



## Catalog of Products and Services

**Telcordia®**

Routing Administration (TRA)

*The Industry Source for Routing and Rating Information*

**May 2011**

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with telcordia expertise

# Telcordia® Routing Administration Catalog of Products

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## General Information

# Welcome to the Telcordia<sup>®</sup> Routing Administration

Telecommunications data is in high demand. Service providers, database managers, and companies within and outside the telecommunications industry need and utilize this data to maximize their business potential.

Critical applications such as call routing, call rating and billing, numbering assignment processes, and nearly any application that utilizes Telcordia Routing Administration's (TRA's) data on the Public Switched Telephone Network (PSTN) depend on having access to the accurate, timely, and comprehensive data provided by TRA data products. Data is also used by geographical information systems and applications, locator services, revenue assurance processes, credit card services, least cost routing processes, call centers, transportation tracking, law enforcement, and countless related types of services.

TRA has been providing data to the telecommunications industry since 1984. Many of our products are a mainstay in supporting the various offerings of service providers, in ensuring their networks are operating properly and efficiently and, bottom line, in ensuring calls placed by their customers and through their network complete without any problems. The extremely high percentage of call completion and billing accuracy that people have come to expect within the areas covered by the North American Numbering Plan (U.S., U.S. Territories, Canada, Bermuda, and parts of the Caribbean) are supported by the data that TRA provides. Numerous regulatory bodies, industry guidelines, and industry standards cite TRA products as necessary and critical to telecommunications products and services within the NANP. TRA works together with these groups to address completeness, accuracy, and consistency in as many areas as possible relative to the data it provides.

TRA products have been enhanced over time to encompass telecommunications data needs for a wide array of users (not just service providers), and to include data that extends worldwide (beyond the NANP).

### ***Differentiators You Can Trust:***

- Our products contain data "directly from the source" (e.g. service providers, agencies assigning numbering, etc.) both domestically and worldwide, a large portion of which is directly input by service providers themselves.
- Because of our data sources, our data accuracy and timeliness are of the highest quality. Avoid increased operational and financial risks that could occur by using delayed, outdated or incomplete data provided by other sources. Data quality is a major factor in regards to cost efficient operations.

### ***Benefits of Telcordia<sup>®</sup> TRA Data Products:***

- Save valuable staff time and expense incurred in compiling, assessing, and maintaining data.
- Since the majority of our products constitute *data* in standard, easy to access formats, as opposed to hard-to-use, involved, self-contained applications, it is convenient for you to manage the integration of this data into your specific business applications, internal databases, and operational processes in a straightforward manner.
- Through the enterprise licensing of our products, the benefits of our data can be extended to everyone in your company to meet a myriad of needs based on a common and consistent source of data. Reduce the time spent on discrepancy resolution within your company as well as other problems that can result from obtaining similar data from a multitude of sources.

- TRA's customer care and technical staff are available to assist with your understanding of the data and in explaining how and why data variations may occur throughout the industry.
- Our ongoing interactions with industry service providers, regulators, industry standards groups, and other related services and products managed by Telcordia® Technologies permits us to serve as a conduit to align your needs, questions, etc., with other companies, industry standards, and supporting applications, amounting to a win-win situation for all involved.

TRA is proud to serve as your number one source of telecommunications data. This catalog provides you an overview of TRA's products and services. In addition, please visit our website at [www.trainfo.com](http://www.trainfo.com) which provides additional information as well as free downloadable samples of most of our products.

If you have any questions that are not readily answered by this catalog or at our website, we welcome you to call our Customer Care Center at 866-NPA-NXXS (866-672-6997) or 732-699-6700 so that we may assist you further.

*Sincerely,*

**Telcordia® Routing Administration**

## General Information

# User Profile and Benefits

Since their inception, TRA products have found their way into many different types of businesses to meet an increasingly wide variety of needs. While continuing to work within and support our historic focus on the telecommunications industry, we are constantly working with our customers, both inside and outside the industry, to develop new approaches to using our data, and maximizing its benefits.

The following few pages provide a quick summary of the type of jobs, functions, and processes that each product can support, as well as potential benefits to your company. However, these pages are just a guide and by no means all inclusive. For additional product information, we invite you to review the product details provided in the remainder of the catalog, visit our website at [www.trainfo.com](http://www.trainfo.com), or call the TRA Customer Care Center.

Telcordia® Product	Who Might Use the Product	Benefits to Your Company
<p><b>LERG™ Routing Guide</b></p> <p><b>LERG™ Tools:</b></p> <ul style="list-style-type: none"> <li>• <b>LERG™ OnLine</b></li> </ul>	<ul style="list-style-type: none"> <li>• Engineers responsible for call routing and switch translations</li> <li>• Engineers needing switch homing arrangements</li> <li>• Planners/architects who need to prepare for network changes</li> <li>• Those involved with preparing, supporting, and maintaining interconnection agreements</li> <li>• Companies entering the telecommunications industry or a new market area who need a recognized source for information on the existing circuit switched network elements in the area</li> </ul>	<ul style="list-style-type: none"> <li>• Properly route and complete all your calls</li> <li>• Avoid lost revenue and maintain customer satisfaction</li> <li>• Get physical routing details to support your interconnection agreements and save your company time and money</li> <li>• Prepare for the 2-3% per month network changes that occur when you get planned network change data months in advance</li> <li>• Get Rate Center information used in your rating and billing processes</li> <li>• LERG OnLine is updated daily with change activity</li> </ul>
<p><b>TPM™ Data Source</b></p>	<ul style="list-style-type: none"> <li>• Call rating and billing operations staff</li> <li>• Users needing to verify billing and call detail records</li> </ul>	<ul style="list-style-type: none"> <li>• Easy manipulation using Microsoft® Access database reduces need for complex programming</li> <li>• Data to support accurate billing and avoidance of revenue loss</li> <li>• Associate appropriate revenue accounting office (RAO) to NPA NXXs</li> </ul>
<p><b>Local Calling Area Data Source (LCADS)</b></p>	<ul style="list-style-type: none"> <li>• Wireless Providers</li> <li>• Local Exchange Carriers (LECs) and Competitive Local Exchange Carriers (CLECs)</li> <li>• Internet Service Providers (ISPs)</li> <li>• Coin telephone operations</li> <li>• PBX table maintenance staff</li> </ul>	<ul style="list-style-type: none"> <li>• Determine where to put a new cell site for service expansion</li> <li>• Build and maintain Trunk Groups, Routing Orders and Switch Translations</li> <li>• Helps determine new service areas</li> <li>• Provides list of numbers to use for local dial-up service</li> </ul>

Telcordia® Product	Who Might Use the Product	Benefits to Your Company
<b>Telemarketing Data Source (TDS)</b>	<ul style="list-style-type: none"> <li>• Call center operations and database engineers</li> <li>• Anyone needing to distinguish wireless number exchanges from pager or landline ones</li> </ul>	<ul style="list-style-type: none"> <li>• Easy search function allows you to segment by State, Country or all records</li> <li>• Data file can be integrated with other databases you may use in assessing calls</li> </ul>
<b>NPA NXX Active Code List (NNACL)</b>	<ul style="list-style-type: none"> <li>• Telemarketers, credit card companies, customer service groups, and others maintaining customer lists/databases</li> <li>• PBX table maintenance staff</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain your internal operations and processes at peak efficiency with a complete listing of all ACTIVE NPA NXX codes within the North American Numbering Plan</li> <li>• Includes Thousands–Block level details for areas where assignments are made at that level</li> </ul>
<b>NPA NXX Activity Guide (NNAG)</b>	<ul style="list-style-type: none"> <li>• Telemarketers, credit card companies, customer service groups, and others maintaining customer lists/databases</li> <li>• PBX table maintenance staff</li> </ul>	<ul style="list-style-type: none"> <li>• Prepare for all FUTURE NPA NXX codes adds, changes and disconnects with a complete code change listing within the North American Numbering Plan area</li> <li>• Includes Thousands–Block level details for areas where assignments are made at that level</li> </ul>
<b>LIDB Access Routing Guide (LARG)</b>	<ul style="list-style-type: none"> <li>• Alternate Billing Service providers and database maintenance staff</li> <li>• Users needing to route SS7 Queries to LIDB databases</li> </ul>	<ul style="list-style-type: none"> <li>• Critical source of data to populate global title translation tables within the STP that will save staff time, increase accuracy and improve performance</li> <li>• Reduces misrouted or failed calls for third-party billing, collect calls and calling card calls</li> <li>• Recovers revenues and reduces customer complaints</li> </ul>
<b>Calling Name Access Routing Guide (CNARG)</b>	<ul style="list-style-type: none"> <li>• Service providers and database maintenance staff who need access to calling name information in order to provide calling party's name to end users</li> </ul>	<ul style="list-style-type: none"> <li>• A complete source of data to populate global title translation tables within the STP that will save staff time and money</li> <li>• Increase accuracy of data</li> </ul>
<b>Telephone Area Code Directory (TACD)</b>	<ul style="list-style-type: none"> <li>• Telephone operators and administration staff in many diverse organizations, such as law offices, universities, hospitals, and large businesses</li> </ul>	<ul style="list-style-type: none"> <li>• An essential reference for Area Codes by state and locality that saves staff time in researching such information</li> </ul>

Telcordia® Product	Who Might Use the Product	Benefits to Your Company
<b>Emergency Notifications (ENs)</b>	<ul style="list-style-type: none"> <li>• Engineers responsible for call routing and switch translations</li> <li>• Network planners/architects who need to prepare for coming changes</li> <li>• Call rating and billing operations staff</li> </ul>	<ul style="list-style-type: none"> <li>• Maintain accurate operations with information on new NPA NXXs that have been announced late relative to their effective date</li> <li>• Supports LERG™ Routing Guide and TPM™ Data Source products</li> </ul>
<b>Area Code Split Exchange Data (ACSED)</b>	<ul style="list-style-type: none"> <li>• Any group maintaining customer lists/databases containing telephone data for telemarketing or customer service</li> </ul>	<ul style="list-style-type: none"> <li>• Prepare for Area Code splits with this quarterly product</li> <li>• Provides an up-to-date listing of the NXXs involved with all North American Numbering Plan Area Code splits</li> </ul>
<b>Vertical and Horizontal Calculation Software (VHCALC)</b>	<ul style="list-style-type: none"> <li>• Switch manufacturers</li> <li>• Network planners</li> <li>• Cartographers developing special purpose maps</li> </ul>	<ul style="list-style-type: none"> <li>• Save staff time with a software tool that translates latitude and longitude and V and H coordinates for new switch installations, Rate Centers and points of interconnection; can also compute distance</li> </ul>
<b>Geographic Exchange List (GEL)</b>	<ul style="list-style-type: none"> <li>• Market planners</li> <li>• Cartographers developing special purpose maps</li> </ul>	<ul style="list-style-type: none"> <li>• A single, accurate source for geographic information contained in the LERG™ Routing Guide and TPM™ Data Source associated with an NPA NXX</li> </ul>

## General Information

### **Target Market and Selected Benefits**

The Telcordia® Routing Administration provides an array of products that serve the varied needs of local and long distance telephone companies, new competitive local exchange companies, wireless carriers, value added resellers, telemarketing and customer care organizations, map developers and other businesses and organizations that depend on accurate “snap-shots” of the PSTN.

***Examples of job functions or organizations using these products are:***

- Engineers responsible for call routing and switch translations
- Network planners/architects preparing for changes
- Groups maintaining customer lists/databases
- Switch manufacturers
- Signaling Network Control Center staff
- Marketing managers planning new service and product introductions
- Call rating and billing staff
- Forecasters (marketing, network, etc.)
- Operator services staff
- PBX maintenance personnel and PBX administrators
- Coin telephone operations staff
- Cartographers developing special purpose maps
- Telephone receptionists, secretaries, office administration staff

***TRA products provide value and benefit clients in many ways. Some examples are:***

- Data to properly route/complete calls to avoid lost revenue and maintain customer confidence and satisfaction
- Data to support and correlate with interconnection agreements
- Preparing for the 2-3% per month changes network configurations, numbering, etc.
- Being on top of planned NPA NXX codes, blocks, and new Area Codes
- Data for accurate billing settlements and revenue collection
- Vertical and Horizontal coordinates translations (based on Latitude and Longitude) for switches, Rate Centers, points of interconnection
- A single source of data for populating LIDB and Calling Name global title translation tables within the Signal Transfer Points (STPs)
- Area Code, town, state, time zone data for placing calls and updating internal lists

## General Information

# How to Use the TRA Product Catalog

Each product description in this catalog contains information that discusses product applications, benefits and, in most cases, provides examples of data formats. Each product description indicates when the product is produced, available distribution frequency, and available distribution formats. Towards the end of the catalog is an explanation of our pricing, ordering procedures, Enterprise Licenses, and policies.

