC_FAREINSTRUMENTID
IDX_FAREINSTRUMENTVALUE_IF98		FAREINSTRUMENTVALUE	RTD_VALIDFROMSTOPID
IDX_FAREINSTRUMENTVALUE_PK	Y	FAREINSTRUMENTVALUE	RTD_FAREINSTRUMENTVALUEID
IDX_FAREZONE_IF44		FAREZONE	CPT_AGENCYID
IDX_FAREZONE_PK	Y	FAREZONE	RTD_FAREZONEID
IDX_HUBAGENCIES		HUB	HUB_ASSOCIATEDAGENCIES
IDX_HUBNAME		HUB	HUB_NAME
IDX_HUBSIGN		HUB	HUB_SIGN
SYS_C003369976	Y	HUB	RTD_HUBID
IDX_UNQHUBROUTE	Y	HUBROUTE	RTD_HUBID, SCH_ROUTEID

IDX_LANDMARK_AK1	Y	LANDMARK	OBJECTID
IDX_LANDMARK_CAT		LANDMARK	RTD_LMCATID
IDX_LANDMARK_CITYCAT		LANDMARK	SP_CITYNAME, RTD_LMCATID
IDX_LANDMARK_PK	Y	LANDMARK	RTD_LANDMARKID
IDX_LANDMARK_SP_LANDMARKNAME		LANDMARK	SP_LANDMARKNAME
LMNAME_TEXT_INDEX		LANDMARK	SP_LANDMARKNAME
LM_CITYNAME		LANDMARK	SP_CITYNAME
IDX_LANDMARKALIAS_IF95		LANDMARKALIAS	RTD_LANDMARKID
IDX_LANDMARKALIAS_PK	Y	LANDMARKALIAS	RTD_LANDMARKALIASID
IDX_LMCAT_PUBLIC		LANDMARKCATEGORY	RTD_LMCATPUBLIC
SYS_C0035798	Y	LANDMARKCATEGORY	RTD_LMCATID
LOCALITY_PK	Y	LOCALITY	LOCALITY_ID
LOCALITYCARRIER_PK	Y	LOCALITYCARRIER	LOCALITY_CARRIER_ID
IDX_PARKINGFACILITY_CITY		PARKINGFACILITY	PARKINGFACILITY_CITY
IDX_PARKINGFACILITY_NAME		PARKINGFACILITY	PARKINGFACILITY_NAME
IDX_PARKINGFACILITY_TYPE		PARKINGFACILITY	RTD_PARKINGFACILITYTYPEID
SYS_C003369945	Y	PARKINGFACILITY	RTD_PARKINGFACILITYID
SYS_C003369949	Y	PARKINGFACILITYENTRANCE	ENTRANCE_ID, RTD_PARKINGFACILITYID
SYS_C003369959	Y	PARKINGFACILITYFACILITY	RTD_PARKINGFACILITYID, FACILITY_ID
IDX_UNQPARKFACILITYHUB	Y	PARKINGFACILITYHUB	RTD_HUBID, RTD_PARKINGFACILITYID
SYS_C003369941	Y	PARKINGFACILITY_TYPE	RTD_PARKINGFACILITYTYPEID
SYS_C003369968	Y	PARKINGSTALL	RTD_PARKINGSTALLID
SYS_C003369963	Y	PARKINGSTALL_TYPE	RTD_PARKINGSTALLTYPEID
SYS_C003369954	Y	PARKINGSTOP	CPT_STOPPOINTID, RTD_PARKINGFACILITYID
IDX_PATTERN_IF34		PATTERN	SCH_ROUTEID

IDX_PATTERN_PK	Y	PATTERN	SCH_PATTERNID
IDX_PATTERN_RTEDIRDIRNAME		PATTERN	SCH_ROUTEID, RTD_PATTERNDIRECTION, RTT_DIRECTIONNAME
IDX_PAT_PATID	Y	PATTERN	SCH_PATTERNID, SCH_ROUTEID, RTD_PATTERNVARIATION
IDX_PATSBYSTOP		PATTERNSTOP	CPT_STOPPOINTID, SCH_PATTERNID
IDX_PATSBYSTOPID		PATTERNSTOP	SCH_PATTERNID, CPT_STOPPOINTID
IDX_PATTERNSTOP_IF62		PATTERNSTOP	CPT_STOPPOINTID
IDX_PATTERNSTOP_IF63		PATTERNSTOP	SCH_PATTERNID
IDX_PATTERNSTOP_IF64		PATTERNSTOP	RTD_FAREZONEID
IDX_PATTERNSTOP_PK	Y	PATTERNSTOP	RTD_PATTERNSTOPID
IDX_PATTERNSTOP_STOPPTSTOPID		PATTERNSTOP	CPT_STOPPOINTID, RTT_STOPID
R953_SDE_ROWID_UK	Y	PATTERNSTOP	OBJECTID
IDX_PEAKHOUR_IF56		PEAKHOUR	CPT_AGENCYID
IDX_PEAKHOUR_IF57		PEAKHOUR	SCH_ROUTEID
IDX_PEAKHOUR_PK	Y	PEAKHOUR	RTD_PEAKHOURID
XPKPLATFORMLOCATION	Y	PLATFORMLOCATION	PLATFORMLOCATION_ID
IDX_PORTAL_IF58		PORTAL	CPT_STOPPOINTID
IDX_PORTAL_PK	Y	PORTAL	RTD_PORTALID
XIF3PORTAL		PORTAL	FACILITY_ID
XIF5PORTAL		PORTAL	PORTALTYPE_ID
XIF1PORTALACCESSIBILITIES		PORTALACCESSIBILITIES	RTD_PORTALID
XIF2PORTALACCESSIBILITIES		PORTALACCESSIBILITIES	ACCESSIBILITYTYPE_ID
XPKPORTALACCESSIBILITIES	Y	PORTALACCESSIBILITIES	RTD_PORTALID, ACCESSIBILITYTYPE_ID
XIF1PORTALSTOP		PORTALSTOP	CPT_STOPPOINTID
XIF2PORTALSTOP		PORTALSTOP	RTD_PORTALID
XPKPORTALSTOP	Y	PORTALSTOP	CPT_STOPPOINTID, RTD_PORTALID

XPKPORTALTYPE	Y	PORTALTYPE	PORTALTYPE_ID
IDX_RIDERCATEGORY_IF46		RIDERCATEGORY	CPT_AGENCYID
IDX_RIDERCATEGORY_IF47		RIDERCATEGORY	SCH_ROUTEID
IDX_RIDERCATEGORY_PK	Y	RIDERCATEGORY	RTD_RIDERCATEGORYID
IDX_ROUTE_IF29		ROUTE	CPT_AGENCYID
IDX_ROUTE_PK	Y	ROUTE	SCH_ROUTEID
IDX_RTE_SEARCH1		ROUTE	SCH_ROUTEDESIGNATOR
IDX_RTE_SEARCH2		ROUTE	ROUTE_NAME
ROUTESORT		ROUTE	LEADNUM, NAMESANSNUM
IDX_STOPFROM		ROUTES_TRANSFERS	STOP_FROM_ID
IDX_STOPTO		ROUTES_TRANSFERS	STOP_TO_ID
ROUTES_TRANSFERS_PK	Y	ROUTES_TRANSFERS	ROUTE_TO_ID, ROUTE_FROM_ID, STOP_FROM_ID, STOP_TO_ID
IDX_ROUTE_SCHEDULE_PK	Y	ROUTE_SCHEDULE	RSCH_ID
IDX_ROUTE_SCHEDULE_DAYTYPE_PK	Y	ROUTE_SCHEDULE_DAYTYPE	SCH_DAYTYPEID, RSCH_ID
IDX_ROUTE_SCHED_DIRECTION_PK	Y	ROUTE_SCHEDULE_DIRECTION	RSCH_ID, RSCHDIR_ID
IDX_ROUTE_SCHEDULE_STOP_PK	Y	ROUTE_SCHEDULE_STOP	RSCH_ID, CPT_STOPPOINTID, RSCHSTOP_SEQUENCE
IDX_ROUTE_SCHEDULE_TRIP_PK	Y	ROUTE_SCHEDULE_TRIP	RSCH_ID, RSCHTRP_SEQUENCE, SCH_TRIPID
IDX_SCHEDULE_ID	Y	SCHEDULE	RTD_SCHEDULEID, SCH_TRIPID, TS_TPSEQNO, RTD_PATTERNSTOPID
IDX_SCHEDULE_IF39		SCHEDULE	SCH_TRIPID
IDX_SCHEDULE_IF59		SCHEDULE	RTD_PATTERNSTOPID
IDX_SCHEDULE_PK	Y	SCHEDULE	RTD_SCHEDULEID
CONST_SPDAY_PK	Y	SPECIALDAYS	SCH_SPECIALDAYID
CONST_SPDAY_UNQ	Y	SPECIALDAYS	SCH_SPECIALDAYID, SPECIALDAYNAME
IDX_LATLONG		STOP	SP_LONGITUDE, SP_LATITUDE, CPT_STOPPOINTID
IDX_STOP_AK1	Y	STOP	OBJECTID

IDX_STOP_IF30		STOP	CPT_AGENCYID
IDX_STOP_IF42		STOP	RTD_LANDMARKID
IDX_STOP_PK	Y	STOP	CPT_STOPPOINTID
STOPSORT		STOP	NAMESANSNUM, LEADNUM
STOP_LAT_LONG		STOP	CPT_STOPPOINTID, SP_LATITUDE, SP_LONGITUDE
XIF3STOP		STOP	FACILITY_ID
IDX_TIMEPOINT_IF67		TIMEPOINT	CPT_STOPPOINTID
IDX_TIMEPOINT_PK	Y	TIMEPOINT	RTD_TIMEPOINTID
IDX_TRIP_IF38		TRIP	SCH_PATTERNID
IDX_TRIP_PK	Y	TRIP	SCH_TRIPID
IDX_TRIP_TRIPID	Y	TRIP	SCH_TRIPID, SCH_PATTERNID, SCH_DAYTYPEID

RTDNS: List of All Triggers

Trigger Name	Type	Event	Base Object Type	Base Object
LANDMARKSORTCOLSTRIG	BEFORE EACH ROW	INSERT OR UPDATE	TABLE	RTDNS.LANDMARK
LMOBJIDTRIG	BEFORE EACH ROW	INSERT	TABLE	RTDNS.LANDMARK
TIU_LANDMARK	BEFORE EACH ROW	INSERT OR UPDATE	TABLE	RTDNS.LANDMARK
tIU_PARKINGFACILITY	BEFORE EACH ROW	INSERT OR UPDATE	TABLE	RTDNS.PARKINGFACILITY
PATTSTOPOBJIDTRIG	BEFORE EACH ROW	INSERT	TABLE	RTDNS.PATTERNSTOP
ROUTEGEOMETRY_DROP	AFTER EACH ROW	DELETE	TABLE	RTDNS.ROUTE
ROUTESORTCOLSTRIG	BEFORE EACH ROW	INSERT OR UPDATE	TABLE	RTDNS.ROUTE
SCH_TIMEVALUES	BEFORE EACH ROW	INSERT OR UPDATE	TABLE	RTDNS.SCHEDULE
STOPOBJIDTRIG	BEFORE EACH ROW	INSERT	TABLE	RTDNS.STOP

STOPSORTCOLSTRIG	BEFORE EACH ROW	INSERT OR UPDATE	TABLE	RTDNS.STOP
TIU_STOP_XY_MERCATOR	BEFORE EACH ROW	INSERT OR UPDATE	TABLE	RTDNS.STOP
TU_UPDATE_STOPPOINTS	AFTER EACH ROW	UPDATE	TABLE	RTDNS.STOP
SDE_LOGOFF_CLEANUP	BEFORE EVENT	LOGOFF	SCHEMA	RTDNS

RTDNS: List of All Sequences

Sequence Name	Min Value	Max Value	Increment	Cycle	Order	Cache Size
SEQ_AGENCYMODULEPARAM_ID	1	1.00E+27	1	No	Yes	20
SEQ_AGENCYMODULE_ID	1	1.00E+27	1	No	Yes	20
SEQ_AGENCY_ID	1	1.00E+27	1	No	Yes	20
SEQ_EVENT_ID	1	1.00E+27	1	No	Yes	20
SEQ_MESSAGE_ID	1	1.00E+27	1	No	Yes	20
SEQ_MODULE_ID	1	1.00E+27	1	No	Yes	20
SEQ_PARAMETER_ID	1	1.00E+27	1	No	Yes	20
SEQ_USERMODULEPARAM_ID	1	1.00E+27	1	No	Yes	20
SEQ_USERMODULE_ID	1	1.00E+27	1	No	Yes	20
SEQ_USER_ID	1	1.00E+27	1	No	Yes	20
SNAPSHOT_ID$	1	2.00E+09	1	No	No	20
SNAPSITE_ID$	1	4.00E+09	1	No	No	20
SNS$NODE_NUMBER$	1	1.00E+27	1	No	No	20
SNS$SHARED$OBJSEQ	1	1.00E+27	1	No	No	20
SQ_ACCESSIBILITYTYPE_ID	1	1.00E+27	1	No	No	20
SQ_ALTERNATE_ALTPATHID	3864	1.00E+27	1	No	No	20
SQ_AMENITY_PIAMENITYID	663	1.00E+27	1	No	No	20
SQ_BATCHFARE_FAREITEMID	883	1.00E+27	1	No	No	20
SQ_DAYTYPE_SCHDAYTYPEID	6500	1.00E+27	1	No	No	20
SQ_ENTRANCE_ID	1	1.00E+12	1	No	No	20
SQ_FACILITY_ID	1	1.00E+27	1	No	No	20
SQ_FAREDEF_FAREDEFID	3683	1.00E+27	1	No	No	20

SQ_FAREINCOST_FAREINCOSTID	943	1.00E+27	1	No	No	20
SQ_FAREINPRICE_FAREINPRICEID	1263	1.00E+27	1	No	No	20
SQ_FAREINVALUE_FAREINVALUEID	863	1.00E+27	1	No	No	20
SQ_FAREIN_FCFAREINID	783	1.00E+27	1	No	No	20
SQ_FAREZONE_FAREZONEID	4203	1.00E+27	1	No	No	20
SQ_FARE_FAREID	52183	1.00E+27	1	No	No	20
SQ_HUB_HUBID	1	1.00E+12	1	No	No	20
SQ_LANDMARK_LANDMARKID	61032	1.00E+27	1	No	No	20
SQ_LANDMARK_OBJECTID	475262	1.00E+27	1	No	No	20
SQ_LMKALIAS_LMKALIASID	703	1.00E+27	1	No	No	20
SQ_PARKFACIL_PARKFACILTYPEID	1	1.00E+12	1	No	No	20
SQ_PARKFACIL_PARKINGFACILITYID	1	1.00E+12	1	No	No	20
SQ_PARKINGSTALL_PARKINGSTALLID	1	1.00E+12	1	No	No	20
SQ_PARKINGSTALL_TYPEID	1	1.00E+12	1	No	No	20
SQ_PATTERNSTOP_OBJECTID	1	1.00E+27	1	No	No	20
SQ_PATTERNSTOP_PATTERNSTOPID	2479103	1.00E+27	1	No	No	20
SQ_PATTERN_SCHPATTERNID	84043	1.00E+27	1	No	No	20
SQ_PATTFN_PATTERNFOOTNOTEID	663	1.00E+27	1	No	No	20
SQ_PEAKHOUR_PEAKHOURID	983	1.00E+27	1	No	No	20
SQ_PLATFORMLOCATION_ID	1	1.00E+27	1	No	No	20
SQ_PORTALTYPE_ID	1	1.00E+27	1	No	No	20
SQ_PORTAL_OBJECTID	663	1.00E+27	1	No	No	20
SQ_PORTAL_RTDSTOPPORTALID	663	1.00E+27	1	No	No	20
SQ_REGALTPATTERN_PATTERNID	663	1.00E+27	1	No	No	20
SQ_REGALTPATTSTP_PATTSTOPID	663	1.00E+27	1	No	No	20

SQ_RIDERCAT_RIDERCATID	3723	1.00E+27	1	No	No	20
SQ_ROUTESCHEDULE_RSCHID	1	1.00E+27	1	No	No	0
SQ_ROUTE_SCHROUTEID	26703	1.00E+27	1	No	No	20
SQ_SCHEDULE_SCHEDULEID	14351983	1.00E+27	1	No	No	20
SQ_STOP_CPTSTOPPOINTID	1125443	1.00E+27	1	No	No	20
SQ_STOP_OBJECTID	730770	1.00E+27	1	No	No	20
SQ_TIMEPOINT_RTD_TIMEPOINTID	98143	1.00E+27	1	No	No	20
SQ_TRIPFN_TRIPFOOTNOTEID	663	1.00E+27	1	No	No	20
SQ_TRIP_SCHTRIPID	1980463	1.00E+27	1	No	No	20
SQ_TSFADDZFARE_ADDZONEFAREID	663	1.00E+27	1	No	No	20
SQ_TSFHEADCHG_HEADSIGNCHANGEID	663	1.00E+27	1	No	No	20
SQ_TSFNONTPSTART_NONTPSTARTID	663	1.00E+27	1	No	No	20
SQ_TSFNOTRAN_NOTRANSFERSLIPID	663	1.00E+27	1	No	No	20
SQ_TSFOTHRWAIT_OTHERWAITINGID	663	1.00E+27	1	No	No	20
SQ_TSFPICKDROP_PICKUPDROPOFFID	663	1.00E+27	1	No	No	20
SQ_TSFREGINTERV_REGINTERVALID	663	1.00E+27	1	No	No	20
SQ_TSFRTECHG_ROUTECHANGEID	663	1.00E+27	1	No	No	20
SQ_TSFSTOPSKIP_STOPSKIPID	663	1.00E+27	1	No	No	20
SQ_TSHOLIDAYSCH_HOLIDAYSCHID	683	1.00E+27	1	No	No	20
SQ_TSSPECEVENT_SPECEVENTID	702	1.00E+27	1	No	No	20

RTDNS: List of All Functions

Name	Type	Lines of Code
APROC	PROCEDURE	184

APROC1	PROCEDURE	10
CONCATENATE_LIST	FUNCTION	14
GETPATDIR	FUNCTION	41
LEADINGNUM	FUNCTION	2
PATTERNSIG	FUNCTION	3
RTDNS_UTIL	PACKAGE	753
RTDNS_UTIL.BUILDTIMETABLE	PACKAGE	753
RTDNS_UTIL.BUILDTIMETABLE	PACKAGE	753
RTDNS_UTIL.DEGTORAD	PACKAGE	753
RTDNS_UTIL.DISTANCE	PACKAGE	753
RTDNS_UTIL.HAVERSINEDISTANCE	PACKAGE	753
RTDNS_UTIL.LATLONG2XMERCATOR	PACKAGE	753
RTDNS_UTIL.LATLONG2YMERCATOR	PACKAGE	753
RTDNS_UTIL.QUICKDISTANCE	PACKAGE	753
RTDNS_UTIL.RADTODEG	PACKAGE	753
STOPSIG	FUNCTION	3
STRINGSANSNUM	FUNCTION	2

Appendix E SCHEMA DESCRIPTIONS - RTDWEB

RTDWEB: List of All Tables

Table Name	# of Cols	# of Indexes	Tablespace	Buffer Pool	Comment
ANNOUNCEMENT	11	9	USERS	DEFAULT	Current announcements
ANNOUNCEMENT_ARCHIVE	13	0	USERS	DEFAULT	Archived announcements
ANNOUNCEMENT_QUEUE	14	1	USERS	DEFAULT	Queue for distributing announcments to remote databases
ANNOUNCEMENT_ROUTES	4	2	USERS	DEFAULT	Route(s) affected by announcements
ANNOUNCEMENT_TYPE	2	0	USERS	DEFAULT	Type of announcements
ANNOUNCEMENTRELATIONS	2	2	USERS	DEFAULT	Announcement, announcement type relationship
CMS_ROLE	2	1	USERS	DEFAULT	CMS user roles
CMS_USER	14	0	USERS	DEFAULT	CMS users
CMS_USER_ROLES	2	0	USERS	DEFAULT	CMS user, role relationship
CMS_USER_TYPE	2	0	USERS	DEFAULT	CMS user types
DATA_EXPORT_TASK	8	1	USERS	DEFAULT	Data export task definitions
DATA_EXPORT_TASK_RUN	3	1	USERS	DEFAULT	Record of an export task's execution
EVENT	10	9	USERS	DEFAULT	Record all user web related events
EVENT_ARCHIVE	10	3	USERS	DEFAULT	Holds all events prior to current day
EVENT_PROVIDERS	5	0	USERS	DEFAULT	Keeps track of agency provider data accesses
EVENT_ROUTES	5	2	USERS	DEFAULT	Keeps track of route data accesses
EVENT_STATS	6	1	USERS	DEFAULT	Event stastics
EVENT_TYPE	2	1	USERS	DEFAULT	Event types
EXPORT_FORMAT	2	1	USERS	DEFAULT	Defines export task output formats

EXPORTED_DATASET	4	1	USERS	DEFAULT	Record of an export task's output
FEEDBACK	20	3	USERS	DEFAULT	CMS user feedback
FEEDBACKSTATUS	2	0	USERS	DEFAULT	Feedback status types
FEEDBACKSTATUSHISTORY	7	1	USERS	DEFAULT	Feedback status history (audit data)
FEEDBACKTYPE	2	0	USERS	DEFAULT	Feedback types
MESSAGE_TYPE	2	1	USERS	DEFAULT	[Deprecated]
PAGE_MESSAGE	3	2	USERS	DEFAULT	[Deprecated]
POPDESTAGENCIES	2	2	USERS	DEFAULT	Agencies serving popular destinations
POPDESTRELATIONS	2	0	USERS	DEFAULT	Popular destination, type relationship
POPULAR_DESTINATION	10	2	USERS	DEFAULT	Popular destinations
POPULARDESTINATION_TYPE	2	0	USERS	DEFAULT	Popular destination types
PROMOBOX	10	1	USERS	DEFAULT	Provides clickable objects for web users
RESPONSE	11	0	USERS	DEFAULT	CMS feedback response
RESPONSETYPE	2	0	USERS	DEFAULT	CMS feedback response types
ROUTES_MAPS	6	0	USERS	DEFAULT	Route map inventory
SEARCH_ANNOUNCEMENTS	13	1	USERS	DEFAULT	[Deprecated]
STANDARDRESPONSES	4	0	USERS	DEFAULT	Standard CMS feedback responses
SURVEY	4	1	USERS	DEFAULT	Survey definitions
SURVEY_ANSWER	3	0	USERS	DEFAULT	Participant responses to a survey's questions
SURVEY_PARTICIPANT	1	1	USERS	DEFAULT	Participant ID number to identify a set of survey responses
SURVEY_QUESTION	3	1	USERS	DEFAULT	Inventory of survey questions
SYSTEM_MAPS	4	0	USERS	DEFAULT	System map inventory
TRANSIT_PROVIDER	19	4	USERS	DEFAULT	Transit agency providers

ANNOUNCEMENT

Column Name	Data Type	Not Null?	Data Def.	Comments
ANN_ID	NUMBER(15)	Y		[PK] Primary key
ANN_TITLE	VARCHAR2(255)			Title of announcement
ANN_CONTENT	VARCHAR2(4000)			Body text of announcement
ANN_URL	VARCHAR2(255)			URL for further information regarding announcement
ANN_RELEASED	DATE		SYSDATE	Date/time announcement recorded
ANN_EFFECTIVE_FROM	DATE		SYSDATE+1	Date/time announcement commences
ANN_EFFECTIVE_TO	DATE			Date/time announcement concludes
ANN_APPROVED	VARCHAR2(1)		'N'	Is announcement approved for production
CMSUSER_ID	NUMBER	Y		CMS user who created announcement
ANN_EMERGENCY	VARCHAR2(1)		'N'	Is announcement classified as an "emergency"
PROVIDER_ID	CHAR(2)			[FK] ID of agency affected by announcement

ANNOUNCEMENT_ARCHIVE

Column Name	Data Type	Not Null?	Data Def.	Comments
ANNARCH_ID	NUMBER(15)	Y		[PK] Primary key
ANNARCH_TITLE	VARCHAR2(255)			Title of announcement
ROUTE_ID	NUMBER			[FK] ID of route attached to announcement
ANNARCH_CONTENT	VARCHAR2(2048)			Body text of announcement
ANNARCH_URL	VARCHAR2(255)			URL for further information regarding announcement
ANNARCH_RELEASED	DATE			Date/time announcement recorded
ANNARCH_EFFECTIVE_FROM	DATE			Date/time announcement commences

ANNARCH_EFFECTIVE_TO	DATE			Date/time announcement concludes
ANNTYPE_ID	NUMBER	Y		[FK] ID of announcement type
ANNARCH_APPROVED	VARCHAR2(1)			Was announcement approved for production
CMSUSER_ID	NUMBER	Y		CMS user who created announcement
PROVIDER_ID	CHAR(2)			[FK] ID of agency affected by announcement
ANNARCH_EMERGENCY	VARCHAR2(1)			Was annuoncement classified as an "emergency"

ANNOUNCEMENT_QUEUE

Column Name	Data Type	Not Null?	Data Def.	Comments
NEW_ANN_ID	NUMBER(15)			
OLD_ANN_ID	NUMBER(15)			
ANN_TITLE	VARCHAR2(255)			
ANN_CONTENT	VARCHAR2(4000)			
ANN_URL	VARCHAR2(255)			
ANN_RELEASED	DATE			
ANN_EFFECTIVE_FROM	DATE			
ANN_EFFECTIVE_TO	DATE			
ANN_APPROVED	VARCHAR2(1)			
CMSUSER_ID	NUMBER			
ANN_EMERGENCY	VARCHAR2(1)			
PROVIER_ID	CHAR(2)			
ANN_ACTION	CHAR(1)			
ANN_QUEUE_ID	NUMBER	Y		

ANNOUNCEMENT_ROUTES

Column Name	Data Type	Not Null?	Data Def.	Comments
ANN_ID	NUMBER(15)	Y		[FK] ID of announcement
SCH_ROUTEID	NUMBER(15)	Y		[FK] ID of route associated with announcement
CPT_AGENCYID	VARCHAR2(2)			[FK] ID of agency associated with announcement
SCH_ROUTEDESIGNATOR	VARCHAR2(50)			Name of route associated with announcement

ANNOUNCEMENT_TYPE

Column Name	Data Type	Not Null?	Data Def.	Comments
ANNTYPE_ID	NUMBER	Y		[PK] Primary key
ANNTYPE_NAME	VARCHAR2(50)			Description of announcement type

ANNOUNCEMENTRELATIONS

Column Name	Data Type	Not Null?	Data Def.	Comments
ANNTYPE_ID	NUMBER			[FK] ID of announcement type
ANN_ID	NUMBER			[FK] ID of announcement

