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NEW APPLICATION

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Deborah Scott
Director, Utilities Division
Arizona Corporation Commission
1200 West Washington
Phoenix, AZ 85007

DOCKET NO. T00000F-99-0641

Re: Petition for NPA Relief Plan for the 520 Area Code

Dear Ms. Scott:

Enclosed please find an original and ten (10) copies of a petition of Lockheed Martin IMS, in its role as the North American Numbering Plan Administrator and on behalf of the Arizona telecommunications industry, requesting approval of a relief plan for the 520 area code. Please date-stamp the enclosed return copy as received and return it in the attached self-addressed stamped envelope.

If you have any questions regarding this matter, please contact the undersigned.

Respectfully submitted,

Kimberly Wheeler
Counsel for Lockheed Martin IMS
North American Numbering Plan Administrator

Enclosure

dc-181559

Before the
ARIZONA CORPORATION COMMISSION
Phoenix, Arizona 85007

Petition for Approval of NPA Relief Plan for the 520 Area Code	Docket No. _____

PETITION OF THE
NORTH AMERICAN NUMBERING PLAN ADMINISTRATOR
ON BEHALF OF THE ARIZONA TELECOMMUNICATIONS INDUSTRY

The North American Numbering Plan Administrator Lockheed Martin IMS ("NANPA"), in its role as the neutral third party NPA Relief Planner for Arizona under the North American Numbering Plan and on behalf of the Arizona telecommunications industry ("Industry"),[1] hereby petitions the Arizona Corporation Commission ("Commission") to approve one of the two Industry proposed relief plans – a geographic split or an all-services distributed overlay – for the 520 Numbering Plan Area ("NPA").[2]

NANPA estimates that without NPA relief, the supply of central office codes ("CO codes") for the 520 NPA will exhaust during the fourth quarter of 2001. Based upon that projection, the Industry met on September 8, 1999 and participated in a conference call on

[1] The Industry is composed of current and prospective telecommunications carriers operating in, or considering operations within, the state of Arizona.

[2] As the neutral third party administrator, NANPA has no independent view regarding the relief option selected by the Industry.

September 27, 1999[3] and reached consensus to recommend to the Commission two NPA relief plans: a geographic split with the Tucson/Nogales area retaining the 520 NPA, and an all-services distributed overlay for the entire geographic area encompassed by the 520 NPA.[4] In support of this petition, NANPA submits the following:

I. BACKGROUND

The 1999 Central Office Code Utilization Survey ("COCUS") projections for CO code utilization indicate that the 520 NPA will exhaust during the fourth quarter of 2001. To allow sufficient time to prepare for NPA relief to avoid number exhaust, NANPA notified the Commission and the Industry members on July 1 and July 21, 1999, respectively, that NPA relief planning needed to be addressed.

As stated above, the Industry met on September 8, 1999 in Phoenix, Arizona and again by conference call on September 27, 1999 to discuss various relief alternatives, *e.g.*, geographic splits and overlays. Pursuant to the NPA Relief Planning Guidelines, NANPA presented an Initial Planning Document ("IPD") at the meeting. The IPD contained descriptions, maps, dialing requirements and the projected lives of four relief alternatives for the 520 NPA.[5] At the meetings, the participants discussed the four relief alternatives: an all-services distributed overlay

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[3] A copy of the meeting minutes for both meetings, including a list of invitees and attendees, is attached as Exhibit 4.

[4] In order to plan for the introduction of new area codes, NANPA and the Industry utilized the NPA Code Relief Planning & Notification Guidelines (INC 97-0404-016, Aug. 30, 1999) ("NPA Relief Planning Guidelines"). The NPA Relief Planning Guidelines assist NANPA, the industry and regulatory authorities within a particular geographic NPA in the planning and execution of relief efforts. The NPA Relief Guidelines can be accessed on the ATIS web site located at <http://www.atis.org/atis/clc/inc/incdocs.htm>.

[5] The IPD is attached as Exhibit 5.

– referred to as Alternative #3 in the IPD; and three versions of a two-way geographic split – Alternatives #1, #2, and #4. The three geographic split alternatives differed as to where the dividing boundary line was placed. No additional alternatives were proposed by the Industry. After extensive discussion, the Industry was unable to reach consensus to recommend a single relief alternative to the Commission as the preferred form of relief for the 520 geographic area. The Industry then decided, by consensus, to request that the Commission approve one of two relief plans: 1) Alternative #2, a two-way geographic split with the Tucson/Nogales area retaining the 520 NPA; or 2) Alternative #3, the all-services distributed overlay.