Note that TRA data products have been developed to support a wide range of users with varying needs. In this regard, some data elements such as NPA NXX block information are an integral part of, and common across, several products. In choosing a particular product to meet your needs, you should consider your need for the extent of data being provided in a given product, how the data is provided (e.g. ASCII files, database, etc.), the product's production schedule (e.g. monthly, quarterly, etc.), and the product's distribution format choices.

To ensure a smooth process for you and TRA, and especially if you are a new customer, it is recommended that you contact our Customer Care Center with any questions about a particular product, and/or for assistance in completing the TRA Price and Order Request Forms.

### ***Product Distribution / Format:***

Unless otherwise noted, all products are issued in their entirety with each issuance. For example, an annual subscription to a product created monthly equates to your receiving a full new product each month whose data reflects any changes that occurred since the previous issuance.

The most commonly used methods of obtaining TRA products is via download from a secured TRA Internet website and, for some products, via CD-ROM. Some products also may be emailed or transmitted via electronic data transfer.

Note that the original diskette means of distributing some products has been discontinued as a formal offering.

*Note: Media availability varies by product*

**Web Download:** TRA products can be downloaded from a secure, username/password/IP address protected website maintained by TRA. An account set-up form needs to be filled out and returned to TRA to receive products via this method.

**CD-ROM:** TRA products provided on CD-ROM contain data in fixed-record ASCII flat files and include supporting information in text based (.txt) or Microsoft® Word (.doc) files. Some may also have the data in a pre-loaded Microsoft® Access database to help view and use the data without needing programming expertise.

**Email:** Some (smaller file size) products can be delivered via email.

**Electronic Data Transfer:** Some products may also be available via an electronic data transfer service that employs, a third-party software package called CONNECT:Direct (Stirling Software). Requests to use this from a new TRA CONNECT:Direct customer will be addressed on a case by case basis (focused on technical efforts, etc.). If you decide to proceed, there will be a minimum \$1000 set-up fee.

## ***Product Examples / Samples:***

In several product descriptions in this catalog, **examples of data** in a screen print or report format illustrate the type of data a product provides. These examples, as well as this catalog in general, are provided to assist in your understanding of the pertinent aspects of a product. Examples should not be considered tutorials, should not be deemed to reflect the most recent information, and should not be considered all-inclusive.

In addition, several **product samples**, intended to provide you with an understanding of the nature of the product and its data, are available via download, at no charge, at [www.trainfo.com](http://www.trainfo.com). Samples include supporting document files regarding the product. The data included in samples may be past dated and comprise just a subset of the total records involved with each product; nonetheless, samples are comprehensive in representing the product.

# Telcordia® LERG™ Routing Guide

The Telcordia® LERG™ Routing Guide contains current information about the local Public Switched Telephone Network (PSTN) and includes scheduled future activity associated with the network. Initially designed for routing of interLATA calls by interexchange carriers, the LERG™ Routing Guide has evolved to provide support for information exchange between all local service providers (CLECs, wireless providers, ISPs, etc.), and has grown to serve as a source for performing network analysis, marketing and demographic analysis, and many other uses uncovered by our customers.

The LERG™ Routing Guide provides routing details to support your interconnection agreements, saving your company time and potential loss of revenue. It supports proper routing and completion of all calls, and thus helps maintain customer satisfaction.

The LERG CD and web-downloadable LERG contain fixed formatted data files as well as the same data pre-loaded into a Microsoft® Access database.

## ***The LERG™ Routing Guide is a valuable resource for:***

- Engineers responsible for call routing and switch translations
- Network planners/architects who need to prepare for future changes
- Those involved with preparing, supporting, and maintaining interconnection agreements
- Companies entering the telecommunications industry or a new market area who need a trusted source of information on the existing circuit switched network elements in the area

A free downloadable sample of a complete LERG™ Routing Guide, as you will receive in a standard issuance but containing slightly older data and a small percentage of the full volume of data, is available for your review at [www.trainfo.com](http://www.trainfo.com) (catalog tab).

Each issuance of the LERG™ Routing Guide is a complete replacement of the previous issuance. Files exist that indicate records that were added, changed, or removed on a month-to-month basis.

**The LERG™ Routing Guide General Information Section (also available as a download from [www.trainfo.com](http://www.trainfo.com) (documents tab)) is included with each LERG and provides information on:**

- Data Glossary (data definitions)
- System Codes (Routing Code 1XX), Service Codes, North American Numbering Plan Universal Central Office Codes (NXXs), and Operator Service Codes
- Signaling System 7 (SS7) Network Codes
- Vertical Service Codes
- Automatic Number Identification Information Indicator (ANI II) Digits Codes
- Also, high level information regarding:
  - 900 NXX Codes
  - Toll Free (e.g. 800) Codes
  - 500 NXX Personal Communications Services
  - 710 NXX Codes

## ***LERG™ Routing Guide data files provide data regarding:***

- Operating Company Numbers, Company Names, Routing Contacts
- Country Code Assignments
- NPA Information (i.e., Area Codes)
- LATA Codes By Region
- Destination Codes (Area Codes / Prefixes) (NPA NXX Thousands-Blocks assignments for the United States and its territories, Canada, Bermuda, and 16 Caribbean countries)
- Oddball NXXs (e.g. 911, 976)

- Switching Entity Record detail (e.g. Equipment Type, V&H Coordinates)
- Rate Center details (e.g. V&H Coordinates) and Localities (including counties and postal codes)\*
- Switch Homing Arrangements (tandem and other switch-to-switch interconnections)
- Operator Access Tandem Codes (ATCs)
- Location Routing Numbers (LRNs)

\* Counties and postal codes currently pertain to only U.S. data

### ***Fixed - Record ASCII Format Files:***

The fixed-record ASCII format files of the LERG™ Routing Guide are provided as multiple data sets/files and utilize over 300MB of storage.

You may obtain a copy of LERG data file layouts and specifications at no charge by downloading them from [www.trainfo.com](http://www.trainfo.com) (documents tab) or by calling our Customer Care Center to request a copy by email.

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### ***Telcordia® LERG™ Routing Guide:***

***Produced: first workday monthly***

***Distribution frequency: monthly or quarterly (March, June, September, December)***

***Distribution format(s): web download, CD-ROM, electronic data transfer (monthly subscribers only and assessed on a case by case basis)***

### ***CD-ROM:***

Each CD-ROM has data provided in two formats: (1) fixed-record ASCII format and (2) a copy of the files in a pre-loaded Microsoft® Access database that permits users to utilize the selection, sorting, analyses and report generation capabilities of Microsoft® Access.

### ***Web Download:***

Both formats on the CD-ROM can be downloaded from a secured TRA Internet website. You benefit by having the ability to download a product several days earlier than if received by mail. You may download a product anytime within the month for monthly products (or subscription period for other products).

### ***Electronic Data Transfer:***

The LERG™ Routing Guide product may also be available to you via an electronic data transfer service that employs CONNECT:Direct, a third-party software package (Stirling Software). Requests to use CONNECT:Direct from a new TRA CONNECT:Direct customer will be addressed on a case by case basis (focused on technical efforts, etc.). If you decide to proceed, there is a minimum \$1000 set-up fee.

## LERG™ One-Day Changes Process:

Subscribers to the monthly LERG™ Routing Guide have the option to also subscribe to the LERG™ One-Day Changes Process. Data changes in the underlying databases are analyzed daily to provide files reflecting day-to-day changes. This produces a set of files that denote daily changes in a format consistent with the following subset of LERG™ Routing Guide files:

- LERG1 (OCN)
- LERG6 (NPA NXX)
- LERG7 (Switch)
- LERG7SHA (Switch Homing)
- LERG12 (Location Routing Numbers (LRNs))

The files provided in this process are in a flat (fixed-record) file format only. They contain only those records that have undergone a change (added, removed, and modified) each calendar day and are not a complete file replacement. Integration of the changes into the LERG™ is the responsibility of the end user since users handle the LERG data in many different ways.

LERG One Day Process data is downloadable from a secured Internet site and requires a logon and password from TRA (through this the user can also establish a daily email transmission of the files). The data is also available via a CONNECT:Direct electronic data transfer service (use of CONNECT:Direct as a means to receive this product may be restricted for new TRA CONNECT:Direct customers). The LERG™ One-Day Changes Process is available free of charge to customers with a monthly LERG™ Routing Guide Enterprise License.

**Telcordia® LERG™ One Day Process:**

**Produced: daily (files issued each workday)**

**Distribution frequency: available to monthly LERG subscribers**

**Distribution format(s): web download, electronic data transfer (monthly subscribers only and assessed on a case by case basis)**

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## Telcordia LERG™ Routing Guide Examples - Overview

The following pages provide LERG data examples from data in the June 2008 LERG. Data is provided for illustrative purposes only. Displayed data from *selected* LERG™ Routing Guide files reflects the front-end interface provided with the Microsoft Access version of the data. Users can *optionally* use this front-end interface to view the data.

The examples represent just *some* of the data files in the LERG™ Routing Guide.

Since NPA NXX block data is a primary data element in the LERG, to which other data interrelates, this series of examples from the LERG begins with the LERG6 which is the principal file containing NPA NXX block data.

# Telcordia LERG™ Routing Guide Example

## LERG6 – NPA NXX Block Assignment:

LERG6 contains data relative to assigned NPA NXXs. As of this writing, this amounts to approximately 165,000 assigned NPA NXX records, and approximately 500,000 assigned numeric blocks within NPA NXXs.

In the example below,

- NPA NXX 732 699, BLOCK A, is shown. BLOCK ID A indicates the carrier is the high-level assignee of the NXX (which carries certain responsibilities). Numeric BLOCK ID ranges are from 0 to 9. For example, a BLOCK ID value of 4 indicates line range 4000-4999. If numeric block data exists for an NPA NXX, the block data information should take precedent over the “A” record relative to the assignee and certain other fields. 732 699 is active (i.e. EFFDATE=blank) as of the product date.
- 732 699 is an end office code (COCTYPE=EOC) (i.e. landline/wireline) with no special services (SSC=N) and rates to the RATE CENTER of NEWBRNSWCK in NJ which is in LATA 224. The LERG8 file (example not shown) translates NEWBRNSWCK to “New Brunswick” as the full name of the Rate Center. NEWBRNSWCK is also the identified primary LOCALITY for 732 699.
- Telephone numbers assigned in 732 699 are dialable by end users (DIND=Y).
- Telephone numbers are subject to being “ported” across carriers (PORT=Y).
- Assignments to carriers for this NPA NXX are not subject to assignments at the Thousands-Block level (TBP=N). Note that if a carrier has retained all 10 blocks from an NPA NXX it had been assigned prior to pooling becoming effective and, as is the case in this example, the LERG will only show the A block with a TBP=N. In cases where there have been numeric blocks assigned, both an A block record as well as numeric block record(s) will exist with a TBP value of Y.
- Carriers completing calls to either the end office or to the access tandem should send the full 10 digit telephone number to the terminating switch in both cases (TD-EO=10, TD-AT=10).
- The switch this NPA NXX is native to is identified by the CLLI™ of PSWYNJPIDS5. The Switch Homing Arrangement (SHA) Indicator of 00 identifies the switch homing applicable to this NPA NXX / switch combination that can be determined from LERG7SHA.
- The NPA NXX has been assigned to Operating Company Number (OCN) 9206 (expanded further on the next page of this example). Data is administered for the LERG by AOCN (i.e. OCN) 9200.