CMS_ROLE

Column Name	Data Type	Not Null?	Data Def.	Comments
CMSROLE_ID	NUMBER	Y		[PK] Primary key
CMSROLE_NAME	VARCHAR2(250)	Y		Description of CMS role

CMS_USER

Column Name	Data Type	Not Null?	Data Def.	Comments
CMSUSER_ID	NUMBER	Y		[PK] Primary key
CMSUSER_FIRSTNAME	VARCHAR2(50)			CMS user first name
CMSUSER_LASTNAME	VARCHAR2(50)			CMS user last name
CMSUSER_TITLE	VARCHAR2(50)			CMS user title
CMSUSER_USERNAME	VARCHAR2(20)			CMS user login username
CMSUSER_PASSWORD	VARCHAR2(20)			CMS user login password
CMSUSER_PHONE	VARCHAR2(50)			CMS user telephone number
CMSUSER_EMAIL	VARCHAR2(255)			CMS user email address
CMSUSER_STATUS	VARCHAR2(1)		'I'	Indicates whether CMS user is active or inactive
CMSUSER_LASTLOGIN	DATE			Date/time CMS user last logged in
CMSUSER_RECEIVE_MESSAGES	VARCHAR2(1)		'Y'	Can CMS user received messages
PROVIDER_ID	CHAR(2)			Agency associated with CMS user
CMSUSERTYPE_ID	NUMBER		0	[FK] CMS user type
FEEDBACK_ASSIGNEE	VARCHAR2(1)			Can CMS user be assigned CMS feedback

CMS_USER_ROLES

Column Name	Data Type	Not Null?	Data Def.	Comments
CMSROLE_ID	NUMBER	Y		[FK] ID of CMS role
CMSUSER_ID	NUMBER	Y		[FK] ID of CMS user

CMS_USER_TYPE

Column Name	Data Type	Not Null?	Data Def.	Comments
CMSUSERTYPE_ID	NUMBER	Y		[PK] Primary key
CMSUSERTYPE_NAME	VARCHAR2(20)			Description of user type

DATA_EXPORT_TASK

Column Name	Data Type	Not Null?	Data Def.	Comments
TASK_ID	NUMBER(10)	Y		[PK] Primary key
TASK_PROVIDER_ID	VARCHAR2(20)			Agency code of provider exported
TASK_RUN_FREQUENCY	NUMBER(10)			Number of minutes between scheduled exports
TASK_UPDATED_ONLY	VARCHAR2(1)			
TASK_LAST_RUN	DATE			Date/time last export executed for export task
TASK_DATA_DICTIONARY_FILE	VARCHAR2(1000)			File name of data dictionary file
TASK_EXPORT_FORMAT_ID	NUMBER(10)			
TASK_RUN_TIME	DATE			[currently unused]

DATA_EXPORT_TASK_RUN

Column Name	Data Type	Not Null?	Data Def.	Comments
RUN_ID	NUMBER(10)	Y		[PK] Primary key
RUN_TIMESTAMP	DATE	Y		Date/time the export task executed
RUN_TASK_ID	NUMBER(10)	Y		[FK] ID of data export task

EVENT

Column Name	Data Type	Not Null?	Data Def.	Comments
EVENT_ID	NUMBER(12)	Y		[PK] Primary key
EVENT_ERRORNUMBER	NUMBER			Error number generated by event
EVENT_DESCRIPTION	VARCHAR2(1024)			Text of the event
EVENT_SOURCE	VARCHAR2(255)			Internet source of the event
EVENT_TIME	DATE		SYSDATE	Date/time event occurred
EVENTTYPE_ID	NUMBER		0	[FK] ID of event type
EVENT_IP	VARCHAR2(20)			IP address of event source
EVENT_BROWSER	VARCHAR2(100)			Web browser used by event source
EVENT_SESSION	VARCHAR2(20)			Web user session identifier
EVENT_REFERRER	VARCHAR2(250)			IP/URL of referring website

EVENT_ARCHIVE

Column Name	Data Type	Not Null?	Data Def.	Comments
EVENT_ID	NUMBER(12)	Y		[PK] Primary key
EVENT_ERRORNUMBER	NUMBER			Error number generated by event
EVENT_DESCRIPTION	VARCHAR2(1024)			Text of the event
EVENT_SOURCE	VARCHAR2(255)			Internet source of the event
EVENT_TIME	DATE		SYSDATE	Date/time event occurred
EVENTTYPE_ID	NUMBER		0	[FK] ID of event type
EVENT_IP	VARCHAR2(20)			IP address of event source
EVENT_BROWSER	VARCHAR2(100)			Web browser used by event source

EVENT_SESSION	VARCHAR2(20)			Web user session identifier
EVENT_REFERRER	VARCHAR2(250)			IP/URL of referring website

EVENT_PROVIDERS

Column Name	Data Type	Not Null?	Data Def.	Comments
EVPROV_ID	NUMBER	Y		[PK] Primary key
EVPROV_DATE	DATE		SYSDATE	Date/time event occurred
EVPROV_COUNT	NUMBER		0	Accumulated total count of events
EVENTTYPE_ID	NUMBER			[FK] ID of event type
PROVIDER_ID	CHAR(2)			[FK] ID of agency provider

EVENT_ROUTES

Column Name	Data Type	Not Null?	Data Def.	Comments
EVRTE_ID	NUMBER	Y		[PK] Primary key
EVRTE_DATE	DATE		SYSDATE	Date/time event occurred
EVRTE_COUNT	NUMBER		0	Accumulated total count of events
EVENTTYPE_ID	NUMBER			[FK] ID of event type
ROUTE_ID	NUMBER			[FK] ID of route

EVENT_STATS

Column Name	Data Type	Not Null?	Data Def.	Comments
EVSTAT_ID	NUMBER	Y		[PK] Primary key
EVSTAT_DATE	DATE			Date/time event occurred
EVENTTYPE_ID	NUMBER	Y		[FK] ID of route
EVSTAT_COUNT	NUMBER			Accumulated total count of events
EVSTAT_ERRORNUMBER	NUMBER			Error number generated by event
EVSTAT_TAG	VARCHAR2(250)			IP/URL of referring website

EVENT_TYPE

Column Name	Data Type	Not Null?	Data Def.	Comments
EVENTTYPE_ID	NUMBER	Y		[PK] Primary key
EVENTTYPE_NAME	VARCHAR2(50)			Name of event type

EXPORT_FORMAT

Column Name	Data Type	Not Null?	Data Def.	Comments
FORMAT_ID	NUMBER(10)	Y		[PK] Primary key
FORMAT_NAME	VARCHAR2(20)	Y		Description of export format

EXPORTED_DATASET

Column Name	Data Type	Not Null?	Data Def.	Comments
DATASET_ID	NUMBER(10)	Y		[PK] Primary key

DATASET_TIMESTAMP	DATE	Y		Date/time export occurred
DATASET_FILE	VARCHAR2(1000)	Y		Filename given to exported data
DATASET_TASK_ID	NUMBER(10)	Y		[FK] ID of data export task

FEEDBACK

Column Name	Data Type	Not Null?	Data Def.	Comments
FDBCK_ID	NUMBER	Y		[PK] Primary key
FDBCK_SUBJECT	VARCHAR2(255)			User provided subject name of feedback
FDBCK_CONTENT	VARCHAR2(4000)			User provided content of feedback
FDBTYPE_ID	NUMBER	Y	0	[FK] ID of feedback type
FDBCK_EMAIL	VARCHAR2(100)			Email address of feedback provider
CMSUSER_ID	NUMBER			[FK] ID of CMS user assigned to feedback
FDBCK_NAME	VARCHAR2(100)			Name of feedback provider
FDBCK_ADDRESS	VARCHAR2(100)			Address of feedback provider
FDBCK_CITY	VARCHAR2(100)			City of feedback provider
FDBCK_STATE	VARCHAR2(2)			State of feedback provider
FDBCK_ZIP	VARCHAR2(10)			Zip code of feedback provider
FDBCK_HOST	VARCHAR2(255)			Web site where feedback was initiated
FDBCK_BROWSER	VARCHAR2(255)			Web browser used by feedback provider
FDBCK_PHONE	VARCHAR2(20)			Phone number of feedback provider
FDBCK_REFERRER	VARCHAR2(1000)			URL of page where feedback was initiated
FDBCKST_ID	NUMBER	Y	0	[FK] ID of feedback status
FDBCK_TIMESTAMP	DATE		SYSDATE	Date/time feedback was submitted

FDBCK_PARENT	NUMBER			[FK] ID of preceding feedback
FDBCK_NOTES	VARCHAR2(4000)			[currently unused]
FDBCK_MANTISID	VARCHAR2(10)			[currently unused]

FEEDBACKSTATUS

Column Name	Data Type	Not Null?	Data Def.	Comments
FDBCKST_ID	NUMBER	Y		[PK] Primary key
FDBCKST_NAME	VARCHAR2(100)			Description of feedback status

FEEDBACKSTATUSHISTORY

Column Name	Data Type	Not Null?	Data Def.	Comments
FDBCK_TRACKID	NUMBER	Y		
FDBCK_ID	NUMBER	Y		
FDBCK_CHANGERID	NUMBER			
FDBCK_FROMID	NUMBER	Y		
FDBCK_TOID	NUMBER	Y		
FDBCK_CHANGEDON	DATE	Y	SYSDATE	
FDBCK_NOTES	VARCHAR2(4000)			

FEEDBACKTYPE

Column Name	Data Type	Not Null?	Data Def.	Comments
FDBTYPE_ID	NUMBER	Y		[PK] Primary key
FDBTYPE_NAME	VARCHAR2(255)			Description of feedback type

MESSAGE_TYPE

Column Name	Data Type	Not Null?	Data Def.	Comments
MESSAGETYPE_ID	NUMBER	Y		
MESSAGE_NAME	VARCHAR2(50)			

PAGE_MESSAGE

Column Name	Data Type	Not Null?	Data Def.	Comments
MESSAGE_ID	NUMBER	Y		
MESSAGE_CONTENT	VARCHAR2(4000)			
MESSAGETYPE_ID	NUMBER	Y		

POPDESTAGENCIES

Column Name	Data Type	Not Null?	Data Def.	Comments
PROVIDER_ID	CHAR(2)	Y		[FK] ID of agency provider
POPDEST_ID	NUMBER	Y		[FK] ID of popular destination

POPDESTRELATIONS

Column Name	Data Type	Not Null?	Data Def.	Comments
POPDESTTYPE_ID	NUMBER	Y		[FK] ID of popular destination type
POPDEST_ID	NUMBER	Y		[FK] ID of popular destination

POPULAR_DESTINATION

Column Name	Data Type	Not Null?	Data Def.	Comments
POPDEST_ID	NUMBER	Y		[PK] Primary key
LANDMARK_ID	NUMBER			[FK] ID of landmark associated with popular destination
POPDEST_NAME	VARCHAR2(255)			Name of popular destination
POPDEST_LOCATION	VARCHAR2(1024)			Location description of popular destination
POPDEST_URL	VARCHAR2(255)			URL for website of popular destination
POPDEST_IMAGEFILE	VARCHAR2(1024)			Filename of full image of popular destination
POPDEST_THUMBNAIL	VARCHAR2(1024)			Filename of thumbnail image of popular destination
POPDEST_DESCRIPTION	VARCHAR2(2048)			Description of popular destination
POPDEST_CLICKCOUNT	NUMBER			Accumulated access total of popular destination
POPDEST_CITY	VARCHAR2(50)			City of popular destination

POPULARDESTINATION_TYPE

Column Name	Data Type	Not Null?	Data Def.	Comments
POPDESTTYPE_ID	NUMBER	Y		[PK] Primary key
POPDESTTYPE_NAME	VARCHAR2(50)			Name of popular destination type

PROMOBOX

Column Name	Data Type	Not Null?	Data Def.	Comments
PROMO_ID	NUMBER	Y		
PROMO_TITLE	VARCHAR2(40)			
PROMO_TARGET	VARCHAR2(16)			
PROMO_DESTINATION	VARCHAR2(255)			
PROMO_ALTTAG	VARCHAR2(80)			
PROMO_IMAGEFILE	VARCHAR2(80)			
PROMO_WIDTH	NUMBER			
PROMO_HEIGHT	NUMBER			
PROMO_SPOT	NUMBER			
PROMO_DISPLAY_TYPE	NUMBER			

RESPONSE

Column Name	Data Type	Not Null?	Data Def.	Comments
RESPONSE_ID	NUMBER	Y		[PK] Primary key
RESPONSE_TO	VARCHAR2(255)			Email address where response sent
RESPONSE_FROM	VARCHAR2(100)			Email address where response originated
RESPONSE_CC	VARCHAR2(255)			Email address where response carbon copied
RESPONSE_TIMESTAMP	DATE		SYSDATE	Date/time response sent
RESPONSE_SUBJECT	VARCHAR2(255)			Subject line of response
FDBCK_ID	NUMBER	Y		[FK] ID of feedback associated with response
RESPONSE_CONTENT	VARCHAR2(4000)			Body of response

RESPONSE_SENT_TO_USER	VARCHAR2(1)		'N'	Was response actually emailed to addressee
RESPTYPE_ID	NUMBER	Y	0	[FK] ID of response type
CMSUSER_ID	NUMBER	Y		[FK] CMS user who generated response

RESPONSETYPE

Column Name	Data Type	Not Null?	Data Def.	Comments
RESPTYPE_ID	NUMBER	Y		[PK] Primary key
RESPTYPE_NAME	VARCHAR2(255)			Name of response type

ROUTES_MAPS

Column Name	Data Type	Not Null?	Data Def.	Comments
ROUTEMAP_ID	NUMBER	Y		[PK] Primary key
ROUTE_ID	NUMBER			[FK] ID of route associated with route map
ROUTEMAP_NAME	VARCHAR2(250)			User friendly name of route map
ROUTEMAP_FILE	VARCHAR2(200)			File name of route map
CPT_AGENCYID	VARCHAR2(2)			[FK] ID of agency provider
SCH_ROUTEDESIGNATOR	VARCHAR2(50)			Name of route associated with route map

STANDARDRESPONSES

Column Name	Data Type	Not Null?	Data Def.	Comments
STDRESP_ID	NUMBER	Y		[PK] Primary key
STDRESP_SUBJECT	VARCHAR2(255)			Subject line of standard reponse
STDRESP_CONTENT	VARCHAR2(4000)			Body of standard response
STDRESP_NAME	VARCHAR2(100)			User friendly name of standard reponse

SURVEY

Column Name	Data Type	Not Null?	Data Def.	Comments
SURVEY_ID	NUMBER			[PK] Primary key
SURVEY_NAME	VARCHAR2(1000)			Name of survey
SURVEY_DESCRIPTION	VARCHAR2(4000)			Description of survey
EXTERNAL_SURVEY	VARCHAR2(1200)			External URL of survey

SURVEY_ANSWER

Column Name	Data Type	Not Null?	Data Def.	Comments
SURVEYQUESTION_ID	NUMBER	Y		[FK] ID of survey question
SURVEYANSWER_TEXT	VARCHAR2(4000)			Body of survey question answer
SURVEYPARTICIPANT_ID	NUMBER			[FK] ID of survey participant

SURVEY_PARTICIPANT

Column Name	Data Type	Not Null?	Data Def.	Comments

SURVEYPARTICIPANT_ID	NUMBER			[PK] Primary key

SURVEY_QUESTION

Column Name	Data Type	Not Null?	Data Def.	Comments
SURVEYQUESTION_ID	NUMBER			[PK] Primary key
SURVEYQUESTION_TEXT	VARCHAR2(1000)	Y		Body of survey question
SURVEY_ID	NUMBER			[FK] ID of survey

SYSTEM_MAPS

Column Name	Data Type	Not Null?	Data Def.	Comments
SYSMAP_ID	NUMBER	Y		[PK] Primary key
SYSMAP_NAME	VARCHAR2(250)			User friendly name of route map
SYSMAP_FILE	VARCHAR2(200)			File name of route map
PROVIDER_ID	CHAR(2)	Y		[FK] ID of agency provider

TRANSIT_PROVIDER

Column Name	Data Type	Not Null?	Data Def.	Comments
PROVIDER_ID	CHAR(2)	Y		[PK] Primary key
PROVIDER_NAME	VARCHAR2(255)			Name of agency provider
PROVIDER_ADDRESS	VARCHAR2(255)			Address of agency provider
PROVIDER_EMAIL	VARCHAR2(100)			Email address of agency provider
PROVIDER_WEBSITE	VARCHAR2(500)			Website URL of agency provider

PROVIDER_CONTACT	VARCHAR2(1000)			Primary contact(s) of agency provider
PROVIDER_CONTACTURL	VARCHAR2(255)			Webiste URL of agency provider's contact page
PROVIDER_DESCRIPTION	VARCHAR2(4000)			Description of agency provider
PROVIDER_INTCONTACT	VARCHAR2(255)			Internal contact information
PROVIDER_ANNOUNCEMENTSURL	VARCHAR2(255)			Website URL of agency provider's news/announcement page
PROVIDER_FILENAME	VARCHAR2(1024)			Filename of agency provider image/logo
PROVIDER_ACCESSIBILITY	VARCHAR2(2048)			Description of ADA accessibility of agency provider fleet
PROVIDER_SERVEDREGIONS	VARCHAR2(500)			Geographic regions service by agency provider
PROVIDER_PROFILEURL	VARCHAR2(500)			Website URL of agency provider's about page
PROVIDER_MAPFILE	VARCHAR2(250)			Filename of agency provider map
PROVIDER_TRIPPLANNER	VARCHAR2(1)		'N'	Is agency provider's data hosted in trip planner
PROVIDER_USEEXTINFO	VARCHAR2(1)		'Y'	Indicates whether provider data is internal or external
PROVIDER_FAREURL	VARCHAR2(255)			Website URL of agency provider's fare page
RTT_SHOWSTOPONLY	CHAR(1)			

RTDWEB: List of All Views

View Name	Status	# of Columns	Text Length	# of Dependencies
ALL_EFFECTIVE_ANNOUNCEMENTS	VALID	12	407	2
CLOSED_ANNOUNCEMENTS	VALID	12	482	2
EFFECTIVE_ANNOUNCEMENTS	VALID	12	633	2
EFFECTIVE_ANNOUNCEMENTS_ROUTES	VALID	2	218	2
EFFECTIVE_SCHEDMESSAGES	VALID	13	484	3
POPDEST_CITIES	VALID	11	352	2

VIEW_POPDESTINATIONS	VALID	4	185	2
WKLY_FEEDBACK_SUMMARY	VALID	4	309	3

RTDWEB: List of All Check Constraints

CONSTRAINT_NAME	TABLE_NAME	SEARCH_CONDITION
SYS_C0022531	ANNOUNCEMENT	ANN_ID IS NOT NULL
SYS_C0022532	ANNOUNCEMENT	CMSUSER_ID IS NOT NULL
SYS_C0022533	ANNOUNCEMENT_ARCHIVE	ANNARCH_ID IS NOT NULL
SYS_C0022534	ANNOUNCEMENT_ARCHIVE	ANNTYPE_ID IS NOT NULL
SYS_C0022535	ANNOUNCEMENT_ARCHIVE	CMSUSER_ID IS NOT NULL
CK_ANNOUNCEMENTQUEUE_ACTION	ANNOUNCEMENT_QUEUE	ann_action IN ('I','U','D')
SYS_C003411497	ANNOUNCEMENT_QUEUE	ANN_QUEUE_ID IS NOT NULL
SYS_C0022536	ANNOUNCEMENT_ROUTES	ANN_ID IS NOT NULL
SYS_C0022537	ANNOUNCEMENT_ROUTES	SCH_ROUTEID IS NOT NULL
SYS_C0022538	ANNOUNCEMENT_TYPE	ANNTYPE_ID IS NOT NULL
SYS_C001437520	BACKUP_CMS_USER	CMSUSER_ID IS NOT NULL
SYS_C0022539	CMS_ROLE	CMSROLE_ID IS NOT NULL
SYS_C0022540	CMS_ROLE	CMSROLE_NAME IS NOT NULL
SYS_C0022541	CMS_USER	CMSUSER_ID IS NOT NULL
SYS_C0022542	CMS_USER_ROLES	CMSROLE_ID IS NOT NULL
SYS_C0022543	CMS_USER_ROLES	CMSUSER_ID IS NOT NULL
SYS_C0022544	CMS_USER_TYPE	CMSUSERTYPE_ID IS NOT NULL
SYS_C0022545	DATA_EXPORT_TASK	TASK_ID IS NOT NULL

SYS_C0022546	DATA_EXPORT_TASK_RUN	RUN_ID IS NOT NULL
SYS_C0022547	DATA_EXPORT_TASK_RUN	RUN_TIMESTAMP IS NOT NULL
SYS_C0022548	DATA_EXPORT_TASK_RUN	RUN_TASK_ID IS NOT NULL
SYS_C001675432	DRANN_CAT_INDEXI	DR$TOKEN IS NOT NULL
SYS_C001675433	DRANN_CAT_INDEXI	DR$TOKEN_TYPE IS NOT NULL
SYS_C001675434	DRANN_CAT_INDEXI	DR$ROWID IS NOT NULL
SYS_C001675435	DRANN_CAT_INDEXI	DR$TOKEN_INFO IS NOT NULL
SYS_C003364806	DR$IDX_ANN_TEXT_CONTENT1$I	DR$TOKEN IS NOT NULL
SYS_C003364807	DR$IDX_ANN_TEXT_CONTENT1$I	DR$TOKEN_TYPE IS NOT NULL
SYS_C003364808	DR$IDX_ANN_TEXT_CONTENT1$I	DR$ROWID IS NOT NULL
SYS_C003364809	DR$IDX_ANN_TEXT_CONTENT1$I	DR$TOKEN_INFO IS NOT NULL
SYS_C003364810	DR$IDX_ANN_TEXT_CONTENT2$I	TOKEN_TEXT IS NOT NULL
SYS_C003364811	DR$IDX_ANN_TEXT_CONTENT2$I	TOKEN_TYPE IS NOT NULL
SYS_C003364812	DR$IDX_ANN_TEXT_CONTENT2$I	TOKEN_FIRST IS NOT NULL
SYS_C003364813	DR$IDX_ANN_TEXT_CONTENT2$I	TOKEN_LAST IS NOT NULL
SYS_C003364814	DR$IDX_ANN_TEXT_CONTENT2$I	TOKEN_COUNT IS NOT NULL
SYS_C003364816	DR$IDX_ANN_TEXT_CONTENT2$N	NLT_MARK IS NOT NULL
SYS_C003364794	DR$IDX_ANN_TEXT_TITLE1$I	DR$TOKEN IS NOT NULL
SYS_C003364795	DR$IDX_ANN_TEXT_TITLE1$I	DR$TOKEN_TYPE IS NOT NULL
SYS_C003364796	DR$IDX_ANN_TEXT_TITLE1$I	DR$ROWID IS NOT NULL
SYS_C003364797	DR$IDX_ANN_TEXT_TITLE1$I	DR$TOKEN_INFO IS NOT NULL
SYS_C003364798	DR$IDX_ANN_TEXT_TITLE2$I	TOKEN_TEXT IS NOT NULL
SYS_C003364799	DR$IDX_ANN_TEXT_TITLE2$I	TOKEN_TYPE IS NOT NULL
SYS_C003364800	DR$IDX_ANN_TEXT_TITLE2$I	TOKEN_FIRST IS NOT NULL

SYS_C003364801	DR$IDX_ANN_TEXT_TITLE2$I	TOKEN_LAST IS NOT NULL
SYS_C003364802	DR$IDX_ANN_TEXT_TITLE2$I	TOKEN_COUNT IS NOT NULL
SYS_C003364804	DR$IDX_ANN_TEXT_TITLE2$N	NLT_MARK IS NOT NULL
SYS_C0022584	DR$IDX_PROV_SEARCH1$I	TOKEN_TEXT IS NOT NULL
SYS_C0022585	DR$IDX_PROV_SEARCH1$I	TOKEN_TYPE IS NOT NULL
SYS_C0022586	DR$IDX_PROV_SEARCH1$I	TOKEN_FIRST IS NOT NULL
SYS_C0022587	DR$IDX_PROV_SEARCH1$I	TOKEN_LAST IS NOT NULL
SYS_C0022588	DR$IDX_PROV_SEARCH1$I	TOKEN_COUNT IS NOT NULL
SYS_C0022590	DR$IDX_PROV_SEARCH1$N	NLT_MARK IS NOT NULL
SYS_C0022592	DR$IDX_PROV_SEARCH2$I	TOKEN_TEXT IS NOT NULL
SYS_C0022593	DR$IDX_PROV_SEARCH2$I	TOKEN_TYPE IS NOT NULL
SYS_C0022594	DR$IDX_PROV_SEARCH2$I	TOKEN_FIRST IS NOT NULL
SYS_C0022595	DR$IDX_PROV_SEARCH2$I	TOKEN_LAST IS NOT NULL
SYS_C0022596	DR$IDX_PROV_SEARCH2$I	TOKEN_COUNT IS NOT NULL
SYS_C0022598	DR$IDX_PROV_SEARCH2$N	NLT_MARK IS NOT NULL
SYS_C0022600	DR$IDX_PROV_SEARCH3$I	TOKEN_TEXT IS NOT NULL
SYS_C0022601	DR$IDX_PROV_SEARCH3$I	TOKEN_TYPE IS NOT NULL
SYS_C0022602	DR$IDX_PROV_SEARCH3$I	TOKEN_FIRST IS NOT NULL
SYS_C0022603	DR$IDX_PROV_SEARCH3$I	TOKEN_LAST IS NOT NULL
SYS_C0022604	DR$IDX_PROV_SEARCH3$I	TOKEN_COUNT IS NOT NULL
SYS_C0022606	DR$IDX_PROV_SEARCH3$N	NLT_MARK IS NOT NULL
SYS_C0022608	DR$IDX_PROV_SEARCH4$I	TOKEN_TEXT IS NOT NULL
SYS_C0022609	DR$IDX_PROV_SEARCH4$I	TOKEN_TYPE IS NOT NULL
SYS_C0022610	DR$IDX_PROV_SEARCH4$I	TOKEN_FIRST IS NOT NULL

