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TELECOM Digest Guide to
North American Area Codes

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January 16, 1989

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This guide is in several parts:

- 1) Numerical listing of area codes; major cities served by each or state name, where area code serves entire state or province.
- 2) Listing and discussion of SAC's (Special Area Codes) which do not relate to the voice telephone network or do relate to the voice network but have no specific geographical region assigned.
- 3) Numerical listing of prefixes in 'area code' 800 (the code used for In-WATS 'toll-free' calling) and telephone carrier which is assigned to each.
- 4) Numerical listing of prefixes in 'area code' 900 (the code used for value added information services) and the telephone company or IP (Information Provider) which operates each group of lines.
- 5) A translation table for the names of the companies involved.
- 6) A technical discussion of the processing of 700/800/900 calls.
- 7) A glossary of technical terms used throughout the guide.

To ascertain the name of a community assigned to any particular prefix other than 700/800/900 -- that is to say, a 'regular' area code, simply dial the AT&T Operator at 10288-0 (or simply '00' if AT&T is your default long distance carrier. Ask the operator for the 'name-place' of the area code and prefix in question. There is no charge for this service.

The persons named at the start of each item in the guide are responsible for the accuracy of the contents therein. We hope this guide to area codes in North America will be useful information for Usenetters using the phone.

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To: comp-dcom-telecom@rutgers.edu
From: dupuy@cs.columbia.edu (Alexander Dupuy)
Subject: Area Code Numerical Listings
Date: 13 Jan 89 22:11:51 GMT

You don't need a C program to translate area codes into placenames: this script does the trick just as well, and it's easy to modify when they change:

@alex

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#!/bin/sh
'exec' /usr/bin/look "$1" "$@"
011 [ International Access Code ]
201 Morristown, and Newark, (Northeast) New Jersey
202 Washington, District of Columbia
203 All parts of Connecticut
204 All parts of Manitoba, CANADA
205 All parts of Alabama
206 Seattle, Tacoma, and Vancouver, (Western) Washington
207 All parts of Maine
208 All parts of Idaho
209 Fresno and Stockton, (Central) California
212 New York City (Manhattan and Bronx) New York
213 Los Angeles, California
214 Dallas, (Northeast) Texas
215 Allentown, Chester, and Philadelphia, (Southeast) Pennsylvania
216 Akron, Cleveland, Massillon, and Youngstown, (Northeast) Ohio
217 Springfield, (South Central) Illinois
218 Duluth, (Northern) Minnesota
219 Gary, Hammond, Michigan City, and South Bend, (Northwest) Indiana
301 All parts of Maryland
302 All parts of Delaware
303 Denver, (North and West) Colorado
304 All parts of West Virginia
305 Fort Lauderdale, Key West and Miami, (Southeast) Florida
306 All parts of Saskatchewan, CANADA
307 All parts of Wyoming
308 North Platte, (Western) Nebraska
309 Peoria, (West Central) Illinois
312 Chicago, Illinois
313 Detroit and Ann Arbor, (Eastern) Michigan
314 Saint Louis and Columbia, (Eastern) Missouri
315 Syracuse and Utica, (North Central) New York
316 Dodge City and Wichita, (Southern) Kansas
317 Indianapolis and Kokomo, (Central) Indiana
318 Lake Charles and Shreveport, (Western) Louisiana
319 Dubuque, (Eastern) Iowa
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401 All parts of Rhode Island
402 Lincoln and Omaha, (Eastern) Nebraska
403 All parts of Alberta, CANADA
404 Atlanta and Rome, (Northern) Georgia
405 Oklahoma City, (South and West) Oklahoma
406 All parts of Montana
407 Orlando, West Palm Beach, (Eastern) Florida
408 San Jose and Sunnyvale, (Silicon Valley) California
409 Galveston, (Southeast) Texas
411 [Directory Assistance]
412 Pittsburgh, (Western) Pennsylvania
413 Springfield, (Western) Massachusetts
414 Green Bay, Milwaukee, and Racine, (Eastern) Wisconsin
415 Oakland and San Francisco, (Bay Area) California
416 Toronto, (South Central) Ontario, CANADA
417 Joplin and Springfield, (Southwest) Missouri
418 Quebec City, (Northeast) Quebec, CANADA
419 Toledo, (Northwest) Ohio
501 All parts of Arkansas
502 Louisville and Paducah, (Western) Kentucky
503 All parts of Oregon
504 Baton Rouge and New Orleans, (Eastern) Louisiana
505 All parts of New Mexico
506 All parts of New Brunswick, CANADA
507 Rochester, (Southern) Minnesota
508 Worcester, Framingham and New Bedford, (Eastern) Massachusetts
509 Spokane, and Walla Walla, (Eastern) Washington
512 Austin, Corpus Christi, and San Antonio, (Southern) Texas
513 Cincinnati and Dayton, (Southwest) Ohio
514 Montreal, (Southern) Quebec, CANADA
515 Des Moines, (Central) Iowa
516 Hempstead, (Long Island) New York
517 Lansing and Saginaw, (Central) Michigan
518 Albany and Schenectady, (Northeast) New York
519 London, (Southwest) Ontario, CANADA
601 All parts of Mississippi
602 All parts of Arizona
603 All parts of New Hampshire
604 All parts of British Columbia, CANADA
605 All parts of South Dakota
606 Ashland and Covington, (Eastern) Kentucky
607 Binghamton, Elmira and Ithaca, (South Central) New York
608 Beloit and Madison, (Southwest) Wisconsin
609 Atlantic City, Camden, and Trenton, (Southwest) New Jersey
611 [Repair Service]
612 Minneapolis and Saint Paul, (Central) Minnesota
613 Ottawa, (Southeast) Ontario, CANADA
614 Columbus, (Southeast) Ohio