LERG 6		MENU	
NPA:	732	NXX:	699
BLOCK ID:	A	STATUS:	<input type="checkbox"/>
EFF DATE:		COCTYPE:	EOC
SSC:	N	DIND:	Y
TD-EO:	10	TD-AT:	10
PORTABLE:	Y	1000 BLK POOLING:	N
OCN:	9206	AOCN:	9200
RC ABBREV:	NEWBRNSWCK	RC TYPE:	<input type="checkbox"/>
RC LATA:	224	LOC NAME:	NEWBRNSWCK
LOC COUNTY:	<input type="checkbox"/>	LOC STATE:	NJ
LINE FROM:	0000	LINE TO:	9999
SWITCH:	PSWYNJPIDS5	SHA IND:	00
LATA:	224	LATA NAME:	NORTH JERSEY NJ
TEST LINE #:	<input type="checkbox"/>	TEST LINE RESPONSE:	<input type="checkbox"/>
EXPIRES:	<input type="checkbox"/>	RECORD CREATED:	12/22/2004
"E" STATUS:	12/29/2004	LAST MODIFIED:	12/29/2004

# Telcordia LERG™ Routing Guide Example

## LERG1 – OCN / Company Name / Routing Contact:

LERG1 contains data covering approximately 15,000 assigned Operating Company Number (OCN) identifiers.

Many LERG data elements, and especially primary data elements such as NPA NXX Blocks and switches, are associated with an OCN. The LERG1 file provides a mapping of this four character identifier to a specific company name and related company information. The LERG1OCN file (example not shown), includes additional contact information for various organizations, functions, and services, for those companies choosing to provide it.

In this example,

- OCN 9206 shows as being assigned to Verizon New Jersey, Inc.
- The OVERALL OCN (a higher level of grouping, should it exist), in this example, is also 9206.
- The Operating Company is listed as a Regional Bell Operating Company (CATEGORY=RBOC). CATEGORY values, based on company, including CLEC, wireless, etc., can be keyed upon to further assess data in the LERG.
- The Routing Contact Information lists the name, title, company name, telephone number, and address for the person to call regarding routing questions relative to the LERG (this information is blanked out in the example).

LERG 1		MENU	
OCN #:	9206	OVERALL OCN:	9206
OCN NAME:	VERIZON NEW JERSEY, INC.		
ABBREVIATED OCN NAME:	VERIZON NEW JERSEY		
OCN STATE:	NJ	CATEGORY:	RBOC
<b>ROUTING CONTACT INFORMATION:</b>			
FIRST:		MI:	
LAST:			
TITLE:			
CO NAME (SPECIFIC):	VERIZON COMMUNICATIONS		
ADDRESS 1:		FLOOR:	
		RM:	
ADDRESS 2:			
CITY:		STATE:	NJ
ZIP:			
PHONE:		LKA:	

# Telcordia LERG™ Routing Guide Example

## LERG 7 - Switching Entities:

LERG7 contains high level (not homing) data regarding approximately 50,000 switch CLLI codes used in the LERG. Homing information is contained in LERG7SHA.

In this example,

- Switch PSWYNJPIDS5 is physically located within LATA 224 in Northern New Jersey.
- Its COMMON LANGUAGE® equipment type designation, 5EH, is explained in a separately available document available at [www.commonlanguage.com](http://www.commonlanguage.com). At that site, click on “Store” in the upper right corner of the web page then, at the store site, click on “order a code spreadsheet”, then, click on “SSC Codes” and follow the instructions for ordering the document CL-DATA-SSC.
- Vertical and Horizontal Coordinates (based on latitude and longitude) of the switch are provided (but noted in the example as 12345). Switch V&H values are often used in “access” pricing.
- PSWYNJPIDS5 has International Direct Distance Dialing (IDDD) capability.
- It is located at (street address is blanked out in the example) in Piscataway, NJ.
- The switch is owned by OCN 9206, which we previously noted as Verizon New Jersey, Inc.
- Data is administered for the LERG by AOCN 9200 (i.e. Verizon).
- The Switching Entity-Office Functionalities (SOF) noted by the data provider are End Office, Host, E.164, Local Number Portability (LNP) capable, 800 SSP support, serves as a CCS AC OFC, has CSP functionality, and is provisioned to support Intra LATA Presubscription. These functionalities are explained to a greater degree in the LERG Glossary file.

LERG 7		MENU	
SWITCH:	PSWYNJPIDS5	STATUS:	<input type="checkbox"/>
LATA:	224	LATA NAME:	NORTH JERSEY NJ
OCN:	9206	AOCN:	9200
		V-COORD:	12345
		H-COORD:	12345
SW STREET:	<input type="text"/>		
		SW CITY:	PISCATAWAY
SW STATE:	NJ	SW ZIP:	08854
CL 4/5 SW:	<input type="text"/>	IDDD:	<input checked="" type="checkbox"/>
	CLN IND:	A	PT CODE FLAG:
		BILL-TO RAO:	<input type="checkbox"/>
		SEND-TO RAO:	<input type="checkbox"/>
<b>SWITCH OFFICE FUNCTIONALITY (SOF):</b>			
1-EO:	<input checked="" type="checkbox"/>	2-HOST:	<input checked="" type="checkbox"/>
3-REM:	<input type="checkbox"/>	4-DA:	<input type="checkbox"/>
5-4/5:	<input type="checkbox"/>	6-WIRELESS:	<input type="checkbox"/>
7-FG D ADJ EO:	<input type="checkbox"/>	12-FG B TDM:	<input type="checkbox"/>
13-FG C TDM:	<input type="checkbox"/>	14-FG D TDM:	<input type="checkbox"/>
15-OS TDM:	<input type="checkbox"/>	16-INT OFC:	<input type="checkbox"/>
17-DA TDM:	<input type="checkbox"/>	18-911 TDM:	<input type="checkbox"/>
19-FG D ADJ TDM:	<input type="checkbox"/>	20-LOCAL TDM:	<input type="checkbox"/>
21-INTRA TDM:	<input type="checkbox"/>	22-CS DATA TDM:	<input type="checkbox"/>
23-BCR5:	<input type="checkbox"/>	24-BCR6:	<input type="checkbox"/>
25-PRI 64:	<input type="checkbox"/>	26-ISDN MULT:	<input type="checkbox"/>
27-ISDN FS:	<input type="checkbox"/>	28-X75:	<input type="checkbox"/>
29-X121:	<input type="checkbox"/>	30-E164:	<input checked="" type="checkbox"/>
34-STP:	<input type="checkbox"/>	35-CCS AC:	<input checked="" type="checkbox"/>
37-800 SSP:	<input checked="" type="checkbox"/>	38-LNP:	<input checked="" type="checkbox"/>
42-CIP:	<input checked="" type="checkbox"/>	43-CSP:	<input checked="" type="checkbox"/>
45-SW 56:	<input type="checkbox"/>	46-FGD 56:	<input type="checkbox"/>
47-FGD 64:	<input type="checkbox"/>	48-INT PRSUB:	<input checked="" type="checkbox"/>
49-CALL AGENT:	<input type="checkbox"/>	50-TRUNK GATE:	<input type="checkbox"/>
		51-ACCESS GATE:	<input type="checkbox"/>
RECORD CREATED:	8/5/1990	"E" STATUS:	1/1/2000
		LAST MODIFIED:	8/19/2002

# Telcordia LERG™ Routing Guide Example

## LERG7SHA - Switch Homing Arrangements:

LERG7SHA contains information about switch-to-switch interrelationships (e.g. homing). Approximately 50,000 homing relationships exist in the LERG. In the example, the switch PSWYNJPIDS5 with a SHA Indicator of 00 (this is the switch and SHA Indicator that appeared for NPA NXX BLOCK 732 699 A in LERG6) is noted. The record shows several different tandems as well as an STP relationship relative to PSWYNJPIDS5 00. The originating and terminating tandems are the same for all the same functionalities. This is often, but not always, the case. This example indicates that traffic terminating to PSWYNJPIDS5 may be routed for Feature Group B as well as Feature Group D to NBWKNJNB05T; to NBWKNJNB04T in the case of local and intraLATA traffic; and to ELZBNJEL02T for operator services.

LERG 7 SHA		MENU	
SWITCH:	PSWYNJPIDS5	SHA INDICATOR:	00
LATA:	224	LATA NAME:	NORTH JERSEY NJ
OCN:	9206	AOCN:	9200
STATUS: <input type="checkbox"/> EFF DATE: <input type="text"/>			
<b>ORIGINATING TANDEM:</b>			
ORG B:	NBWKNJNB05T	ORG C:	<input type="text"/>
ORG OS:	ELZBNJEL02T	ORG B INT:	<input type="text"/>
ORG D INT:	<input type="text"/>	ORG LOCAL:	NBWKNJNB04T
ORG CIR SW:	<input type="text"/>	ORG INTRA-L:	NBWKNJNB04T
<b>TERMINATING TANDEM:</b>			
TRM B:	NBWKNJNB05T	TRM C:	<input type="text"/>
TRM OS:	ELZBNJEL02T	TRM B INT:	<input type="text"/>
TRM D INT:	<input type="text"/>	TRM LOCAL:	NBWKNJNB04T
TRM CIR SW:	<input type="text"/>	TRM INTRA-L:	NBWKNJNB04T
HOST:	<input type="text"/>	STP1:	NBWKNJNB01W
ORIG 800 SSP:	<input type="text"/>	STP2:	NWRKNJ0201W
ACTUAL SW ID:	<input type="text"/>	ISDN FOREIGN OFF:	<input type="text"/>
CALL AGENT:	<input type="text"/>	TRK GATEWAY:	<input type="text"/>
RECORD CREATED:	8/5/1990	"E" STATUS:	1/1/2000
LAST MODIFIED:	8/19/2002		

## Telcordia LERG™ Routing Guide Example

### **LERG8 files – Rate Center and Locality Information:**

LERG8, LERG8LOC, and LERG8PST contain information covering approximately 25,000 Rate Centers within the NANP area, 65,000 localities (e.g. towns) within those Rate Centers, and (currently only for U.S. data) each locality's county and associated USPS postal code(s) (some localities not defined in USPS data are being researched). In the example being used, NPA NXX BLOCK 732 699 A rates to the New Brunswick, NJ Rate Center which has the noted Rate Center V&H Coordinates and the NPAs that can be associated with it. In addition, the Microsoft Access query results depicted below combine LERG8LOC and LERG8PST data to indicate the principal localities in the New Brunswick NJ Rate Center, and each locality's postal codes and county.

LERG 8					MENU
RC STATE:	<input type="text" value="NJ"/>	RC ABBR NAME:	<input type="text" value="NEWBRNSWCK"/>	RC TYPE:	<input type="text"/>
		RC FULL NAME:	<input type="text" value="NEW BRUNSWICK"/>		
STATUS:	<input type="text"/>	EFF DATE:	<input type="text"/>	SPLIT INDICATOR:	<input type="text" value="N"/>
LATA:	<input type="text" value="224"/>	LATA NAME:	<input type="text" value="NORTH JERSEY NJ"/>		
MAJOR-V:	<input type="text" value="05085"/>	MAJOR-H:	<input type="text" value="01434"/>	MTA-1 (MAJOR TRADING AREA 1):	<input type="text" value="01"/>
MINOR-V:	<input type="text"/>	MINOR-H:	<input type="text"/>	MTA-2 (MAJOR TRADING AREA 2):	<input type="text"/>
NPA1:	<input type="text" value="732"/>	NPA2:	<input type="text" value="908"/>	NPA3:	<input type="text" value="848"/>
NPA4:	<input type="text"/>	NPA5:	<input type="text"/>	NPA6:	<input type="text"/>
NPA7:	<input type="text"/>	NPA8:	<input type="text"/>	NPA9:	<input type="text"/>
NPA10:	<input type="text"/>				
EMB OVERLAY NPA1:	<input type="text"/>	EMB OVERLAY NPA2:	<input type="text"/>		
EMB OVERLAY NPA3:	<input type="text"/>	EMB OVERLAY NPA4:	<input type="text"/>		