II. DESCRIPTION OF THE RECOMMENDED RELIEF PLANS

Alternative #2, a two-way geographic split, would split the 520 NPA into two NPAs with the dividing boundary separating a geographic corridor surrounding Tucson and Nogales from the rest of the 520 NPA.[6] The Tucson/Nogales corridor would retain the 520 area code. The remaining area would be assigned a new area code. A geographic split requires customers located within the area receiving the new area code to change their telephone numbers. Customers will continue using a combination of seven and 1 + ten-digit local dialing patterns: local calls placed within an area code would require seven-digit dialing while local calls placed between the two area codes would require 1 + ten-digit dialing.

The all-services distributed overlay alternative would overlay a new area code on the same geographic area covered by the existing 520 NPA. All existing customers would retain the 520 area code and would not need to change their telephone numbers. Federal Communications

[6] See Exhibits 3 and 5 for a summary and maps of the Industry recommended relief alternatives.

Commission ("FCC") regulations require ten-digit dialing within and between the 520 NPA and the new overlay NPA.[7] When the 520 NPA exhausts, all CO code assignments will be made in the new overlay area code.

During the Industry relief meetings, Industry members decided, by consensus, to recommend that if the Commission approves the Industry recommended geographic split or overlay alternatives, that permissive dialing begin on October 28, 2000 and the conversion to mandatory dialing occur on April 28, 2001. Activation of the relief area code will occur June 30, 2001. Adhering to the proposed timeframe will avoid the denial or delay of service to telecommunications providers' customers due to the unavailability of CO codes.

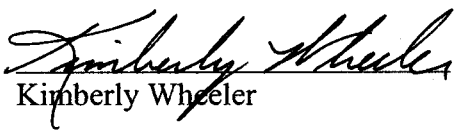
III. CONCLUSION

NANPA, on behalf of the Industry, requests that the Commission issue an order approving either the Industry recommended geographic split or all-services distributed overlay as the means of relief for the 520 NPA. The Industry will begin implementing NPA relief once the Commission has issued a final order approving the instant petition. Because the 520 NPA is projected to exhaust in the fourth quarter of 2001, the Industry also requests that the Commission

[7] 47 C.F.R. §52.19(c)(3)(ii).

order the permissive and mandatory dialing periods to begin on October 28, 2000 and April 28, 2001, respectively.

Respectfully submitted,



Kimberly Wheeler

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Counsel for Lockheed Martin IMS
North American Numbering Plan Administrator

Bruce H. Armstrong
NPA Relief Planner-Western Region
Lockheed Martin IMS
North American Numbering Plan
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November 5, 1999

520 NPA EXHAUST RELIEF PLAN

LIST OF EXHIBITS

TAB	EXHIBIT DESCRIPTION
1	Executive Summary
2	Proposed 520 NPA Exhaust Relief Plans and Explanation of Exhaust Forecast
3	Relief Plan Details - Alternative Plans Submitted, Including Maps • Summary of Plans • Life Calculations • NPA Relief Maps
4	Industry Meeting Minutes
5	Initial Planning Document Including Maps of Other Alternatives • Initial Planning Document • Maps of Other Alternatives
6	Miscellaneous Handouts

1

EXECUTIVE SUMMARY

This document describes the planning background, industry process, relief alternatives and implementation schedule related to relief planning for the exhaust of the 520 Numbering Plan Area (NPA) or area code. A new area code is required to relieve the 520 area code, currently projected to exhaust in the fourth quarter of 2001 (4Q2001).

Lockheed Martin NANPA, in its role as Area Code Relief Coordinator, convened an industry meeting attended by members of the telecommunications industry planning team to develop and consider various relief alternatives for the 520 area code. This team is composed of current and prospective central office code holders, incumbent local exchange carriers, interexchange carriers, wireless carriers and competitive local exchange carriers as well as a member of the Arizona Corporation Commission Staff.

Currently, there are 45 central office code holders in the 520 area code.