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615 Chattanooga and Nashville, (Eastern) Tennessee
616 Battle Creek, and Grand Rapids, (Western) Michigan
617 Boston area, (Eastern) Massachusetts
618 Alton and Centralia, (Southern) Illinois
619 San Diego and the Imperial Valley, California
701 All parts of North Dakota
702 All parts of Nevada
703 Arlington and Roanoke, (North and Western) Virginia
704 Charlotte and Salisbury, (Western) North Carolina
705 North Bay, (Northern) Ontario, CANADA
706 Tijuana, (Northwest) MEXICO [equivalent to +52 6X XXX XXX]
707 Eureka, Napa, and Santa Rosa, (North Coastal) California
708 Aurora, Elgin, Evanston, and Waukegan (Northeast) Illinois (as of 11-89)
709 All parts of Newfoundland and Labrador, CANADA
712 Council Bluffs, (Western) Iowa
713 Houston, Texas
714 Orange County and Palm Springs, California
715 Eau Claire and Wausau, (Northern) Wisconsin
716 Buffalo, Niagara Falls, and Rochester, (Western) New York
717 Harrisburg, Scranton, and Wilkes-Barre, (Central) Pennsylvania
718 New York City (Queens, Brooklyn and Staten Island) New York
719 Colorado Springs and Pueblo, (Southeast) Colorado
801 All parts of Utah
802 All parts of Vermont
803 All parts of South Carolina
804 Charlottesville, Norfolk, and Richmond, (Southeast) Virginia
805 Bakersfield, Ventura, and Simi Valley, (South Central) California
806 Amarillo, (Northern) Texas
807 Thunder Bay, (Northwest) Ontario, CANADA
808 All parts of Hawaii
809 Bahamas, Bermuda, Puerto Rico, and the Virgin Islands
812 Evansville, (Southern) Indiana
813 Fort Myers and St. Petersburg, (Southwest) Florida
814 Altoona and Erie, (West Central) Pennsylvania
815 Joliet, and Rockford, (Northwest) Illinois
816 Kansas City and Saint Joseph, (Northwest) Missouri
817 Fort Worth, Temple, and Waco, (North Central) Texas
818 San Fernando (Suburban area near Los Angeles), California
819 Sherbrooke (South Central and Northwest) Quebec, CANADA
901 Memphis, (Western) Tennessee
902 All parts of Prince Edward Island and Nova Scotia, CANADA
903 * Unassigned *
904 Jacksonville, (Northeast) Florida
905 Mexico City, (Northern) MEXICO [equivalent to +52 5 XXX XXXX]
906 Sault Ste. Marie, (Northern) Michigan
907 All parts of Alaska
908 * Unassigned *
909 * Unassigned *

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911 [Police/Fire Emergency Service]
912 Macon and Savannah, (Southern) Georgia
913 Salina and Topeka, (Northern) Kansas
914 White Plains, and Poughkeepsie, (Southern) New York
915 El Paso, (Western) Texas
916 Sacramento, (Northern) California
917 * Unassigned *
918 Muskogee and Tulsa, (Northeast) Oklahoma
919 Greenville, Raleigh, and Winston Salem, (Eastern) North Carolina

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inet: dupuy@columbia.edu
uucp: ...!rutgers!columbia!dupuy

Date: Sun, 15 Jan 89 10:39:19 EST
From: telecom@bu-cs.BU.EDU (TELECOM Moderator)
To: Telecom@bu-cs.bu.edu
Subject: Supplementary Code Numbers

You may wish to add a few additional codes to the list given above. These three digit codes are also in use, although they are not, strictly speaking, 'area codes'. They are not in the chart above since I thought some of you may not want them there. If you do, then edit them in.