SYS_C0022611	DR$IDX_PROV_SEARCH4$I	TOKEN_LAST IS NOT NULL
SYS_C0022612	DR$IDX_PROV_SEARCH4$I	TOKEN_COUNT IS NOT NULL
SYS_C0022614	DR$IDX_PROV_SEARCH4$N	NLT_MARK IS NOT NULL
SYS_C0022549	EVENT	EVENT_ID IS NOT NULL
SYS_C003402879	EVENT	EVENTTYPE_ID IS NOT NULL
SYS_C003402880	EVENT	EVENT_TIME IS NOT NULL
SYS_C003402736	EVENTTEST	EVENT_ID IS NOT NULL
SYS_C003401836	EVENT_ARCHIVE	EVENT_ID IS NOT NULL
SYS_C003402877	EVENT_ARCHIVE	EVENTTYPE_ID IS NOT NULL
SYS_C003402878	EVENT_ARCHIVE	EVENT_TIME IS NOT NULL
SYS_C0022550	EVENT_PROVIDERS	EVPROV_ID IS NOT NULL
SYS_C0022551	EVENT_ROUTES	EVRTE_ID IS NOT NULL
SYS_C0022552	EVENT_STATS	EVSTAT_ID IS NOT NULL
SYS_C0022553	EVENT_STATS	EVENTTYPE_ID IS NOT NULL
SYS_C0022554	EVENT_TYPE	EVENTTYPE_ID IS NOT NULL
SYS_C0022555	EXPORTED_DATASET	DATASET_ID IS NOT NULL
SYS_C0022556	EXPORTED_DATASET	DATASET_TIMESTAMP IS NOT NULL
SYS_C0022557	EXPORTED_DATASET	DATASET_FILE IS NOT NULL
SYS_C0022558	EXPORTED_DATASET	DATASET_TASK_ID IS NOT NULL
SYS_C0022559	EXPORT_FORMAT	FORMAT_ID IS NOT NULL
SYS_C0022560	EXPORT_FORMAT	FORMAT_NAME IS NOT NULL
SYS_C0022561	FEEDBACK	FDBCK_ID IS NOT NULL
SYS_C0022562	FEEDBACK	FDBTYPE_ID IS NOT NULL
SYS_C0022563	FEEDBACK	FDBCKST_ID IS NOT NULL

SYS_C0022564	FEEDBACKSTATUS	FDBCKST_ID IS NOT NULL
SYS_C002638647	FEEDBACKSTATUSHISTORY	FDBCK_TRACKID IS NOT NULL
SYS_C002638648	FEEDBACKSTATUSHISTORY	FDBCK_ID IS NOT NULL
SYS_C002638649	FEEDBACKSTATUSHISTORY	FDBCKST_FROMID IS NOT NULL
SYS_C002638650	FEEDBACKSTATUSHISTORY	FDBCKST_TOID IS NOT NULL
SYS_C002638651	FEEDBACKSTATUSHISTORY	FDBCK_CHANGEDON IS NOT NULL
SYS_C0022565	FEEDBACKTYPE	FDBTYPE_ID IS NOT NULL
SYS_C002347527	MESSAGE_TYPE	MESSAGETYPE_ID IS NOT NULL
SYS_C002347529	PAGE_MESSAGE	MESSAGE_ID IS NOT NULL
SYS_C002347530	PAGE_MESSAGE	MESSAGETYPE_ID IS NOT NULL
SYS_C0022566	POPDESTAGENCIES	PROVIDER_ID IS NOT NULL
SYS_C0022567	POPDESTAGENCIES	POPDEST_ID IS NOT NULL
SYS_C0022568	POPDESTRELATIONS	POPDESTTYPE_ID IS NOT NULL
SYS_C0022569	POPDESTRELATIONS	POPDEST_ID IS NOT NULL
SYS_C0022570	POPULARDESTINATION_TYPE	POPDESTTYPE_ID IS NOT NULL
SYS_C0022571	POPULAR_DESTINATION	POPDEST_ID IS NOT NULL
SYS_C002841911	PROMOBOX	PROMO_ID IS NOT NULL
SYS_C0022572	RESPONSE	RESPONSE_ID IS NOT NULL
SYS_C0022573	RESPONSE	FDBCK_ID IS NOT NULL
SYS_C0022574	RESPONSE	RESPTYPE_ID IS NOT NULL
SYS_C0022575	RESPONSE	CMSUSER_ID IS NOT NULL
SYS_C0022576	RESPONSETYPE	RESPTYPE_ID IS NOT NULL
SYS_C0022577	ROUTES_MAPS	ROUTEMAP_ID IS NOT NULL
SYS_C001465820	SEARCH_ANNOUNCEMENTS	ANN_ID IS NOT NULL

SYS_C001465821	SEARCH_ANNOUNCEMENTS	CMSUSER_ID IS NOT NULL
SYS_C0022578	STANDARDRESPONSES	STDRESP_ID IS NOT NULL
SYS_C0022579	SURVEY_ANSWER	SURVEYQUESTION_ID IS NOT NULL
SYS_C0022580	SURVEY_QUESTION	SURVEYQUESTION_TEXT IS NOT NULL
SYS_C0022581	SYSTEM_MAPS	SYSMAP_ID IS NOT NULL
SYS_C0022582	SYSTEM_MAPS	PROVIDER_ID IS NOT NULL
SYS_C0022583	TRANSIT_PROVIDER	PROVIDER_ID IS NOT NULL

RTDWEB: List of All Indexes

Index Name	Unique?	Table Name	Columns
IDX_ANNID	Y	ANNOUNCEMENT	ANN_ID, ANN_EFFECTIVE_FROM, ANN_EFFECTIVE_TO, PROVIDER_ID
IDX_ANN_TEXT_CONTENT1		ANNOUNCEMENT	ANN_CONTENT
IDX_ANN_TEXT_CONTENT2		ANNOUNCEMENT	ANN_CONTENT
IDX_ANN_TEXT_TITLE1		ANNOUNCEMENT	ANN_TITLE
IDX_ANN_TEXT_TITLE2		ANNOUNCEMENT	ANN_TITLE
PK_ANNOUNCEMENTID	Y	ANNOUNCEMENT	ANN_ID
IDX_ANNREL1		ANNOUNCEMENTRELATIONS	ANN_ID, ANNTYPE_ID
PK_ANNOUNCEMENTQUEUE_ID	Y	ANNOUNCEMENT_QUEUE	ANN_QUEUE_ID
SYS_C0084457	Y	ANNOUNCEMENT_ROUTES	ANN_ID, SCH_ROUTEID
IDX_CMSROLENAME	Y	CMS_ROLE	CMSROLE_NAME
TASK_ID_PK	Y	DATA_EXPORT_TASK	TASK_ID
RUN_ID_PK	Y	DATA_EXPORT_TASK_RUN	RUN_ID
FKIDX_EVENT_EVENTTYPEID		EVENT	EVENTTYPE_ID

IDX_EVENT_IP		EVENT	EVENT_IP
IDX_EVENT_REFERRER		EVENT	EVENT_REFERRER
IDX_EVENT_SESSION		EVENT	EVENT_SESSION
IDX_EVENT_SESSIONCOUNT		EVENT	EVENT_SESSION, EVENT_IP, EVENTTYPE_ID
IDX_EVENT_TIME		EVENT	EVENT_TIME
PKIDX_EVENT_ID	Y	EVENT	EVENT_ID
FKIDX_EVENTTEST_EVENTTYPEID		EVENTTEST	EVENTTYPE_ID
IDX_EVENTTEST_REFERRER		EVENTTEST	EVENT_REFERRER
IDX_EVENTTEST_SESSION		EVENTTEST	EVENT_SESSION
IDX_EVENTTEST_TIME		EVENTTEST	EVENT_TIME
PK_EVENTTEST_ID	Y	EVENTTEST	EVENT_ID
FK_EVENTARCHIVE_EVENTTYPE		EVENT_ARCHIVE	EVENTTYPE_ID
IDX_EVENTARCHIVE_TIME		EVENT_ARCHIVE	EVENT_TIME
PK_EVENTARCHIVE_ID	Y	EVENT_ARCHIVE	EVENT_ID
IDX_EVNT_ROUTEID		EVENT_ROUTES	ROUTE_ID, EVENTTYPE_ID
IDX_EVDATE		EVENT_STATS	EVSTAT_DATE
SYS_C0084383	Y	EVENT_TYPE	EVENTTYPE_ID
DATASET_ID_PK	Y	EXPORTED_DATASET	DATASET_ID
FORMAT_ID_PK	Y	EXPORT_FORMAT	FORMAT_ID
FEEDBACK_PK	Y	FEEDBACK	FDBCK_ID
IDX_FEEDBACK_STATUS		FEEDBACK	FDBCKST_ID
IDX_FEEDBACK_TIMESTAMP		FEEDBACK	FDBCK_TIMESTAMP
FEEDBACKSTATUSHISTORY_PK	Y	FEEDBACKSTATUSHISTORY	FDBCK_TRACKID
MESSAGE_TYPE_PK	Y	MESSAGE_TYPE	MESSAGETYPE_ID

PAGE_MESSAGE_PK	Y	PAGE_MESSAGE	MESSAGE_ID
PAGE_MESSAGE_UK1	Y	PAGE_MESSAGE	MESSAGETYPE_ID
SYS_C0013706_1	Y	POPDESTAGENCIES	PROVIDER_ID, POPDEST_ID
IDX_POPDEST_CITY		POPULAR_DESTINATION	POPDEST_CITY
IDX_POPDEST_CLICKS		POPULAR_DESTINATION	POPDEST_CLICKCOUNT
PROMOBOX_PK	Y	PROMOBOX	PROMO_ID
ANN_CAT_INDEX		SEARCH_ANNOUNCEMENTS	ANN_SEARCH
CNSTR_SURVEY_PK	Y	SURVEY	SURVEY_ID
PK_SURVEY_PARTICIPANT	Y	SURVEY_PARTICIPANT	SURVEYPARTICIPANT_ID
PK_SURVEY_QUESTION	Y	SURVEY_QUESTION	SURVEYQUESTION_ID
IDX_PROV_SEARCH1		TRANSIT_PROVIDER	PROVIDER_NAME
IDX_PROV_SEARCH2		TRANSIT_PROVIDER	PROVIDER_DESCRIPTION
IDX_PROV_SEARCH3		TRANSIT_PROVIDER	PROVIDER_ACCESSIBILITY
IDX_PROV_SEARCH4		TRANSIT_PROVIDER	PROVIDER_CONTACT

RTDWEB: List of All Triggers

Trigger Name	Type	Event	Base Obj. Type	Base Object
DR$IDX_ANN_TEXT_CONTENT1TC	AFTER EACH ROW	INSERT OR UPDATE	TABLE	RTDWEB.ANNOUNCEMENT
DR$IDX_ANN_TEXT_TITLE1TC	AFTER EACH ROW	INSERT OR UPDATE	TABLE	RTDWEB.ANNOUNCEMENT
TD_ANNOUNCEMENT	AFTER EACH ROW	DELETE	TABLE	RTDWEB.ANNOUNCEMENT
TI_ANNOUNCEMENT_ID	BEFORE EACH ROW	INSERT	TABLE	RTDWEB.ANNOUNCEMENT
TI_ANNOUNCEMENT_RELEASE	BEFORE EACH ROW	INSERT	TABLE	RTDWEB.ANNOUNCEMENT
TU_ANNOUNCEMENT	AFTER EACH ROW	UPDATE	TABLE	RTDWEB.ANNOUNCEMENT

TU_REBUILD_TXTINDEX	AFTER EACH ROW	INSERT OR UPDATE	TABLE	RTDWEB.ANNOUNCEMENT
TI_ANNOUNCEMENT_ARCHIVE	AFTER EACH ROW	INSERT	TABLE	RTDWEB.ANNOUNCEMENT_ARCHIVE
TU_ANNOUNCEMENT_ARCHIVE	AFTER EACH ROW	UPDATE	TABLE	RTDWEB.ANNOUNCEMENT_ARCHIVE
TI_ANNOUNCEMENT_QUEUE_PK	BEFORE EACH ROW	INSERT	TABLE	RTDWEB.ANNOUNCEMENT_QUEUE
TI_ANNOUNCEMENT_ROUTES	AFTER EACH ROW	INSERT	TABLE	RTDWEB.ANNOUNCEMENT_ROUTES
TU_ANNOUNCEMENT_ROUTES	AFTER EACH ROW	UPDATE	TABLE	RTDWEB.ANNOUNCEMENT_ROUTES
TD_ANNOUNCEMENT_TYPE	AFTER EACH ROW	DELETE	TABLE	RTDWEB.ANNOUNCEMENT_TYPE
TU_ANNOUNCEMENT_TYPE	AFTER EACH ROW	UPDATE	TABLE	RTDWEB.ANNOUNCEMENT_TYPE
TI_CMSROLE_ID	BEFORE EACH ROW	INSERT	TABLE	RTDWEB.CMS_ROLE
TD_CMS_USER	AFTER EACH ROW	DELETE	TABLE	RTDWEB.CMS_USER
TI_CMSUSER_ID	BEFORE EACH ROW	INSERT	TABLE	RTDWEB.CMS_USER
TU_CMS_USER	AFTER EACH ROW	UPDATE	TABLE	RTDWEB.CMS_USER
TD_CMS_USER_TYPE	AFTER EACH ROW	DELETE	TABLE	RTDWEB.CMS_USER_TYPE
TU_CMS_USER_TYPE	AFTER EACH ROW	UPDATE	TABLE	RTDWEB.CMS_USER_TYPE
TI_DATAEXPORTTASK_ID	BEFORE EACH ROW	INSERT	TABLE	RTDWEB.DATA_EXPORT_TASK
TI_DATAEXPORTRUN_ID	BEFORE EACH ROW	INSERT	TABLE	RTDWEB.DATA_EXPORT_TASK_RUN
TI_EVENT_ID	BEFORE EACH ROW	INSERT	TABLE	RTDWEB.EVENT
TU_EVENT	AFTER EACH ROW	UPDATE	TABLE	RTDWEB.EVENT
TIU_EVENTTEST	BEFORE EACH ROW	INSERT OR UPDATE	TABLE	RTDWEB.EVENTTEST
TI_EVPROV_ID	BEFORE EACH ROW	INSERT	TABLE	RTDWEB.EVENT_PROVIDERS
TI_EVRTE_ID	BEFORE EACH ROW	INSERT	TABLE	RTDWEB.EVENT_ROUTES
TI_EVSTAT_ID	BEFORE EACH ROW	INSERT	TABLE	RTDWEB.EVENT_STATS
TD_EVENT_TYPE	AFTER EACH ROW	DELETE	TABLE	RTDWEB.EVENT_TYPE
TU_EVENT_TYPE	AFTER EACH ROW	UPDATE	TABLE	RTDWEB.EVENT_TYPE

TI_DATAEXPORTDATASET_ID	BEFORE EACH ROW	INSERT	TABLE	RTDWEB.EXPORTED_DATASET
TD_FEEDBACK	AFTER EACH ROW	DELETE	TABLE	RTDWEB.FEEDBACK
TI_FEEDBACK_ID	BEFORE EACH ROW	INSERT	TABLE	RTDWEB.FEEDBACK
TU_FEEDBACK	AFTER EACH ROW	UPDATE	TABLE	RTDWEB.FEEDBACK
UP_FEEDBACKSTATUSHISTORY	AFTER EACH ROW	UPDATE	TABLE	RTDWEB.FEEDBACK
TD_FEEDBACKSTATUS	AFTER EACH ROW	DELETE	TABLE	RTDWEB.FEEDBACKSTATUS
TU_FEEDBACKSTATUS	AFTER EACH ROW	UPDATE	TABLE	RTDWEB.FEEDBACKSTATUS
TD_FEEDBACKTYPE	AFTER EACH ROW	DELETE	TABLE	RTDWEB.FEEDBACKTYPE
TU_FEEDBACKTYPE	AFTER EACH ROW	UPDATE	TABLE	RTDWEB.FEEDBACKTYPE
TI_POPDESTRELATIONS	AFTER EACH ROW	INSERT	TABLE	RTDWEB.POPDESTRELATIONS
TU_POPDESTRELATIONS	AFTER EACH ROW	UPDATE	TABLE	RTDWEB.POPDESTRELATIONS
TD_POPULARDESTINATION_TYPE	AFTER EACH ROW	DELETE	TABLE	RTDWEB.POPULARDESTINATION_TYPE
TU_POPULARDESTINATION_TYPE	AFTER EACH ROW	UPDATE	TABLE	RTDWEB.POPULARDESTINATION_TYPE
TD_POPULAR_DESTINATION	AFTER EACH ROW	DELETE	TABLE	RTDWEB.POPULAR_DESTINATION
TI_POPDEST_ID	BEFORE EACH ROW	INSERT	TABLE	RTDWEB.POPULAR_DESTINATION
TU_POPULAR_DESTINATION	AFTER EACH ROW	UPDATE	TABLE	RTDWEB.POPULAR_DESTINATION
TI_RESPONSE_ID	BEFORE EACH ROW	INSERT	TABLE	RTDWEB.RESPONSE
TU_RESPONSE	AFTER EACH ROW	UPDATE	TABLE	RTDWEB.RESPONSE
TD_RESPONSETYPE	AFTER EACH ROW	DELETE	TABLE	RTDWEB.RESPONSETYPE
TU_RESPONSETYPE	AFTER EACH ROW	UPDATE	TABLE	RTDWEB.RESPONSETYPE
TI_ROWMAP_ID	BEFORE EACH ROW	INSERT	TABLE	RTDWEB.ROUTES_MAPS
DR$ANN_CAT_INDEXTC	AFTER EACH ROW	INSERT OR UPDATE	TABLE	RTDWEB.SEARCH_ANNOUNCEMENTS
TI_STDRESP_ID	BEFORE EACH ROW	INSERT	TABLE	RTDWEB.STANDARDRESPONSES
TI_SYSMAP_ID	BEFORE EACH ROW	INSERT	TABLE	RTDWEB.SYSTEM_MAPS

TD_TRANSIT_PROVIDER	AFTER EACH ROW	DELETE	TABLE	RTDWEB.TRANSIT_PROVIDER
TU_TRANSIT_PROVIDER	AFTER EACH ROW	UPDATE	TABLE	RTDWEB.TRANSIT_PROVIDER

RTDWEB: List of All Sequences

Sequence Name	Min Value	Max Value	Increment	Cycle	Order	Cache Size
SEQ_AGENCYMODULEPARAM_ID	871	1.00E+27	1	No	No	20
SEQ_AGENCYMODULE_ID	613	1.00E+27	1	No	No	20
SEQ_AGENCY_ID	671	1.00E+27	1	No	No	20
SEQ_ANNOUNCEMENT_ID	1	1.00E+27	10	No	No	20
SEQ_ANNOUNCEMENT_QUEUE_ID	1	1.00E+27	1	No	No	20
SEQ_CMSROLE_ID	168	1.00E+27	1	No	No	20
SEQ_CMSUSER_ID	3811	1.00E+27	1	No	No	20
SEQ_DATAEXPORT_DATASET_ID	43	1.00E+27	1	No	No	20
SEQ_DATAEXPORT_RUN_ID	60344	1.00E+27	1	No	No	20
SEQ_DATAEXPORT_TASK_ID	43	1.00E+27	1	No	No	20
SEQ_DATASET_ID	934	1.00E+27	1	No	No	20
SEQ_EVENT_ID	93267834	1.00E+27	1	No	No	20
SEQ_EVPROV_ID	403450	1.00E+27	1	No	No	20
SEQ_EVRTE_ID	910519	1.00E+27	1	No	No	20
SEQ_EVSTAT_ID	111488	1.00E+27	1	No	No	20
SEQ_FEEDBACK_HISTORY_ID	1	1.00E+27	1	No	No	20
SEQ_FEEDBACK_ID	11	1.00E+27	10	No	No	20
SEQ_MESSAGE_ID	611	1.00E+27	1	No	No	20

SEQ_MODULE_ID	612	1.00E+27	1	No	No	20
SEQ_MYTRANSIT_LOCATIONID	611	1.00E+27	1	No	No	20
SEQ_MYTRANSIT_PROVIDERID	611	1.00E+27	1	No	No	20
SEQ_MYTRANSIT_ROUTEID	611	1.00E+27	1	No	No	20
SEQ_MYTRANSIT_TRIPID	611	1.00E+27	1	No	No	20
SEQ_MYTRANSIT_USERID	611	1.00E+27	1	No	No	20
SEQ_PARAMETER_ID	1511	1.00E+27	1	No	No	20
SEQ_PARATRANSIT_ID	1651	1.00E+27	1	No	No	20
SEQ_POPDEST_ID	1751	1.00E+27	1	No	No	20
SEQ_RESPONSE_ID	51432	1.00E+27	1	No	No	20
SEQ_ROUTEMAP_ID	4731	1.00E+27	1	No	No	20
SEQ_RUN_ID	878	1.00E+27	1	No	No	20
SEQ_STDRESP_ID	2171	1.00E+27	1	No	No	20
SEQ_SURVEY_ID	1	1.00E+06	1	Yes	No	20
SEQ_SURVEY_PARTICIPANT_ID	1	1.00E+16	1	Yes	No	20
SEQ_SURVEY_QUESTION_ID	1	1.00E+07	1	Yes	No	20
SEQ_SYSMAP_ID	3331	1.00E+27	1	No	No	20
SEQ_TASK_ID	94	1.00E+27	1	No	No	20
SEQ_USERMODULEPARAM_ID	911	1.00E+27	1	No	No	20
SEQ_USERMODULE_ID	671	1.00E+27	1	No	No	20
SEQ_USER_ID	616	1.00E+27	1	No	No	20
SEQ_WEBEVENT_ID	1	1.00E+27	10	No	No	20
SNAPSHOT_ID$	1	2.00E+09	1	No	No	20
SNAPSITE_ID$	1	4.00E+09	1	No	No	20

SNS$NODE_NUMBER$	1	1.00E+27	1	No	No	20
SNS$SHARED$OBJSEQ	1	1.00E+27	1	No	No	20
SQ_ALTERNATE_ALTPATHID	1	1.00E+27	1	No	No	20
SQ_AMENITY_PIAMENITYID	1	1.00E+27	1	No	No	20
SQ_BATCHFARE_FAREITEMID	1	1.00E+27	1	No	No	20
SQ_FAREDEF_FAREDEFID	1	1.00E+27	1	No	No	20
SQ_FAREINCOST_FAREINCOSTID	1	1.00E+27	1	No	No	20
SQ_FAREINPRICE_FAREINPRICEID	1	1.00E+27	1	No	No	20
SQ_FAREINVALUE_FAREINVALUEID	1	1.00E+27	1	No	No	20
SQ_FAREIN_FCFAREINID	1	1.00E+27	1	No	No	20
SQ_FAREZONE_FAREZONEID	1	1.00E+27	1	No	No	20
SQ_FARE_FAREID	1	1.00E+27	1	No	No	20
SQ_LANDMARK_LANDMARKID	1	1.00E+27	1	No	No	20
SQ_LANDMARK_OBJECTID	1	1.00E+27	1	No	No	20
SQ_LMKALIAS_LMKALIASID	1	1.00E+27	1	No	No	20
SQ_PATTERNSTOP_PATTERNSTOPID	1	1.00E+27	1	No	No	20
SQ_PATTERN_SCHPATTERNID	1	1.00E+27	1	No	No	20
SQ_PATTFN_PATTERNFOOTNOTEID	1	1.00E+27	1	No	No	20
SQ_PEAKHOUR_PEAKHOURID	1	1.00E+27	1	No	No	20
SQ_PORTAL_OBJECTID	1	1.00E+27	1	No	No	20
SQ_PORTAL_RTDSTOPPORTALID	1	1.00E+27	1	No	No	20
SQ_REGALTPATTERN_PATTERNID	1	1.00E+27	1	No	No	20
SQ_REGALTPATTSTP_PATTSTOPID	1	1.00E+27	1	No	No	20
SQ_RIDERCAT_RIDERCATID	1	1.00E+27	1	No	No	20

SQ_ROUTE_SCHROUTEID	1	1.00E+27	1	No	No	20
SQ_SCHEDULE_SCHEDULEID	1	1.00E+27	1	No	No	20
SQ_STOP_CPTSTOPPOINTID	1	1.00E+27	1	No	No	20
SQ_STOP_OBJECTID	1	1.00E+27	1	No	No	20
SQ_TRIPFN_TRIPFOOTNOTEID	1	1.00E+27	1	No	No	20
SQ_TRIP_SCHTRIPID	1	1.00E+27	1	No	No	20
SQ_TSFADDZFARE_ADDZONEFAREID	1	1.00E+27	1	No	No	20
SQ_TSFHEADCHG_HEADSIGNCHANGEID	1	1.00E+27	1	No	No	20
SQ_TSFNONTPSTART_NONTPSTARTID	1	1.00E+27	1	No	No	20
SQ_TSFNOTRAN_NOTRANSFERSLIPID	1	1.00E+27	1	No	No	20
SQ_TSFOTHRWAIT_OTHERWAITINGID	1	1.00E+27	1	No	No	20
SQ_TSFPICKDROP_PICKUPDROPOFFID	1	1.00E+27	1	No	No	20
SQ_TSFREGINTERV_REGINTERVALID	1	1.00E+27	1	No	No	20
SQ_TSFRTECHG_ROUTECHANGEID	1	1.00E+27	1	No	No	20
SQ_TSFSTOPSKIP_STOPSKIPID	1	1.00E+27	1	No	No	20
SQ_TSHOLIDAYSCH_HOLIDAYSCHID	1	1.00E+27	1	No	No	20
SQ_TSSPECEVENT_SPECEVENTID	1	1.00E+27	1	No	No	20

RTDWEB: List of All Functions

Name	Type	Lines of Code
APROC	PROCEDURE	183
DIFFINSERTPROC	PROCEDURE	79

ODCIINDEXALTEROPTIONDUMP	PROCEDURE	21
PRC_REBUILD_ANN_IDX	PROCEDURE	12
RTDWEB_UTIL	PACKAGE	293
RTDWEB_UTIL.ARCHIVE_HOURLY_EVENTS	PACKAGE	293
RTDWEB_UTIL.CREATE_DISTRIBUTE_JOB	PACKAGE	293
RTDWEB_UTIL.CREATE_HOURLYARCHIVE_JOB	PACKAGE	293
RTDWEB_UTIL.CREATE_SUMMARIZE_JOB	PACKAGE	293
RTDWEB_UTIL.DISTRIBUTE_ANNOUNCEMENTS	PACKAGE	293
RTDWEB_UTIL.DROP_DISTRIBUTE_JOB	PACKAGE	293
RTDWEB_UTIL.DROP_HOURLYARCHIVE_JOB	PACKAGE	293
RTDWEB_UTIL.DROP_SUMMARIZE_JOB	PACKAGE	293
RTDWEB_UTIL.RESUMMARIZE_EVENTS	PACKAGE	293
RTDWEB_UTIL.SUMMARIZE_EVENTS	PACKAGE	293
SP_ADDEVENT	PROCEDURE	19
SP_ADDORUPDATEEVENTPROVIDERS	PROCEDURE	33
SP_ADDORUPDATEEVENTROUTES	PROCEDURE	33
SP_ADDORUPDATEEVENTSTATS	PROCEDURE	33
SUMMARIZE_EVENTS	PROCEDURE	51