RC NAME ABBR	LOC STATE	LOC NAME ABBR	LOC INDEX	POSTAL CODE	LOC COUNTY
NEWBRNSWCK	NJ	FRNKLITSHP	GL		SOMERSET
NEWBRNSWCK	NJ	FRNKLITSHP	SO	08873	SOMERSET
NEWBRNSWCK	NJ	FRNKLITSHP	WA		SOMERSET
NEWBRNSWCK	NJ	HIGHLANDPK	CA		MIDDLESEX
NEWBRNSWCK	NJ	HIGHLANDPK	MI		MIDDLESEX
NEWBRNSWCK	NJ	HIGHLANDPK	MI		MIDDLESEX
NEWBRNSWCK	NJ	MILLTOWN	MI	08850	MIDDLESEX
NEWBRNSWCK	NJ	MILLTOWN	MO		MIDDLESEX
NEWBRNSWCK	NJ	NEWBRNSWCK		08901	MIDDLESEX
NEWBRNSWCK	NJ	NEWBRNSWCK		08902	MIDDLESEX
NEWBRNSWCK	NJ	NEWBRNSWCK		08903	MIDDLESEX
NEWBRNSWCK	NJ	NEWBRNSWCK		08904	MIDDLESEX
NEWBRNSWCK	NJ	NEWBRNSWCK		08905	MIDDLESEX
NEWBRNSWCK	NJ	NEWBRNSWCK		08906	MIDDLESEX
NEWBRNSWCK	NJ	NEWBRNSWCK		08922	MIDDLESEX
NEWBRNSWCK	NJ	NEWBRNSWCK		08933	MIDDLESEX
NEWBRNSWCK	NJ	NEWBRNSWCK		08988	MIDDLESEX
NEWBRNSWCK	NJ	NEWBRNSWCK		08989	MIDDLESEX
NEWBRNSWCK	NJ	PISCATAWAY		08855	MIDDLESEX
NEWBRNSWCK	NJ	PISCATAWAY		08854	MIDDLESEX
NEWBRNSWCK	NJ	SOMERSET		08873	SOMERSET
NEWBRNSWCK	NJ	SOMERSET		08875	SOMERSET
NEWBRNSWCK	NJ	SOMERSET		08875	SOMERSET

## Telcordia LERG™ Routing Guide Example

### LERG 12 - Location Routing Numbers:

LERG12 contains information about Location Routing Numbers (LRNs). LRNs are used in regards to Local Number Portability (LNP) call processing within the NANP. Approximately 45,000 LRNs are in the LERG. LRNs are related to NPA NXXs in format, and map to a switch for routing purposes. The NPA NXX 732 699 used in these LERG examples is *not* the basis for an LRN, nor need it be. However, the LERG12 file indicates that the switch PSWYNJPIDS5, used in these examples, has 7324579999 as the LRN. In this example, this happens to be the sole LRN associated with this switch. Therefore, any numbers “ported-in” to this switch would use this LRN for local number portability routing.

LERG 12		MENU			
LRN:	7324579999	STATUS:	<input type="checkbox"/>	EFF DATE:	<input type="text"/>
LRN TYPE:	P	SWITCH:	PSWYNJPIDS5		
LATA:	224	LATA NAME:	NORTH JERSEY NJ		
OCN:	9206	AOCN:	9200		
RC ABBRE:	<input type="text"/>	RC TYPE:	<input type="checkbox"/>	RC STATE:	<input type="checkbox"/>
		SHA INDICATOR:	00		

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The previous pages have provided a brief insight into the data provided in the LERG Routing Guide. Screen shots of 6 of the 24 (as of this writing) data files in the LERG have been depicted. Data is provided for illustrative purposes only. Displayed data reflects the front-end interface (form view) provided with the Microsoft Access version of the data on the LERG CD and as can be downloaded from the web. This data is also viewable using Microsoft Access datasheet format. Users can *optionally* use this front-end interface to view the data. LERG data files are also provided in fixed width ASCII files that can serve as a basis for loading and processing by whatever applications a user may locally employ, and can be viewed with text editors.

A [free downloadable sample](#) of a complete LERG Routing Guide, the same as you will receive in a standard issuance but containing slightly older data and a relatively small percentage of the full volume of data, is available for your review at [www.trainfo.com](http://www.trainfo.com) (catalog tab).

# Telcordia LERG™ OnLine

LERG™ OnLine is an offering separate from the LERG™ Routing Guide itself. It provides, via web access, the ability to access, view, manipulate, and download query results.

This is an easy-to-use web-based GUI application available only to monthly LERG Enterprise Licensees at a small increment above the LERG license fee. LERG OnLine is provided on an enterprise basis for the benefit of everyone in your company.

The LERG OnLine is a means to access up-to-date LERG data and isolate specific information that a user may be interested in obtaining for online review and/or downstream processing. The LERG OnLine provides these capabilities to LERG Enterprise Licensees without their needing to expend time, effort, and expense to develop and maintain local processes; purchase and/or use third party software; or expend unnecessary manual efforts to obtain data from the LERG.

LERG OnLine data is updated daily! It is not just a monthly snapshot of the data. It provides the ability to access updated LERG data without necessarily having to locally develop processes that incorporate LERG One-Day Change Process data with the monthly LERG.

Data in the LERG Online is essentially as has been described in the prior section of this catalog, although specific terminology may vary. Depicted below is the LERG OnLine welcome screen. The next page displays a basic query and results.

**Telcordia® LERG™ OnLine:**

**Produced: updated daily overnight**

**Distribution frequency: daily access (available only to monthly LERG Enterprise Licensees)**

**Distribution format(s): web access**

**Telcordia® LERG OnLine Home Page**

**Welcome**

**Today is Tue Apr 12 07:54:24 EDT 2011**

LERG OnLine provides the ability to query Telcordia LERG Routing Guide data via the Internet. This is an optional service that is made available to licensees of the monthly LERG.

The menu displayed at the top of this screen will appear on every page:

- Click LERG Elements to query LERG data elements such as NPA NXX Block, Switch, LRN, Rate Center, etc.
- Click Standard Reports to query on some of the LERG elements for limited data.
- Click Saved Reports to see all your saved reports.

This system is generally available 24 x 7, however system support is limited to 8:30am-5:00pm (Eastern Time), M-F (other than Telcordia observed holidays). Questions, comments, etc., may be directed to the Telcordia Routing Administration (TRA) group at [tra@telcordia.com](mailto:tra@telcordia.com) or by calling 732-699-6700 or 866-672-6997.

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LERG Routing Guide is a trademark of Telcordia Technologies, Inc.  
Telcordia Routing Administration (TRA) is a trademark of Telcordia Technologies, Inc.


This site is best suited for 1024 x 768 screen resolution or above.  
For questions or support on this site, please contact TRA at 866-NPA-NXXS (i.e. 866-672-6997), or directly on 732-699-6700.

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# Telcordia LERG™ Online Example

## LERG OnLine – Example of Query:

The following LERG OnLine query screen is used to obtain NPA NXX Block data. Enter selection criteria into one or more of the data entry boxes. Use of wildcards, listing of values, etc. can also be used as selection criteria. The results screen shows all records that pertain to NPA NXX 732 699, as requested.

 Telcordia
Telcordia® Routing Administration

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Home
LERG Elements
Standard Reports
Saved Reports
Help
Feedback
Contact Us

---

NPA NXX BL
RC
LOC
SW
Homing
LRN
OCN
NPA
LATA
CC
SS7
E911
DTR

---

### NPA NXX Block

Query Form
Results Table
Results Form
Today is Fri Apr 07 12:09:08 EDT 2006

NPA <b>732</b>	NXX <b>699</b>	Report Title
Block	Status	Daily Changes:
Eff. Date	Current Views <input type="checkbox"/> (check to display only current views)	Activity Date <input type="text"/>
OCN	AOCN	
Switch	SHA Ind.	
Locality	Rate Center	
State/Prov.		
COC Type <input type="text"/>	SSC <input type="text"/>	
TBP Ind.	Portable Ind.	
Creation Date		


Records Matched:

Submit
Clear Query
Create a Downloadable Report

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This site is best suited for 1024 x 768 screen resolution or above.  
For questions or support on this site, please contact TRA at 866-NPA-NXXS (i.e. 866-672-6997), or directly on 732-699-6700.

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Telcordia® Routing Administration

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NPA NXX BL
RC
LOC
SW
Homing
LRN
OCN
NPA
LATA
CC
SS7
E911
DTR

---

### NPA NXX Block

Query Form
Results Table
Results Form
Today is Fri Apr 07 12:09:32 EDT 2006

NPA <b>732</b>	NXX <b>699</b>	<a href="#">Operator Service Codes</a>
Block <b>A</b>	Status	<a href="#">OS Code</a> <a href="#">OS Name</a>
Eff. Date		
OCN <b>9206</b>	AOCN <b>9200</b>	
Switch <b>PSWYNJPIDSS</b>	SHA Ind. <b>00</b>	
Locality <b>NEWBRNSWCK</b>	Rate Center <b>NEWBRNSWCK</b>	
State/Prov. <b>NJ</b>	Creation Date <b>12/22/04</b>	
COC Type <b>EOC</b>	SSC <b>N</b>	
TBP Ind. <b>N</b>	Portable Ind. <b>Y</b>	
DIND <b>Y</b>	TD-EO <b>10</b>	
TD-AT <b>10</b>	Test Line (TL)	
TL Resp.	TL Exp. Date	
ODD Notes	E Status Date <b>12/29/04</b>	
Last Mod. Date <b>12/29/04</b>		
Daily Changes:		
Activity Code	Activity Date	

Records Matched:  Current Record:

Previous Record
Next Record

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This site is best suited for 1024 x 768 screen resolution or above.  
For questions or support on this site, please contact TRA at 866-NPA-NXXS (i.e. 866-672-6997), or directly on 732-699-6700.

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# Telcordia® TPM™ Data Source

The Telcordia® TPM™ Data Source supports various systems used in rating and billing telephone calls and can be used as a source for certain data related to NPA NXXs.

## ***The TPM™ Data Source is a useful resource for:***

- Those who need to manage NPA NXX related data.
- Call rating and billing operations staff who need to associate the appropriate Revenue Accounting Office (RAO) to NPA NXXs.
- Those who specifically have a need for V&H and Rate Center information associated with NPA NXXs.

The TPM™ Data Source contains data for the United States, American Samoa, the Commonwealth of Northern Mariana Islands, Guam, Puerto Rico, the US Virgin Islands, Canada, Bermuda, 16 island countries in the Caribbean, and Mexico.

## ***Data elements include:***

Numbering Plan Area (Area Code)	Revenue Accounting Office (RAO) (Bill to / Send to)
NXX Code (exchange, prefix - with block)	Portability Indicator
Operating Company Number	Thousands-Block Pooling Indicator
IDDD Capability Indicator	NXX Type (wireline, paging, cellular, etc.)
Vertical (V) Coordinate	Time Zone
Horizontal (H) Coordinate	Daylight Savings Time Indicator
Rate Center	Company Type
Place Name	Special Calling Cards (RAO based)
State, Province, Country	International data - Mexico

More comprehensive listings of fields and files are noted in text files containing data specifications and layouts, and in a Glossary, all of which are provided with each product. These files are also available as free downloads from [www.trainfo.com](http://www.trainfo.com) (documents tab).

A free downloadable sample of the TPM™ Data Source, the same you will receive in a standard issuance but containing slightly older data and a relatively small percentage of the full volume of data, is available for your review at [www.trainfo.com](http://www.trainfo.com) (catalog tab).

Each issuance of the TPM™ Data Source is a complete replacement of the previous issuance. Indicators exist on a month-to-month basis that flag those records that were added, changed, or are to be deleted.

## ***Fixed - Record ASCII Format Files:***

The fixed-record ASCII format files of the TPM™ Data Source Routing Guide are provided as multiple data sets/files and consume approximately 150MB of storage.

You may obtain a copy of TPM data file layouts and specifications at no charge by downloading them from [www.trainfo.com](http://www.trainfo.com) (documents tab) or by calling our Customer Care Center to receive them by email.

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## ***Telcordia® TPM™ Data Source:***

***Produced:*** mid-month monthly (product issuances are dated the 15<sup>th</sup> of the month following creation)

***Distribution frequency:*** monthly or quarterly (issue date: January, April, July, October)

**Distribution format(s): CD-ROM, web download, electronic data transfer (monthly subscribers only and assessed on a case by case basis)**

**CD-ROM:**

Each CD-ROM has data provided in two formats: (1) fixed-record ASCII format and (2) a copy of the files in a pre-loaded Microsoft® Access database that permits users to utilize the selection, sorting, analyses and report generation capabilities of Microsoft® Access.

**Web Download:**

Both formats on the CD-ROM can be downloaded from a secured Internet website. You benefit by having the ability to download a product several days earlier than if received by mail. You may download a product anytime within the month for monthly products or subscription period for other products.