200 Local testing, used by many telcos.
410 Western Union Telegraph Company - Northeastern USA
510 Western Union Telegraph Company - Eastern USA
610 Western Union Telegraph Company - Canada
700 Value Added Information Services, per individual OCC
710 Western Union Telegraph Company - Southern USA
800 In-WATS 'toll free' calling
810 Western Union Telegraph Company - Mexico
900 Mass Calling Information/Value Added Services
909 Telenet Communications Corp. Data Network
910 Western Union Telegraph Company - Western USA (from Chicago westward)

The thing with WUTCO is, many years ago the old Bell System operated Teletype machines; what they called the TWX (or [T]ype[W]riter E[X]change. The TWX machines had their own switches, located in existing telephone central offices, but on separate equipment. About twenty years ago, a court ruling required Bell to sell its TWX service to Western Union, in a suit brought by WUTCO against AT&T. WUTCO operated the system as TWX for many years, and in the past five years has changed the name to Telex II. The Western Union central offices for Telex I (the original telex network) have always been in WUTCO offices. The central offices for Telex II (formerly AT&T's TWX) are

still in Bell central offices, although they now belong to WUTC0. Is that clear?

Telenet's data network uses conventional area code numbering in the way its switches route calls. Again, there is a lot of telco central office equipment tied up with hardwired connectons between Telenet and its customers who have direct connect PADS, etc. Telenet also has gateways into telex and TWX (or Telex II). 'Area Code' 909 is assigned for billing purposes to the activities of Telenet. If you use the Telenet network, via indials or whatever, note that any connection of the form @C 909xxx is a connection to the Telenet headquarters offices in Reston, VA.

So these codes 410,510,610,710,810 and 909 are occupied and recognized by the network for purposes other than voice. You cannot dial into them from the voice network, but they are none the less assigned.

Likewise, AUTOVON, the federal government telephone network, is largely accomodated through the Bell central offices in every city with federal government facilities. This part of the overall network was grouped together under 300 at one time. I am not sure of the code now. No one *actually dials* 300-anything, but the number relates to that function. Calling from the public switched network to AUTOVON is largely transparent. In calling to a federal office in Our Nation's Capitol for instance, we can generally dial 202-public-last four *or* we can dial 202-autovon-last four and the call will go through. That is because autovon and 202 prefixes are not overlapped or duplicated in many areas.

When the present unassigned area codes of the conventional format have all been used, sometime around 1992-1995, area codes 210,211,310,311,400,500,511, 600,711 and 811 will be next in line for assignment.

Whether or not you want to include these special numbers in the chart given in the earlier message depends on if you want strictly a listing of the *dialable* codes used by the voice network at present, or if you want to include all *assigned* codes. And while 700-800-900 are not strictly speaking area codes, my belief is they definitely should be added to the list.

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Date: Mon, 2 Jan 89 20:30:08 EST
From: scotts@bu-it.BU.EDU
To: telecom@bu-it.bu.edu
Subject: 800 Service

As some readers of this list may not know, under Equal Access, any long-distance company can carry 1-800 traffic. Which carrier gets

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the call is determined (at the moment) by the NNX of the number. I.E. 1-800-528-1234 (The nation-wide number for making reservations at a Best Western Motel) is carried by AT&T. While 1-800-888-1800 is carried by MCI.

The carrier must have Feature Group D presence for originating calls from the originating exchange (either direct, or through an access tandem).

In the future, when CCIS becomes wide-spread, a query will be made in the database [Who gets 1-800-985-1234?] and the call will be routed appropriately. To clarify: Now the carrier is determined by the NNX. In the future, the carrier will be determined by the entire 7 digits.

A similar situation exists with 900 service. Each carrier can reserve NXX-s from BellCore (the people who among a zillion other tasks are in charge of handing out prefixes and area codes). They're not cheap! To get the actual number is free (there are qualifications that I don't deal with), but to get it 'turned on' in a LATA costs you money, depending on (1) How many prefixes you're getting, (2) whether it's 800 or 900 service, (3) How many Tandems/End Offices are in the LATA. It requires a discrete amount of labor for EACH office, because EACH routing table must be modified.

Of the 800 possible NXX-s, 409 are currently assigned. A long-distance carrier can get one 800 and four 900 numbers just for the paperwork. But to get more than that, you have to show that you're 70% full now, and demonstrate a real need for the capacity.

I have included the entire 800-NXX to long-distance carrier translation table. Note that not every NXX is valid in every area.