Appendix F SCHEMA DESCRIPTIONS - RTDS

RTDS: List of All Tables

Table Name	# of Cols	# of Indexes	Tablespace	Buffer Pool	Comment
AGENCIESCENTERPOINTS	4	2	USERS	DEFAULT	Centerpoint of agency coverage area
AGENCIESLINES	5	3	USERS	DEFAULT	Agency line geography
AGENCIESLINES_S1	5	3	USERS	DEFAULT	Scaled line geography
AGENCIESLINES_S2	5	3	USERS	DEFAULT	Scaled line geography
AGENCIESPOLYS	5	3	USERS	DEFAULT	Agency polygon geography
AGENCIESPOLYS_S1	5	3	USERS	DEFAULT	Scaled polygon geography
AGENCIESPOLYS_S2	5	3	USERS	DEFAULT	Scaled polygon geography
AGENCIESPOLYS_S3	5	2	USERS	DEFAULT	Scaled polygon geography
AGENCIESPOLYS_S4	5	2	USERS	DEFAULT	Scaled polygon geography
AGENCIESSERVICEAREAS	5	2	USERS	DEFAULT	Agency service area shapes
CITIES	3	2	USERS	DEFAULT	City shapes
FAREZONES	5	3	USERS	DEFAULT	Fare zone area geography
FAREZONES_S1	5	3	USERS	DEFAULT	Scaled fare zone geography
FAREZONES_S2	5	3	USERS	DEFAULT	Scaled fare zone geography
FAREZONESLINES	5	3	USERS	DEFAULT	Fare zone line geography
FAREZONESLINES_S1	5	3	USERS	DEFAULT	Scales zone line geography
FAREZONESLINES_S2	5	3	USERS	DEFAULT	Scales zone line geography
LANDMARK	18	2	USERS	DEFAULT	Landmark geography

PATTSTOP_EXT	15	2	USERS	DEFAULT	Extended pattern stop data, used for optimization
POPDESTINATIONS	6	2	USERS	DEFAULT	Popular destination geography
REGIONS	4	2	USERS	DEFAULT	GIS region geography
REGIONS_S1	4	2	USERS	DEFAULT	Scaled region geography
REGIONS_S2	4	2	USERS	DEFAULT	Scaled region geography
ROUTES	6	3	USERS	DEFAULT	Route shape geography
ROUTES_OLD	6	2	USERS	DEFAULT	[Deprecated]
ROUTES_S1	6	3	USERS	DEFAULT	Scaled route geography
ROUTES_S2	6	3	USERS	DEFAULT	Scaled route geography
ROUTES_S3	6	2	USERS	DEFAULT	Scaled route geography
ROUTES_S4	6	2	USERS	DEFAULT	Scaled route geography
STATIONS	4	3	USERS	DEFAULT	Rail station geography

AGENCIESCENTERPOINTS

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
AGENCY_ID	NVARCHAR2(50)			ID of agency
SHAPE	INTEGER		NULL	[FK] Index to ArcSDE spatial feature
AGENCY_NAME	VARCHAR2(250)			Name of agency

AGENCIESLINES

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE

AGENCY_ID	NVARCHAR2(2)			ID of agency
AGENCY_NAME	NVARCHAR2(254)			Name of agency
TRIP_PLANNER_PART	NVARCHAR2(1)			Flag: is agency incorporated into trip planner data?
SHAPE	INTEGER		NULL	Unique shape ID

AGENCIESLINES_S1

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
AGENCY_ID	NVARCHAR2(2)			ID of agency
AGENCY_NAME	NVARCHAR2(254)			Name of agency
TRIP_PLANNER_PART	NVARCHAR2(1)			Flag: is agency incorporated into trip planner data?
SHAPE	INTEGER		NULL	Unique shape ID

AGENCIESLINES_S2

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
AGENCY_ID	NVARCHAR2(2)			ID of agency
AGENCY_NAME	NVARCHAR2(254)			Name of agency
TRIP_PLANNER_PART	NVARCHAR2(1)			Flag: is agency incorporated into trip planner data?
SHAPE	INTEGER		NULL	Unique shape ID

AGENCIESPOLYS

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
AGENCY_ID	NVARCHAR2(254)			ID of agency
AGENCY_NAME	NVARCHAR2(254)			Name of agency
TRIP_PLANNER_PART	NVARCHAR2(254)			Flag: is agency incorporated into trip planner data?
SHAPE	INTEGER		NULL	Unique shape ID

AGENCIESPOLYS_S1

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
AGENCY_ID	NVARCHAR2(254)			ID of agency
AGENCY_NAME	NVARCHAR2(254)			Name of agency
TRIP_PLANNER_PART	NVARCHAR2(254)			Flag: is agency incorporated into trip planner data?
SHAPE	INTEGER		NULL	Unique shape ID

AGENCIESPOLYS_S2

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
AGENCY_ID	NVARCHAR2(254)			ID of agency
AGENCY_NAME	NVARCHAR2(254)			Name of agency
TRIP_PLANNER_PART	NVARCHAR2(254)			Flag: is agency incorporated into trip planner data?
SHAPE	INTEGER		NULL	Unique shape ID

AGENCIESPOLYS_S3

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
AGENCY_ID	NVARCHAR2(254)			ID of agency
AGENCY_NAME	NVARCHAR2(254)			Name of agency
TRIP_PLANNER_PART	NVARCHAR2(254)			Flag: is agency incorporated into trip planner data?
SHAPE	INTEGER		NULL	Unique shape ID

AGENCIESPOLYS_S4

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
AGENCY_ID	NVARCHAR2(254)			ID of agency
AGENCY_NAME	NVARCHAR2(254)			Name of agency
TRIP_PLANNER_PART	NVARCHAR2(254)			Flag: is agency incorporated into trip planner data?
SHAPE	INTEGER		NULL	Unique shape ID

AGENCIESSERVICEAREAS

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
AGENCY_ID	NVARCHAR2(254)			ID of agency
AGENCY_NAME	NVARCHAR2(254)			Name of agency
TRIP_PLANNER_PART	NVARCHAR2(254)			Flag: is agency incorporated into trip planner data?

SHAPE	INTEGER		NULL	[FK] Index to ArcSDE spatial feature

CITIES

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
CITYNAME_A	NVARCHAR2(30)			Name of city
SHAPE	INTEGER		NULL	[FK] Index to ArcSDE spatial feature

FAREZONES

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
FAREZONE_ID	NUMBER(10)			Fare zone number
FAREZONE_NAME	NVARCHAR2(250)			Fare zone name
AGENCY_ID	NVARCHAR2(2)			ID of agency
SHAPE	INTEGER		NULL	[FK] Index to ArcSDE spatial feature

FAREZONES_S1

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
FAREZONE_ID	NUMBER(10)			Fare zone number
FAREZONE_NAME	NVARCHAR2(250)			Fare zone name
AGENCY_ID	NVARCHAR2(2)			ID of agency

SHAPE	INTEGER		NULL	[FK] Index to ArcSDE spatial feature

FAREZONES_S2

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
FAREZONE_ID	NUMBER(10)			Fare zone number
FAREZONE_NAME	NVARCHAR2(250)			Fare zone name
AGENCY_ID	NVARCHAR2(2)			ID of agency
SHAPE	INTEGER		NULL	[FK] Index to ArcSDE spatial feature

FAREZONESLINES

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
FAREZONE_ID	NUMBER(10)			Fare zone number
FAREZONE_NAME	NVARCHAR2(250)			Fare zone name
AGENCY_ID	NVARCHAR2(2)			ID of agency
SHAPE	INTEGER		NULL	[FK] Index to ArcSDE spatial feature

FAREZONESLINES_S1

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
FAREZONE_ID	NUMBER(10)			Fare zone number

FAREZONE_NAME	NVARCHAR2(250)			Fare zone name
AGENCY_ID	NVARCHAR2(2)			ID of agency
SHAPE	INTEGER		NULL	[FK] Index to ArcSDE spatial feature

FAREZONESLINES_S2

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
FAREZONE_ID	NUMBER(10)			Fare zone number
FAREZONE_NAME	NVARCHAR2(250)			Fare zone name
AGENCY_ID	NVARCHAR2(2)			ID of agency
SHAPE	INTEGER		NULL	[FK] Index to ArcSDE spatial feature

LANDMARK

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID_1	INTEGER	Y		Unique feature record ID issued by ArcSDE
RTD_LANDMARKID	NUMBER(15)			[FK] ID of landmark
TS_RECORDTYPE	NVARCHAR2(1)			[Deprecated]
SP_LANDMARKNAME	NVARCHAR2(34)			Name of landmark
SP_LANDMARKDESC	NVARCHAR2(254)			Description of landmark
TS_LOCATION	NVARCHAR2(100)			Location of landmark
LOCATIONTYPE	NVARCHAR2(1)			Indicates whether location is a stop, address, or landmark
SP_CITYNAME	NVARCHAR2(20)			City in which landmark resides
SP_POSTALCODE	NVARCHAR2(5)			Zip code in which landmark resides

SP_LONGITUDE	NUMBER(24,10)			Landmark's longitude
SP_LATITUDE	NUMBER(24,10)			Landmark's latitude
TS_XCOORD	NUMBER(5)			[Deprecated]
TS_YCOORD	NUMBER(5)			[Deprecated]
CPT_AGENCYID	NVARCHAR2(2)			[FK] Two-character code representing a carrier
OBJECTID	NUMBER(10)			Unique feature record ID issued by ArcSDE
LEADNUM	NUMBER(10)			Leading non-alphabetic (ie- numeric) part of landmark name
NAMESANSNUM	NVARCHAR2(34)			Name of landmark without leading numerals
SHAPE	INTEGER		NULL	[FK] Index to ArcSDE spatial feature

PATTSTOP_EXT

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
RTD_PATTERNSTOPID	NUMBER(15)	Y		[FK] ID of pattern stop
SCH_STOPPOINTSEQNO	NUMBER(4)	Y		Sequence number of stop within this pattern
ISTIMEPOINT	NVARCHAR2(1)			Is stop a timepoint
TS_RECORDTYPE	NVARCHAR2(1)			[Deprecated]
TS_STOPTURN	NVARCHAR2(1)			Flag whether site is a physical stop or a turning point
RTD_TIMEPOINTCODE	NVARCHAR2(20)			Timepoint schedule code
SCH_PATTERNID	NUMBER(15)	Y		[FK] ID of pattern to which this patternstop belongs
RTD_FAREZONEID	NUMBER(15)			[FK] ID of zone within which this patternstop resides
CPT_STOPPOINTID	NUMBER(15)	Y		[FK] ID of stop with which this patternstop is associated
SP_LONGITUDE	NUMBER(13,10)			Longitude of patternstop

SP_LATITUDE	NUMBER(13,10)			Latitude of patternstop
PICKUPONLY	NVARCHAR2(1)			Flag if vehicle will not drop-off passengers at this patternstop
DROPOFFONLY	NVARCHAR2(1)			Flag if vehicle will not pick-up passengers at this patternstop
SHAPE	SDE.ST_GEOMETRY			[FK] Index to ArcSDE spatial feature

POPDESTINATIONS

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
POPDEST_ID	NUMBER(10)	Y		ID of popular destination
POPDEST_NAME	NVARCHAR2(255)			Name of popular destination
POPDEST_X	NUMBER(13,10)			X-coordinate
POPDEST_Y	NUMBER(13,10)			Y-coordinate
SHAPE	INTEGER		NULL	[FK] Index to ArcSDE spatial feature

REGIONS

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
REGION_ID	NUMBER(4)			ID of region
REGION_NAME	NVARCHAR2(254)			Name of region
SHAPE	INTEGER		NULL	[FK] Index to ArcSDE spatial feature

REGIONS_S1

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
REGION_ID	NUMBER(4)			ID of region
REGION_NAME	NVARCHAR2(254)			Name of region
SHAPE	INTEGER		NULL	[FK] Index to ArcSDE spatial feature

REGIONS_S2

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
REGION_ID	NUMBER(4)			ID of region
REGION_NAME	NVARCHAR2(254)			Name of region
SHAPE	INTEGER		NULL	[FK] Index to ArcSDE spatial feature

ROUTES

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
SCH_ROUTEID	NUMBER(15)			ID of route
SCH_ROUTEDESIGNATOR	NVARCHAR2(12)			Agency internal route name
CPT_AGENCYID	NVARCHAR2(2)			ID of agency
ROUTE_NAME	NVARCHAR2(250)			Name of route
SHAPE	INTEGER		NULL	[FK] Index to ArcSDE spatial feature

ROUTES_OLD

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
SCH_ROUTEID	NUMBER(15)			ID of route
SCH_ROUTEDESIGNATOR	NVARCHAR2(12)			Agency internal route name
CPT_AGENCYID	NVARCHAR2(2)			ID of agency
ROUTE_NAME	NVARCHAR2(250)			Name of route
SHAPE	INTEGER		NULL	[FK] Index to ArcSDE spatial feature

ROUTES_S1

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
SCH_ROUTEID	NUMBER(15)			ID of route
SCH_ROUTEDESIGNATOR	NVARCHAR2(12)			Agency internal route name
CPT_AGENCYID	NVARCHAR2(2)			ID of agency
ROUTE_NAME	NVARCHAR2(250)			Name of route
SHAPE	INTEGER		NULL	[FK] Index to ArcSDE spatial feature

ROUTES_S2

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
SCH_ROUTEID	NUMBER(15)			ID of route
SCH_ROUTEDESIGNATOR	NVARCHAR2(12)			Agency internal route name

CPT_AGENCYID	NVARCHAR2(2)			ID of agency
ROUTE_NAME	NVARCHAR2(250)			Name of route
SHAPE	INTEGER		NULL	[FK] Index to ArcSDE spatial feature

ROUTES_S3

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
SCH_ROUTEID	NUMBER(15)			ID of route
SCH_ROUTEDESIGNATOR	NVARCHAR2(12)			Agency internal route name
CPT_AGENCYID	NVARCHAR2(2)			ID of agency
ROUTE_NAME	NVARCHAR2(250)			Name of route
SHAPE	INTEGER		NULL	[FK] Index to ArcSDE spatial feature

ROUTES_S4

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
SCH_ROUTEID	NUMBER(15)			ID of route
SCH_ROUTEDESIGNATOR	NVARCHAR2(12)			Agency internal route name
CPT_AGENCYID	NVARCHAR2(2)			ID of agency
ROUTE_NAME	NVARCHAR2(250)			Name of route
SHAPE	INTEGER		NULL	[FK] Index to ArcSDE spatial feature

STATIONS

Column Name	Data Type	Not Null?	Data Def.	Comments
OBJECTID	INTEGER	Y		Unique feature record ID issued by ArcSDE
STATION_NAME	NVARCHAR2(250)			Name of station
AGENCY_ID	NVARCHAR2(2)			Name of agency
SHAPE	INTEGER		NULL	

RTDS: List of All Views

View Name	Status	# of Columns	Text Length	# of Dependencies	Comment

RTDS: List of All Constraints

CONSTRAINT_NAME	TABLE_NAME	SEARCH_CONDITION	Comments
A542_FK1	AGENCIESLINES		
A543_FK1	AGENCIESPOLYS		
A544_FK1	AGENCIESSERVICEAREAS		
A545_FK1	FAREZONES		
A546_FK1	FAREZONESLINES		
A547_FK1	LANDMARK		
A548_FK1	REGIONS		
A549_FK1	ROUTES_OLD		
A593_FK1	STATIONS		
A596_FK1	AGENCIESLINES_S1		
A597_FK1	AGENCIESLINES_S2		

A602_FK1	REGIONS_S1		
A603_FK1	REGIONS_S2		
A606_FK1	FAREZONESLINES_S1		
A607_FK1	FAREZONESLINES_S2		
A608_FK1	AGENCIESPOLYS_S1		
A609_FK1	AGENCIESPOLYS_S2		
A610_FK1	FAREZONES_S1		
A611_FK1	FAREZONES_S2		
A612_FK1	ROUTES		
A613_FK1	ROUTES_S1		
A616_FK1	CITIES		
A621_FK1	AGENCIESCENTERPOINTS		
A623_FK1	AGENCIESPOLYS_S3		
A624_FK1	AGENCIESPOLYS_S4		
A625_FK1	ROUTES_S3		
A626_FK1	ROUTES_S4		
A628_FK1	POPDESTINATIONS		
A630_FK1	ROUTES_S2		
SYS_C001410645	PATTSTOP_EXT	"OBJECTID" IS NOT NULL	
SYS_C001410646	PATTSTOP_EXT	"RTD_PATTERNSTOPID" IS NOT NULL	
SYS_C001410647	PATTSTOP_EXT	"SCH_STOPPOINTSEQNO" IS NOT NULL	
SYS_C001410648	PATTSTOP_EXT	"SCH_PATTERNID" IS NOT NULL	
SYS_C001410649	PATTSTOP_EXT	"CPT_STOPPOINTID" IS NOT NULL	
SYS_C0018411	AGENCIESLINES	"OBJECTID" IS NOT NULL	

SYS_C0018430	AGENCIESPOLYS	"OBJECTID" IS NOT NULL	
SYS_C0018449	AGENCIESSERVICEAREAS	"OBJECTID" IS NOT NULL	
SYS_C00184675	ROUTES_S2	"OBJECTID" IS NOT NULL	
SYS_C0018468	FAREZONES	"OBJECTID" IS NOT NULL	
SYS_C0018487	FAREZONESLINES	"OBJECTID" IS NOT NULL	
SYS_C0018506	LANDMARK	"OBJECTID_1" IS NOT NULL	
SYS_C0018525	REGIONS	"OBJECTID" IS NOT NULL	
SYS_C0018544	ROUTES_OLD	"OBJECTID" IS NOT NULL	
SYS_C0020735	STATIONS	"OBJECTID" IS NOT NULL	
SYS_C0020802	AGENCIESLINES_S1	"OBJECTID" IS NOT NULL	
SYS_C0020821	AGENCIESLINES_S2	"OBJECTID" IS NOT NULL	
SYS_C0020916	REGIONS_S1	"OBJECTID" IS NOT NULL	
SYS_C0020935	REGIONS_S2	"OBJECTID" IS NOT NULL	
SYS_C0020992	FAREZONESLINES_S1	"OBJECTID" IS NOT NULL	
SYS_C0021011	FAREZONESLINES_S2	"OBJECTID" IS NOT NULL	
SYS_C0021030	AGENCIESPOLYS_S1	"OBJECTID" IS NOT NULL	
SYS_C0021049	AGENCIESPOLYS_S2	"OBJECTID" IS NOT NULL	
SYS_C0021068	FAREZONES_S1	"OBJECTID" IS NOT NULL	
SYS_C0021087	FAREZONES_S2	"OBJECTID" IS NOT NULL	
SYS_C0021200	ROUTES	"OBJECTID" IS NOT NULL	
SYS_C0021219	ROUTES_S1	"OBJECTID" IS NOT NULL	
SYS_C0025335	CITIES	"OBJECTID" IS NOT NULL	
SYS_C0033427	AGENCIESCENTERPOINTS	"OBJECTID" IS NOT NULL	
SYS_C0037887	AGENCIESPOLYS_S3	"OBJECTID" IS NOT NULL	

SYS_C0037906	AGENCIESPOLYS_S4	"OBJECTID" IS NOT NULL	
SYS_C0037925	ROUTES_S3	"OBJECTID" IS NOT NULL	
SYS_C0037944	ROUTES_S4	"OBJECTID" IS NOT NULL	
SYS_C0043008	POPDESTINATIONS	"OBJECTID" IS NOT NULL	
SYS_C0043009	POPDESTINATIONS	"POPDEST_ID" IS NOT NULL	

RTDS: List of All Indexes

Index Name	Unique?	Table Name	Columns	Comments
A542_IX1	UNIQUE	AGENCIESLINES	SHAPE	
A543_IX1	UNIQUE	AGENCIESPOLYS	SHAPE	
A544_IX1	UNIQUE	AGENCIESSERVICEAREAS	SHAPE	
A545_IX1	UNIQUE	FAREZONES	SHAPE	
A546_IX1	UNIQUE	FAREZONESLINES	SHAPE	
A547_IX1	UNIQUE	LANDMARK	SHAPE	
A548_IX1	UNIQUE	REGIONS	SHAPE	
A549_IX1	UNIQUE	ROUTES_OLD	SHAPE	
A593_IX1	UNIQUE	STATIONS	SHAPE	
A596_IX1	UNIQUE	AGENCIESLINES_S1	SHAPE	
A597_IX1	UNIQUE	AGENCIESLINES_S2	SHAPE	
A602_IX1	UNIQUE	REGIONS_S1	SHAPE	
A603_IX1	UNIQUE	REGIONS_S2	SHAPE	
A606_IX1	UNIQUE	FAREZONESLINES_S1	SHAPE	
A607_IX1	UNIQUE	FAREZONESLINES_S2	SHAPE	

A608_IX1	UNIQUE	AGENCIESPOLYS_S1	SHAPE	
A609_IX1	UNIQUE	AGENCIESPOLYS_S2	SHAPE	
A610_IX1	UNIQUE	FAREZONES_S1	SHAPE	
A611_IX1	UNIQUE	FAREZONES_S2	SHAPE	
A612_IX1	UNIQUE	ROUTES	SHAPE	
A613_IX1	UNIQUE	ROUTES_S1	SHAPE	
A616_IX1	UNIQUE	CITIES	SHAPE	
A621_IX1	UNIQUE	AGENCIESCENTERPOINTS	SHAPE	
A623_IX1	UNIQUE	AGENCIESPOLYS_S3	SHAPE	
A624_IX1	UNIQUE	AGENCIESPOLYS_S4	SHAPE	
A625_IX1	UNIQUE	ROUTES_S3	SHAPE	
A626_IX1	UNIQUE	ROUTES_S4	SHAPE	
A628_IX1	UNIQUE	POPDESTINATIONS	SHAPE	
A630_IX1	UNIQUE	ROUTES_S2	SHAPE	
A671_IX1	NON-UNIQUE	PATTSTOP_EXT	SHAPE	
I751SCH_ROUTEID0	NON-UNIQUE	ROUTES_S2	SCH_ROUTEID, CPT_AGENCYID	
IDX_AGENCIESLINE	NON-UNIQUE	AGENCIESLINES	AGENCY_ID, TRIP_PLANNER_PART	
IDX_AGENCIESLINE_1	NON-UNIQUE	AGENCIESLINES_S1	AGENCY_ID, TRIP_PLANNER_PART	
IDX_AGENCIESLINE_2	NON-UNIQUE	AGENCIESLINES_S2	AGENCY_ID, TRIP_PLANNER_PART	
IDX_AGENCIESPOLY	NON-UNIQUE	AGENCIESPOLYS	AGENCY_ID, TRIP_PLANNER_PART	
IDX_AGENCIESPOLY_1	NON-UNIQUE	AGENCIESPOLYS_S1	AGENCY_ID, TRIP_PLANNER_PART	
IDX_AGENCIESPOLY_2	NON-UNIQUE	AGENCIESPOLYS_S2	AGENCY_ID, TRIP_PLANNER_PART	
IDX_FAREZONES	NON-UNIQUE	FAREZONES	AGENCY_ID	
IDX_FAREZONES1	NON-UNIQUE	FAREZONES_S1	AGENCY_ID	

IDX_FAREZONES2	NON-UNIQUE	FAREZONES_S2	AGENCY_ID	
IDX_FAREZONESLIN	NON-UNIQUE	FAREZONESLINES	AGENCY_ID	
IDX_FAREZONESLIN_1	NON-UNIQUE	FAREZONESLINES_S1	AGENCY_ID	
IDX_FAREZONESLIN_2	NON-UNIQUE	FAREZONESLINES_S2	AGENCY_ID	
IDX_ROUTES	NON-UNIQUE	ROUTES	CPT_AGENCYID, SCH_ROUTEID	
IDX_ROUTES_S1	NON-UNIQUE	ROUTES_S1	CPT_AGENCYID, SCH_ROUTEID	
IDX_STATIONS	NON-UNIQUE	STATIONS	AGENCY_ID	
R580_SDE_ROWID_UK	UNIQUE	AGENCIESLINES	OBJECTID	
R581_SDE_ROWID_UK	UNIQUE	AGENCIESPOLYS	OBJECTID	
R582_SDE_ROWID_UK	UNIQUE	AGENCIESSERVICEAREAS	OBJECTID	
R583_SDE_ROWID_UK	UNIQUE	FAREZONES	OBJECTID	
R584_SDE_ROWID_UK	UNIQUE	FAREZONESLINES	OBJECTID	
R585_SDE_ROWID_UK	UNIQUE	LANDMARK	OBJECTID_1	
R586_SDE_ROWID_UK	UNIQUE	REGIONS	OBJECTID	
R587_SDE_ROWID_UK	UNIQUE	ROUTES_OLD	OBJECTID	
R633_SDE_ROWID_UK	UNIQUE	STATIONS	OBJECTID	
R636_SDE_ROWID_UK	UNIQUE	AGENCIESLINES_S1	OBJECTID	
R637_SDE_ROWID_UK	UNIQUE	AGENCIESLINES_S2	OBJECTID	
R642_SDE_ROWID_UK	UNIQUE	REGIONS_S1	OBJECTID	
R643_SDE_ROWID_UK	UNIQUE	REGIONS_S2	OBJECTID	
R646_SDE_ROWID_UK	UNIQUE	FAREZONESLINES_S1	OBJECTID	
R647_SDE_ROWID_UK	UNIQUE	FAREZONESLINES_S2	OBJECTID	
R648_SDE_ROWID_UK	UNIQUE	AGENCIESPOLYS_S1	OBJECTID	
R649_SDE_ROWID_UK	UNIQUE	AGENCIESPOLYS_S2	OBJECTID	

R650_SDE_ROWID_UK	UNIQUE	FAREZONES_S1	OBJECTID	
R651_SDE_ROWID_UK	UNIQUE	FAREZONES_S2	OBJECTID	
R652_SDE_ROWID_UK	UNIQUE	ROUTES	OBJECTID	
R653_SDE_ROWID_UK	UNIQUE	ROUTES_S1	OBJECTID	
R657_SDE_ROWID_UK	UNIQUE	CITIES	OBJECTID	
R667_SDE_ROWID_UK	UNIQUE	AGENCIESCENTERPOINTS	OBJECTID	
R669_SDE_ROWID_UK	UNIQUE	AGENCIESPOLYS_S3	OBJECTID	
R670_SDE_ROWID_UK	UNIQUE	AGENCIESPOLYS_S4	OBJECTID	
R671_SDE_ROWID_UK	UNIQUE	ROUTES_S3	OBJECTID	
R672_SDE_ROWID_UK	UNIQUE	ROUTES_S4	OBJECTID	
R675_SDE_ROWID_UK	UNIQUE	POPDESTINATIONS	OBJECTID	
R677_SDE_ROWID_UK	UNIQUE	ROUTES_S2	OBJECTID	
R723_SDE_ROWID_UK	UNIQUE	PATTSTOP_EXT	OBJECTID	