**Electronic Data Transfer:**

The TPM™ Data Source data product may also available to you via an electronic data transfer service that employs CONNECT:Direct, a third-party software package (Stirling Software). Requests to use CONNECT:Direct from a new TRA CONNECT:Direct customer will be addressed on a one-to-one basis (focused on technical efforts, etc.), If you decide to proceed, there is a minimum \$1000 set-up fee.

## Telcordia TPM™ Data Source Guide Example

The following screen shot is from the June 15, 2006 TPM. Data is provided for illustrative purposes only. Displayed data reflects the front-end interface provided with the Microsoft Access version of the data. Users can *optionally* use this front-end interface to view the data.

This example represents just *some* of the data files in the TPM™ Data Source.

Since NPA NXX data is a primary data element in the TPM, the file below (also called the TPM “File”) provides information relative to NPA NXX 732 699.

TPM		Menu	
NPA	732	MAJOR V	05085
NXX	699	MAJOR H	01434
BLOCK ID	A	LATA	224
RANGE	00009999	LATA SUB	00
NXX TYPE	00	RC NAME	NEWBRNSWCK
EFF DATE LAST CHG	12/29/2004	RC TYPE	
EFF DATE ASSIGN	12/29/2004	PLACE NAME	NEWBRNSWCK
CHANGE CODE		ST	NJ
OCN	9206	TIME ZONE	7
COMPANY NAME	VERIZON NEW JERSEY Imported from OCN file	OTH LINE RS	00
AOCN	9200	POINT ID	0
CO CODE	06	<b>1 Indicates Yes 0 Indicates No</b>	
CO TYPE	0	D'LIGHT SAVE IND	1
BILL TO RAO	094	PORT IND	1
SEND TO RAO	000	TBP IND	0
		IDDD	1
		DIND	1

# Telcordia® Local Calling Area Data Source

The Telcordia® Local Calling Area Data Source (LCADS) is a database containing local calling area information for areas within the United States and Canada. Telcordia proactively collects and maintains the local calling tariff database information by utilizing the governing sources.

**LCADS is a valuable resource for:**

- Rating and Billing
- Billing Operations Staff
- Trunking / Traffic Routing
- Local / toll data
- Least Cost Routing

LCADS contains business and residential local calling area plans for various service providers. It is an aid for companies involved with designing optional calling plans, routing of telecom traffic, least cost routing, and validating and identifying local / toll calls. LCADS data is also correlated with LERG Routing Guide data monthly and can be cross related with various data elements in the LERG Routing Guide.

**Data elements include:**

NPANXX	City Name	CO Type (LEC or Wireless)
OCN	Rate Center	State
LATA	Rate Center V&H	
Dialing Patterns	Calling Plans	

Query: Telnums Local to me (Residential) - (TELNUMs that 732699 can call as a Local Call)

NPANXX	COTYPE	ST	OCN	CITY
908262	E	NJ	7232	Belle Mead
732302	E	NJ	5120	Bound Brook
732273	E	NJ	7232	Dunellen
732297	E	NJ	5120	Franklin Park
908930	W	NJ	6391	Metuchen

NPANXX = NPA NXX  
COTYPE = LEC or Wireless  
ST = State  
OCN = Telecom Carrier Operating Company Number (OCN)  
CITY = Name of the Rate Center

Gathering and maintaining the local calling area tariff information is a labor intensive and involved process which Telcordia does for you in supporting the data in this product, thus saving you valuable staff time and expense. Invalid identification of local calling areas can create problems within a company's network routing and rating and billing of traffic, all negative impacts.

LCADS is updated monthly with new NPA NXX assignments and tariff changes as they occur. It is built with Microsoft® Access to allow for selecting, sorting, analyzing and reporting data based upon data tables and can be used as a standalone repository or can easily be integrated into your company Business Support Systems.

**Telcordia® Local Calling Area Database Source:**

**Produced: 10<sup>th</sup> calendar day monthly**

**Distribution frequency: monthly**

**Distribution format(s): web download**

# Telcordia® Telemarketing Data Source

If you have a need to know which exchanges (NXXs) are most likely cellular, landline, or paging, the Telcordia® Telemarketing Data Source is an economical way to keep up with this information.

If your company has call center operations, needs to verify phone numbers, performs processing of customer contact information, or needs to suppress wireless or pager numbers from a database application, or other similar needs, you'll find the Telemarketing Data Source a valuable tool for your business.

The Telemarketing Data Source provides a front-end application that permits you to extract the data provided relative to NPA NXX (prefix, exchange) and Thousands-Block assignments at various levels of selection criteria. Time Zone and Daylight Savings Indicators are also provided by NPA NXX.

The NPA NXXs that comprise the data in the product are those that are active (and to be active within the next two months) within the North American Numbering Plan (NANP) area (US, US Territories, Canada and parts of the Caribbean). The product is provided on CD-ROM and by web download, and is a complete set of data each month.

*Note: The data in the Telemarketing Data Source reflects the NXX and, where applicable, Thousands-Block assignments. Companies specify the use of these NXX and blocks relative to their expected assigned use to new customers. However, due to portability of telephone numbers among service providers in many areas of the NANP, accuracy of a specific ten-digit telephone number correlating to the use designation indicated in this product, although very high, cannot be 100% ensured.*

The following screen shots depict the Multiple Prefix (many records) and Single Prefix (one record) selection screens. The output, based upon your selection criteria, is in ASCII text data file formats that then can be directly viewed or else loaded into local spreadsheets, databases, etc., as your needs may dictate.

**Telcordia® Telemarketing Data Source:**

**Produced: first workday monthly**

**Distribution frequency: monthly**

**Distribution format(s): CD-ROM, web download**

Telcordia® Telemarketing Data Source (Release 4.1)  
Data Source Date Stamp : 04/01/2011

Single Prefix | Multiple Prefix

A. Select Category(ies) of Telephone Number Prefixes Desired:  
 Landline  Cellular  Paging  Select/Unselect All  
 (If you do not select any, all types are included in the output.)

Submit View File Reset  
Help Quit TDS

B. Select the State(s), Province(s) and/or Countries Desired:

United States	Canada	Caribbean Islands	Pacific Islands	NPA NXX Filter
<input checked="" type="checkbox"/> Alaska	<input checked="" type="checkbox"/> Georgia	<input checked="" type="checkbox"/> Maryland	<input checked="" type="checkbox"/> New Hampshire	<input checked="" type="checkbox"/> South Carolina
<input checked="" type="checkbox"/> Alabama	<input checked="" type="checkbox"/> Hawaii	<input checked="" type="checkbox"/> Maine	<input checked="" type="checkbox"/> New Jersey	<input checked="" type="checkbox"/> South Dakota
<input checked="" type="checkbox"/> Arkansas	<input checked="" type="checkbox"/> Iowa	<input checked="" type="checkbox"/> Michigan	<input checked="" type="checkbox"/> New Mexico	<input checked="" type="checkbox"/> Tennessee
<input checked="" type="checkbox"/> Arizona	<input checked="" type="checkbox"/> Idaho	<input checked="" type="checkbox"/> Minnesota	<input checked="" type="checkbox"/> Nevada	<input checked="" type="checkbox"/> Texas
<input checked="" type="checkbox"/> California	<input checked="" type="checkbox"/> Illinois	<input checked="" type="checkbox"/> Missouri	<input checked="" type="checkbox"/> New York	<input checked="" type="checkbox"/> Utah
<input checked="" type="checkbox"/> Colorado	<input checked="" type="checkbox"/> Indiana	<input checked="" type="checkbox"/> Mississippi	<input checked="" type="checkbox"/> Ohio	<input checked="" type="checkbox"/> Virginia
<input checked="" type="checkbox"/> Connecticut	<input checked="" type="checkbox"/> Kansas	<input checked="" type="checkbox"/> Montana	<input checked="" type="checkbox"/> Oklahoma	<input checked="" type="checkbox"/> Vermont
<input checked="" type="checkbox"/> District Of Columbia	<input checked="" type="checkbox"/> Kentucky	<input checked="" type="checkbox"/> North Carolina	<input checked="" type="checkbox"/> Oregon	<input checked="" type="checkbox"/> Washington
<input checked="" type="checkbox"/> Delaware	<input checked="" type="checkbox"/> Louisiana	<input checked="" type="checkbox"/> North Dakota	<input checked="" type="checkbox"/> Pennsylvania	<input checked="" type="checkbox"/> Wisconsin
<input checked="" type="checkbox"/> Florida	<input checked="" type="checkbox"/> Massachusetts	<input checked="" type="checkbox"/> Nebraska	<input checked="" type="checkbox"/> Rhode Island	<input checked="" type="checkbox"/> West Virginia
<input checked="" type="checkbox"/> Select/Unselect All				<input checked="" type="checkbox"/> Wyoming

C. Select Output File Format Options:  
 Select Fields to be Included in the Output  
 Area Code (NPA)  State/Province/Country  Category Type (COCTYPE)  
 Prefix (NXX)  Time Zone  Category Detail (SSC)  
 Block IDs  Daylight Savings  Block Category (L/W/S)

Select a Field Separator  
 None  Tab  Comma  
 Excel  Other

Telcordia® Telemarketing Data Source (Release 4.1)  
Data Source Date Stamp : 04/01/2011

Single Prefix | Multiple Prefix

Query

Area Code (NPA) 732  
Prefix (NXX) 699

Submit Reset  
Quit TDS Help

Results

NPA	NXX	Line Numbers	Number Category
732	699	0000-0999(G)	Landline
		1000-1999(G)	Landline
		2000-2999(G)	Landline
		3000-3999(G)	Landline
		4000-4999(G)	Landline
		5000-5999(G)	Landline
		6000-6999(G)	Landline
		7000-7999(G)	Landline
		8000-8999(G)	Landline
		9000-9999(G)	Landline

State/Province/Country NJ  
Time Zone Eastern  
Daylight Savings Observed Yes

Print

If the values for line numbers are generated from a Block (see help for more information), then letter G is appended to the line numbers. Example : 1000-1999(G).

Example : If a phone number is 1-732-699-6700, then 732 is the area code (NPA), 699 is the prefix (NXX) and 6700 is the line number. The first number 6 in the line number 6700 is called the block number. Block numbers range from 0 to 9. Toll-free prefixes are not included. Note : For more information or explanation of the terms, please click 'Help' button. For additional questions not covered by the Help, please contact TRA Customer Care Center.

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## Telcordia<sup>®</sup> NPA NXX Active Code List

The Telcordia<sup>®</sup> NPA NXX Active Code List (NNACL) is composed of data files that help you maintain your internal operations, processes, and databases at peak efficiency with a complete listing of all active NPA NXX codes within the North American Numbering Plan area. Keep track of the ever changing world of these assignments through the NNACL.

### ***This product is a useful resource for:***

- Telemarketers, credit card companies, customer service groups, and others maintaining customer lists/databases
- PBX maintenance staff
- Database administrators
- Any party needing to confirm if a given NPA NXX has been assigned

The NPA NXX Active Code List lists all NPA NXX assignments that are *active* (in service) as of these dates. Data provided includes the assigned service provider (OCN) of the NPA NXX, the type of service that is provided (e.g. wireless) by the assigned service provider, the associated Rate Center and State/Province/Country, and a Portability Indicator. Also included is a file that can be used to translate the Operating Company Number (OCN) to a company name. A user-friendly and dynamic “search” program to facilitate data selection and extraction is also provided with each issue of the product. A general information section explains the data in greater detail.

NPA NXXs in the United States are also often assigned at the Thousands-Block level (e.g. line numbers 0000-0999,1000-1999, etc.). Where such has occurred, the assigned service provider (OCN) of the block within the NPA NXX and all the data noted above at the NPA NXX level is provided.

As of this writing, approximately 175,000 NPA NXX records and 650,000 blocks have been assigned and are included in the NNACL. The example provided at the end of this description is a depiction of results from the user interface provided with each copy of the NNACL. Results from queries generated through this interface can be downloaded to your local environment using various user-controlled options. Fixed-width ASCII files data feeds are also included with each product should you wish to directly use the data from such files in lieu of the user interface. This data can be locally imported into Excel, loaded into locally developed databases, and/or read with applications that can read text files (e.g. Notepad, Microsoft<sup>®</sup> Word). Reading and processing of the data is a local consideration, based on user needs, processing environment, etc.