Revised 800/OCN Translation Table
Effective 10 October 1988

221 ATX	222 ATX	223 ATX	224 LDL	225 ATX
226 MIC	227 ATX	228 ATX	229 TDX	230 NTK
231 ATX	232 ATX	233 ATX	234 MCI	235 ATX
236 SCH	237 ATX	238 ATX	239 DLT	240 SIR
241 ATX	242 ATX	243 ATX	244 ---	245 ATX
246 ---	247 ATX	248 ATX	249 ---	250 ---
251 ATX	252 ATX	253 ATX	254 TTU	255 ATX
256 LSI	257 ATX	258 ATX	259 ---	260 ---
261 SCH	262 ATX	263 CAN	264 ICT	265 CAN
266 CSY	267 CAN	268 CAN	269 FDG	270 ---
271 ---	272 ATX	273 ---	274 MCI	275 ITT
276 ONE	277 SNT	278 ---	279 MAL	280 ADG

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281 ---	282 ATX	283 MCI	284 MCI	285 ---
286 ---	287 ---	288 MCI	289 MCI	290 ---
291 ---	292 ATX	293 PRO	294 ---	295 ---
296 ---	297 ARE	298 ---	299 CYT	
321 ATX	322 ATX	323 ATX	324 HNI	325 ATX
326 UTC	327 ATX	328 ATX	329 TET	330 TET
331 ATX	332 ATX	333 MCI	334 ATX	335 SCH
336 ATX	337 FST	338 ATX	339 ---	340 ---
341 ATX	342 ATX	343 ATX	344 ATX	345 ATX
346 ATX	347 UTC	348 ATX	349 DCT	350 CSY
351 ATX	352 ATX	353 ---	354 ---	355 ---
356 ATX	357 ---	358 ATX	359 UTC	360 ---
361 CAN	362 ATX	363 CAN	364 HNI	365 MCI
366 UTC	367 ATX	368 ATX	369 TDD	370 TDD
371 ---	372 ATX	373 TDD	374 ---	375 TNO
376 ---	377 GTS	378 ---	379 ---	380 ---
381 ---	382 ATX	383 TDD	384 FDT	385 CAB
386 TBQ	387 CAN	388 ---	389 ---	390 ---
391 ---	392 ATX	393 EXF	394 ---	395 ---
396 ---	397 TDD	398 ---	399 ARZ	
421 ATX	422 ATX	423 ATX	424 ATX	425 TTH
426 ATX	427 ---	428 ATX	429 ---	430 ---
431 ATX	432 ATX	433 ATX	434 AGN	435 ATX
436 IDN	437 ATX	438 ATX	439 ---	440 TXN
441 ATX	442 ATX	443 ATX	444 MCI	445 ATX
446 ATX	447 ATX	448 ATX	449 ---	450 USL
451 ATX	452 ATX	453 ATX	454 ALN	455 ---
456 MCI	457 ATX	458 ATX	459 ---	460 ---
461 CAN	462 ATX	463 CAN	464 ---	465 CAN
466 ALN	467 ICT	468 ATX	469 ---	470 ---
471 ALN	472 ATX	473 ---	474 ---	475 TDD
476 TDD	477 ---	478 AAM	479 ---	480 ---
481 ---	482 ATX	483 ---	484 TDD	485 TDD
486 TDX	487 ---	488 ---	489 TOM	490 ---
491 ---	492 ATX	493 ---	494 ---	495 ---
496 ---	497 ---	498 ---	499 ---	
521 ATX	522 ATX	523 ATX	524 ATX	525 ATX
526 ATX	527 ATX	528 ATX	529 MIT	530 ---
531 ATX	532 ATX	533 ATX	534 ---	535 ATX
536 ALN	537 ATX	538 ATX	539 ---	540 ---
541 ATX	542 ATX	543 ATX	544 ATX	545 ATX
546 UTC	547 ATX	548 ATX	549 ---	550 CMA
551 ATX	552 ATX	553 ATX	554 ATX	555 ATX
556 ATX	557 ALN	558 ATX	559 ---	560 ---
561 CAN	562 ATX	563 CAN	564 ---	565 CAN