ACCIPITER COMMUNICATIONS INC
ARIZONA TELEPHONE CO.
AT&T – LOCAL/ TELEPORT COMMUNICATIONS GROUP - PHOENIX
AT&T WIRELESS SERVICES, INC.
BROOKS FIBER COMMUNICATIONS - TUSCON, INC.
CENTURY EL CENTRO CELLULAR CORP.
CENTURYTEL OF THE SOUTHWEST, INC. - AZ
CITIZENS TELECOMM CO OF THE WHITE MOUNTAINS INC
CITIZENS UTILITIES RURAL COMPANY, INC.
COMMNET CELLULAR, INC.- ARIZONA
CONTINENTAL TEL CO OF CALIFORNIA, INC.
COPPER VALLEY TELEPHONE, INC.
E.SPIRE COMMUNICATIONS, INC. - ARIZONA
ELECTRIC LIGHTWAVE, INC. - ARIZONA
FORT MOJAVE TELECOM, INC.
FRONTIER LOCAL SERVICES - AZ
GILA RIVER TELECOMM, INC.
GST NET - AZ, INC.
MCIMETRO, ATS, INC.
MIDVALE TELEPHONE EXCHANGE, INC.
MOHAVE CELLULAR, L.P., DBA CITIZENS MOHAVE CELL
MOUNTAIN TELECOMMUNICATIONS, INC. - CLEC
NAVAJO COMMUNICATIONS CO. - AZ
NETWORK SERVICES LLC
NEXTEL COMMUNICATIONS
OPTEL ARIZONA TELECOM, INC.
PAGENET
RIO VIRGIN TELEPHONE CO., INC.
SAN CARLOS APACHE TELECOMMUNICATIONS UTILITY, INC.
SMITH BAGLEY INC. DBA CELLULAR ONE OF NE ARIZONA

SOUTH CENTRAL UTAH TELEPHONE ASSOCIATION, INC.
SOUTHWESTCO WIRELESS, INC. - ARIZONA
SOUTHWESTERN TELEPHONE CO.
SPRINT SPECTRUM L.P.
TABLE TOP TELEPHONE CO., INC.
TOHONO O'ODHAM UTILITY AUTHORITY
TRI STATE RADIO PAGING, INC.
TRIAD CELLULAR - UTAH, L.P.
US WEST COMMUNICATIONS - MOUNTAIN BELL
US WEST COMMUNICATIONS, INC.
US WEST NEW VECTOR GRP INC. DBA AIRTOUCH CELL
VALLEY TELECOMMUNICATIONS COMPANY
VALLEY TELEPHONE COOPERATIVE, INC.
VOICESTREAM WIRELESS CORPORATION
WAYNE MARKIS DBA HANDY PAGE

The relief planning process is open to current and prospective central office code holders. Of these, 14 central office code holders, and a potential code holder that does not currently have any central office codes in the 520 area code participated in the relief planning process:

Airtouch Cellular
AT&T Wireless
AT&T Local Services
Cellular One
GST Telecom, Inc.
GTE
MCI WorldCom
Midvale
Sprint PCS
U S West Communications
U S West Wireless
Voicestream Wireless
Citizens Telecommunications
Mountain Telecommunications
Cox Communications

During the September 8, 1999 relief planning meeting and subsequent conference call on September 27, 1999, four different relief plan alternatives were discussed and then the industry reached consensus on sending two of the alternative relief plans to the Commission for consideration. These two plans are a geographic split of the 520 area code and an overlay area code over the entire area presently served by the 520 area code.

To meet statutory requirements, the industry has agreed upon the following implementation schedules:

Alternative 2 (Geographic Split)

	Relief Schedule
Permissive Dialing Begins	10/28/2000
Beginning of Mandatory Dialing	04/28/2001
End of Mandatory and Relief Date	06/30/2001

Alternative 3 (Overlay)

	Relief Schedule
Permissive Dialing Begins	10/28/2000
Beginning of Mandatory 10-Digit Local Dialing	04/28/2001
Introduction of Overlay Area Code and Relief Date	06/30/2001

Under Alternative 2, 27 of the 155 rate centers[1] in the 520 area code would be split off. These 27 rate centers cover a geographic area roughly corresponding to a corridor from the south end of the Phoenix area codes (602, 480, and 623) down Interstate 10 to Tucson and Interstate 19 to Nogales. This Tucson-Nogales corridor would retain the 520 area code and the remaining 128 rate centers would receive a new area code. Customers within both area codes (both the 520 area code and the new area code) would retain 7-digit dialing for all local calls and 1 plus ten-digit dialing for all toll calls within their respective home area code. If the situation were to ever arise, all local calls to destinations outside of their home area code would require ten-digit dialing. All toll calls outside the home area code would require 1 plus ten-digit dialing.