RTDS: List of All Triggers

Trigger Name	Type	Event	Base Obj. Type	Base Object	Comments
SPCOL_DEL_CASCADE_542	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.AGENCIESLINES	
SPCOL_DEL_CASCADE_543	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.AGENCIESPOLYS	
SPCOL_DEL_CASCADE_544	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.AGENCIESSERVICEAREAS	
SPCOL_DEL_CASCADE_545	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.FAREZONES	
SPCOL_DEL_CASCADE_546	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.FAREZONESLINES	
SPCOL_DEL_CASCADE_547	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.LANDMARK	
SPCOL_DEL_CASCADE_548	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.REGIONS	

SPCOL_DEL_CASCADE_549	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.ROUTES_OLD	
SPCOL_DEL_CASCADE_593	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.STATIONS	
SPCOL_DEL_CASCADE_596	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.AGENCIESLINES_S1	
SPCOL_DEL_CASCADE_597	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.AGENCIESLINES_S2	
SPCOL_DEL_CASCADE_602	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.REGIONS_S1	
SPCOL_DEL_CASCADE_603	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.REGIONS_S2	
SPCOL_DEL_CASCADE_606	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.FAREZONESLINES_S1	
SPCOL_DEL_CASCADE_607	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.FAREZONESLINES_S2	
SPCOL_DEL_CASCADE_608	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.AGENCIESPOLYS_S1	
SPCOL_DEL_CASCADE_609	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.AGENCIESPOLYS_S2	
SPCOL_DEL_CASCADE_610	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.FAREZONES_S1	
SPCOL_DEL_CASCADE_611	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.FAREZONES_S2	
SPCOL_DEL_CASCADE_612	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.ROUTES	
SPCOL_DEL_CASCADE_613	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.ROUTES_S1	
SPCOL_DEL_CASCADE_616	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.CITIES	
SPCOL_DEL_CASCADE_621	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.AGENCIESCENTERPOINTS	
SPCOL_DEL_CASCADE_623	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.AGENCIESPOLYS_S3	
SPCOL_DEL_CASCADE_624	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.AGENCIESPOLYS_S4	
SPCOL_DEL_CASCADE_625	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.ROUTES_S3	
SPCOL_DEL_CASCADE_626	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.ROUTES_S4	
SPCOL_DEL_CASCADE_628	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.POPDESTINATIONS	
SPCOL_DEL_CASCADE_630	AFTER EACH ROW	UPDATE OR DELETE	Table	RTDS.ROUTES_S2	

RTDS: List of All Sequences

Sequence Name	Min Value	Max Value	Increment	Cycle	Order	Cache Size	Comments
I542	1	1E+27	10	No	No	10	
I543	1	1E+27	10	No	No	10	
I544	1	1E+27	10	No	No	10	
I545	1	1E+27	10	No	No	10	
I546	1	1E+27	10	No	No	10	
I547	1	1E+27	10	No	No	10	
I548	1	1E+27	10	No	No	10	
I549	1	1E+27	10	No	No	10	
I593	1	1E+27	10	No	No	10	
I596	1	1E+27	10	No	No	10	
I597	1	1E+27	10	No	No	10	
I602	1	1E+27	10	No	No	10	
I603	1	1E+27	10	No	No	10	
I606	1	1E+27	10	No	No	10	
I607	1	1E+27	10	No	No	10	
I608	1	1E+27	10	No	No	10	
I609	1	1E+27	10	No	No	10	
I610	1	1E+27	10	No	No	10	
I611	1	1E+27	10	No	No	10	
I612	1	1E+27	10	No	No	10	
I613	1	1E+27	10	No	No	10	

I616	1	1E+27	10	No	No	10	
I621	1	1E+27	10	No	No	10	
I623	1	1E+27	10	No	No	10	
I624	1	1E+27	10	No	No	10	
I625	1	1E+27	10	No	No	10	
I626	1	1E+27	10	No	No	10	
I628	1	1E+27	10	No	No	10	
I630	1	1E+27	10	No	No	10	
R580	1	2147483647	16	No	No	16	
R581	1	2147483647	16	No	No	16	
R582	1	2147483647	16	No	No	16	
R583	1	2147483647	16	No	No	16	
R584	1	2147483647	16	No	No	16	
R585	1	2147483647	16	No	No	16	
R586	1	2147483647	16	No	No	16	
R587	1	2147483647	16	No	No	16	
R633	1	2147483647	16	No	No	16	
R636	1	2147483647	16	No	No	16	
R637	1	2147483647	16	No	No	16	
R642	1	2147483647	16	No	No	16	
R643	1	2147483647	16	No	No	16	
R646	1	2147483647	16	No	No	16	
R647	1	2147483647	16	No	No	16	
R648	1	2147483647	16	No	No	16	

R649	1	2147483647	16	No	No	16	
R650	1	2147483647	16	No	No	16	
R651	1	2147483647	16	No	No	16	
R652	1	2147483647	16	No	No	16	
R653	1	2147483647	16	No	No	16	
R657	1	2147483647	16	No	No	16	
R667	1	2147483647	16	No	No	16	
R669	1	2147483647	16	No	No	16	
R670	1	2147483647	16	No	No	16	
R671	1	2147483647	16	No	No	16	
R672	1	2147483647	16	No	No	16	
R675	1	2147483647	16	No	No	16	
R677	1	2147483647	16	No	No	16	
R723	1	2147483647	16	No	No	16	
SDE_LOGFILE_LID_GEN	1	1E+27	1	No	No	1	

Appendix G SCHEMA DESCRIPTIONS - TRAFFIC

TRAFFIC: List of All Tables

Table Name	# of Cols	# of Indexes	Tablespace	Buffer Pool	Comment
CONFIG_PARAMETERS	4	1	USERS	DEFAULT	Traffic configuration parameter lookup
INCIDENT	20	1	USERS	DEFAULT	Traffic incident
INCIDENT_LINKS	2	0	USERS	DEFAULT	Incident Link reference
INTERSECTION	9	1	USERS	DEFAULT	Intersection where two roads cross
LINK	17	1	USERS	DEFAULT	A road segment between two points
LINKHISTORY	5	0	USERS	DEFAULT	[currently unused]
ROAD	2	1	USERS	DEFAULT	Road name identification
WATCHDOG	3	0	USERS	DEFAULT	Used to determine when data is stale

CONFIG_PARAMETERS

Column Name	Data Type	Not Null?	Data Def.	Comments
PARAMETER_NAME	VARCHAR2(256)	Y		
PARAMETER_VALUE	VARCHAR2(256)	Y		
TYPE	VARCHAR2(16)	Y		
NOTES	VARCHAR2(256)			

INCIDENT

Column Name	Data Type	Not Null?	Data Def.	Comments
INCIDENT_ID	VARCHAR2(50)	Y		
INCIDENT_STATUS	VARCHAR2(50)			
INCIDENT_CATEGORY	VARCHAR2(128)			
INCIDENT_TYPE	VARCHAR2(256)			
INCIDENT_DESCRIPTION	VARCHAR2(2048)			
INCIDENT_ADVICE	VARCHAR2(256)			
INCIDENT_LOCATION_AREA	VARCHAR2(50			
LINK_ROAD_DESIGNATOR	VARCHAR2(128)			
LATITUDE	FLOAT			
LONGITUDE	FLOAT			
DIRECTION	VARCHAR2(50)			
TOTAL_LANES_COUNT	NUMBER(6)			
AFFECTED_LANES_COUNT	NUMBER(6)			
START_TIME	DATE			
ESTIMATED_DURATION	NUMBER(10)			
CREATION_TIME	DATE			
EVENT_MESSAGE_TIMESTAMP	VARCHAR2(64)			
LAST_UPDATED	DATE			
VERSION_NUMBER	NUMBER			
INCIDENT_IMPACT	FLOAT			

INCIDENT_LINKS

Column Name	Data Type	Not Null?	Data Def.	Comments
INCIDENT_ID	VARCHAR2(50)	Y		
LINK_ID	NUMBER(10)	Y		

INTERSECTION

Column Name	Data Type	Not Null?	Data Def.	Comments
INTERSECTION_ID	NUMBER(10)	Y		
NODE	NUMBER(10)			
CROSS_ROAD	NUMBER(10)	Y		
LATITUDE	FLOAT	Y		
LONGITUDE	FLOAT	Y		
DESCRIPTION	VARCHAR2(64)			
CITY	VARCHAR2(32)			
COUNTY	VARCHAR2(32)			
ON_ROAD	NUMBER(10)	Y		

LINK

Column Name	Data Type	Not Null?	Data Def.	Comments
LINK_ID	NUMBER(10)	Y		
LINK_TYPE	VARCHAR2(8)			
ON_ROAD	NUMBER(10)	Y		

BEGIN_INTERSECTION	NUMBER(10)	Y		
END_INTERSECTION	NUMBER(10)	Y		
LANE_COUNT	NUMBER(10)			
SPEED_LIMIT	NUMBER(10)	Y		
SLOW_DOWN_THRESHOLD	NUMBER(10)			
LENGTH	FLOAT	Y		
LINK_SPEED_AVAILABLE	CHAR(1)			
LINK_REPORTABLE	CHAR(1)			
INCLUDE_IN_TRIP	CHAR(1)			
ACTIVE	CHAR(1)	Y		
TRAVEL_TIME	NUMBER(10)			
SPEED	NUMBER(10)			
DATA_TYPE	VARCHAR2(50)			
LAST_UPDATED	DATE			

LINKHISTORY

Column Name	Data Type	Not Null?	Data Def.	Comments
PLANTYPE	NUMBER(10)			
LINK_ID	NUMBER(10)			
SPEED	NUMBER(10)			
TRAVEL_TIME	NUMBER(10)			
LAST_UPDATED	DATE			

ROAD

Column Name	Data Type	Not Null?	Data Def.	Comments
ROAD_ID	NUMBER(10)	Y		
ROAD_NAME	VARCHAR2(64)	Y		

WATCHDOG

Column Name	Data Type	Not Null?	Data Def.	Comments
DATATYPE	VARCHAR2(128)	Y		
EXPIRE_INTERVAL_SECONDS	NUMBER	Y		
LAST_UPDATED	DATE	Y	SYSDATE	

TRAFFIC: List of All Views

View Name	Status	# of Columns	Text Length	# of Dependencies
TRAFFICRENDERINFO	VALID	9	1731	6

TRAFFIC: List of All Check Constraints

CONSTRAINT_NAME	TABLE_NAME	SEARCH_CONDITION
SYS_C003371406	CONFIG_PARAMETERS	PARAMETER_NAME IS NOT NULL
SYS_C003371407	CONFIG_PARAMETERS	PARAMETER_VALUE IS NOT NULL
SYS_C003371408	CONFIG_PARAMETERS	TYPE IS NOT NULL

SYS_C003371410	INCIDENT	INCIDENT_ID IS NOT NULL
SYS_C003371441	INCIDENT_LINKS	INCIDENT_ID IS NOT NULL
SYS_C003371442	INCIDENT_LINKS	LINK_ID IS NOT NULL
SYS_C003371415	INTERSECTION	INTERSECTION_ID IS NOT NULL
SYS_C003371416	INTERSECTION	CROSS_ROAD IS NOT NULL
SYS_C003371417	INTERSECTION	LATITUDE IS NOT NULL
SYS_C003371418	INTERSECTION	LONGITUDE IS NOT NULL
SYS_C003371419	INTERSECTION	ON_ROAD IS NOT NULL
CHECK_ACTIVE	LINK	ACTIVE='Y' OR ACTIVE='N'
CHECK_INCLUDE	LINK	INCLUDE_IN_TRIP='Y' OR INCLUDE_IN_TRIP='N'
CHECK_REPORTABLE	LINK	LINK_REPORTABLE='Y' OR LINK_REPORTABLE='N'
CHECK_SPEEDAVAIL	LINK	LINK_SPEED_AVAILABLE='Y' OR LINK_SPEED_AVAILABLE='N'
CHECK_TYPE	LINK	LINK_TYPE='HOV' OR LINK_TYPE='FREEWAY' OR LINK_TYPE='BRIDGE' OR LINK_TYPE='ARTERIAL'
SYS_C003371423	LINK	LINK_ID IS NOT NULL
SYS_C003371424	LINK	ON_ROAD IS NOT NULL
SYS_C003371425	LINK	BEGIN_INTERSECTION IS NOT NULL
SYS_C003371426	LINK	END_INTERSECTION IS NOT NULL
SYS_C003371427	LINK	SPEED_LIMIT IS NOT NULL
SYS_C003371428	LINK	LENGTH IS NOT NULL
SYS_C003371429	LINK	ACTIVE IS NOT NULL
CHECK_LINK_ID	LINKHISTORY	LINK_ID IS NOT NULL
CHECK_PLANTYPE	LINKHISTORY	PLANTYPE IS NOT NULL
SYS_C003371412	ROAD	ROAD_ID IS NOT NULL
SYS_C003371413	ROAD	ROAD_NAME IS NOT NULL

SYS_C003371445	WATCHDOG	DATATYPE IS NOT NULL
SYS_C003371446	WATCHDOG	EXPIRE_INTERVAL_SECONDS IS NOT NULL
SYS_C003371447	WATCHDOG	LAST_UPDATED IS NOT NULL

TRAFFIC: List of All Indexes

Index Name	Unique	Table Name	Columns
CONFIG_PARAMETERS_PK	Y	CONFIG_PARAMETERS	PARAMETER_NAME
IDX_INCIDENT_PK	Y	INCIDENT	INCIDENT_ID
IDX_INTERSECTION_PK	Y	INTERSECTION	INTERSECTION_ID
IDX_LINK_PK	Y	LINK	LINK_ID
IDX_ROAD_PK	Y	ROAD	ROAD_ID

TRAFFIC: List of All Triggers

Trigger Name	Type	Event	Base Object Type	Base Object

TRAFFIC: List of All Sequences

Sequence Name	Min Value	Max Value	Increment	Cycle	Order	Cache Size
SEQ_INTERSECTION_ID	1	1.00E+27	1	No	No	20
SEQ_ROAD_ID	1	1.00E+27	1	No	No	20

TRAFFIC: List of All Functions

Name	Type	Lines of Code
DATEDIFF	FUNCTION	45
GETCONFIGPARAMINT	FUNCTION	35
TRAFFIC_UTIL	PACKAGE	58
TRAFFIC_UTIL.CREATE_PURGE_JOB	PACKAGE	58
TRAFFIC_UTIL.DISABLE_PURGE_JOB	PACKAGE	58
TRAFFIC_UTIL.DROP_PURGE_JOB	PACKAGE	58
TRAFFIC_UTIL.ENABLE_PURGE_JOB	PACKAGE	58
TRAFFIC_UTIL.PURGE_ALL_INCIDENTS	PACKAGE	58
TRAFFIC_UTIL.PURGE_CLOSED_INCIDENTS	PACKAGE	58

Appendix H RTIS XML SCHEMA

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- edited with XMLSpy v2010 rel. 2 (http://www.altova.com) by XMLSpy 2009 Professional Ed., Installed for 2 users (with SMP
from 2009-05-17 to 2011-05-18) (SAIC - BD Systems) -->
<!--tternStopSequenceNo-->
<!--.-->
<xs:schema xmlns:gml="http://www.opengis.net/gml" xmlns:xs="http://www.w3.org/2001/XMLSchema"
xmlns:RTDns="http://www.oakland.gistrans.com" targetNamespace="http://www.oakland.gistrans.com" elementFormDefault="qualified"
attributeFormDefault="unqualified">
  <xs:import namespace="http://www.opengis.net/gml" schemaLocation="GML-3.1.1\base\geometryBasic0d1d.xsd"/>
  <xs:import namespace="http://www.opengis.net/gml" schemaLocation="GML-3.1.1\base\geometryBasic2d.xsd"/>
  <xs:element name="Dataset">
    <xs:annotation>
      <xs:documentation>Dataset - Root element of the XML</xs:documentation>
    </xs:annotation>
    <xs:complexType>
      <xs:sequence>
        <xs:element name="DatasetDescription" type="xs:string">
          <xs:annotation>
            <xs:documentation>DatasetDescription - Description of the dataset.</xs:documentation>
          </xs:annotation>
        </xs:element>
        <xs:element name="FacilitiesData" minOccurs="0">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="Facilities" minOccurs="0">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="Facility" type="RTDns:FacilityType" maxOccurs="unbounded"/>
                  </xs:sequence>
                  <xs:attribute name="Count" type="xs:long" use="required"/>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="SpecialDaysData" minOccurs="0">
          <xs:complexType>
            <xs:sequence>
```

```
            <xs:element name="SpecialDays">
              <xs:complexType>
                <xs:sequence>
                  <xs:element name="SpecialDay" type="RTDns:SpecialDayType" maxOccurs="unbounded"/>
                </xs:sequence>
                <xs:attribute name="Count" type="xs:long" use="required"/>
              </xs:complexType>
            </xs:element>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="RelatedCarriers" minOccurs="0">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="Carrier" type="RTDns:CarrierType" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="Carrier" type="RTDns:CarrierType"/>
    </xs:sequence>
    <xs:attribute name="Date" type="xs:date" use="required"/>
    <xs:attribute name="SchemaVersion" type="xs:string" use="optional" default="v.1">
      <xs:annotation>
        <xs:documentation>SchemaVersion - Indicates version of XML schema / DTD used creating the dataset.</xs:documentation>
      </xs:annotation>
    </xs:attribute>
  </xs:complexType>
</xs:element>
<xs:complexType name="CarrierType">
  <xs:sequence>
    <xs:element name="CarrierName" minOccurs="0">
      <xs:annotation>
        <xs:documentation>CarrierName - Name of a transit property.</xs:documentation>
      </xs:annotation>
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:maxLength value="30"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="CarrierPhone" type="xs:string" minOccurs="0">
      <xs:annotation>
        <xs:documentation>CarrierPhone - Telephone number for a transit agency including the area code.</xs:documentation>
```

```
        </xs:annotation>
      </xs:element>
      <xs:element name="CarrierFareZonesCount" type="xs:decimal" minOccurs="0">
        <xs:annotation>
          <xs:documentation>CarrierFareZonesCount - Total number of fare zones the agency maintains.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="CarrierHasAccessibilityInfo" type="xs:boolean" minOccurs="0">
        <xs:annotation>
          <xs:documentation>CarrierHasAccessibilityInfo - Indicates whether or not the agency maintains ADA accessibility
information.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="Geometry" minOccurs="0">
        <xs:complexType>
          <xs:choice>
            <xs:sequence>
              <xs:element ref="gml:Polygon" maxOccurs="unbounded"/>
            </xs:sequence>
            <xs:sequence>
              <xs:element ref="gml:LineString" maxOccurs="unbounded"/>
            </xs:sequence>
          </xs:choice>
        </xs:complexType>
      </xs:element>
      <xs:element name="CarrierLandmarks" minOccurs="0">
        <xs:annotation>
          <xs:documentation>CarrierLandmarks - Element containing list of landmarks of the agency.</xs:documentation>
        </xs:annotation>
        <xs:complexType>
          <xs:sequence>
            <xs:element name="Landmark" maxOccurs="unbounded">
              <xs:complexType>
                <xs:complexContent>
                  <xs:extension base="RTDns:LandmarkType"/>
                </xs:complexContent>
              </xs:complexType>
            </xs:element>
          </xs:sequence>
          <xs:attribute name="Count" type="xs:long" use="required"/>
        </xs:complexType>
      </xs:element>
      <xs:element name="CarrierStops" minOccurs="0">
```

```
  <xs:annotation>
    <xs:documentation>CarrierStops - Element containing list of stops of the agency.</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:sequence>
      <xs:element name="Stop" maxOccurs="unbounded">
        <xs:complexType>
          <xs:complexContent>
            <xs:extension base="RTDns:StopType"/>
          </xs:complexContent>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
    <xs:attribute name="Count" type="xs:long" use="required"/>
  </xs:complexType>
</xs:element>
<xs:element name="CarrierDayTypes" minOccurs="0">
  <xs:annotation>
    <xs:documentation>CarrierDayTypes - Element containing list of day types of the agency.</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:sequence>
      <xs:element name="CarrierDayType" type="RTDns:DayTypeType" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:attribute name="Count" type="xs:long" use="required"/>
  </xs:complexType>
</xs:element>
<xs:element name="CarrierRoutes" minOccurs="0">
  <xs:annotation>
    <xs:documentation>CarrierRoutes - Element containing list of routes of the agency.</xs:documentation>
  </xs:annotation>
  <xs:complexType>
    <xs:sequence>
      <xs:element name="Route" maxOccurs="unbounded">
        <xs:complexType>
          <xs:complexContent>
            <xs:extension base="RTDns:RouteType"/>
          </xs:complexContent>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
    <xs:attribute name="Count" type="xs:long" use="required"/>
  </xs:complexType>
```

```
      </xs:element>
      <xs:element name="CarrierPeakHours" minOccurs="0">
        <xs:annotation>
          <xs:documentation>CarrierPeakHours - Element containing list of peak hours of the agency.</xs:documentation>
        </xs:annotation>
        <xs:complexType>
          <xs:sequence>
            <xs:element name="PeakHour" type="RTDns:PeakHourType" maxOccurs="unbounded"/>
          </xs:sequence>
          <xs:attribute name="Count" type="xs:long" use="required"/>
        </xs:complexType>
      </xs:element>
      <xs:element name="CarrierRiderCategories" minOccurs="0">
        <xs:annotation>
          <xs:documentation>CarrierRiderCategories - Element containing list of rider categories of the
agency.</xs:documentation>
        </xs:annotation>
        <xs:complexType>
          <xs:sequence>
            <xs:element name="RiderCategory" type="RTDns:RiderCategoryType" maxOccurs="unbounded"/>
          </xs:sequence>
          <xs:attribute name="Count" type="xs:long" use="required"/>
        </xs:complexType>
      </xs:element>
      <xs:element name="CarrierFareZones" minOccurs="0">
        <xs:annotation>
          <xs:documentation>CarrierFareZones - Element containing list of fare zones of the agency.</xs:documentation>
        </xs:annotation>
        <xs:complexType>
          <xs:sequence>
            <xs:element name="FareZone" type="RTDns:FareZoneType" maxOccurs="unbounded"/>
          </xs:sequence>
          <xs:attribute name="Count" type="xs:long" use="required"/>
        </xs:complexType>
      </xs:element>
      <xs:element name="CarrierFareDefinitions" minOccurs="0">
        <xs:annotation>
          <xs:documentation>CarrierFareDefinitions - Element containing list of fare definitions of the
agency.</xs:documentation>
        </xs:annotation>
        <xs:complexType>
          <xs:sequence>
            <xs:element name="FareDefinition" type="RTDns:FareDefinitionType" maxOccurs="unbounded"/>
```

```
          </xs:sequence>
          <xs:attribute name="Count" type="xs:long" use="required"/>
        </xs:complexType>
      </xs:element>
      <xs:element name="CarrierFareInstruments" minOccurs="0">
        <xs:annotation>
          <xs:documentation>CarrierFareInstruments - Element containing list of fare instruments of the
agency.</xs:documentation>
        </xs:annotation>
        <xs:complexType>
          <xs:sequence>
            <xs:element name="FareInstrument" type="RTDns:FareInstrumentType" maxOccurs="unbounded"/>
          </xs:sequence>
          <xs:attribute name="Count" type="xs:long" use="required"/>
        </xs:complexType>
      </xs:element>
      <xs:element name="CarrierSpecialDays" minOccurs="0">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="CarrierSpecialDay" type="RTDns:CarrierSpecialDay" maxOccurs="unbounded"/>
          </xs:sequence>
          <xs:attribute name="Count" type="xs:long" use="required"/>
        </xs:complexType>
      </xs:element>
      <xs:element name="CarrierTransfers" minOccurs="0">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="Transfer" type="RTDns:TransferType" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
    <xs:attribute name="ID" type="xs:ID" use="required">
      <xs:annotation>
        <xs:documentation>
ID attribute represents internal system ID used to address elements in the original data source (your database ID). At the same
time this id must be unique in the particular XML for the element of the same type (e.g. stop element can have same ID as route
element but this ID must be unique along the stops)
        </xs:documentation>
      </xs:annotation>
    </xs:attribute>
    <xs:attribute name="ExternalID" type="xs:string" use="optional"/>
  </xs:complexType>
```

```
  <xs:complexType name="RouteType">
    <xs:sequence>
      <xs:element name="RouteDesignator">
        <xs:annotation>
          <xs:documentation>RouteDesignator - An alpha-numeric identifier of a collection of patterns in a revenue
service.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="100"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="RouteName" type="xs:string" minOccurs="0"/>
      <xs:element name="RouteServiceType" default="0" minOccurs="0">
        <xs:annotation>
          <xs:documentation>RouteServiceType - Type of transit service provided.
Values:
1 - Regular
2 - Express
3 - Circular
4 - Radial
5 - Feeder
6 - Jitney
7 - Limited
8 - Non-revenue
9 - Unknown
10 - Charter Service
11 - School Service
12 - Special Service
13 - Operator Training
14 - Maintenance Service
15 - No Service
16 - Stand-by
17 - Extra
0 - Unknown</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:decimal">
            <xs:enumeration value="1">
              <xs:annotation>
                <xs:documentation>1 - Regular</xs:documentation>
              </xs:annotation>
```

```
</xs:enumeration>
<xs:enumeration value="2">
  <xs:annotation>
    <xs:documentation>2 - Express</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="3">
  <xs:annotation>
    <xs:documentation>3 - Circular</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="4">
  <xs:annotation>
    <xs:documentation>4 - Radial</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="5">
  <xs:annotation>
    <xs:documentation>5 - Feeder</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="6">
  <xs:annotation>
    <xs:documentation>6 - Jitney</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="7">
  <xs:annotation>
    <xs:documentation>7 - Limited</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="8">
  <xs:annotation>
    <xs:documentation>8 - Non-revenue</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="9">
  <xs:annotation>
    <xs:documentation>9 - Unknown</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="10">
  <xs:annotation>
```

```
      <xs:documentation>10 - Charter Service</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="11">
    <xs:annotation>
      <xs:documentation>11 - School Service</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="12">
    <xs:annotation>
      <xs:documentation>12 - Special Service</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="13">
    <xs:annotation>
      <xs:documentation>13 - Operator Training</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="14">
    <xs:annotation>
      <xs:documentation>14 - Maintenance Service</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="15">
    <xs:annotation>
      <xs:documentation>15 - No Service</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="16">
    <xs:annotation>
      <xs:documentation>16 - Stand-by</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="17">
    <xs:annotation>
      <xs:documentation>17 - Extra</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="0">
    <xs:annotation>
      <xs:documentation>0 - Unknown</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
```