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566 ALN	567 CAN	568 ---	569 ---	570 ---
571 ---	572 ATX	573 ---	574 AMM	575 ---
576 ---	577 GTS	578 ---	579 LNS	580 WES
581 ---	582 ATX	583 TDD	584 TDD	585 ---
586 ATC	587 LTQ	588 ATC	589 LGT	590 ---
591 ---	592 ATX	593 TDD	594 TDD	595 ---
596 ---	597 ---	598 ---	599 ---	
621 ATX	622 ATX	623 ---	624 ATX	625 NLD
626 ATX	627 MCI	628 ATX	629 ---	630 ---
631 ATX	632 ATX	633 ATX	634 ATX	635 ATX
636 CQU	637 ATX	638 ATX	639 BUR	640 ---
641 ATX	642 ATX	643 ATX	644 CMA	645 ATX
646 ---	647 ATX	648 ATX	649 ---	650 ---
651 ---	652 ATX	653 ---	654 ATX	655 ---
656 ---	657 TDD	658 TDD	659 ---	660 ---
661 CAN	662 ATX	663 CAN	664 UTC	665 CAN
666 MCI	667 CAN	668 CAN	669 UTC	670 ---
671 ---	672 ATX	673 TDD	674 TDD	675 ---
676 ---	677 ---	678 MCI	679 ---	680 ---
681 ---	682 ATX	683 MTD	684 ---	685 ---
686 LGT	687 NTS	688 ---	689 ---	690 ---
691 ---	692 ATX	693 ---	694 ---	695 ---
696 ---	697 ---	698 NYC	699 PLG	
720 TGN				
721 ---	722 ATX	723 ---	724 RTC	725 SAN
726 UTC	727 MCI	728 TDD	729 UTC	730 ---
731 ---	732 ATX	733 UTC	734 ---	735 UTC
736 UTC	737 MEC	738 MEC	739 ---	740 ---
741 MIC	742 ATX	743 EDS	744 ---	745 ---
746 ---	747 TDD	748 TDD	749 TDD	750 ---
751 ---	752 ATX	753 ---	754 TSH	755 ---
756 ---	757 TID	758 ---	759 MCI	760 ---
761 ---	762 ATX	763 ---	764 AAM	765 ---
766 ---	767 UTC	768 SNT	769 ---	770 GCN
771 SNT	772 ATX	773 CUX	774 ---	775 ---
776 UTC	777 MCI	778 UTC	779 TDD	780 TDD
781 ---	782 ATX	783 ALN	784 ALG	785 SNH
786 *1	787 ---	788 ---	789 TMU	790 ---
791 ---	792 ATX	793 ---	794 ---	795 ---
796 ---	797 TID	798 TDD	799 --	
821 ATX	822 ATX	823 THA	824 ATX	825 MCI
826 ATX	827 UTC	828 ATX	829 UTC	830 ---
831 ATX	832 ATX	833 ATX	834 ---	835 ATX
836 TDD	837 TDD	838 ---	839 VST	840 ---
841 ATX	842 ATX	843 ATX	844 LDD	845 ATX

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846 ---	847 ATX	848 ATX	849 ---	850 TKC
851 ATX	852 ATX	853 ---	854 ATX	855 ATX
856 ---	857 TLS	858 ATX	859 ---	860 ---
861 ---	862 ATX	863 ALN	864 TEN	865 ---
866 ---	867 ---	868 SNT	869 UTC	870 ---
871 ---	872 ATX	873 MCI	874 ATX	875 ALN
876 MCI	877 UTC	878 ALN	879 ---	880 NAS
881 NAS	882 ATX	883 ---	884 ---	885 ATX
886 ALN	887 ETS	888 MCI	889 ---	890 ---
891 ---	892 ATX	893 ---	894 ---	895 ---
896 TXN	897 ---	898 CGI	899 TDX	
921 ---	922 ATX	923 ALN	924 ---	925 ---
926 ---	927 ---	928 CIS	929 ---	930 ---
931 ---	932 ATX	933 ---	934 ---	935 ---
936 RBW	937 MCI	938 ---	939 ---	940 TSF
941 ---	942 ATX	943 ---	944 ---	945 ---
946 ---	947 ---	948 ---	949 ---	950 MCI
951 BML	952 ATX	953 ---	954 ---	955 MCI
956 ---	957 ---	958 *2	959 *2	960 CNO
961 ---	962 ATX	963 SOC	964 ---	965 ---
966 TDX	967 ---	968 TED	969 TDX	970 ---
971 ---	972 ATX	973 ---	974 ---	975 ---
976 ---	977 ---	978 ---	979 ---	980 ---
981 ---	982 ATX	983 WUT	984 ---	985 ---
986 WUT	987 ---	988 WUT	989 TDX	990 ---
991 ---	992 ATX	993 ---	994 ---	995 ---
996 VOA	997 ---	998 ---	999 MCI	

NOTES:

*1 -- RELEASED FOR FUTURE ASSIGNMENT

*2 -- These NXX codes are generally reserved for test applications; They may be reserved for Access Tandem testing from an End Office.

Note also: The following NXX are dedicated for RCCP (Radio Common Carrier Paging) under the discretion of the local exchange carrier:

202, 212, 302, 312, 402, 412, 502, 512, 602, 612, 702, 712, 802, 812, 902, and 912.