Under Alternative 3, all of the 155 rate centers in the current 520 area code will be assigned an additional overlay area code. Mandatory 10-digit dialing will be required for all local calls within the overlay area. A customer education period to adjust to the dialing change will be included. Current customers will retain their existing area code and phone number(s). Telephone numbers for lines installed after implementation of the overlay may be assigned from the new overlay area code.

Expedited Decision Requested

The industry planning team requested that NANPA, as the neutral third-party administrator, present these relief alternatives and their respective implementation schedules to the Arizona Corporation Commission for review and final decision. After the Commission has conducted any proposed hearings or workshops, an expedited decision is respectfully requested to provide adequate time for industry to provide customer notice and customer education in the ordinary course of business.

[1] Blackwater, Casa Blanca, Casa Grande, Coolidge, Coronado, Eloy, Florence, Globe, Green Valley, Hayden, Komathe, Lone Butte, Marana, Maricopa Village, Maricopa, Miami, Nogales, Patagonia, Sacaton, San Carlos, San Manuel, Stotonic, Superior, Tubac, Tucson, Vail and Whitlow.

2

520 NPA PROPOSED NPA RELIEF PLAN

DOCUMENT LAYOUT

This document provides information regarding the background and current status of the 520 NPA ("Numbering Plan Area" or area code), and information regarding the telecommunications industry's exhaust relief planning process. On the following pages, references are made to various tabs, which contain specific information regarding the relief planning process, as shown in the Table of Contents.

BACKGROUND

The 602 area code was introduced in 1947 as Arizona's first area code to serve the entire state. In March 1995, the 602 area code was split into the 602 and 520 area codes. The 520 area code serves a geographic area that includes most of the geographic territory of the State of Arizona except the Phoenix local calling area. The area now served by the 520 area code includes Tucson, Nogales, Yuma, Flagstaff, Prescott and Kingman. There are 155 rate centers served by the 520 area code. NANPA has determined that the 520 area code will exhaust in approximately 4th quarter 2001. An explanation of the forecasting process is attached to this Relief Plan.

RELIEF PLAN

Upon consensus of the industry representatives present at the planning meeting, NANPA is presenting two relief alternatives for consideration by the Corporation Commission, an overlay alternative and a geographic split alternative.

The industry considered four alternatives that were developed and distributed prior to the planning meeting. No additional alternatives were presented during the planning meeting. Each of these four alternatives was discussed at the planning meeting and details of that discussion may be found in the minutes of that meeting behind Tab 4 and in the Initial Planning Document behind Tab 5.

A two way geographic split divides the area served by an existing area code into 2 separate geographic areas. The customers in one of these areas will retain the existing area code while all customers in the other geographic area will be changed to a new area code. This provides a single area code for each geographic area. Future splits will continue to reduce the size of the geographic area served by each area code. Two-way splits, when equally balanced, require an area code change for approximately one half of the customers. . Stationery, business cards and advertising will need to be revised by customers receiving the new area code. Geographic splits permit 7-digit dialing for local calls within an area code. Implementation is generally understood by the telecommunications industry. Customer education will be necessary for a split plan.

With an overlay there will be a new area code serving the same geographic area currently served by the 520 area code. An overlay will not reduce the size of the geographic area now served by the 520 area code. An overlay allows for demand for all new central office codes

subsequent to the exhaust of the 520 area code to be provided from the new overlay area code. Subsequent relief will likely be another overlay. Overlays avoid the need for public and political involvement concerning split boundaries and which side should retain the old area code. An overlay will not require existing customers to change their area code or telephone number. There is no need to revise stationery, business cards and advertising unless they contain only seven digit phone numbers. An overlay will require customers to dial 10 digits for all calls within the geographic area.[1] Because the overlay is a new concept in Arizona, it will require a different focus for customer education than that used by a split plan.

By industry consensus in the meeting held in Phoenix on September 8, 1999 and a subsequent conference call on September 27, 1999, the following two alternatives are presented to the Arizona Corporation Commission for consideration of relief of the 520 area code.

Alternative # 2A – Geographic Split

Under Alternative 2, 27 of the 155 rate centers[2] currently served by the 520 area code would be split off. These 27 rate centers cover a geographic area roughly corresponding to a corridor from the south end of the Phoenix area codes (602, 480, and 623) down Interstate 10 to Tucson and Interstate 19 to Nogales. This Tucson-Nogales corridor would retain the 520 area code and the remaining 128 rate centers would receive a new area code. Customers within both area codes (both the 520 area code and the new area code) would retain 7-digit dialing for all local calls and 1 plus ten-digit dialing for all toll calls within their respective home area code. All local calls to destinations outside of their home area code would require ten-digit dialing. All toll calls outside the home area code would require 1 plus ten-digit dialing.