```
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="RouteActivationDate" type="xs:date" minOccurs="0">
        <xs:annotation>
          <xs:documentation>RouteActivationDate - The date a public transportation staff, service, facility or asset is placed in
service, becomes operational or is registered.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="RouteDeactivationDate" type="xs:date" minOccurs="0">
        <xs:annotation>
          <xs:documentation>RouteDeactivationDate - The date a public transportation staff, service, facility or asset goes out
of service.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element ref="RTDns:Status" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Status - Identifies the operational status of a transit route.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element ref="RTDns:ADAAccess" minOccurs="0"/>
      <xs:element name="RouteIsLooping" type="xs:boolean" minOccurs="0">
        <xs:annotation>
          <xs:documentation>RouteIsLooping - Indicates whether the route is looping route or not.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="Geometry" minOccurs="0">
        <xs:complexType>
          <xs:sequence>
            <xs:element ref="gml:LineString" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="RoutePatterns" minOccurs="0">
        <xs:annotation>
          <xs:documentation>RoutePatterns - Element containing list of patterns of the route.</xs:documentation>
        </xs:annotation>
        <xs:complexType>
          <xs:sequence>
            <xs:element name="Pattern" maxOccurs="unbounded">
              <xs:complexType>
                <xs:complexContent>
                  <xs:extension base="RTDns:PatternType"/>
```

```
                </xs:complexContent>
              </xs:complexType>
            </xs:element>
          </xs:sequence>
          <xs:attribute name="Count" type="xs:long" use="required"/>
        </xs:complexType>
      </xs:element>
      <xs:element name="RouteSchedules" minOccurs="0">
        <xs:annotation>
          <xs:documentation>RouteSchedules - Element containing list of route schedules (trips and timepoints groupings) of the
route.</xs:documentation>
        </xs:annotation>
        <xs:complexType>
          <xs:sequence>
            <xs:element name="RouteSchedule" type="RTDns:RouteScheduleType" maxOccurs="unbounded">
              <xs:annotation>
                <xs:documentation>RouteSchedule - way of grouping of data depending on day type or direction for given route.
Defines sequences of trips and timepoints in visual schedule representation.</xs:documentation>
              </xs:annotation>
            </xs:element>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="RouteTransfers" minOccurs="0">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="Transfer" type="RTDns:RouteTransferType" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="RepresentationOptions" type="RTDns:RouteRepresentationType" minOccurs="0"/>
      <xs:element name="RouteMode" minOccurs="0">
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="2"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="RTTEnabled" type="xs:boolean" minOccurs="0"/>
      <xs:element name="RTTRouteName" type="xs:string" minOccurs="0"/>
    </xs:sequence>
    <xs:attributeGroup ref="RTDns:ElementInfo"/>
  </xs:complexType>
```

```
  <xs:complexType name="PatternType">
    <xs:sequence>
      <xs:element name="PatternDesignator" minOccurs="0">
        <xs:annotation>
          <xs:documentation>PatternDesignator - An alpha-numeric identifier for a defined sequence of points, events and
activation events along a transit route.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="40"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="PatternStaticSignMessage" minOccurs="0">
        <xs:annotation>
          <xs:documentation>PatternStaticSignMessage - The message or content of a static sign.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="120"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="PatternActivationDate" type="xs:date" minOccurs="0">
        <xs:annotation>
          <xs:documentation>PatternActivationDate - The date a public transportation staff, service, facility or asset is placed
in service, becomes operational or is registered.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="PatternDeactivationDate" type="xs:date" minOccurs="0">
        <xs:annotation>
          <xs:documentation>PatternDeactivationDate - The date a public transportation staff, service, facility or asset goes out
of service.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element ref="RTDns:Status" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Status - Identifies the operational status of a transit pattern.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element ref="RTDns:ADAAccess" minOccurs="0">
        <xs:annotation>
```

```
          <xs:documentation>ADAAccess - A numeric code indicating the special accessibility status of a transit
pattern.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element ref="RTDns:PatternCompassDirection"/>
      <xs:element name="PatternVariation" type="xs:decimal" minOccurs="0">
        <xs:annotation>
          <xs:documentation>PatternVariation - identifies the various alternate paths that a route may take in one particular
direction. Each variation is coded as either the main path (0), or numbered alternate paths such as 1, 2,..upto
9.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="PatternDescription" minOccurs="0">
        <xs:annotation>
          <xs:documentation>PatternDescription - Describes the pattern.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="30"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="PatternRouteID" type="xs:IDREF">
        <xs:annotation>
          <xs:documentation>PatternRouteID - ID of route the pattern is related to. Route element with this ID has to be
presented in the same dataset.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="Geometry" minOccurs="0">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="Part" maxOccurs="unbounded">
              <xs:complexType>
                <xs:sequence>
                  <xs:element ref="gml:LineString"/>
                  <xs:element ref="RTDns:GeometryAttribute" minOccurs="0" maxOccurs="unbounded"/>
                </xs:sequence>
                <xs:attribute name="SequenceNo" type="xs:decimal" use="required"/>
              </xs:complexType>
            </xs:element>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
```

```
      <xs:element name="PatternStops" minOccurs="0">
        <xs:annotation>
          <xs:documentation>PatternStops - Element containing list of pattern stops of the pattern.</xs:documentation>
        </xs:annotation>
        <xs:complexType>
          <xs:sequence>
            <xs:element name="PatternStop" type="RTDns:PatternStopType" maxOccurs="unbounded"/>
          </xs:sequence>
          <xs:attribute name="Count" type="xs:long" use="required"/>
        </xs:complexType>
      </xs:element>
      <xs:element name="PatternTrips" minOccurs="0">
        <xs:annotation>
          <xs:documentation>PatternTrips - Element containing list of trips of the pattern.</xs:documentation>
        </xs:annotation>
        <xs:complexType>
          <xs:sequence>
            <xs:element name="Trip" type="RTDns:TripType" maxOccurs="unbounded"/>
          </xs:sequence>
          <xs:attribute name="Count" type="xs:long" use="required"/>
        </xs:complexType>
      </xs:element>
      <xs:element name="RTTDirectionName" type="xs:string" minOccurs="0"/>
    </xs:sequence>
    <xs:attributeGroup ref="RTDns:ElementInfo"/>
  </xs:complexType>
  <xs:complexType name="PatternStopType">
    <xs:sequence>
      <xs:element name="PatternStopSequenceNo" type="xs:decimal">
        <xs:annotation>
          <xs:documentation>PatternStopSequenceNo - Sequence number for a stop in a pattern.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="PatternStopIsTimePoint" type="xs:boolean" minOccurs="0">
        <xs:annotation>
          <xs:documentation>PatternStopIsTimePoint - Indicates whether the stop is a timepoint or not.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="PatternStopIsTurn" type="xs:boolean" minOccurs="0">
        <xs:annotation>
          <xs:documentation>PatternStopIsTurn - Indicates whether the transit vehicle stops or only turns and do not stop at this
location. In case of turnpoint (not stop) has to be set to "true".</xs:documentation>
        </xs:annotation>
```

```
      </xs:element>
      <xs:choice minOccurs="0">
        <xs:element name="PatternStopIsPickUpOnly" type="xs:boolean" minOccurs="0"/>
        <xs:element name="PatternStopIsDropOffOnly" type="xs:boolean" minOccurs="0"/>
      </xs:choice>
      <xs:element name="PatternStopPatternID" type="xs:IDREF">
        <xs:annotation>
          <xs:documentation>PatternStopPatternID - ID of pattern the pattern stop is related to. Pattern element with this ID has
to be presented in the same dataset.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="PatternStopStopID" type="xs:IDREF">
        <xs:annotation>
          <xs:documentation>PatternStopStopID - ID of stop the pattern stop is related to. Stop element with this ID has to be
presented in the same dataset.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="PatternStopTimePointCode" minOccurs="0">
        <xs:annotation>
          <xs:documentation>PatternStopTimePointCode - Timepoint location/place code (short name).</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="20"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="PatternStopFareZoneID" type="xs:IDREF" minOccurs="0">
        <xs:annotation>
          <xs:appinfo>Farezone that patternstop is associated with.</xs:appinfo>
          <xs:documentation>Farezone that patternstop is associated with.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="PatternStopWaitTime" minOccurs="0">
        <xs:simpleType>
          <xs:restriction base="xs:decimal">
            <xs:totalDigits value="7"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="PatternStopBordOnly" type="xs:boolean" minOccurs="0"/>
      <xs:element name="PatternStopUnboardOnly" type="xs:boolean" minOccurs="0"/>
      <xs:element name="RTTStopID" type="xs:string" minOccurs="0"/>
```

```
    </xs:sequence>
    <xs:attributeGroup ref="RTDns:ElementInfo"/>
  </xs:complexType>
  <xs:complexType name="StopType">
    <xs:sequence>
      <xs:element name="StopCategory" minOccurs="0">
        <xs:annotation>
          <xs:documentation>StopCategory - Defines type of stop.
Values:
TS - Train Stop
BT - Bart Stop
PL - Pickup Location
FT - Ferry Terminal
BS - Bus Stop</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="2"/>
            <xs:enumeration value="TS">
              <xs:annotation>
                <xs:documentation>TS - Train Stop</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
            <xs:enumeration value="BT">
              <xs:annotation>
                <xs:documentation>BT - Bart Stop</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
            <xs:enumeration value="PL">
              <xs:annotation>
                <xs:documentation>PL - Pickup Location</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
            <xs:enumeration value="FT">
              <xs:annotation>
                <xs:documentation>FT - Ferry Terminal</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
            <xs:enumeration value="BS">
              <xs:annotation>
                <xs:documentation>BS - Bus Stop</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
```

```
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="StopPublicLabel" type="xs:string" minOccurs="0">
        <xs:annotation>
          <xs:documentation>StopPublicLabel - text to use for labeling stop in public interfaces (maps, schedules,
etc.)</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="StopLocation" type="RTDns:LocationType" minOccurs="0">
        <xs:annotation>
          <xs:documentation>StopLocation - Describes location of the stop.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="StopRelativeDirection" minOccurs="0">
        <xs:annotation>
          <xs:documentation>StopRelativeDirection - Locates a stop relative to the intersection along the pattern's travel
direction.
Values:
NS - Near Side
FS - Far Side
MB - Mid-Block
AT - At Intersection
BT - Between
OP - Opposite</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="2"/>
            <xs:enumeration value="NS">
              <xs:annotation>
                <xs:documentation>NS - Near Side</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
            <xs:enumeration value="FS">
              <xs:annotation>
                <xs:documentation>FS - Far Side</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
            <xs:enumeration value="MB">
              <xs:annotation>
                <xs:documentation>MB - Mid-Block</xs:documentation>
              </xs:annotation>
```

```
            </xs:enumeration>
            <xs:enumeration value="AT">
              <xs:annotation>
                <xs:documentation>AT - At Intersection</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
            <xs:enumeration value="BT">
              <xs:annotation>
                <xs:documentation>BT - Between</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
            <xs:enumeration value="OP">
              <xs:annotation>
                <xs:documentation>OP - Opposite</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element ref="RTDns:IntersectionPosition" minOccurs="0">
        <xs:annotation>
          <xs:documentation>IntersectionPosition - Transit stop location relative to the street intersection.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element ref="RTDns:ADAAccess" minOccurs="0">
        <xs:annotation>
          <xs:documentation>ADAAccess - A numeric code indicating the special accessibility status of a stop.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="StopFareZoneID" type="xs:IDREF" minOccurs="0">
        <xs:annotation>
          <xs:documentation>StopFareZoneID - ID of fare zone the stop is related to. Fare zone element with this ID has to be
presented in the same dataset.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="StopLandmarkID" type="xs:IDREF" minOccurs="0">
        <xs:annotation>
          <xs:documentation>StopLandmarkID - ID of landmark the stop is related to. Landmark element with this ID has to be
presented in the same dataset.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="StopTimePoints" minOccurs="0">
        <xs:annotation>
```

```
      <xs:documentation>StopTimePoints - Element containing list of time points of the stop.</xs:documentation>
    </xs:annotation>
    <xs:complexType>
      <xs:sequence>
        <xs:element name="TimePoint" type="RTDns:TimePointType" maxOccurs="unbounded"/>
      </xs:sequence>
      <xs:attribute name="Count" type="xs:long" use="required"/>
    </xs:complexType>
  </xs:element>
  <xs:element name="StopAmenities" minOccurs="0">
    <xs:annotation>
      <xs:documentation>StopAmenities - Element containing list of amenities of the stop.</xs:documentation>
    </xs:annotation>
    <xs:complexType>
      <xs:sequence>
        <xs:element name="Amenity" type="RTDns:AmenityType" maxOccurs="unbounded"/>
      </xs:sequence>
      <xs:attribute name="Count" type="xs:long" use="required"/>
    </xs:complexType>
  </xs:element>
  <xs:element name="StopFacility" type="xs:IDREF" minOccurs="0">
    <xs:annotation>
      <xs:documentation>Reference of facility stop is related to (if any)</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="TransferMatrixes" minOccurs="0">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="TransferMatrix" type="RTDns:TransferMatrixType" minOccurs="0" maxOccurs="unbounded"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="StopDestinationCode" type="xs:decimal" minOccurs="0"/>
  <xs:element name="StopAreaCode" minOccurs="0">
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:maxLength value="50"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:element>
  <xs:element name="StopInterchangeType" minOccurs="0">
    <xs:simpleType>
      <xs:restriction base="xs:string">
```

```
            <xs:maxLength value="1"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="StopInterchangeQuality" minOccurs="0">
        <xs:simpleType>
          <xs:restriction base="xs:decimal">
            <xs:totalDigits value="2"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="StopIsCentralStop" type="xs:boolean" minOccurs="0"/>
      <xs:element name="StopNumberTicketPrinter" minOccurs="0">
        <xs:simpleType>
          <xs:restriction base="xs:decimal">
            <xs:totalDigits value="5"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="StopNameTicketPrinter" minOccurs="0">
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="30"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="StopStopAreas" minOccurs="0">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="StopArea" type="RTDns:StopAreaType" minOccurs="0" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="StopInterchangeDefinitions" minOccurs="0">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="InterchangeDefinitions" type="RTDns:InterchangeDefinitionType" minOccurs="0"
maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
    <xs:attributeGroup ref="RTDns:ElementInfo"/>
```

```
  </xs:complexType>
  <xs:complexType name="LandmarkType">
    <xs:sequence>
      <xs:element name="LandmarkName" minOccurs="0">
        <xs:annotation>
          <xs:documentation>LandmarkName - The name of a landmark</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="255"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="LandmarkDescription" minOccurs="0">
        <xs:annotation>
          <xs:documentation>LandmarkDescription - The description of a landmark.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="256"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="LandmarkLocation" type="RTDns:LocationType" minOccurs="0">
        <xs:annotation>
          <xs:documentation>LandmarkLocation - Describes location of the landmark.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="LandmarkParentID" type="xs:IDREF" minOccurs="0">
        <xs:annotation>
          <xs:documentation>LandmarkParentID - ID of parent landmark element. Landmark with this ID has to be presented in the
same dataset.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="LandmarkAliases" minOccurs="0">
        <xs:annotation>
          <xs:documentation>LandmarkAliases - Element containing list of aliases of the landmark.</xs:documentation>
        </xs:annotation>
        <xs:complexType>
          <xs:sequence>
            <xs:element name="LandmarkAlias" type="RTDns:LandmarkAliasType" maxOccurs="unbounded"/>
          </xs:sequence>
          <xs:attribute name="Count" type="xs:long" use="required"/>
```

```
        </xs:complexType>
      </xs:element>
      <xs:element name="LandmarkCategories" minOccurs="0">
        <xs:annotation>
          <xs:documentation>LandmarkCategories - Element containing list of categories of the landmark.</xs:documentation>
        </xs:annotation>
        <xs:complexType>
          <xs:sequence>
            <xs:element name="LandmarkCategory" type="RTDns:LandmarkCategoryType" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
    <xs:attributeGroup ref="RTDns:ElementInfo"/>
  </xs:complexType>
  <xs:complexType name="LandmarkAliasType">
    <xs:sequence>
      <xs:element name="LandmarkAliasName" minOccurs="0">
        <xs:annotation>
          <xs:documentation>LandmarkAliasName - Alternate name for landmark.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="50"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="LandmarkAliasLandmarkID" type="xs:IDREF">
        <xs:annotation>
          <xs:documentation>LandmarkAliasLandmarkID - ID of landmark the alias is related to. Landmark element with this ID has
to be presented in the same dataset.</xs:documentation>
        </xs:annotation>
      </xs:element>
    </xs:sequence>
    <xs:attributeGroup ref="RTDns:ElementInfo"/>
  </xs:complexType>
  <xs:complexType name="PortalType">
    <xs:sequence>
      <xs:element name="PortalCode" minOccurs="0">
        <xs:annotation>
          <xs:documentation>PortalCode - Optional character code for the stop portal that may be assigned by the transit agency
to identify the portal. For example, the stop portal at the NorthWest corner of Broadway and 13th intersection may be coded as
Brod13thNW.</xs:documentation>
```

```
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="10"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="PortalType" minOccurs="0">
        <xs:annotation>
          <xs:documentation>PortalType - Indicates the type of the portal.
Value:
1 - Street Level Entrance to Underground Station
2 - Elevated Train Station
3 - Surface Train Station
4 - Ferry Terminal</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:decimal">
            <xs:enumeration value="1">
              <xs:annotation>
                <xs:documentation>1 - Street Level Entrance to Underground Station</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
            <xs:enumeration value="2">
              <xs:annotation>
                <xs:documentation>2 - Elevated Train Station</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
            <xs:enumeration value="3">
              <xs:annotation>
                <xs:documentation>3 - Surface Train Station</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
            <xs:enumeration value="4">
              <xs:annotation>
                <xs:documentation>4 - Ferry Terminal</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="Description" type="xs:string" minOccurs="0"/>
      <xs:element name="PortalLocation" type="RTDns:LocationType" minOccurs="0">
```

```
        <xs:annotation>
          <xs:documentation>PortalLocation - Describes location of the portal.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="PortalCompassDirection" minOccurs="0">
        <xs:annotation>
          <xs:documentation>PortalCompassDirection - Indicates the position of the portal in terms of eight basic compass
directions relative to the street it is on.
Values:
N - North
S - South
E - East
W - West
NE - NorthEast
NW - NorthWest
SE - SouthEast
SW - SouthWest</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="2"/>
            <xs:enumeration value="N">
              <xs:annotation>
                <xs:documentation>N - North</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
            <xs:enumeration value="S">
              <xs:annotation>
                <xs:documentation>S - South</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
            <xs:enumeration value="E">
              <xs:annotation>
                <xs:documentation>E - East</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
            <xs:enumeration value="W">
              <xs:annotation>
                <xs:documentation>W - West</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
            <xs:enumeration value="NE">
              <xs:annotation>
```

```
                <xs:documentation>NE - NorthEast</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
            <xs:enumeration value="NW">
              <xs:annotation>
                <xs:documentation>NW - NorthWest</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
            <xs:enumeration value="SE">
              <xs:annotation>
                <xs:documentation>SE - SouthEast</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
            <xs:enumeration value="SW">
              <xs:annotation>
                <xs:documentation>SW - SouthWest</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
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      </xs:element>
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            <xs:element name="PortalStopID" type="xs:IDREF" maxOccurs="unbounded">
              <xs:annotation>
                <xs:documentation>PortalStopID - ID of stop the portal is related to. Stop element with this ID has to be
presented in the same dataset.</xs:documentation>
              </xs:annotation>
            </xs:element>
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              <xs:annotation>
                <xs:documentation>ADAAccess - A numeric code indicating the special accessibility status of a transit stop
portal.</xs:documentation>
              </xs:annotation>
            </xs:element>
          </xs:sequence>
```

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      </xs:complexType>
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  </xs:sequence>
  <xs:attributeGroup ref="RTDns:ElementInfo"/>
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<xs:complexType name="AmenityType">
  <xs:sequence>
    <xs:element name="AmenityName" minOccurs="0">
      <xs:annotation>
        <xs:documentation>AmenityName - The name of an amenity.</xs:documentation>
      </xs:annotation>
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:maxLength value="30"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
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      <xs:annotation>
        <xs:documentation>Status - Inidicates the operational status of the amenity.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="AmenityOwner" minOccurs="0">
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        <xs:documentation>AmenityOwner - Owner of the amenity.</xs:documentation>
      </xs:annotation>
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    </xs:element>
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      <xs:annotation>
        <xs:documentation>AmenityNumber - Indicates the number of the amenity installed at the stop.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="AmenityInstallationDate" type="xs:date" minOccurs="0">
      <xs:annotation>
        <xs:documentation>AmenityInstallationDate - Date of installation of the amenity.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="AmenityMaintenanceDate" type="xs:date" minOccurs="0">
```

```
        <xs:annotation>
          <xs:documentation>AmenityMaintenanceDate - Date of last maintenance of teh amenity.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="AmenityStopID" type="xs:IDREF">
        <xs:annotation>
          <xs:documentation>AmenityStopID - ID of stop the amenity is related to. Stop element with this ID has to be presented
in the same dataset.</xs:documentation>
        </xs:annotation>
      </xs:element>
    </xs:sequence>
    <xs:attributeGroup ref="RTDns:ElementInfo"/>
  </xs:complexType>
  <xs:complexType name="TimePointType">
    <xs:sequence>
      <xs:element name="TimePointCode">
        <xs:annotation>
          <xs:documentation>TimePointCode - Timepoint location/place code (short name).</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="20"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="TimePointDescription" minOccurs="0">
        <xs:annotation>
          <xs:documentation>TimePointDescription - Description for each timepoint.</xs:documentation>
        </xs:annotation>
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        </xs:simpleType>
      </xs:element>
      <xs:element name="TimePointStopID" type="xs:IDREF">
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          <xs:documentation>TimePointStopID - ID of stop the time point is related to. Stop element with this ID has to be
presented in the same dataset.</xs:documentation>
        </xs:annotation>
      </xs:element>
    </xs:sequence>
    <xs:attributeGroup ref="RTDns:ElementInfo"/>
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  </xs:complexType>
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    <xs:sequence>
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            <xs:maxLength value="1"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="TripPatternID" type="xs:IDREF">
        <xs:annotation>
          <xs:documentation>TripPatternID - ID of pattern the trip is related to. Pattern element with this ID has to be
presented in the same dataset.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="TripSequenceNo" type="xs:decimal" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Seq. number of the trip in a pattern.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element ref="RTDns:ADAAccess" minOccurs="0">
        <xs:annotation>
          <xs:documentation>ADAAccess - A numeric code indicating the special accessibility status of a transit route
trip.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="TripSchedules" minOccurs="0">
        <xs:annotation>
          <xs:documentation>TripSchedules - Element containing list of schedule items of the trip.</xs:documentation>
        </xs:annotation>
        <xs:complexType>
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            <xs:element name="Schedule" type="RTDns:ScheduleType" maxOccurs="unbounded"/>
          </xs:sequence>
          <xs:attribute name="Count" type="xs:long" use="required"/>
        </xs:complexType>
      </xs:element>
      <xs:element name="TripNotes" minOccurs="0">
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```

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        </xs:complexType>
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    <xs:attributeGroup ref="RTDns:ElementInfo"/>
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  <xs:complexType name="ScheduleType">
    <xs:sequence>
      <xs:element name="ScheduleTimePointSequenceNo" type="xs:decimal">
        <xs:annotation>
          <xs:documentation>ScheduleTimePointSequenceNo - Specifies the timepoint sequence number for stops that are also
timepoints.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="ScheduleTimePointTime" type="xs:time">
        <xs:annotation>
          <xs:documentation>ScheduleTimePointTime - The time value associated with a time point for a particular
trip.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="ScheduleIsTimeDeparture" type="xs:boolean" minOccurs="0">
        <xs:annotation>
          <xs:documentation>ScheduleIsTimeDeparture - Indicates whether a timepoint time value is for the arrival or the
departure of the transit vehicle.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="ScheduleTripID" type="xs:IDREF">
        <xs:annotation>
          <xs:documentation>ScheduleTripID - ID of trip the schedule is related to. Trip element with this ID has to be presented
in the same dataset.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="SchedulePatternStopID" type="xs:IDREF">
        <xs:annotation>
          <xs:documentation>SchedulePatternStopID - ID of pattern stop the schedule is related to. Pattern stop element with this
ID has to be presented in the same dataset.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="JourneyPatternWaitTime" type="xs:time" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Wait time at stop </xs:documentation>
        </xs:annotation>
```

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      </xs:element>
      <xs:element name="JourneyPatternRunTime" type="xs:time" minOccurs="0"/>
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  </xs:complexType>
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    <xs:sequence>
      <xs:element name="RouteScheduleRouteID" type="xs:IDREF">
        <xs:annotation>
          <xs:documentation>RouteScheduleRouteID - ID of route the route schedule is related to. Route element with this ID has
to be presented in the same dataset.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="RouteScheduleDirections">
        <xs:annotation>
          <xs:documentation>List of patterns directions (at least one item) for given route to be grouped together into one route
schedule.</xs:documentation>
        </xs:annotation>
        <xs:complexType>
          <xs:sequence>
            <xs:element ref="RTDns:PatternCompassDirection" maxOccurs="unbounded"/>
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        </xs:complexType>
      </xs:element>
      <xs:element name="RouteScheduleDayTypes">
        <xs:annotation>
          <xs:documentation>List of day types (at least one item) for given route to be grouped together into one route
schedule.</xs:documentation>
        </xs:annotation>
        <xs:complexType>
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            <xs:element name="RouteScheduleCarrierDayTypeID" type="xs:IDREF" maxOccurs="unbounded"/>
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        </xs:complexType>
      </xs:element>
      <xs:element name="RouteSchedulePatternStopSequences" minOccurs="0">
        <xs:annotation>
          <xs:documentation>List of PatternStop IDs with their sequence numbers in given route schedule.</xs:documentation>
        </xs:annotation>
        <xs:complexType>
          <xs:sequence>
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```

```
            <xs:sequence>
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              <xs:element name="SequenceNo"/>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
  <xs:element name="RouteScheduleTripSequences" minOccurs="0">
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      <xs:documentation>List of Trip IDs with their sequence numbers in given route schedule.</xs:documentation>
    </xs:annotation>
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              <xs:element name="SequenceNo"/>
            </xs:sequence>
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        </xs:element>
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    </xs:complexType>
  </xs:element>
  <xs:element name="RouteScheduleActivationDate" type="xs:date" minOccurs="0">
    <xs:annotation>
      <xs:documentation>RouteScheduleActivationDate - The date route schedule becomes operational.</xs:documentation>
    </xs:annotation>
  </xs:element>
  <xs:element name="RouteScheduleDeactivationDate" minOccurs="0">
    <xs:annotation>
      <xs:documentation>RouteScheduleDeactivationDate - The date route schedule goes out of service.</xs:documentation>
    </xs:annotation>
  </xs:element>
</xs:sequence>
<xs:attributeGroup ref="RTDns:ElementInfo"/>
</xs:complexType>
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  <xs:sequence>
    <xs:element name="PeakHourDayTypeID" type="xs:IDREF"/>
    <xs:element ref="RTDns:AppliesTo" minOccurs="0">
```

```
        <xs:annotation>
          <xs:documentation>AppliesTo- Indicates how the peak hour definition is applied.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element ref="RTDns:FareSystemMode" minOccurs="0">
        <xs:annotation>
          <xs:documentation>PeakHourMode - A transit service type category characterized by specific right-of-way, technological
and operational features.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="PeakHourActivationDate" type="xs:date" minOccurs="0">
        <xs:annotation>
          <xs:documentation>PeakHourActivationDate - The date a public transportation staff, service, facility or asset is placed
in service, becomes operational or is registered.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="PeakHourDeactivationDate" type="xs:date" minOccurs="0">
        <xs:annotation>
          <xs:documentation>PeakHourDeactivationDate - The date a public transportation person, place or thing is taken out of
service, decommissioned or deregistered.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="PeakHourFromTime" type="xs:time" minOccurs="0">
        <xs:annotation>
          <xs:documentation>PeakHourFromTime - Beginning time of the peak hour fare.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="PeakHourToTime" type="xs:time" minOccurs="0">
        <xs:annotation>
          <xs:documentation>PeakHourToTime - Ending time of the peak hour fare.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="PeakHourRouteID" type="xs:IDREF" minOccurs="0">
        <xs:annotation>
          <xs:documentation>PeakHourRouteID - ID of route the peak hour is related to. Route element with this ID has to be
presented in the same dataset.</xs:documentation>
        </xs:annotation>
      </xs:element>
    </xs:sequence>
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  <xs:complexType name="RiderCategoryType">
    <xs:sequence>
```