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900 Series Prefix to OCN translation table

Please note that this differs from the 800 table, because much fewer of the 900 NXXs are assigned.

NXX OCN				
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200 ATX	202 Ameritech	210 ATX	220 ATX	221 TDX
222 ONC	223 TDX	225 Pac. Bell	226 MCI	233 TDX
234 TEN	240 U.S. West	248 Ameritech	250 ATX	258 TEN
254 TTU	255 SNT	260 ATX	264 ADG	266 CSY
272 Bell Atl.	273 CAN	275 ITT	280 Ameritech	282 LGT
283 Pac. Bell	288 GTE N.west	297 CAN	300 ATX	301 Ameritech
302 Ameritech	303 Pac. Bell	321 TEN	322 TDX	327 ETS
328 ATX	331 TET	332 PLG	333 U.S. West	335 Bell Atl.
342 ATX	344 ATX	345 ALN	346 United Tel.	350 ATX
364 GTE N.west	366 ONC	369 TEN	370 ATX	377 GTS
386 United Tel.	388 SNT	399 ARZ	400 ATX	407 ATX
410 ATX	420 ATX	422 ALN	426 PLG	428 Ameritech
430 U.S. West	444 ONC	445 PHE	446 MCI	450 Ameritech
451 CAN	456 TEN	463 United Tel.	478 AAM	479 ARZ
480 ATX	483 GTE Midwest	488 ONC	490 U.S. West	500 ATX
505 Pac. Bell	520 ATX	529 MIT	536 BUR	540 ALN
543 ALN	545 GTE Calif.	550 ALN	555 ATX	567 ALN
580 U.S. West	590 ATX	595 CAN	600 ATX	620 Ameritech
624 Pac. Bell	626 CSY	628 Ameritech	630 CAN	633 MIT
639 PLG	643 CAN	645 CAN	650 ATX	654 TEN
656 SNT	660 ATX	661 United Tel.	663 MDE	665 ALN
666 ONC	670 CAN	677 CAN	678 MCI	680 ATX
686 LTG	690 CAN	698 NY Tel.	699 PLG	701 Bell Atl.
710 TGN	720 ATX	722 Pac. Bell	724 RTC	725 SNT
727 GTE Calif.	730 ATX	739 CSY	740 ATX	741 TEN
746 ITT	750 CAN	753 ALN	765 ALN	773 ATX
777 Pac. Bell	778 Ameritech	780 Ameritech	786 ATX	790 CAN
792 CAN	801 Bell Atl.	820 ATX	830 CAN	843 Pac. Bell
844 Pac. Bell	847 United Tel.	850 ATX	860 ATX	866 AAM
870 CAN	872 TEN	887 ETS	888 CIS	900 TDX
901 Bell Atl.	903 ATX	909 ATX	924 Ameritech	932 ATX
948 ARZ	949 MIC	963 TEN	970 MIC	971 MIC
972 MIC	973 MIC	974 ALN	975 ALN	976 ATX
988 MCI	990 MCI	991 ALG	993 SNT	999 TEN

OCN Reference List:

ADG - Advantage Network, Inc.	AGN - AMRIGON
ALG - Allnet Communication Services	AMM - Access Long Distance
AAM - ALASCOM	ARE - American Express TRS
ARZ - AmeriCall Corporation (Calif.)	ATC - Action Telecom Co.
ATX - AT&T	BML - Phone America
BUR - Burlington Tel.	CAB - Hedges Communications
CAN - Telcom Canada	CNO - COMTEL of New Orleans
CQU - ConQuest Comm. Corp	CSY - COM Systems
CUX - Compu-Tel Inc.	CYT - ClayDesta Communications
DCT - Direct Communications, Inc.	DLT - Delta Communications, Inc.
EDS - Electronic Data Systems Corp.	ETS - Eastern Telephone Systems, Inc.