Note that companies regulated in the United States by the Federal Communications Commission (FCC) and/or individual state regulatory commissions and, in Canada, by the Canadian Radio-television Telecommunications Commission (CRTC), for the most part, participate in telephone number portability (i.e. a party assigned a phone number, under most circumstances, can have that number managed by any service provider serving that area). However, the company assigned a numbering resource is the only company that can assign line numbers from that resource to new subscribers. However, once subscribers are assigned a numbering resource, they can “port” their numbers to another provider. At times, this may cross type of service as well (e.g. wireline to wireless as well as the reverse). However, the NNACL does not contain individual line level data. However it does contain the primary company for the numbering resource (the assigned OCN). Also, from a type of service standpoint (disregarding the service provider), a high percentage of line level data is within the type of service defined by the assigned service provider.

A sample copy of the NNACL, containing abridged, slightly older data, is available for download free of charge, at [www.trainfo.com](http://www.trainfo.com) (catalog tab).

If there is need to reference or track changes that occur between quarterly issuances of the NNACL, the Telcordia<sup>®</sup> NPA NXX Activity Guide (NNAG), with records formatted the same as in the NNACL, provides (only) activity (i.e. adds/deletes, changes to data), and is issued monthly. An integration application to directly update the NNACL data with the NNAG data is not provided due to the wide range of user environments and uses of

the data; such must be developed by the user if needed. Due to the vast diversity among user environments integration of the data into your local environment is your responsibility; however, TRA can assist your staff through explanation of the data, etc.

**Telcordia® NPA NXX Active Code List:**

**Produced: first workday quarterly (January, April, July, October)**

**Distribution frequency: quarterly (January, April, July, October)**

**Distribution format(s): CD-ROM, web download**

File Database View Data Source Date : 04/01/2011

### Telcordia® NPA-NXX Active Code List (NNACL)

NPA NXX Block Search OCN Search Help

Select Output Fields and Enter Search Criteria:

NPA  2\* (Use ? to match any one number or letter, or \* for more than one)  
 NXX   
 Block (B)   
 COC Type (COC)   
 OCN   
 Switch (SW)   
 Rate Center (RC)

Portable (PI)  All  
 Special Service Code (SSC)   
 OCN Name   
 Switch LATA (LATA)   
 RC State/Province (ST)

(Check/uncheck boxes to include/exclude the fields in the output)

Select Output Mode:  Display  File  
 Select a Field Separator and Headers for File Output:  Fixed  Tab  Comma  Excel  Other  Add Headers To File

Results (Record count 23169):

NPA	NXX	COC	SSC	OCN	OCN Name	Switch	LATA	Rate Center	ST	P
201	200	EOC	N	9206	VERIZON NEW JERSEY	JRCYNJBRD55	224	JERSEY CITY	NJ	Y
201	201	UFA	N	MULT	MULTIPLE OCN LISTING	--VARIOUS--	99999	RATE CENTER NOT APPLICABLE	NJ	N
201	202	PMC	BX	6630	USA MOBILITY WRLS	WAYNNJ08CM0	224	HACKENSACK	NJ	N
201	203	EOC	N	325E	YMAX COMMS CORP. NJ	NWRKNJMDD5J	224	HACKENSACK	NJ	Y
201	204	EOC	N	389C	EUREKA NETWORKS - NJ	NWRKNJMD7MD	224	JERSEY CITY	NJ	Y
201	205	SP2	S	6664	SPRINT SPECTRUM LP	TTBONJ12CM5	224	JERSEY CITY	NJ	Y
201	206	PMC	C	6232	NEXTEL COMM INC	FRFDNJ46W01	224	HACKENSACK	NJ	Y
201	207	PMC	C	6391	VERIZON WIRELESS-NJ	JRCYNJ10CM3	224	NEWARK	NJ	Y
201	208	PMC	C	4036	NEW CINGULAR WRL DC	RCPKNJ02GT1	224	JERSEY CITY	NJ	Y
201	209	EOC	N	9206	VERIZON NEW JERSEY	JRCYNJBRD55	224	JERSEY CITY	NJ	Y
201	210	EOC	N	7421	AT&T LOC - NY	MRTWNJMRNMD	224	UNION CITY	NJ	Y
201	211	N11	N	MULT	MULTIPLE OCN LISTING	--VARIOUS--	99999	RATE CENTER NOT APPLICABLE	NJ	N
201	213	PMC	C	6391	VERIZON WIRELESS-NJ	BBTPNJ06CM2	224	MORRISTOWN	NJ	Y
201	214	PMC	C	4036	NEW CINGULAR WRL DC	RCPKNJ02GT1	224	HACKENSACK	NJ	Y
201	215	EOC	N	2680	PAETEC COMM - NJ	NWRKNJ02XMY	224	BAYONNE	NJ	Y
201	216	EOC	N	9206	VERIZON NEW JERSEY	JRCYNJJOD55	224	JERSEY CITY	NJ	Y
201	217	EOC	N	9206	VERIZON NEW JERSEY	JRCYNJJOD55	224	JERSEY CITY	NJ	Y
201	218	PMC	C	4036	NEW CINGULAR WRL DC	RCPKNJ02GT1	224	HACKENSACK	NJ	Y
201	219	PMC	B	6630	USA MOBILITY WRLS	WAYNNJ08CM0	224	JERSEY CITY	NJ	N
201	220	PMC	C	4036	NEW CINGULAR WRL DC	RCPKNJ02GT1	224	HACKENSACK	NJ	Y
201	221	EOC	N	7142	TELEPORT COM NY - NJ	RCPKNJ02BMD	224	HACKENSACK	NJ	Y
201	222	EOC	N	9206	VERIZON NEW JERSEY	JRCYNJBRD55	224	JERSEY CITY	NJ	Y

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 For more information or the latest product, contact Telcordia® Routing Administration Customer Care Center.  
 Toll Free: 866-NPA-NXXS, Direct: 732-699-6700, Email: tra@telcordia.com, Web: www.trainfo.com.

# Telcordia<sup>®</sup> NPA NXX Activity Guide

The Telcordia<sup>®</sup> NPA NXX Activity Guide (NNAG) helps you to prepare for all future NPA NXX adds, changes and disconnects, as well as last minute changes to active records. It can be considered and used as a standalone product, or as a complement to the Telcordia<sup>®</sup> NPA NXX Active Code List (NNACL).

***This product is a useful resource for:***

- Telemarketers, credit card companies, customer service groups, and others maintaining customer lists/databases
- PBX maintenance staff
- Database administrators
- Any party needing to confirm if a given NPA NXX has been assigned

The NNAG consists of NPA NXX records associated with future activity reported by service providers (generally covering several months ahead), as well as last minute changes made in the prior month. Data provided includes the assigned service provider (OCN) of the NPA NXX, the type of service that is provided (e.g. wireless) by the assigned service provider, the associated Rate Center and State/Province/Country, and a Portability Indicator. Also included is a file that can be used to translate the Operating Company Number (OCN) to a company name. A user-friendly and dynamic “search” program to facilitate data selection and extraction is also provided with each issue of the product. A general information section explains the data in greater detail.

The primary NNAG file includes an activity code associated with the NPA NXX and its data (E=establish, M=modify, D=disconnect), as well as the date that the activity is currently targeted to occur.

The NNAG does not list active NPA NXX information unless it is associated with a future modification or deletion. However, the separately available NPA NXX Active Code List (NNACL) contains a complete list of active codes. Telcordia<sup>®</sup> Routing Administration does not provide integration processes between the two lists.

The example provided at the end of this description is a depiction of results from the user interface provided with each copy of the NNAG. Results from queries generated through this interface can be downloaded to your local environment using various user-controlled options. Fixed-width ASCII files data feeds are also included with each product should you wish to directly use the data from such files in lieu of the user interface. This data can be locally imported into Excel, loaded into locally developed databases, and/or read with applications that can read text files (e.g. Notepad, Microsoft<sup>®</sup> Word). Reading and processing of the data is a local consideration, based on user needs, processing environment, etc.

A sample copy of the NNAG, containing abridged, slightly older data, is available for download, at no charge, at [www.trainfo.com](http://www.trainfo.com) (catalog tab).

If there is need to initialize or periodically maintain a complete set of active NPA NXX records, such is available quarterly through the NNACL product. An integration application to directly update the NNACL data with the NNAG data is not provided due to the wide range of user environments and uses of the data; such must be developed by the user if needed. Due to the vast diversity among user environments, integration of the data into your local environment is your responsibility; however, TRA can assist your staff through explanation of the data, etc.

***Telcordia<sup>®</sup> NPA NXX Activity Guide:***

***Produced: first workday monthly***

***Distribution frequency: monthly***

***Distribution format(s): CD-ROM, web download***

## Telcordia® NPA-NXX Activity Guide (NNAG)

NPA NXX Block Search

OCN Search

Help

Select Files To Be Searched:

 Main Data
  Insert Data
  Both

Select Output Fields and Enter Search Criteria:

NPA  2\* (Use ? to match any one number or letter, or \* for more than one)

NXX

Block (B)

Status (S)  All

Portable (PI)  All

COC Type (COC)

Effective Date (Date)

OCN

Special Service Code (SSC)

OCN Name

Switch (SW)

Switch LATA (LATA)

Rate Center (RC)

RC State/Province (ST)

(Check/uncheck boxes to include/exclude the fields in the output)

Select Output Mode:

 Display
  File

Select a Field Separator and Headers for File Output:

 Fixed
  Tab
  Comma
  Excel
  Other
  Add Headers To File

Run Query

View Output File

Reset

Quit

Results (Record count 767):

View Results in a Separate Window

NPA	NXX	S	Date	COC	SSC	OCN	OCN Name	Switch	LATA	Rate Center	ST
201	275	E	050511	SP2	S	6664	SPRINT SPECTRUM LP	TTBONJ12CM5	224	JERSEY CITY	NJ
201	279	D	042511	PMC	B	6800	TRINITY INTERNTL	JRCYNJZFCM8	224	UNION CITY	NJ
201	419	D	042511	PMC	B	6800	TRINITY INTERNTL	JRCYNJZFCM8	224	HACKENSACK	NJ
201	449	E	050511	SP2	S	6664	SPRINT SPECTRUM LP	TTBONJ12CM2	224	HACKENSACK	NJ
201	464	E	041811	EOC	N	264F	PEERLESS NTWK - NJ	JRCYNJ65DS4	224	HACKENSACK	NJ
201	589			PMC	C	6391	VERIZON WIRELESS-NJ	JRCYNJ10CM3	224	JERSEY CITY	NJ
201	589	M	060311	SP2	S	6664	SPRINT SPECTRUM LP	TTBONJ12CM5	224	JERSEY CITY	NJ
201	685	D	042511	PMC	B	6800	TRINITY INTERNTL	JRCYNJZFCM8	224	NEWARK	NJ
201	749	E	042111	PMC	C	4036	NEW CINGULAR WRL DC	RCPKNJ02GT1	224	RAMSEY	NJ
201	877	E	052811	PMC	C	5562	METRO PCS, INC.	NWRKNJ0247Z	224	CLIFFSIDE	NJ
201	885	D	042511	PMC	B	6800	TRINITY INTERNTL	JRCYNJZFCM8	224	NEWARK	NJ
201	912	E	042111	PMC	C	4036	NEW CINGULAR WRL DC	RCPKNJ02GT1	224	JERSEY CITY	NJ
202	224			EOC	N	9211	VERIZON WASHINGTON	WASHDCDKDS0	236	WASHINGTON ZONE 1	DC
202	224	M	040911	EOC	N	9211	VERIZON WASHINGTON	WASHDCDKDS0	236	WASHINGTON ZONE 1	DC
202	499	E	050711	PMC	C	6855	OMNIPOINT COMM CAP	BTVLM12CMA	236	WASHINGTON ZONE 1	DC
202	568	E	041011	PMC	C	6402	VERIZON WIRELESS-DC	ADLPMDTCM2	236	WASHINGTON ZONE 1	DC
202	827	E	040211	EOC	N	8964	XO D.C., INC.	WASHDCZDS0	236	WASHINGTON ZONE 1	DC

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For more information or the latest product, contact Telcordia® Routing Administration Customer Care Center.

Toll Free: 866-NPA-NXXS, Direct: 732-699-6700, Email: tra@telcordia.com, Web: www.trainfo.com.