NPA	Projected Life	NXXs
520 (Tucson/Nogales)	~13 years (159 months)	288
New NPA (Not Tucson/Nogales)	~12 years (148 months)	316

Alternative #3 –Overlay

Alternative #3 is an overlay. As the 520 area code reaches exhaust, a new area code will be activated to serve the same geographic territory, which encompasses the entire State of Arizona except for the greater Phoenix area. After the relief date, requests for new central office codes may be filled from the new area code.

[1] This requirement is from the Federal Communications Commission in *Memorandum Opinion and Order and Order on Reconsideration*, CC Docket No. 96-98, 13 FCC Rcd. 19009, 19029 (1998) *(Pennsylvania Numbering Order)*.

[2] Blackwater, Casa Blanca, Casa Grande, Coolidge, Coronado, Eloy, Florence, Globe, Green Valley, Hayden, Komathe, Lone Butte, Marana, Maricopa Village, Maricopa, Miami, Nogales, Patagonia, Sacaton, San Carlos, San Manuel, Stotonic, Superior, Tubac, Tucson, Vail and Whitlow.

Alternative #3 - Overlay of Entire NPA

NPA	Projected Life
Life of Overlay	~12 years (149 months)

The life of the overlay is estimated to be approximately 12 years.

Set-Aside of Codes Per FCC Order If Overlay Is Approved Relief Plan

The industry decided to set aside 10 central codes per the requirements of the Federal Communications Commission in Decision No. 96-333. Note: Since this decision was made by the industry, the Federal Communications Commission has issued Decision FCC 99-243 (*Third Order on Reconsideration of Second Report and Order and Memorandum Opinion and Order*) on October 21, 1999[3]. This FCC decision effectively eliminated the requirement to set aside any codes in the event an overlay is chosen as the Commission-approved relief plan.

Customer Education – Commission Guidance Requested

The industry recognizes that customer education will be required regardless of which relief alternative is approved. However, customer education requirements for a geographic split will differ from the customer education requirements for an overlay. The industry has not submitted a customer education proposal as part of this plan, but requests specific guidance from the Commission regarding the scope of such a plan for this area. The specific customer education plan will depend on the Commission's decision.

GENERAL INDUSTRY PROCESS

The process for implementing a new area code in Arizona is covered by industry guidelines.

Industry-Approved Documents

Three industry documents have been approved by the industry for use in NPA exhaust relief planning. The documents provide structural and procedural process guidelines.

INC 92-0726-004 "Recommended Notification Procedures to Industry for Changes in Access Network Architecture"

INC 97-0404-016 "NPA Code Relief Planning and Notification Guidelines"

INC 95-0407-008 "Central Office Code (NXX) Assignment Guidelines"

[3] See Paragraph 27 under Section 3 of FCC order.

These documents are available on the Internet at: www.atis.org.

Industry Planning Process

The planning process for NPA Relief is established in the industry–approved document *"NPA Code Relief Planning and Notification Guidelines"* (INC 97-0404-016). The purpose of that document is to provide guidelines to NPA Relief Coordinators, affected parties and applicable regulatory authorities within the affected NPAs. It lists the assumptions, constraints, and planning principles used in NPA Code relief planning efforts. It also lists the steps of the NPA Code relief planning process, and describes the alternative methods of providing NPA Code relief and their various attributes. The general attributes of splits and overlays are provided in Tab 6.

Industry " Consensus"

The *"NPA Code Relief Planning and Notification Guidelines"* (INC 97-0404-016) defines the term "consensus" as used in the area code relief planning process, as follows:

> "Consensus is established when substantial agreement has been reached among interest groups participating in the consideration of the subject at hand. Interest groups are those materially affected by the outcome or result. Substantial agreement means more than a simple majority, but not necessarily unanimity."

Criteria for Evaluating Exhaust Relief Alternatives

The industry employs a set of criteria to use in comparing the 520 NPA relief alternatives. (Numbers within parentheses (below) refer to the section in the *"NPA Code Relief Planning and Notification Guidelines"* (INC 97-0404-016) on which the criteria are based.)