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EXF - Execulines of Florida, Inc.	FDG - First Digital Network
FDN - Florida Digital Network	FDT - Friend Technologies
FST - First Data Resources	GCN - General Communications, Inc.
GTS - Telenet Comm. Corp.	HNI - Houston Network, Inc.
ITT - United States Transmission System	LDD - LDDS-II, Inc.
LDL - Long Distance for Less	LGT - LITEL
LNS - Lintel Systems	LSI - Long Distance Savers
LTQ - Long Distance for Less	MAL - MIDAMERICAN
MCI - MCI Telecommunications Corp.	MDE - Meade Associates
MEC - Mercury, Inc.	MIC - Microtel, Inc.
MIT - Midco Communications	MTD - Metromedia Long Distance
NLD - National Data Corp.	NTK - Network Telemanagement Svcs.
NTS - NTS Communications	ONC - OMNICALL, Inc.
ONE - One Call Communications, Inc.	PHE - Phone Mail, Inc.
PLG - Pilgrim Telephone Co.	PRO - PROTO-COL
RBW - R-Comm	RTC - RCI Corporation
SAN - Satelco	SCH - Schneider Communications
SDY - TELVUE Corp.	SIR - Southern Interexchange Services
SLS - Southland Systems, Inc.	SNH - Sunshine Telephone Co.
SNT - SouthernNet, Inc.	SOC - State of California
TBQ - Telecable Corp.	TDD - Teleconnect
TDX - Cable & Wireless Comm.	TED - TeleDial America
TEM - Telesystems, Inc.	TEN - Telesphere Network, Inc.
TET - Teltec Savings Communications Co.	TGN - Telemanagement Consult't Corp.
THA - Touch America	TID - TMC South Central Indiana
TKC - TK Communications, Inc.	TLS - TELE-SAV
TMU - Tel-America, Inc.	TNO - ATC Signal Communications
TOM - TMC of Montgomery	TOR - TMC of Orlando
TSF - SOUTH-TEL	TSH - Tel-Share
TTH - Tele Tech, Inc.	TTU - Total-Tel USA
TXN - Tex-Net	USL - U.S. Link Long Distance
UTC - U.S. Telcom, Inc. (U.S. Sprint)	VOA - Valu-Line
VST - STAR-LINE	WES - Westel
WUT - Western Union Telegraph Co.	

NOTE: Where local telcos, such as Illinois Bell offer 800 service, they purchase blocks of numbers from AT&T on prefixes assigned to AT&T. They are free to purchase blocks of numbers from any carrier of their choice however.

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Date: Tue, 3 Jan 89 01:57:48 EST
From: scotts@bu-it.BU.EDU
To: telecom@bu-cs.bu.edu
Subject: Another lesson on 700/800/900 service

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I have compiled some more information about the SACs for your edification.

These include 700, 800, and 900.

Most telephone users from the United States are quite familiar with 800 service. A number that they dial and incur NO charge (not even message units in most [all?] areas).

Then there is 900 service, which is most people perceive as 'value added', i.e. you pay more for the information than for the transport of the call. These vary typically from 35 cents to a few dollars for either a timed service, or a 'as long as you like' duration-sensitive service. There are two sub-species of 900 service, AT&T and "everybody else".

Finally there is 700 service, which many people remember as Alliance Teleconferencing. This is the third "canonical" SAC. With few limitations, this SAC is given over to the IEC entirely.

Let's look at these in more detail:

800 service is offered by various IECs. Each NXX in the 800 SAC is assigned to a given carrier, who is responsible for assigning numbers from that block to customers, and providing 10 digit translation. When you as Joe Customer dial 1-800-222-1234 (made up number, please don't bother them) it will initiate the following sequence:

1. If you are in an Electronic Office (DMS-100, DMS-200, 1A ESS, #5 ESS) the 800-222 will be translated to "AT&T" and search for an opening in a trunk group marked for 800 origination. Should none be found, bump to step 3

2. If you are in a non-electronic office (SXS, XB, and some flavors of ESS), it will go to the access tandem that you're office 'homes' on, where 800-222 will be translated to "AT&T"

[note that if at this point, the number doesn't have a translation, you will get a "lose" recording from the CO]

3. Find a trunk in a trunk group marked for 800 origination. Should none be found, give the customer a recording "Due to network congestion, your 800 call could not be completed" or die, or whatever. (Depends on phase of moon, etc.)

4. The end office will the send the following pulse-strea (in MF):

KP + II + 3/10D + ST + KP + 800 222 1234 + ST

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(note that this is a simplification, there are some fine points of ANI spills that are beyond the scope of this article)

II = 2 information digits ... typical values are:

00 normal ANI .. 10 digits follow

01 ONI line ... NPA follows

02 ANI failure ... NPA follows

3/10D = 3 or 10 digits. Either the NPA, or the entire 10 digit number.

KP and ST are control tones

5. The carrier receives all of this (and probably throws the ANI into the bit bucket) and translates the 800 number to what's called a PTN, or Plant Test Number. For Example, 617-555-9111. Then, the call is routed AS IF the customer had dialed that 10 digit number. Of course, the billing data is marked as an 800 call, so the subscriber receiving th call pays the appropriate amount.