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      <xs:element name="RiderCategoryClassification" type="xs:decimal" minOccurs="0">
        <xs:annotation>
          <xs:documentation>RiderCategoryClassification - Type of rider on public transportation vehicles.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="RiderCategoryClassificationDescription" minOccurs="0">
        <xs:annotation>
          <xs:documentation>RiderCategoryClassificationDescription - The description of a rider
classification.</xs:documentation>
        </xs:annotation>
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          <xs:documentation>AppliesTo- Indicates how the rider category definition is applied.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element ref="RTDns:FareSystemMode" minOccurs="0"/>
      <xs:element name="RiderCategoryActivationDate" type="xs:date" minOccurs="0">
        <xs:annotation>
          <xs:documentation>RiderCategoryActivationDate - The date a public transportation staff, service, facility or asset is
placed in service, becomes operational or is registered.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="RiderCategoryDeactivationDate" type="xs:date" minOccurs="0">
        <xs:annotation>
          <xs:documentation>RiderCategoryDeactivationDate - The date a public transportation person, place or thing is taken out
of service, decommissioned or deregistered.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="RiderCategoryProof" minOccurs="0">
        <xs:annotation>
          <xs:documentation>RiderCategoryProof - Description of the instrument that a rider presents as a proof of his/her
category.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="20"/>
          </xs:restriction>
```

```
        </xs:simpleType>
      </xs:element>
      <xs:element name="RiderCategoryRouteID" type="xs:IDREF" minOccurs="0">
        <xs:annotation>
          <xs:documentation>RiderCategoryRouteID - ID of route the rider category is related to. Route element with this ID has
to be presented in the same dataset.</xs:documentation>
        </xs:annotation>
      </xs:element>
    </xs:sequence>
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    <xs:sequence>
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        <xs:annotation>
          <xs:documentation>FareZoneName - This column will allow transit agencies to identify fare zones by names or some sort
of description.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="FareZoneNo" type="xs:string" minOccurs="0">
        <xs:annotation>
          <xs:documentation>FareZoneNo - A unique number used to reference a geographic area with which a specified fare is
associated. (The fare may be based on trips between two fare zones or as a fixed value at stop points contained in the
zone.).</xs:documentation>
        </xs:annotation>
      </xs:element>
    </xs:sequence>
    <xs:attributeGroup ref="RTDns:ElementInfo"/>
  </xs:complexType>
  <xs:complexType name="FareDefinitionType">
    <xs:sequence>
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      <xs:element ref="RTDns:FareSystemMode" minOccurs="0"/>
      <xs:element name="FareDefinitionActivationDate" type="xs:date" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Date when the fare is activated.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="FareDefinitionDeactivationDate" type="xs:date" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Date from when the fare is no longer valid.</xs:documentation>
        </xs:annotation>
      </xs:element>
```

```
      <xs:element name="FareDefinitionZoneTotal" type="xs:decimal" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Total number of fare zones applicable for this fare.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="FareDefinitionRouteID" type="xs:IDREF" minOccurs="0">
        <xs:annotation>
          <xs:documentation>ID of route to which a fare definition may be applicable. It is populated only when the AppliesTo has
value of 'R' indicating that the fare definition applies only to a route.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="FareDefinitionIsPayableOnBoard" type="xs:boolean" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Indicates whether the fare is payable on board or not.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="FareDefinitionFares" minOccurs="0">
        <xs:annotation>
          <xs:documentation>FareDefinitionFares - Element containing list of fares of the fare definition.</xs:documentation>
        </xs:annotation>
        <xs:complexType>
          <xs:sequence>
            <xs:element name="Fare" type="RTDns:FareType" maxOccurs="unbounded"/>
          </xs:sequence>
          <xs:attribute name="Count" type="xs:long" use="required"/>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
    <xs:attributeGroup ref="RTDns:ElementInfo"/>
  </xs:complexType>
  <xs:complexType name="FareType">
    <xs:sequence>
      <xs:element name="FareFareZone1ID" type="xs:IDREF" minOccurs="0">
        <xs:annotation>
          <xs:documentation>ID of the 'from fare zone', if a zone fare is defined. If the agency has just one zone, it will be
defined as the fare zone 0 (zero) in the FareZones.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="FareFareZone2ID" type="xs:IDREF" minOccurs="0">
        <xs:annotation>
          <xs:documentation>ID of the 'to fare zone', if a zone fare is defined. If the agency has just one zone, it will be
defined as the fare zone 0 (zero) in the FareZones.</xs:documentation>
        </xs:annotation>
```

```
    </xs:element>
    <xs:element name="FareFareCost" type="xs:decimal" minOccurs="0">
      <xs:annotation>
        <xs:documentation>The cost of a zone or non-zone fare for transit service.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="FareRiderCategoryID" type="xs:IDREF" minOccurs="0">
      <xs:annotation>
        <xs:documentation>ID of related rider category.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="FarePeakHourID" type="xs:IDREF" minOccurs="0">
      <xs:annotation>
        <xs:documentation>ID of related peak hour.</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="FareFareDefinitionID" type="xs:IDREF">
      <xs:annotation>
        <xs:documentation>ID of related fare definition.</xs:documentation>
      </xs:annotation>
    </xs:element>
  </xs:sequence>
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    <xs:element name="FareInstrumentType" minOccurs="0">
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        <xs:documentation>Code for a fare instrument type such as passes, transfers, etc.</xs:documentation>
      </xs:annotation>
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          <xs:maxLength value="3"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="FareInstrumentItemName" minOccurs="0">
      <xs:annotation>
        <xs:documentation>A name/description of the fare instrument.</xs:documentation>
      </xs:annotation>
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:maxLength value="30"/>
```

```
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
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        <xs:annotation>
          <xs:documentation>Cost of fare instrument.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="FareInstrumentFIValues">
        <xs:annotation>
          <xs:documentation>FareInstrumentFIValues - Element containing list of fare instrument values of the fare instrument
itself.</xs:documentation>
        </xs:annotation>
        <xs:complexType>
          <xs:sequence>
            <xs:element name="FareInstrumentValue" type="RTDns:FareInstrumentValueType" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="FareInstrumentNotes" minOccurs="0">
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          <xs:sequence>
            <xs:element name="FareInstrumentNotes" type="RTDns:NoteType" minOccurs="0" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="FareInstrumentUsageDescription" type="xs:string" minOccurs="0"/>
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    <xs:attributeGroup ref="RTDns:ElementInfo"/>
  </xs:complexType>
  <xs:complexType name="FareInstrumentCostType">
    <xs:sequence>
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      <xs:element ref="RTDns:FareSystemMode" minOccurs="0"/>
      <xs:element name="FICostActivationDate" type="xs:date" minOccurs="0">
        <xs:annotation>
          <xs:documentation>The date when this fare instrument cost becomes effective.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="FICostDeactivationDate" type="xs:date" minOccurs="0">
        <xs:annotation>
          <xs:documentation>The date till when this fare instrument cost remains effective.</xs:documentation>
```

```
        </xs:annotation>
      </xs:element>
      <xs:element name="FICostTotalCostCategory" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Indicates the number of cost categories per rider category.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="1"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="FICostIsPayableOnBoard" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Indicates whether the fare instrument cost is payable on board the transit vehicle or
not.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="1"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="FICostRouteID" type="xs:IDREF" minOccurs="0">
        <xs:annotation>
          <xs:documentation>ID of the route to which a fare instrument cost may be applicable.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="FICostIssued" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Indicates where the fare instrument is issued.
Valid values are:
B - upon boarding
L - upon leaving
O - other.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="1"/>
            <xs:enumeration value="B">
              <xs:annotation>
                <xs:documentation>B - Boarding</xs:documentation>
              </xs:annotation>
```

```
            </xs:enumeration>
            <xs:enumeration value="L">
              <xs:annotation>
                <xs:documentation>L - Leaving</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
            <xs:enumeration value="O">
              <xs:annotation>
                <xs:documentation>O - Other</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="FICostFareInstrumentID" type="xs:IDREF">
        <xs:annotation>
          <xs:documentation>ID of related fare instrument.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="FICostFIPrices">
        <xs:annotation>
          <xs:documentation>FICostFIPrices - Element containing list of fare instrument prices of the fare instrument cost
itself.</xs:documentation>
        </xs:annotation>
        <xs:complexType>
          <xs:sequence>
            <xs:element name="FICostFIPrice" type="RTDns:FareInstrumentPriceType" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
    <xs:attributeGroup ref="RTDns:ElementInfo"/>
  </xs:complexType>
  <xs:complexType name="FareInstrumentValueType">
    <xs:sequence>
      <xs:element ref="RTDns:AppliesTo"/>
      <xs:element ref="RTDns:FareSystemMode" minOccurs="0"/>
      <xs:element name="FIValueActivationDate" type="xs:date" minOccurs="0">
        <xs:annotation>
          <xs:documentation>The date when this fare instrument value becomes effective.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="FIValueDeactivationDate" type="xs:date" minOccurs="0">
```

```
        <xs:annotation>
          <xs:documentation>The date till when this fare instrument value remains effective.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="FIValueTotalValueCategory" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Indicates the number of value categories per rider category. Values must be between 0 to 9 or
'U'.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="1"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="FIValueIsRenewable" type="xs:boolean" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Indicates whether or not this fare instrument value is renewable.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="FIValueTravelDirection" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Indicates the travel direction this fare instrument value can be applied to.
Values:
O - One Way
A - Any Direction
R - Round Trip
C - Continuous</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="1"/>
            <xs:enumeration value="O">
              <xs:annotation>
                <xs:documentation>One Way</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
            <xs:enumeration value="A">
              <xs:annotation>
                <xs:documentation>Any Direction</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
            <xs:enumeration value="R">
```

```
              <xs:annotation>
                <xs:documentation>Round Trip</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
            <xs:enumeration value="C">
              <xs:annotation>
                <xs:documentation>Continuous</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="FIValueRideValue" type="xs:decimal" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Maximum number of rides (trips) allowed on a fare instrument.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="FIValueFareTimeValue" type="xs:decimal" minOccurs="0">
        <xs:annotation>
          <xs:documentation>The duration (in minutes) over which a fare instrument has value.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="FIValueValidFromStopID" type="xs:IDREF" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Identifies the stop where acceptance of a fare instrument begins on a
route/pattern.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="FIValueValidToStopID" type="xs:IDREF" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Identifies the stop where acceptance of the fare instrument ends on a
route/pattern.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="FIValueIsAcceptedAtAllStops" type="xs:boolean" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Indicates whether or not the fare instrument is accepted at all stops of a particular route. This
value is necessary only when FIValueRouteID element presented.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="FIValueRouteID" type="xs:IDREF" minOccurs="0">
        <xs:annotation>
```

```
          <xs:documentation>ID of the route to which a fare instrument value be applicable. This element will be presented only
when the AppliesTo has value of 'R' indicating that the fare instrument value applies only to a route.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="FIValueAgencyUsedID" type="xs:string" minOccurs="0">
        <xs:annotation>
          <xs:documentation>ID of the agency that accepts the fare instrument.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="FIValueFareInstrumentID" type="xs:IDREF">
        <xs:annotation>
          <xs:documentation>ID of related fare instrument.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="FIValueFIPrices">
        <xs:annotation>
          <xs:documentation>FICostFIPrices - Element containing list of fare instrument prices of the fare instrument value
itself.</xs:documentation>
        </xs:annotation>
        <xs:complexType>
          <xs:sequence>
            <xs:element name="FIValueFIPrice" type="RTDns:FareInstrumentPriceType" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
    <xs:attributeGroup ref="RTDns:ElementInfo"/>
  </xs:complexType>
  <xs:complexType name="FareInstrumentPriceType">
    <xs:sequence>
      <xs:element name="FIPricePeakHourID" type="xs:IDREF" minOccurs="0">
        <xs:annotation>
          <xs:documentation>ID of related PeakHour</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="FIPriceFareType" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Indicates the type of fare or fare instrument value assigned. Allows for different types of fare cost
or value maintained in the same table except for the zone fare.
Values:
IC - Cost of purchasing a fare instrument
IV - Value of a fare instrument applied</xs:documentation>
        </xs:annotation>
```

```
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="2"/>
            <xs:enumeration value="IC">
              <xs:annotation>
                <xs:documentation>Cost of purchasing a fare instrument</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
            <xs:enumeration value="IV">
              <xs:annotation>
                <xs:documentation>Value of a fare instrument applied</xs:documentation>
              </xs:annotation>
            </xs:enumeration>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="FIPriceInstrumentPrice" type="xs:decimal" minOccurs="0">
        <xs:annotation>
          <xs:documentation>The cost or value of a fare instrument for transit service.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="FIPriceCoveredZonesCount" default="U">
        <xs:annotation>
          <xs:documentation>Indicates how many fare zones can be traveled with a particular fare instrument cost. A value of '0'
(zero) indicates free; where InstrumentPrice has $0.00 value. A value of 'U' (unlimited) indicates no zone restriction with that
cost category. Other values are betweem 1 and 9, indicating the number of zones that can be traveled.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="1"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="FIPriceRiderCategoryID" type="xs:IDREF" minOccurs="0">
        <xs:annotation>
          <xs:documentation>ID of related RiderCategory</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:choice>
        <xs:element name="FIPriceFICostID" type="xs:IDREF">
          <xs:annotation>
            <xs:documentation>ID of related FareInstrumentCost</xs:documentation>
          </xs:annotation>
```

```
      </xs:element>
      <xs:element name="FIPriceFIValueID" type="xs:IDREF">
        <xs:annotation>
          <xs:documentation>ID of related FareInstrumentValue</xs:documentation>
        </xs:annotation>
      </xs:element>
    </xs:choice>
  </xs:sequence>
  <xs:attributeGroup ref="RTDns:ElementInfo"/>
</xs:complexType>
<xs:complexType name="LocationType">
  <xs:sequence>
    <xs:element name="LocationAddress">
      <xs:annotation>
        <xs:documentation>LocationAddress - Street address, an intersection address, or a landmark name.</xs:documentation>
      </xs:annotation>
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:maxLength value="250"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="LocationCityName">
      <xs:annotation>
        <xs:documentation>LocationCityName - The name of a municipality.</xs:documentation>
      </xs:annotation>
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:maxLength value="250"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="LocationPostalCode" minOccurs="0">
      <xs:annotation>
        <xs:documentation>LocationPostalCode - The five character postal/zip code.</xs:documentation>
      </xs:annotation>
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:maxLength value="5"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="LocationOnStreet" type="xs:string" minOccurs="0">
```

```
        <xs:annotation>
          <xs:documentation>LocationOnStreet - Information describing on which street location point is.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="LocationAtStreet" type="xs:string" minOccurs="0">
        <xs:annotation>
          <xs:documentation>LocationAtStreet - Information describing at which street location point is.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element ref="gml:Point" minOccurs="0"/>
    </xs:sequence>
    <xs:attribute name="Type" use="required">
      <xs:annotation>
        <xs:documentation>
Type - Indicates the type of location address (intersection, street, landmark).
  Values:
  S - Street
  I - Intersection
  L - Landmark
  U - Unknown
        </xs:documentation>
      </xs:annotation>
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:maxLength value="1"/>
          <xs:enumeration value="S">
            <xs:annotation>
              <xs:documentation>S - Street</xs:documentation>
            </xs:annotation>
          </xs:enumeration>
          <xs:enumeration value="I">
            <xs:annotation>
              <xs:documentation>I - Intersection</xs:documentation>
            </xs:annotation>
          </xs:enumeration>
          <xs:enumeration value="L">
            <xs:annotation>
              <xs:documentation>L - Landmark</xs:documentation>
            </xs:annotation>
          </xs:enumeration>
          <xs:enumeration value="U">
            <xs:annotation>
              <xs:documentation>U - Unknown</xs:documentation>
```

```
            </xs:annotation>
          </xs:enumeration>
        </xs:restriction>
      </xs:simpleType>
    </xs:attribute>
  </xs:complexType>
  <xs:complexType name="DayTypeType">
    <xs:annotation>
      <xs:documentation>DayType - Defines special events that alter schedules of some or all routes of an agency. For example,
for the duration of the county fair or during the football season there may be some changes to schedules of some routes. If an
event has multiple durations defined, each duration is represented by a separate record in this table.</xs:documentation>
    </xs:annotation>
    <xs:sequence>
      <xs:element name="DayTypeCode">
        <xs:annotation>
          <xs:documentation>A schedule day type code that is assigned to the schedule. There are 10 pre-defined codes and other
custom one-letter alpha codes from A-Z. The digit codes are generic for all agencies and signifies the same schedule type
whereas, letter codes can mean different schedule for different transit service provider. The 9 pre-defined digit codes inlcude,
1- Monday, 2-Tuesday, 3-Wednesday, 4-Thursday, 5-Friday, 6-Saturday, 7-Sunday, 8- Weekdays, 9-Holiday, and 0-No
Service.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:length value="1"/>
            <xs:pattern value="[0-9]"/>
            <xs:pattern value="[A-Z]"/>
            <xs:pattern value="[a-z]"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="DayTypeDescription">
        <xs:annotation>
          <xs:documentation>Description of the schedule. For example, a Monday-Tuesday-Thurseday schedule can be described as
Mon-Tues-Thurs.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="30"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="DayTypeActivationDate" type="xs:date" minOccurs="0">
        <xs:annotation>
```

```
    <xs:documentation>The date when the schedule begins.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="DayTypeDeactivationDate" type="xs:date" minOccurs="0">
  <xs:annotation>
    <xs:documentation>The date when the schedule expires.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="DayTypeMonday" type="xs:boolean" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Indicates whether or not the schedule applies to Mondays.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="DayTypeTuesday" type="xs:boolean" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Indicates whether or not the schedule applies to Tuesdays.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="DayTypeWednesday" type="xs:boolean" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Indicates whether or not the schedule applies to Wednesdays.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="DayTypeThursday" type="xs:boolean" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Indicates whether or not the schedule applies to Thursdays.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="DayTypeFriday" type="xs:boolean" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Indicates whether or not the schedule applies to Fridays.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="DayTypeSaturday" type="xs:boolean" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Indicates whether or not the schedule applies to Saturdays.</xs:documentation>
  </xs:annotation>
</xs:element>
<xs:element name="DayTypeSunday" type="xs:boolean" minOccurs="0">
  <xs:annotation>
    <xs:documentation>Indicates whether or not the schedule applies to Sundays.</xs:documentation>
  </xs:annotation>
</xs:element>
```

```
      <xs:element name="DayTypeHoliday" type="xs:boolean" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Indicates whether or not the schedule applies to Holidays.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="DayTypeNoService" type="xs:boolean" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Indicates no service available for a particular date or a range fo dates.</xs:documentation>
        </xs:annotation>
      </xs:element>
    </xs:sequence>
    <xs:attributeGroup ref="RTDns:ElementInfo"/>
  </xs:complexType>
  <xs:complexType name="RouteTransferType">
    <xs:sequence>
      <xs:element name="TransferFromRouteID" type="xs:IDREF"/>
      <xs:element name="TransferToRouteID" type="xs:IDREF"/>
      <xs:element name="TransferStopID" type="xs:IDREF"/>
      <xs:element name="TransferToMode">
        <xs:annotation>
          <xs:documentation>Mode - A transit service type category characterized by specific right-of-way, technological and
operational features.
Values:
TR - Aerial Tramway
PB - Publico
RT - Personal Rapid Transit
OR - Other
MM - Multi-mode
MO - Monorail
LR - Light Rail
JT - Jitney
IP - Inclined Plane
HR - Heavy Rail
VP - Vanpool
TB - Trolleybus
T - Train
CC - Cable Car
CR - Commuter Rail
DR - Demand Responsive
F - Ferry Boat
DM - Dual Mode
B - Bus
AG - Automated Guideway  </xs:documentation>
```

```
</xs:annotation>
<xs:simpleType>
  <xs:restriction base="xs:string">
    <xs:maxLength value="2"/>
    <xs:enumeration value="TR">
      <xs:annotation>
        <xs:documentation>TR - Aerial Tramway</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="PB">
      <xs:annotation>
        <xs:documentation>PB - Publico</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="RT">
      <xs:annotation>
        <xs:documentation>RT - Personal Rapid Transit</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="OR">
      <xs:annotation>
        <xs:documentation>OR - Other</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="MM">
      <xs:annotation>
        <xs:documentation>MM - Multi-mode</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="MO">
      <xs:annotation>
        <xs:documentation>MO - Monorail</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="LR">
      <xs:annotation>
        <xs:documentation>LR - Light Rail</xs:documentation>
      </xs:annotation>
    </xs:enumeration>
    <xs:enumeration value="JT">
      <xs:annotation>
        <xs:documentation>JT - Jitney</xs:documentation>
      </xs:annotation>
```

```
</xs:enumeration>
<xs:enumeration value="IP">
  <xs:annotation>
    <xs:documentation>IP - Inclined Plane</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="HR">
  <xs:annotation>
    <xs:documentation>HR - Heavy Rail</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="VP">
  <xs:annotation>
    <xs:documentation>VP - Vanpool</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="TB">
  <xs:annotation>
    <xs:documentation>TB - Trolleybus</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="T">
  <xs:annotation>
    <xs:documentation>T - Train</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="CC">
  <xs:annotation>
    <xs:documentation>CC - Cable Car</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="CR">
  <xs:annotation>
    <xs:documentation>CR - Commuter Rail</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="DR">
  <xs:annotation>
    <xs:documentation>DR - Demand Responsive</xs:documentation>
  </xs:annotation>
</xs:enumeration>
<xs:enumeration value="F">
  <xs:annotation>
```

```
            <xs:documentation>F - Ferry Boat</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="DM">
          <xs:annotation>
            <xs:documentation>DM - Dual Mode</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="B">
          <xs:annotation>
            <xs:documentation>B - Bus</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="AG">
          <xs:annotation>
            <xs:documentation>AG - Automated Guideway</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
      </xs:restriction>
    </xs:simpleType>
  </xs:element>
</xs:sequence>
</xs:complexType>
<xs:complexType name="RouteRepresentationType">
  <xs:sequence>
    <xs:element name="RouteRepresentationRouteID"/>
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  </xs:sequence>
  <xs:attributeGroup ref="RTDns:ElementInfo"/>
</xs:complexType>
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  <xs:sequence>
    <xs:element name="FacilityName" type="xs:string"/>
    <xs:element name="FacilityDescription" type="xs:string" minOccurs="0"/>
    <xs:element name="FacilityPhone" type="xs:string" minOccurs="0"/>
    <xs:element name="FacilityFax" type="xs:string" minOccurs="0"/>
    <xs:element name="FacilityLocation" type="RTDns:LocationType" minOccurs="0"/>
    <xs:element name="FacilityURL" type="xs:string" minOccurs="0"/>
    <xs:element name="FacilityType" type="xs:short" default="0">
      <xs:annotation>
        <xs:documentation>0 - Unknown</xs:documentation>
      </xs:annotation>
    </xs:element>
```

```
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    <xs:sequence>
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      <xs:element name="MiddaySpacesNum" type="xs:int" minOccurs="0"/>
      <xs:element name="AccessibleSpacesNum" type="xs:int" minOccurs="0"/>
      <xs:element name="CarpoolSpacesNum" type="xs:int" minOccurs="0"/>
      <xs:element name="ReservationNeeded" type="xs:boolean" minOccurs="0"/>
      <xs:element name="ReservationPhone" type="xs:string" minOccurs="0"/>
      <xs:element name="Cost" type="xs:decimal" minOccurs="0"/>
      <xs:element name="CostUnit" default="0" minOccurs="0">
        <xs:annotation>
          <xs:documentation>0 - Unknown</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:short">
            <xs:enumeration value="0"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="FacilityBicycling" minOccurs="0">
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    <xs:sequence>
      <xs:element name="HasStation" type="xs:boolean" minOccurs="0"/>
      <xs:element name="StationPhone" type="xs:string" minOccurs="0"/>
      <xs:element name="OpenTime" type="xs:time" minOccurs="0"/>
      <xs:element name="CloseTime" type="xs:time" minOccurs="0"/>
      <xs:element name="StationFees" type="xs:decimal" minOccurs="0"/>
      <xs:element name="RacksNum" type="xs:int" minOccurs="0"/>
      <xs:element name="RackReservationPhone" type="xs:string" minOccurs="0"/>
      <xs:element name="LockersNum" type="xs:int" minOccurs="0"/>
      <xs:element name="LockerReservationPhone" type="xs:string" minOccurs="0"/>
      <xs:element name="LockerFees" type="xs:decimal" minOccurs="0"/>
    </xs:sequence>
  </xs:complexType>
</xs:element>
<xs:element name="FacilityPlatforms" minOccurs="0">
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    <xs:sequence>
      <xs:element name="Platform" maxOccurs="unbounded">
```