1. Minimize end users' confusion (Sec. 2.4)
2. Balance the cost of implementation for all affected parties (Sec. 2.4)
3. Provide that customers who undergo number changes shall not be required to change again for a period of 8- 10 years (Sec's. 2.5 & 5.0f)
4. Not favor a particular interest group (Sec. 2.6)
5. Cover a period of at least five years beyond the predicted date of exhaust (Sec. 5.0a)
6. Provide that all of the codes in a given area shall exhaust about the same time in the case of split. In practice, this may not be possible, but severe imbalances, for example a difference of more than 15 years, should be avoided (Sec. 5.0h)
7. Comply with State & Federal statutes, rulings and orders.

PUBLIC NOTIFICATION AND MEETINGS FOR 520 AREA CODE

In July 1999 NANPA notified the Arizona Corporation Commission and telephone corporations that the 520 area code was projected to exhaust in the fourth quarter of 2001. In September 1999 two industry meetings were convened (one face-to-face meeting and one conference call) to develop alternatives for area code exhaust relief. If the Commission determines that it intends to hold any public hearings or technical hearings in its process of making a decision on area code relief, to the extent possible, NANPA and members of the industry team will attend those Commission-sponsored hearings.

NPA EXHAUST RELIEF PLANNING

The planning process for the exhaust relief of the 520 area code began in July 1999. At that time, the Area Code Relief Coordinator formed an industry team to consider relief options. The relief planning team met in Phoenix on September 8, 1999 and via a conference call on September 27, 1999.

Highlights of the industry planning meetings are found in Tab 4. Maps and summaries of all alternatives considered can be found in Tab 5.

E 9-1-1 CONCERNS

During the industry planning meeting, it was determined that there might be negative impacts on the E 9-1-1 systems in Arizona. It is known that certain upgrades are required upon the addition of a 5th area code to a E 9-1-1 tandem router. Since a new area code in Arizona would be the 5th area code, this capacity problem must be addressed prior to implementation of any new area code. U S West has informed the industry team that it has plans to upgrade its 9-1-1 systems to deploy expanded Automatic Number Identification (*i.e.*, ten-digit ANI) prior to the implementation of any new area code in Arizona. In the eventuality of this upgrade to ten-digit ANI, certain upgrades to Public Safety Answering Point (PSAP) equipment will likely be necessary. However, the upgrades to the PSAP equipment will rely on local jurisdictions responsible for such equipment.

INDUSTRY PARTICIPANTS' POSITION PAPERS

In an effort to provide additional information, clarification and specific company statements from the 520 area code relief planning team participants, the industry planning team members were given the opportunity to submit position papers as an addendum to this document. However, no position papers were submitted at the time of this filing.

NEED FOR TIMELY COMMISSION ACTION

The industry planning team requests the Arizona Corporation Commission to decide as soon as possible on a recommended relief plan submitted in this report in order to move forward with the final planning and implementation of relief in the 520 NPA.

Industry guidelines require a 12-month notice to the industry at the national level prior to implementation of the new NPA. Therefore, a decision from the Commission in as short a

time as possible is requested so service providers can provide notice to their affected subscribers as soon as possible, particularly in the event an accelerated implementation schedule is included in the final decision.

SOURCE OF THIS DOCUMENT

This document was prepared by Lockheed Martin IMS – North American Numbering Plan Administration (NANPA) – Area Code Relief Planning, in conjunction with the 520 NPA Relief Planning Team. NANPA submits the results of the relief planning process on behalf of the telecommunications industry. As the neutral third-party administrator, Lockheed Martin IMS, in its role as North American Numbering Plan Administration (NANPA) has no independent view regarding the recommended alternatives.

Respectfully submitted,

Bruce H. Armstrong
NPA Relief Planning – Western Region
Lockheed Martin NANPA

NPA EXHAUST FORECAST

The responsibilities of the North American Numbering Plan Administrator (NANPA) include developing and publishing the forecasted exhaust of all area codes (or NPAs) in the North American Numbering Plan Area. On an annual basis as part of the forecasting process, current holders of central office codes (NXXs or prefixes) are requested to contribute data on forward-looking demand for numbering resources to NANPA. This process is referred to as the Central Office Code Utilization Survey (COCUS). Using historic demand and industry-supplied future demand, NANPA creates a forecast for each and every area code in the North American Numbering Plan Area. Since taking over the function of the NANPA from the Regional Bell Operating Companies, this is the first forecast prepared by Lockheed Martin as the NANPA and the first forecast prepared using industry demand forecasts. For the 520 area code in Arizona, this forecast produces an expected exhaust date of 4th quarter 2001. These forecasts will be updated every six months using actual results.