900 Service. As I mentioned earlier there are two flavors of 900 service, AT&T, and "Everybody Else". Everybody else is handled exactly as 800 service above, except the IEC will probably use the ANI information to send you a bill. (Either directly, or through your BOC, each situation governed by applicable tarrifs and contractual arrangements between the IEC and the BOC)

AT&T 900 is a curious monster indeed. It was designed as a "mass termination" service. When you dial a 900 # by AT&T (such as the "hear space shuttle mission audio" number) you get routed to one of twelve "nodes" strewn throughout the country. These nodes are each capable of terminating 9,000 calls >PER SECOND<. There are several options available, where the customer and/or the IP pay for all/part of the call. The big difference between 800 and AT&T 900 is >NOT< "who pays for the call" (there are free 900 numbers) but "how many people can it handle at once". The IP is responsible for providing program audio. AT&T is prohibited from providing audio-program services (i.e. tape recorded messages) [As with any rule, there are exceptions to these as well]

The last SAC we'll deal with is 700. I've seen ads on late-nite television for Group Access Bridging service (GAB) under 700 numbers, with a elephantine dialing sequence. The one that comes to mind is 10041-1-700-777-7777. [I make no guarantee about the quality or availability of this service. I don't even know if it still exists.] If you were to dial 1-700-555-4141 you will hear a recording announcing your Equal-Access carrier. (Some carriers ignore the last four digits, and any 700-555 number will give the announcement).

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This is signalled the same as 800 service, and may or may not be billed ENTIRELY at the discretion of the IEC. In New York, under PSC tariff you can order 900 and/or 700 blocking as well as 976, 970, 550, and 540 blocking in various (but not entirely orthogonal) combinations.

What in ONE carrier might be a customer service hotline (Dial 1-700-1 AM LOST) might for another be a revenue product. There is LITTLE standardization of 700 usage from IEC to IEC.

The one last dialing pattern that is worth mentioning is what's called, "cut through dialing". Try dialing 10220#. If Western Union comes to your town, you'll get a FG-A style dial tone. Presumably if you had a Western Union "Calling Card" [I don't know their term for it] you could dial a call. (If someone DOES have WU service, could they please check this out for me?)

Glossary:

ANI - Automatic Number Identification. An MF sequence that identifies your line for toll billing information. Often confused with ANAC (Automatic Number Announcement Circuit) which reads your number back in a synthesized voice.

BOC - Bell Operating Company. A often misused term (even in this very article :-)) that in general usage means, "Your local exchange carrier." Since most of the telephones in the country are served by what used to be the Bell system, we tend to use the term. The proper term in this case, however IS "Exchange Carrier [EC]" They provide service within your LATA.

FG-A - Feature Group A. Line Side termination for Long Distance carriers. The old 555-1234 for Widget Telephone Company then dial an access code and the number style dialing is called FG-A.

FG-B - Feature Group B. Trunk Side termination for Long Distance carriers. (aka ENFIA B). 950 service. This is LATA wide service, and doesn't cost the customer message units. ANI is only provided when the trunks terminate in the End Office (as opposed to an access tandem).

FG-D - Feature Group D. Trunk Side termination. Provides 10xxx dialing, 1+ pre-subscription dialing, and Equal Access 800/900 service. Only available in electronic offices and some 5XB offices (through a beastie called an Adjunct Frame.)

GAB - Group Audio Bridging. Where several people call the same

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number, to talk to other people calling the same number. "Party" or "Chat" lines.

IEC - Inter-Exchange Carrier. Someone who actually carries calls from place to place. AT&T, Sprint, MCI are all IECs.

IP - Information Provider. Someone who sells a value-added service over the telephone. Where you pay for the INFORMATION you're receiving, as well as the cost of TRANSPORT of the call.

NXX - Notation convention for what used to be called a "prefix". N represents the digits 2 through 9, and X represents the digits 0 through 9. There are 800 valid NXX combinations, but some are reserved for local use. (411 for Directory, 611 for Repair Bureau, 911 for emergency, etc.)

ONI - Operator Number Identification. In areas with some styles of party-line service, the CO cannot tell who you are, and the operator will come on and say, "What number are you calling from?". You can lie, they have to trust you. They MAY know which PREFIX you're coming from, though.

PTN - Plant Test Number. A regular 10 digit number assigned with your inward WATS line. This may NOT be a 'dialable' number from the local CO. (A friend has a WATS line in Amherst, MA [413-549, #5 ESS] and you cannot dial the PTN locally, but you can if you come in on a toll trunk.)

SAC - Special Area Code. Bellcore speak for area codes that aren't really places, but classes of service.

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Closing note: The information in this [Guide to North American Area Codes] first appeared in various parts in TELECOM Digest Volume 9, issues 2 and 15; January 3 and January 15, 1989.

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Patrick Townson
Telecom Digest Moderator
telecom@bu-cs.bu.edu