```
              <xs:complexType>
                <xs:sequence>
                  <xs:element name="PlatformNumber" type="xs:int"/>
                  <xs:element name="PlatformDescription"/>
                  <xs:element name="PlatformLocation">
                    <xs:annotation>
                      <xs:documentation>0 - Unknown
1 - Under Grade
2 - At Grade
3 - Above Grade</xs:documentation>
                    </xs:annotation>
                    <xs:simpleType>
                      <xs:restriction base="xs:int">
                        <xs:enumeration value="0"/>
                        <xs:enumeration value="1"/>
                        <xs:enumeration value="2"/>
                        <xs:enumeration value="3"/>
                      </xs:restriction>
                    </xs:simpleType>
                  </xs:element>
                </xs:sequence>
                <xs:attributeGroup ref="RTDns:ElementInfo"/>
              </xs:complexType>
            </xs:element>
          </xs:sequence>
          <xs:attribute name="Count" type="xs:long" use="required"/>
        </xs:complexType>
      </xs:element>
      <xs:element name="FacilityAccessibilities" minOccurs="0">
        <xs:complexType>
          <xs:sequence>
            <xs:element ref="RTDns:ADAAccess" maxOccurs="unbounded"/>
          </xs:sequence>
          <xs:attribute name="Count" type="xs:long" use="required"/>
        </xs:complexType>
      </xs:element>
      <xs:element name="FacilityEntrances" minOccurs="0">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="Entrance">
              <xs:complexType>
                <xs:sequence>
                  <xs:element name="EntranceDescription" type="xs:string" minOccurs="0"/>
```

```
                <xs:element name="EntranceInOnly" type="xs:boolean" minOccurs="0"/>
                <xs:element name="EntranceOutOnly" type="xs:boolean" minOccurs="0"/>
                <xs:element name="EntrancePortals" minOccurs="0">
                  <xs:complexType>
                    <xs:sequence>
                      <xs:element name="PortalID" type="xs:IDREF"/>
                      <xs:element name="Info" type="xs:string" minOccurs="0"/>
                      <xs:element name="EntrancePortalAccessibilities" minOccurs="0">
                        <xs:complexType>
                          <xs:sequence>
                            <xs:element ref="RTDns:ADAAccess" maxOccurs="unbounded"/>
                          </xs:sequence>
                        </xs:complexType>
                      </xs:element>
                    </xs:sequence>
                    <xs:attribute name="Count" type="xs:long" use="required"/>
                  </xs:complexType>
                </xs:element>
              </xs:sequence>
              <xs:attributeGroup ref="RTDns:ElementInfo"/>
            </xs:complexType>
          </xs:element>
        </xs:sequence>
        <xs:attribute name="Count" type="xs:long" use="required"/>
      </xs:complexType>
    </xs:element>
    <xs:element name="FacilityPortals" minOccurs="0">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="Portal" type="RTDns:PortalType" maxOccurs="unbounded"/>
        </xs:sequence>
        <xs:attribute name="Count" type="xs:long" use="required"/>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
  <xs:attributeGroup ref="RTDns:ElementInfo"/>
</xs:complexType>
<xs:complexType name="LandmarkCategoryType">
  <xs:sequence>
    <xs:element name="LandmarkCategoryName" type="xs:string"/>
  </xs:sequence>
  <xs:attributeGroup ref="RTDns:ElementInfo"/>
</xs:complexType>
```

```
  <xs:complexType name="SpecialDayType">
    <xs:sequence>
      <xs:element name="SpecialDayName" type="xs:string"/>
      <xs:element name="SpecialDayDescription" type="xs:string" minOccurs="0"/>
      <xs:element name="SpecialDayFromDate" type="xs:date"/>
      <xs:element name="SpecialDayToDate" type="xs:date"/>
    </xs:sequence>
    <xs:attributeGroup ref="RTDns:ElementInfo"/>
  </xs:complexType>
  <xs:complexType name="CarrierSpecialDay">
    <xs:sequence>
      <xs:element name="SpecialDayID" type="xs:IDREF"/>
      <xs:element name="DayTypeID" type="xs:IDREF"/>
      <xs:element name="FromDayTypeID" type="xs:IDREF"/>
      <xs:element name="Description" type="xs:string" minOccurs="0"/>
      <xs:element name="Exceptions" minOccurs="0">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="Exception">
              <xs:complexType>
                <xs:sequence>
                  <xs:element name="RouteID" type="xs:IDREF"/>
                  <xs:element name="DayTypeID" type="xs:IDREF"/>
                  <xs:element name="FromDayTypeID" type="xs:IDREF"/>
                  <xs:element name="ExceptionDescription" type="xs:string" minOccurs="0"/>
                  <xs:element name="ExternalURL" type="xs:string" minOccurs="0"/>
                </xs:sequence>
              </xs:complexType>
            </xs:element>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
    <xs:attributeGroup ref="RTDns:ElementInfo"/>
  </xs:complexType>
  <xs:element name="Status">
    <xs:annotation>
      <xs:documentation>Status - Operational status.
Values:
F - Effective from a particular date
N - Not Ready
T - Valid to a specified date
R - Ready for testing
```

```
E - Errors exist
I - Effective immediately and indefinitely</xs:documentation>
    </xs:annotation>
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:maxLength value="1"/>
        <xs:enumeration value="F">
          <xs:annotation>
            <xs:documentation>F - Effective from a particular date</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="N">
          <xs:annotation>
            <xs:documentation>N - Not Ready</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="T">
          <xs:annotation>
            <xs:documentation>T - Valid to a specified date</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="R">
          <xs:annotation>
            <xs:documentation>R - Ready for testing</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="E">
          <xs:annotation>
            <xs:documentation>E - Errors exist</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="I">
          <xs:annotation>
            <xs:documentation>I - Effective immediately and indefinitely</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
      </xs:restriction>
    </xs:simpleType>
  </xs:element>
  <xs:element name="IntersectionPosition">
    <xs:annotation>
      <xs:documentation>IntersectionPosition - Location relative to the street intersection.
Values:
```

```
N - North of the intersection
S - South of the intersection
E - East of the intersection
W - West of the intersection
NW - NorthWest of the intersection
SW - SouthWest of the intersection
NE - NorthEast of the intersection
SE - SouthEast of the intersection  </xs:documentation>
    </xs:annotation>
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:maxLength value="2"/>
        <xs:enumeration value="N">
          <xs:annotation>
            <xs:documentation>N - North of the intersection</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="S">
          <xs:annotation>
            <xs:documentation>S - South of the intersection</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="E">
          <xs:annotation>
            <xs:documentation>E - East of the intersection</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="W">
          <xs:annotation>
            <xs:documentation>W - West of the intersection</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="NW">
          <xs:annotation>
            <xs:documentation>NW - NorthWest of the intersection</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="SW">
          <xs:annotation>
            <xs:documentation>SW - SouthWest of the intersection</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="NE">
```

```
          <xs:annotation>
            <xs:documentation>NE - NorthEast of the intersection</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="SE">
          <xs:annotation>
            <xs:documentation>SE - SouthEast of the intersection</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
      </xs:restriction>
    </xs:simpleType>
  </xs:element>
  <xs:element name="AppliesTo" default="C">
    <xs:annotation>
      <xs:documentation>AppliesTo - Indicates how the ellement/attribute is applied.
Values:
C - Carrier
T - Transit Type (Mode)
R - Route</xs:documentation>
    </xs:annotation>
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:maxLength value="1"/>
        <xs:enumeration value="C">
          <xs:annotation>
            <xs:documentation>C - Carrier</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="T">
          <xs:annotation>
            <xs:documentation>T - Transit Type (Mode)</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="R">
          <xs:annotation>
            <xs:documentation>R - Route</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
      </xs:restriction>
    </xs:simpleType>
  </xs:element>
  <xs:element name="FareSystemMode">
    <xs:annotation>
```

```
      <xs:documentation>FareSystemMode - A transit service type category characterized by specific right-of-way, technological
and operational features.</xs:documentation>
    </xs:annotation>
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:maxLength value="2"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:element>
  <xs:element name="GeometryAttribute">
    <xs:complexType>
      <xs:attribute name="AttributName" type="xs:string"/>
      <xs:attribute name="AttributeValue"/>
    </xs:complexType>
  </xs:element>
  <xs:element name="PatternCompassDirection">
    <xs:annotation>
      <xs:documentation>PatternCompassDirection - The compass direction of the pattern.
Values:
N - North
S - South
E - East
W - West
NE - NorthEast
NW - NorthWest
SE - SouthEast
SW - SouthWest
CL - Clockwise
CC - Counterclockwise
IB - Inbound
OB - Outbound, LP - Loop</xs:documentation>
    </xs:annotation>
    <xs:simpleType>
      <xs:restriction base="xs:string">
        <xs:maxLength value="2"/>
        <xs:enumeration value="N">
          <xs:annotation>
            <xs:documentation>N - North</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="S">
          <xs:annotation>
            <xs:documentation>S - South</xs:documentation>
```

```
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="E">
    <xs:annotation>
      <xs:documentation>E - East</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="W">
    <xs:annotation>
      <xs:documentation>W - West</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="NE">
    <xs:annotation>
      <xs:documentation>NE - NorthEast</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="NW">
    <xs:annotation>
      <xs:documentation>NW - NorthWest</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="SE">
    <xs:annotation>
      <xs:documentation>SE - SouthEast</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="SW">
    <xs:annotation>
      <xs:documentation>SW - SouthWest</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="CC">
    <xs:annotation>
      <xs:documentation>CC - Clockwise</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="CL">
    <xs:annotation>
      <xs:documentation>CW - Counterclockwise</xs:documentation>
    </xs:annotation>
  </xs:enumeration>
  <xs:enumeration value="IB"/>
```

```
        <xs:enumeration value="OB"/>
        <xs:enumeration value="LP"/>
      </xs:restriction>
    </xs:simpleType>
  </xs:element>
  <xs:attributeGroup name="ElementInfo">
    <xs:annotation>
      <xs:documentation>Set of attributes common for most of elements. Includes ID, ExternalID and
ChangeStatus.</xs:documentation>
    </xs:annotation>
    <xs:attribute name="ID" type="xs:ID" use="required">
      <xs:annotation>
        <xs:documentation>ID attribute represents internal system ID used to address elements in the original data source (your
database ID). At the same time this id must be unique in the particular XML for the element of the same type (e.g. stop element
can have same ID as route element but this ID must be unique along the stops)
</xs:documentation>
      </xs:annotation>
    </xs:attribute>
    <xs:attribute name="ExternalID" type="xs:string" use="optional">
      <xs:annotation>
        <xs:documentation>
External database ID. In case of export from RTD it is ID used by agency in XML as unique primary ID and preserved in database.
In case of import into RTD this element will be used trying to identify objects already existing in the database (RTD).
        </xs:documentation>
      </xs:annotation>
    </xs:attribute>
    <xs:attribute name="ChangeStatus" use="optional" default="0">
      <xs:annotation>
        <xs:documentation>
ChangeStatus- shows object change status.
  Values:
  0 - Unknown / No cahanges (default value)
  1 - New object
  2 - Attributes changed
  3 - Geometry changed
  4 - Object deleted
        </xs:documentation>
      </xs:annotation>
      <xs:simpleType>
        <xs:restriction base="xs:integer">
          <xs:enumeration value="0">
            <xs:annotation>
              <xs:documentation>0 - Unknown / No cahanges (default value)</xs:documentation>
```

```
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="1">
          <xs:annotation>
            <xs:documentation>1 - New object</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="2">
          <xs:annotation>
            <xs:documentation>2 - Attributes changed</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="3">
          <xs:annotation>
            <xs:documentation>3 - Geometry changed</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="4">
          <xs:annotation>
            <xs:documentation>4 - Object deleted</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
      </xs:restriction>
    </xs:simpleType>
  </xs:attribute>
</xs:attributeGroup>
<xs:annotation>
  <xs:documentation>MDV TripPlanner/DIVA specific types</xs:documentation>
</xs:annotation>
<xs:complexType name="TransferMatrixType">
  <xs:sequence>
    <xs:element ref="RTDns:ADAAccess"/>
    <xs:element name="FromMode" type="RTDns:ModeType">
      <xs:annotation>
        <xs:documentation>Origin Means of Transportation</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="ToMode" type="RTDns:ModeType">
      <xs:annotation>
        <xs:documentation>Destination Means of Transportation</xs:documentation>
      </xs:annotation>
    </xs:element>
    <xs:element name="InterchangeTime">
```

```
      <xs:annotation>
        <xs:documentation>This indicates the time it takes to transfer from Origin MOT to Destination MOT</xs:documentation>
      </xs:annotation>
      <xs:simpleType>
        <xs:restriction base="xs:decimal">
          <xs:totalDigits value="7"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
  </xs:sequence>
  <xs:attributeGroup ref="RTDns:ElementInfo"/>
</xs:complexType>
<xs:complexType name="InterchangeBreakInfoType">
  <xs:annotation>
    <xs:documentation>Contains passenger information in case of broken interchanges.</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="InterchangeValidity" type="xs:IDREF"/>
    <xs:element name="InterchangeHeadline">
      <xs:annotation>
        <xs:documentation>Headline </xs:documentation>
      </xs:annotation>
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:length value="100"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="InterchangeInformation">
      <xs:annotation>
        <xs:documentation>General information displayed when connection is broken </xs:documentation>
      </xs:annotation>
      <xs:simpleType>
        <xs:restriction base="xs:string">
          <xs:length value="4000"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="Recommendation">
      <xs:annotation>
        <xs:documentation>Recommendation when interchange is broken</xs:documentation>
      </xs:annotation>
      <xs:simpleType>
```

```
          <xs:restriction base="xs:string">
            <xs:length value="4000"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
    </xs:sequence>
    <xs:attributeGroup ref="RTDns:ElementInfo"/>
  </xs:complexType>
  <xs:complexType name="InterchangeValidityType">
    <xs:annotation>
      <xs:documentation>This defines certain parameters for calculation of a defined interchange in dependency of the time of
day</xs:documentation>
    </xs:annotation>
    <xs:sequence>
      <xs:element name="InterchangeDefinition" type="xs:IDREF">
        <xs:annotation>
          <xs:documentation>ID of Interchange Definition </xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="StartTime" type="xs:dateTime">
        <xs:annotation>
          <xs:documentation>Time of day from which parameters are valid (sec after midnight) </xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="EndTime" type="xs:dateTime">
        <xs:annotation>
          <xs:documentation>Time of day until which parameters are valid (sec after midnight) </xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="MinimumInterchangeTime">
        <xs:annotation>
          <xs:documentation>Minimum interchange time (System will not calculate interchanges below this value)
</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:decimal">
            <xs:totalDigits value="6"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="MaximumInterchangeTime">
        <xs:annotation>
```

```
          <xs:documentation>Maximum interchange time (System will not calculate interchanges above this value)
</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:decimal">
            <xs:totalDigits value="6"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="MaximumDelayAuto" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Maximum time (sec) that the control centre may automatically delay the distributor journey in case
the feeder journey is late </xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:decimal">
            <xs:totalDigits value="6"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="MaximumDelayManual" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Maximum time (sec) that a control centre employee may manually delay the distributor journey in case
the feeder journey is late </xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:decimal">
            <xs:totalDigits value="6"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="InterchangeBreakInfos" minOccurs="0">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="InterchangeBreakInfo" type="RTDns:InterchangeBreakInfoType" minOccurs="0" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
    <xs:attributeGroup ref="RTDns:ElementInfo"/>
  </xs:complexType>
  <xs:complexType name="InterchangeDefinitionType">
    <xs:annotation>
```

```
      <xs:documentation>Definition for a given stop or stop pair and a given set of feeder/distributor routes.</xs:documentation>
    </xs:annotation>
    <xs:sequence>
      <xs:element name="InterchangeDayType">
        <xs:annotation>
          <xs:documentation>DayType for Which this definition is valid.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:decimal">
            <xs:totalDigits value="10"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="InterchangeStartStop" type="xs:string">
        <xs:annotation>
          <xs:documentation>Interchange starting Stop </xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="InterchangeEndStop" type="xs:string">
        <xs:annotation>
          <xs:documentation>Interchange Ending Stop</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="InterchangeOriginStop" type="xs:IDREF" minOccurs="0">
        <xs:annotation>
          <xs:documentation>This field acts as a filter. If set, only Trips which come from the specified stop are taken into
account. E.g. if there is short working on the feeder route, it is possible to exclude trips which do not cover the whole
route</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="InterchangeDestinationStop" type="xs:IDREF" minOccurs="0">
        <xs:annotation>
          <xs:documentation>This field acts as a filter. If set, only trips which will go to the specified stop are taken into
account.</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="InterchangeUsageFlag" minOccurs="0">
        <xs:annotation>
          <xs:documentation>This flag controls the usage of the Interchange definition throughout the system.</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:decimal">
            <xs:totalDigits value="11"/>
```

```
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="InterchangeControlCenter" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Control Center id (of the control center which monitors this interchange) </xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:decimal">
            <xs:totalDigits value="10"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="InterchangeDefinitionForeignKey" minOccurs="0">
        <xs:annotation>
          <xs:documentation>For cross platform interchange monitoring: key of this interchange definition in external system
</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="20"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="InterchangeRoute" type="xs:IDREF" minOccurs="0"/>
      <xs:element name="InterchangeValidities" minOccurs="0">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="InterchangeValidity" type="RTDns:InterchangeValidityType" minOccurs="0" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="DefinitionGroup" minOccurs="0">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="DefinitionGroupShortName">
              <xs:simpleType>
                <xs:restriction base="xs:string">
                  <xs:maxLength value="10"/>
                </xs:restriction>
              </xs:simpleType>
            </xs:element>
            <xs:element name="DefinitionGroupLongName">
```

```
            <xs:simpleType>
              <xs:restriction base="xs:string">
                <xs:maxLength value="100"/>
              </xs:restriction>
            </xs:simpleType>
          </xs:element>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
  <xs:attributeGroup ref="RTDns:ElementInfo"/>
</xs:complexType>
<xs:complexType name="FootWalkMatrixType">
  <xs:annotation>
    <xs:documentation>Describes footwalks between areas and their properties</xs:documentation>
  </xs:annotation>
  <xs:sequence>
    <xs:element name="StartStopAreaID" type="xs:string"/>
    <xs:element name="EndStopAreaID" type="xs:string"/>
    <xs:element name="AttributeFlag">
      <xs:simpleType>
        <xs:restriction base="xs:decimal">
          <xs:totalDigits value="11"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="PropertyFlag">
      <xs:simpleType>
        <xs:restriction base="xs:decimal">
          <xs:totalDigits value="11"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="FixedTime">
      <xs:simpleType>
        <xs:restriction base="xs:decimal">
          <xs:totalDigits value="7"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="VariableTime">
      <xs:simpleType>
        <xs:restriction base="xs:decimal">
```

```
            <xs:totalDigits value="7"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="Distance">
        <xs:simpleType>
          <xs:restriction base="xs:decimal">
            <xs:totalDigits value="6"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="IsBlocked" type="xs:boolean"/>
      <xs:element name="Description">
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:length value="255"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="FootWalkForcePoint" minOccurs="0" maxOccurs="unbounded">
        <xs:annotation>
          <xs:documentation>Defines intermediate Stops which cannot be avoided when using a particular
footwalk.</xs:documentation>
        </xs:annotation>
        <xs:complexType>
          <xs:sequence>
            <xs:element name="FootWalkMatrixID" type="xs:IDREF"/>
            <xs:element name="StopAreaID" type="xs:IDREF"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="FootWalkElement" minOccurs="0" maxOccurs="unbounded">
        <xs:annotation>
          <xs:documentation>Describes Obstacles to be found on footway (e.g. stairs)</xs:documentation>
        </xs:annotation>
        <xs:complexType>
          <xs:sequence>
            <xs:element name="Quantity">
              <xs:simpleType>
                <xs:restriction base="xs:decimal">
                  <xs:totalDigits value="2"/>
                </xs:restriction>
              </xs:simpleType>
```

```
          </xs:element>
          <xs:element name="Attribute">
            <xs:simpleType>
              <xs:restriction base="xs:decimal">
                <xs:totalDigits value="11"/>
              </xs:restriction>
            </xs:simpleType>
          </xs:element>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
  <xs:attributeGroup ref="RTDns:ElementInfo"/>
</xs:complexType>
<xs:complexType name="StopAreaType">
  <xs:sequence>
    <xs:element name="StopID" type="xs:string"/>
    <xs:element name="StopAreaNumber">
      <xs:simpleType>
        <xs:restriction base="xs:decimal">
          <xs:totalDigits value="2"/>
        </xs:restriction>
      </xs:simpleType>
    </xs:element>
    <xs:element name="ShortName">
      <xs:simpleType>
        <xs:restriction base="xs:string"/>
      </xs:simpleType>
    </xs:element>
    <xs:element name="LongName">
      <xs:simpleType>
        <xs:restriction base="xs:string"/>
      </xs:simpleType>
    </xs:element>
    <xs:element name="StopAreaFootWalkMatrix" minOccurs="0">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="FootWalkMatrix" type="RTDns:FootWalkMatrixType" minOccurs="0" maxOccurs="unbounded"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
  </xs:sequence>
  <xs:attributeGroup ref="RTDns:ElementInfo"/>
```

```
  </xs:complexType>
  <xs:complexType name="NoteType">
    <xs:annotation>
      <xs:documentation>NoteType - Notes or information for users which can be displayed on trips.</xs:documentation>
    </xs:annotation>
    <xs:sequence>
      <xs:element name="ShortName">
        <xs:simpleType>
          <xs:restriction base="xs:string"/>
        </xs:simpleType>
      </xs:element>
      <xs:element name="DisplayType">
        <xs:annotation>
          <xs:documentation>DisplayType - Used to control display of Notes values:
0 - Display Always
1 - Display only when Boarding
2 - Display only when alighting
3 - Display only when on board</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:decimal">
            <xs:enumeration value="0"/>
            <xs:enumeration value="1"/>
            <xs:enumeration value="2"/>
            <xs:enumeration value="3"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="ContentType">
        <xs:annotation>
          <xs:documentation>ContentType - Used to indiacate the type of Note values:
0- General
1- Train Name
2- Telephone Number
3- Bicycle Regulation
4- Track Usage</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:decimal">
            <xs:enumeration value="0"/>
            <xs:enumeration value="1"/>
            <xs:enumeration value="2"/>
            <xs:enumeration value="3"/>
```

```
            <xs:enumeration value="4"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="UsageFlag" type="xs:decimal">
        <xs:annotation>
          <xs:documentation>UsageFlag - Enables/disables Notes for different Media such as Trip Planner, Schedules
values:
</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="Url" minOccurs="0">
        <xs:annotation>
          <xs:documentation>Url - Link to detailed information on this Note</xs:documentation>
        </xs:annotation>
        <xs:simpleType>
          <xs:restriction base="xs:string"/>
        </xs:simpleType>
      </xs:element>
      <xs:element name="Priority" type="xs:decimal">
        <xs:annotation>
          <xs:documentation>Priority -  This is used to control disply of Note on Web and Printout</xs:documentation>
        </xs:annotation>
      </xs:element>
      <xs:element name="Content" type="xs:string" minOccurs="0"/>
    </xs:sequence>
    <xs:attributeGroup ref="RTDns:ElementInfo"/>
  </xs:complexType>
  <xs:complexType name="TransferType">
    <xs:annotation>
      <xs:documentation>Describes transfer applied in system</xs:documentation>
    </xs:annotation>
    <xs:sequence>
      <xs:element ref="RTDns:AppliesTo"/>
      <xs:element name="TransferToCarrierID" minOccurs="0">
        <xs:simpleType>
          <xs:restriction base="xs:string">
            <xs:maxLength value="2"/>
          </xs:restriction>
        </xs:simpleType>
      </xs:element>
      <xs:element name="TransferFromRouteID" type="xs:IDREF" minOccurs="0"/>
      <xs:element name="TransferToRouteID" type="xs:IDREF" minOccurs="0"/>
```

```
      <xs:element name="TransferRiderCategoryTypeID" type="xs:IDREF" minOccurs="0"/>
      <xs:element name="TransferFareInstrumentType" type="RTDns:FareInstrumentType"/>
      <xs:element name="TransferExceptionDescription" type="xs:string" minOccurs="0"/>
      <xs:element name="TransferNotes" minOccurs="0">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="TransferNote" type="RTDns:NoteType" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
    <xs:attributeGroup ref="RTDns:ElementInfo"/>
  </xs:complexType>
  <xs:element name="ADAAccess" default="0">
    <xs:annotation>
      <xs:documentation>ADAAccess - A numeric code indicating the special accessibility status.
Values:
0 - Unknown
1 - No ADA
2 - Full ADA
3 - Wheel Chair
4 - Blind
5 - Deaf
6 - Blind/Wheel Chair
7 - Deaf/Blind
8 - Deaf/Wheel Chair</xs:documentation>
    </xs:annotation>
    <xs:simpleType>
      <xs:restriction base="xs:decimal">
        <xs:enumeration value="0">
          <xs:annotation>
            <xs:appinfo>Unknown</xs:appinfo>
            <xs:documentation>0 - Unknown</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="1">
          <xs:annotation>
            <xs:documentation>1 - No ADA</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="2">
          <xs:annotation>
            <xs:documentation>2 - Full ADA</xs:documentation>
```

```
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="3">
          <xs:annotation>
            <xs:documentation>3 - Wheel Chair</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="4">
          <xs:annotation>
            <xs:documentation>4 - Blind</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="5">
          <xs:annotation>
            <xs:documentation>5 - Deaf</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="6">
          <xs:annotation>
            <xs:documentation>6 - Blind/Wheel Chair</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="7">
          <xs:annotation>
            <xs:documentation>7 - Deaf/Blind</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
        <xs:enumeration value="8">
          <xs:annotation>
            <xs:documentation>8 - Deaf/Wheel Chair</xs:documentation>
          </xs:annotation>
        </xs:enumeration>
      </xs:restriction>
    </xs:simpleType>
  </xs:element>
  <xs:simpleType name="ModeType">
    <xs:annotation>
      <xs:documentation>ModeType - A transit service type category characterized by specific right-of-way, technological and
operational features.
Values:
TR - Aerial Tramway
PB - Publico
RT - Personal Rapid Transit
```

```
OR - Other
MM - Multi-mode
MO - Monorail
LR - Light Rail
JT - Jitney
IP - Inclined Plane
HR - Heavy Rail
VP - Vanpool
TB - Trolleybus
T - Train
CC - Cable Car
CR - Commuter Rail
DR - Demand Responsive
F - Ferry Boat
DM - Dual Mode
B - Bus
AG - Automated Guideway</xs:documentation>
    </xs:annotation>
    <xs:restriction base="xs:string">
      <xs:whiteSpace value="collapse"/>
      <xs:length value="2"/>
    </xs:restriction>
  </xs:simpleType>
</xs:schema>
```