Because of the amount of time required to determine a single implementation plan, have that plan approved by the Arizona Corporation Commission, and implement the plan is recommended to be at least 30 months, NANPA must begin the relief planning process as soon as we determine that an exhaust date is imminent. The 1999 NANPA forecast was released in May, showing the projected exhaust date of 4th Quarter 2001 for the 520 area code in Arizona.

Forecasting Process

As stated above, NANPA uses both historical demand for central office codes and future demand provided by industry.[4] NANPA employs a forecast that allows for a constant linear growth and what is called a "growth pool". Under normal growth in an area, the growth will follow the same growth pattern as simple demand for actual telephone numbers. This is the portion that is accounted for in the linear growth portion of the forecast. The problem with using just this single growth pattern is that is does not account for the non-linear demand for central office codes when new participants enter the market.[5] As more and more competitive carriers enter the market in Arizona, this non-linear demand is exhibited. In order to adequately estimate the future demand for telephone numbering resources in Arizona, both the simple trend line and the growth pool should be considered.

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[4] In the past, industry participation in supplying future demand for numbering resources in the annual COCUS has been voluntary. Industry guidelines and recommendations to the FCC by the North American Numbering Council (NANC) will require mandatory participation in the annual COCUS. The 1999 COCUS was still operating under voluntary participation. Therefore, not all providers participated in the survey.

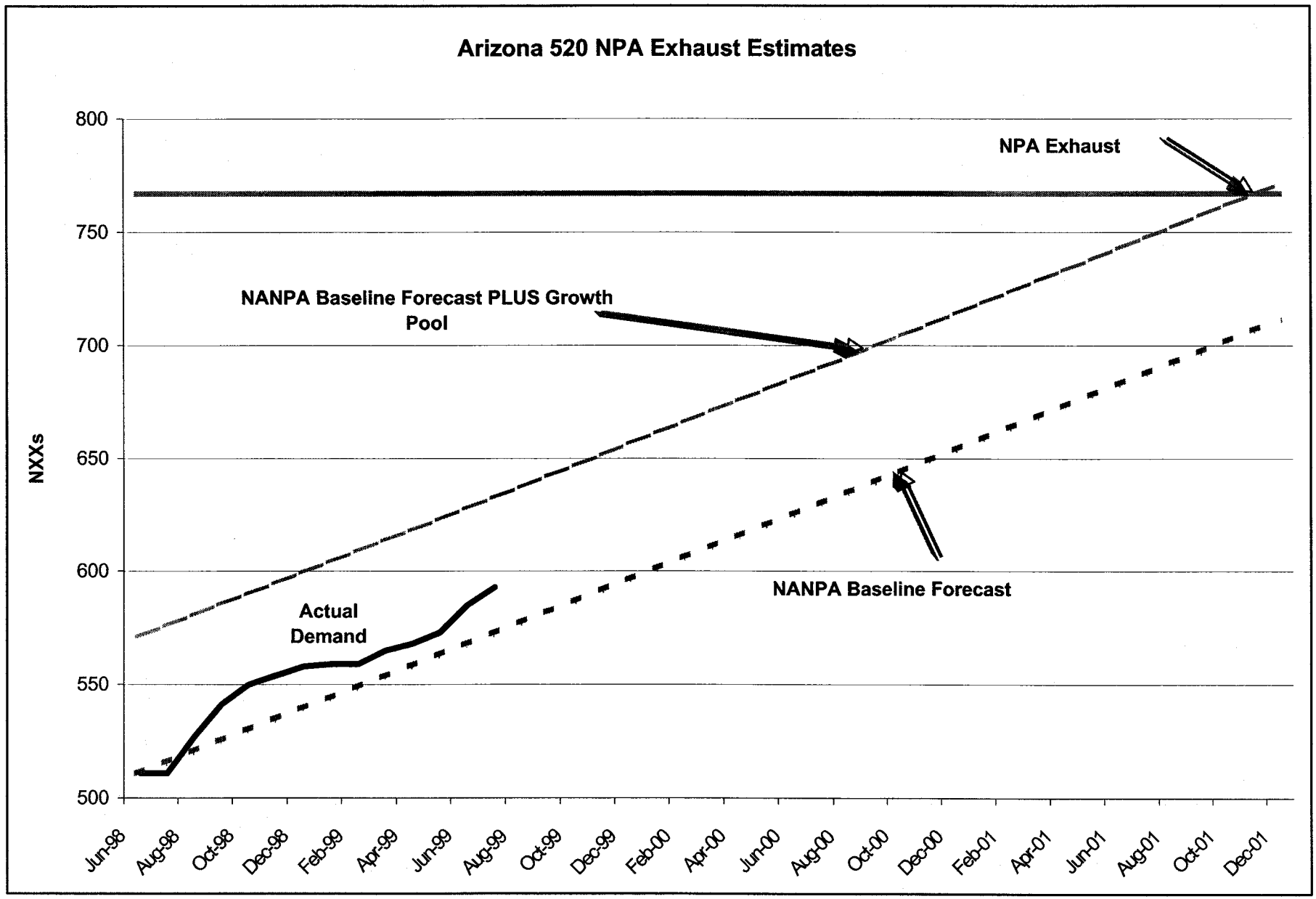
[5] For a rather extreme example, the 520 area code has approximately 155 rate centers. In order for a new entrant local exchange company to provide service in the entire area code, that company would need 155 central office codes (or the potential for 1,550,000 telephone numbers).