## Telcordia<sup>®</sup> LIDB Access Routing Guide (LARG)

The Telcordia<sup>®</sup> LIDB Access Routing Guide (LARG) is a single source for Line Information DataBase (LIDB) access routing data. The data can be used to administer and maintain Signal Transfer Point global title translation (GTT) tables for routing to data sources supporting Alternate Billing Services (certain calling cards, bill-to-third, collect, etc.). It identifies the responsible Signaling Network Control Center (SNCC), the appropriate Line Information DataBase provider, the inter-network route effective date, and the capability code or pseudo point code data. The LARG's format and content are similar to the Calling Name Access Routing Guide (CNARG) that is used to manage access for database queries relative to Calling Name information.

***The LARG is a useful tool for:***

- Alternate Billing Service providers
- Database maintenance staff
- Increasing accuracy of queries
- Improving GTT performance

A text file that defines data fields, provides contact information, etc., is provided with each issue.

***Telcordia<sup>®</sup> LIDB Access Routing Guide:***

***Produced: first workday monthly***

***Distribution frequency: monthly***

***Distribution format(s): email, web download***

## Telcordia<sup>®</sup> Calling Name Access Routing Guide (CNARG)

The Telcordia<sup>®</sup> Calling Name Access Routing Guide (CNARG) is a single source of information for accessing information relative to databases containing subscriber Calling Name information. The CNARG data can be used to administer and maintain Signal Transfer Point global title translations (GTT) tables used to route to points that contain this data. The CNARG's format and content are similar to the LIDB Access Routing Guide (LARG) that is used to manage access for database queries relative to alternate billing services information.

***The Calling Name Access Routing Guide is a useful tool for:***

- Calling Name service providers
- Database maintenance staff
- Increasing accuracy of queries
- Improving GTT performance

A text file that defines data fields, provides contact information, etc., is provided with each issue.

***Telcordia<sup>®</sup> Calling Name Access Routing Guide:***

***Produced: first workday monthly***

***Distribution frequency: monthly***

***Distribution format(s): email, web download***

# Telcordia® Telephone Area Code Directory (TACD)

The Telcordia® Telephone Area Code Directory identifies the Area Code(s) (NPA(s)) associated with a given locality within the North American Numbering Plan. This product is useful as a reference tool to research area codes by state and locality. It most often is used by those knowing a locality and needing to know the associated Area Code. Provided as data files, the user can locally develop various associations of localities, states/provinces/countries, and Area Codes, as may be needed for studies, marketing plans, etc. Data changes to these relationships may result for various factors such as Area Code splits and overlays, renamed localities, new localities, Area Code boundary changes, etc.

***Telcordia® Telephone Area Code Directory:***

***Produced: mid-month monthly***

***Distribution frequency: monthly***

***Distribution format(s): email, web download***

***The following example of TACD data is presented for illustrative purposes only.***

The following represents the data that is included in the TACD. The actual product consists of a fixed formatted ASCII data file. File specifications and a glossary of terms are provided with each issuance. File specifications can also be downloaded, at no charge, from [www.trainfo.com](http://www.trainfo.com) (documents tab).

TELEPHONE AREA CODE DIRECTORY  
NORTH CAROLINA

ASHEBORO	336	AULANDER	252	BAILEY	252
ASHEVILLE	828	AUTRYVILLE	910	BAKERSVILLE	828
ASFORD	828	AVON	252	BALD CREEK	828
ATKINSON	910	AYDEN	252	BALD HEAD COAST GUARD	980
ATLANTIC	252	AYDLETT	252	BALDWIN	336
ATLANTIC BEACH	252	BADIN	704	BALFOUR	828
AUBURN	919		980	BALSAM	828
	984	BADIN LAKE	336	BALSAM GROVE	828
AULANDER	252	BAHAMA	919	BANNER ELK	828
AURORA	252		984	BARCO	252

# Telcordia® Emergency Notifications

Telcordia® Emergency Notifications report last minute changes that are not included in the current month's products. Emergency Notifications are published at least once a week.

***Telcordia® Emergency Notifications are useful for:***

- Engineers responsible for call routing and switch translations
- Network planners/architects to prepare for coming changes
- Call rating and billing operations staff
- Recipients of the LERG and/or TPM that need to be aware of last minute NXX announcements (new code openings)

Emergency Notifications report *new* NXXs that are effective in less than 45 days from the date they are entered into the underlying TRA database by the service provider or its agent. Industry lead time for an NXX opening is a minimum of 45 days from the data entry date; however for various reasons, exceptions may sometimes be necessary. Emergency Notifications may also provide information of general interest such as reported blocked calls, short notice homing changes, and Rate Center changes. High level information regarding Area Code Splits (dates and test numbers) are provided and summarized once a month.

Immediate Emergency Notifications are the same as the Emergency Notifications. These are immediately issued anytime a new NXX is in effect less than 15 days from the effective date. Emergency Notification subscribers receive the Immediate Emergency Notification service at no extra charge. Emergency Notifications are available by email only. Note that the EN / IEN service does not provide indication of late code openings relative to NPA NXX *block* assignments.

***Telcordia® Emergency Notifications:***

**Produced: Each Tuesday and as may be needed otherwise**

**Distribution frequency: Each Tuesday and as may be needed otherwise**

**Distribution format(s): email**

# Telcordia® Area Code Split Exchange Data

Telcordia® Area Code Split Exchange Data (ACSED) provides a listing of all the exchanges (prefixes, NXXs) involved with an Area Code split. Although lists may be available from other sources, they often do not reflect changes that occur mid-stream during the permissive dialing period. The ACSED *does* reflect such changes.

**The ACSED is a useful resource for:**

- Those maintaining customer lists/databases for associations, telemarketing, customer service, etc.
- Preparing for upcoming area code splits relative to the above types of situations, as well as for internal company processes, billing systems, and network processes.
- Collection agencies, legal agencies, regulatory bodies, and any company or agency that deals with researching telephone numbers from sources that may be several years old.

**Although Area Code splits are substantially less pervasive than they were a few years ago, the quarterly ACSED can keep you aware of future splits.** An Area Code Split Exchange Data – Historical (ACSED-H) is *also* available and provides an exchange list for each split since 1989, covering 150 splits. Included with the ACSED, and with most splits in the ACSED-H, is a listing of the primary localities associated with each split.

Data, as shown below, is provided as fixed formatted ASCII files that can be read with a text editor, loaded into spreadsheet programs, processed and also loaded into various databases. Due to the vast diversity among user environments, integration of the data into your local environment is your responsibility; however, TRA can assist your staff through explanation of the data, etc.

Data is structured as shown below and is provided as one file for each split. However, an executable program is included with the ACSED that provides options to re-organize the data into a few other layouts, as well as combine data from different files, so as to make it easier to integrate with your local needs.

A sample copy of the ACSED, containing abridged data, is available for download, at no charge, at [www.trainfo.com](http://www.trainfo.com) (catalog tab).

**Telcordia® Area Code Split Exchange Data:**

**Produced: first workday quarterly (March, June, September, December)**

**Distribution frequency: quarterly (March, June, September, December) (Note: ACSED-H is available as a one-time order only)**

**Distribution format(s): email, web download**

ACSED (spreadsheet format is for illustrative purposes only)					ACSED			
					Locality Data			
NPA	NXX	START DATE	STOP DATE	RATE CENTER	OLD NPA	NEW NPA	STATE	LOCALITY
...					...			
909	253	010184	103004	ELSINORE	909	951	CA	ALBERHILL
951	253	071704		ELSINORE	909	951	CA	ANZA
909	255	010184	103004	RIVERSIDE	909	951	CA	ARLINGTON
951	255	071704		RIVERSIDE	909	951	CA	BANNING
909	256	010184	103004	CORONA	909	951	CA	BEAUMONT
951	256	071704		CORONA	909	951	CA	CABAZON
909	257	010184	103004	IDYLLWILD	909	951	CA	CHERRY VALLEY (RIVERSIDE)
951	257	071704		IDYLLWILD	909	951	CA	CORONA
909	258	010184	103004	CORONA	909	951	CA	EDGEMONT
951	258	071704		CORONA	909	951	CA	ELSINORE
909	259	010184	103004	FERRIS	909	951	CA	HEMET
951	259	071704		FERRIS	909	951	CA	HEMET DA
909	264	010184	103004	CORONA	909	951	CA	HIGHGROVE
951	264	071704		CORONA	909	951	CA	HOMELAND
909	265	010184	103004	TEMECULA	909	951	CA	IDYLLWID (RIVERSIDE)
951	265	071704		TEMECULA	909	951	CA	LAKEVIEW
...					...			

# Telcordia® Vertical and Horizontal Calculation Software

Telcordia® Vertical and Horizontal Calculation Software (VH-CALC) can help save staff time by translating latitude and longitude and V&H coordinates for such needs as new switch installations, Rate Centers, and points of interconnection. It also can be used to compute distances between sets of V&H coordinates.

## ***This software is a useful tool for:***

- Switch manufacturers
- Network planners
- Cartographers developing special purpose maps

Vertical and Horizontal (V&H) coordinates identify points on the earth's surface and are derived from latitude and longitude. Developed by the telecommunications industry, they simplify the calculations needed to determine the straight-line airline distance between two sets of geographical points. Distance-sensitive rating processes use Rate Center V&H coordinates to determine mileage relative to rate bands. Switch V&H coordinates are used primarily when developing distance sensitive access charges.

The Vertical and Horizontal Calculation Software is a PC-based program that permits the conversion, in both directions, of V&H coordinates and latitude/longitude. The program has two modes: interactive and batch. It is DOS-based but is executable in Windows. The interactive mode is a user-prompted interface that assesses one set of coordinates at a time. The batch mode provides the capability to convert sets of V&H coordinates and latitude/longitude data in a data file, in either direction, in bulk.

The software is provided on a 3.5", 1.44MB DOS-formatted diskette. The ReadMe file on the diskette provides specifics on how to use the software, as well as information on the batch mode file layouts.

## ***Vertical and Horizontal Calculation-Interactive:***

This mode provides the capability to assess the following, one set of coordinates at a time:

1. Converts Vertical and Horizontal coordinates to latitude/longitude
2. Converts latitude/longitude to Vertical and Horizontal coordinates
3. Computes the distance between a set of Vertical and Horizontal coordinates
4. Provides Vertical and Horizontal coordinates and computes the latitude/longitude for an NPA NXX\*
5. Computes the distance between a pairs of NPA NXXs\*

\*Used only with the following data products: TPM™ Data Source, OTCNPG, Geographic Exchange List. These products provide Rate Center Vertical and Horizontal coordinates; the Geographic Exchange List includes Switch Vertical and Horizontal coordinates.

## ***Vertical and Horizontal Calculation-Batch:***

This includes the Vertical and Horizontal Calculation-Interactive software, and adds additional programs that convert all records in a user-created data file containing V&H coordinates to latitude/longitude (and in the reverse direction). Data in the Vertical and Horizontal Calculation - Batch software requires a locally prepared ASCII file in a prescribed layout for input to the program. Users should have some experience with PCs and data management to address input and output requirements of the program.

## ***Telcordia® Vertical and Horizontal Coordinates Software:***

***Produced: ongoing version; updated release if /when necessary***

***Distribution frequency: one-time***

***Distribution format(s): diskette***

# Telcordia<sup>®</sup> Geographic Exchange List (GEL)

The Telcordia<sup>®</sup> Geographic Exchange List (GEL) is a source for all geographic information associated with an NPA NXX in the LERG<sup>™</sup> Routing Guide and TPM<sup>™</sup> Data Source.

## ***The GEL is a useful tool for:***

- Those needing geographic information for exchanges
- Market planners
- Cartographers developing special purpose maps

The GEL is issued semiannually in January and July of each year. Each issue contains a complete listing of currently active NPA NXXs and associated geographical data. Each NPA NXX record is associated with a compilation of its geographic data from the LERG<sup>™</sup> Routing Guide and TPM<sup>™</sup> Data Source as noted below.

The GEL is available on 3.5", 1.44MB DOS-formatted diskettes, with data in fixed-record ASCII formatted data files. Each data file represents a Numbering Plan Area (i.e., Area Code) series Numbering Plan Area 2XX through 9XX, where X=0-9.

## ***The GEL data elements are:***

- NPA (Area Code)
- Central Office Code (COC)
- (e.g. NXX, "prefix", "exchange")
- State (of the NPA NXX)
- Locality (of the NPA NXX)
- Rate Center Name
- Rate Center Vertical Coordinate
- Rate Center Horizontal Coordinate
- Place Name (generally appears on bills)
- Place Name State
- Serving Wire Center (switch) Vertical Coordinate
- Serving Wire Center (switch) Horizontal Coordinate
- Serving Wire Center (switch) City/Town
- Serving Wire Center (switch) State
- Serving Wire Center (switch) Zip/Postal Code
- Rate Center (Full) Name

The Serving Wire Center is the switch with which the NPA NXX is associated. Vertical and Horizontal coordinates are derived from longitude and latitude coordinates. The Vertical and Horizontal coordinates usually pinpoint a location and are used to calculate the airline mileage between two sets of points. Zip Code information relates to the *switch address only* and is not a representation of the NPA NXX coverage relative to Zip Codes. Locality and Place Name are one per NPA NXX. Occasionally the NPA NXX covers several towns while the GEL identifies only one.

## ***Telcordia<sup>®</sup> Geographic Exchange List:***

***Produced: first workday (January, July)***

***Distribution frequency: semi-annual (January, July)***

***Distribution format(s): diskette***

# Operating Telephone Company Numbering Plan Guide

Distribution of the Telcordia® Operating Telephone Company Numbering Plan Guide (OTCNPG) is restricted to local Service Providers and their service bureaus. The OTCNPG is provided under license and is not available to the general public.

***The Telcordia® Operating Telephone Company Numbering Plan Guide is used to:***

- Support various systems used in call rating
- Support processes that involve the NPA NXX data contained in the product

***The OTCNPG data includes:***

NPA NXX data	RAO Directory	Card Issue Identification (CIID) codes
CNA Contacts	Special Calling Card data	Operating Company Numbers (OCNs)
Business Office data	Toll Library Directory	

Note that much of the data available through the OTCNPG is also available through the unrestricted Telcordia® TPM™ Data Source.

***Telcordia® Operating Telephone Company Numbering Plan Guide:***

***Produced: mid-month monthly (product issuances are dated the 15<sup>th</sup> of the month following creation)***

***Distribution frequency: monthly or quarterly (issue date: January, April, July, October)***

***Distribution format(s): CD-ROM, web download, electronic data transfer (monthly subscribers only and assessed on a case by case basis)***

## Point Code Data

Point codes are 24-bit binary codes which are needed for all signaling points using Signaling System 7 (SS7). SS7 is a means by which elements of the telephone network exchange information. Point codes identify network nodes in order that the SS7 network can route calls properly.

Point codes consist of 9 digits. The first three represent the network, the second three the cluster, and the third three the member. (Large networks start at 254 and are decrementing. Small networks use network code 002, and point code blocks are assigned from network code 005. ANSI-41 wireless networks outside of North America are assigned from network code 006.)

EXAMPLES:	LARGE	254-000-000 through 254-255-255
	SMALL	002-001-000 through 002-001-255
	BLOCK	005-001-004 through 005-001-007
	ANSI-41	006-001-000 through 006-001-255

*Note: Telcordia Technologies is the Administrator of SS7 point codes. Telcordia maintains a website, [www.ss7pcadmin.com](http://www.ss7pcadmin.com), where carriers can order and pay for point code "assignments" online. The website also contains assignment guidelines. A complete updated listing of these assignments (a mapping of assigned point code ranges to given service providers) is provided as a data file in the Telcordia® LERG Routing Guide. However, Point Code "assignments" should not be confused with the Point Code Data product as described below.*

TRA processes and provides SS7 Point Code Data in accordance with the Alliance for Telecommunications Industry Solutions (ATIS) guidelines. The Point Code Data product maps specific 9 digit point codes to switches (identified via CLLI™ codes). Information is provided to Telcordia directly from service providers that desire information be distributed in this manner. Since some data providers consider this information proprietary, to obtain the Point Code Data product you must call TRA. We will interface with the provider(s) from whom you seek data and, should the provider concur, we will provide you the data.

The point code data can be considered an extension of the switch (LERG7) file data in the Telcordia® LERG Routing Guide. The LERG contains a Point Code field – if the field contains a "P", then that CLLI and point code relationship may be able to be made available to you.

***Following is the layout of the primary file in the Point Code Data product (data is fixed formatted ASCII):***

OCN	(Operating Company Number)
EFFDATE	(Date of an activity)
STATUS	(Type of activity)
SW IDENT	(CLLI)
POINT CODE	9 digits

OCN refers to a four digit code which can be used to identify the "owner" of the switch. An OCN to company name mapping file is also provided with the Point Code Data product. EFFDATE is used in conjunction with STATUS and refers to the effective start date of the STATUS activity. A blank EFFDATE indicates that the record is already "active" as of the date of the product.

***Point Code Data:***

***Produced: first workday monthly***

***Distribution frequency: monthly***

***Distribution format(s): email***

## [Product Pricing / Ordering / Licenses / Other Services](#)

### ***Product Pricing:***

Pricing is not included in this catalog. Although some of the "smaller" TRA products are fixed priced for all customers, the majority of products follow a value based pricing scheme. Value based pricing is based on assessing several parameters that attempt to determine the 'value' of the product to the customer. Parameters include the type of company requesting the product, size of the company, etc. This pricing process is an equitable process whereby similar types of customers, relative to the assessed parameters, are charged the same price. The pricing process is consistent with the general TRA philosophy of providing a fair and equitable environment relative to its customers. In terms of value based pricing, this can be best understood as weighing pricing to customers in consideration that larger companies may 'benefit' substantially more from the data in TRA products than smaller companies.

### ***Product Ordering Process:***

Ordering a TRA product is a two step process. Once you have decided on which products may meet your needs, please follow these steps:

***Obtain a Price Quote*** - TRA products are priced based on value based pricing principles. Thus, prices can vary by company. To obtain a price quote, complete both pages of the TRA Price Request Form, then submit them to TRA. The first page is used to identify the product(s) you are interested in and the second page is used as input to determine pricing. Once the TRA Price Request Form is received by TRA, TRA will respond within two business days either with a quoted price(s) or, requesting further information that may be necessary to determine such.

***Submit an Order*** - After reviewing the price quote, if you wish to proceed to order a product(s), you need to complete a TRA Order Request Form. Simply list the product(s) you have chosen to license along with the quoted price(s). Also, include the required shipping and billing addressee information and indicate the billing method along with any Purchase Order Number, if applicable, and sign the order form. The completed order form, along with any payment as may be applicable for the given product(s) should then be submitted as described on the form.

TRA Price and Order Request Forms are available at [www.trainfo.com](http://www.trainfo.com), or you may call the TRA CCC for a copy. Note that some products may require pre-payment; others may be periodically billed.

### ***Renewals:***

Given various scenarios under which a customer may order and pay for a TRA product, specifics may vary, but in general, the renewal process for subscriptions is as follows:

A subscription to a TRA product is viewed as an ongoing (automatically renewable) annual subscription. TRA will issue a notice at a reasonable point before your annual subscription date indicating the product's pricing for the upcoming year. Essentially, if you wish to continue to receive the product you will just need to pay for the subscription once you are billed or, if prepayment is required, prepay for an additional year. If you are billed monthly, there is no need for any action if you wish to continue for another year, beyond just continued payment of monthly billed amounts.

### ***TRA Enterprise Licenses:***

- All TRA product licenses are “Enterprise Licenses” that grant ALL employees in a company or specific Line of Business (LOB) unlimited access to the TRA data product for internal job functions within the specific company Line of Business (LOB) obtaining the license.
- An Enterprise License for the monthly subscription LERG™ Routing Guide Data Product includes the LERG™ Routing Guide One-Day Changes Process product.
- The product may be copied, duplicated, or loaded onto any employee’s personal computer, a LAN, WAN, server, Operations Support System, or other networked device that is accessed by all employees and downstream systems.
- Data may not be extracted in whole or in part for use in derivative products or services for distribution, license, or sale outside the company or LOB.
- Standard pricing algorithms are employed to ensure prices to all clients are fair and equitable and consistent with TRA and industry-accepted Fair Share principles. Prices for Enterprise Licenses are determined by the use of product data and the value your company derives from the data in the product.

### ***Special Licenses:***

Under certain conditions, TRA will consider special licensing arrangements designed for companies with special needs. Due to the unique nature of each client’s need, these Special Licenses are customized to meet your company’s specific situation. TRA will work with you to design a license to help you reach your goals and at the same time protect our product content from unauthorized use. Please contact our TRA Customer Care Center to discuss how TRA can best meet your company’s needs.

### ***Restrictions on Using TRA Data:***

TRA strictly prohibits the use of data from its products for other purposes without a special license as previously described. Please contact our TRA Customer Care Center to inquire about a special license.

### ***Extended Product Support Services:***

TRA can provide customers with services that go beyond answering routine questions and similar basic product support. Such can include, but is not limited to:

- Extracting detailed report information, file data, etc., from specific products should the customer not have the time, expertise, etc., to do so.
- Developing software to automatically retrieve or to utilize a TRA product at the user-end.
- Correlating, assessing, etc, user supplied data in relation to TRA product data.

Telcordia® Routing Administration reviews each request for extended product support services on an individual case basis. After the review, if determined we can provide such service, an approximate amount of time and a price to complete the requested work will be quoted. Such services may be cost beneficial if you are trying to obtain specific information and are not familiar with the data and/or concerned with your ability, costs, etc., to process the data.

For additional information, contact TRA at 866-NPA-NXXs (866-672-6997) or 732-699-6700.

## ***TRA Training / Workshops:***

### *Data input:*

TRA provides Live Meeting training to those service providers or their representatives that input into TRA databases. This training constitutes 4 separate 3 hour modules held over a 4 day period. Sessions are scheduled approximately once per quarter. Companies that input data can also arrange for a company specific session via Live Meeting as well as on-site suitcased training.

### *TRA and Product Workshops:*

TRA can suitcase a prepared “workshop” to a customer location if desired. TRA personnel will conduct the workshop which can vary from one to two days in length. The workshop covers topics such as industry groups involved with rating/routing, TRA responsibilities, numbering, basic routing concepts, and from a products standpoint, focuses primarily on the LERG product. Specific topics can be fine tuned between TRA and the company requesting a workshop. Pricing varies due to various factors. Please contact TRA if you are interested.

## **Payment Information**

### ***Payment and Billing Terms:***

The Telcordia® Routing Administration accepts credit cards (American Express, Master Card, and VISA) for payment for all TRA product license fees. Some products/orders may require prepayment. Orders that do not require prepayment may be prepaid at the option of the customer. Products not requiring prepayment are billed on an annual basis (monthly and quarterly billing options are available upon request; however, a 3% service charge applies). Payment is due within thirty (30) days of the date of the invoice. Overdue payments are subject to late charges and interest in accordance with the TRA Product License Terms and Conditions.

### ***Taxes:***

Customers are responsible for remitting appropriate taxes relative to the product or service purchased. Taxes are based on several factors including the type of product or service involved and any jurisdictional taxes (e.g. sales, state, local, provincial) that may apply. Tax requirements are based on the “primary user/ship-to” address provided by the customer on the order form regardless of the distribution format used to obtain the product.

### ***Subscription Term:***

Billable TRA product licenses (those not *requiring* prepayment) are considered evergreen in nature, meaning the intent is to continue to distribute the product unless specifically terminated by either party. This ensures that you are afforded uninterrupted receipt of a product that may be directly tied to internal processes run by your company. However, to ensure your awareness of when the billing term of your license is nearing conclusion (usually an annual period), you will be notified of upcoming billing for a new term to permit for continued receipt of the product.

### ***Cancellation Policy:***

If payment is not received within 45 days of the billing date, the order is cancelled without notice and subsequent products are not sent. If the customer wishes to renew distribution, payment of past due amounts and late payment charges must be made and a new order must be submitted with prepayment for one year. After the year has transpired, the customer may choose monthly billing as long as payment is received in a timely manner. Notify TRA in writing, thirty days in advance, to cancel product delivery.

### ***Refund Policy:***

There are no refunds for products requiring prepayment. If you are uncertain as to what a particular product contains, please call our Customer Care Center at 866-NPA-NXXs (866-672-6997) or 732-699-6700 before submitting an order.

### ***Shipping:***

TRA product prices include shipping, except for overnight and international shipments.