The NANPA forecast in the 520 area code predicts a linear demand of 4.7 central office codes per month. The nonlinear portion predicts the need for 60 central office codes between now and 4th quarter 2001 for the growth pool. After four months of actual growth since the forecast was published, the actual growth rate is slightly above the simple linear forecast, but still below the amount allowed for the growth pool. Although some forecast experts may disagree, the actual growth is still where it was predicted by the forecast. See Figure 1.

In producing the forecast for the exhaust of the 520 area code, NANPA used the combination of the linear trend and the growth pool to arrive at a forecasted exhaust date of 4th Quarter 2001. The current growth in demand in the 520 area code remains between the "linear simple"[6] curve and the "linear add"[7] curve. This is what one would expect when tracking the proposed forecast. NANPA will continue to track these actual results and, if necessary, modify its forecast if the actual results deviate from the forecast to a significant degree.

[6] The "linear simple" curve represents the simple linear trend of approximately 4.7 central office codes per month..

[7] The "linear add" curve represents the additive portion provided for in the growth pool.


Arizona 520 NPA Exhaust Estimates
NXXs
800
750
700
650
600
550
500
NPA Exhaust
NANPA Baseline Forecast PLUS Growth Pool
NANPA Baseline Forecast
Actual Demand
Jun-98
Aug-98
Oct-98
Dec-98
Feb-99
Apr-99
Jun-99
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3

SUMMARY OF INDUSTRY-RECOMMENDED RELIEF ALTERNATIVE

ALTERNATIVE 2
GEOGRPAHIC SPLIT

520 NPA

Under Alternative 2, 27 of the 155 rate centers currently served by the 520 area code would be split off. These 27 rate centers cover a geographic area roughly corresponding to a corridor from the south end of the Phoenix area codes (602, 480, and 623) down Interstate 10 to Tucson and Interstate 19 to Nogales. This Tucson-Nogales corridor would retain the 520 area code and the remaining 128 rate centers would receive a new area code. This corridor includes that rate centers of Blackwater, Casa Blanca, Casa Grande, Coolidge, Coronado, Eloy, Florence, Globe, Green Valley, Hayden, Komathe, Lone Butte, Marana, Maricopa Village, Maricopa, Miami, Nogales, Patagonia, Sacaton, San Carlos, San Manuel, Stotonic, Superior, Tubac, Tucson, Vail and Whitlow.

Projected Life of 520 NPA: approx. 13 years (159 months)

New NPA

The remaining 128 rate centers would be assigned a new area code. The rate centers include Aguila, Ajo, Alpine, Ash Fork, Az Village, Bagdad, Benson, Bisbee, Black Mesa, Blue Ridge, Bonita, Bouse, Bowie, Bullhdcyn, Bullheadcy, Cameron, Camp Verde, Cascabel, Castlerock, Chinle, Chino Vly, Cibola, Clifton, Coloradocy, Cottonwood, Dennehotso, Dilcon, Douglas, Duncan, E Kingman, Ehrenberg, Elfrida, Flagstaff, Fredonia, Ftdefiance, Ganado, Gila Bend, Golden Vly, Grandcnyon, Greasewood, Greenhaven, Greer, Harquhlvly, Hawleylake, Heber, Holbrook, Humboldt, Hyder, Incrptcnyn, Josephcity, Kaibito, Kayenta, Keamscnyon, Kingman, Kyktsmovlg, Le Chee, Leupp, Littlefld, Lkhavasucy, Lkmhvrnchs, Lkpleasant, Lukachukai, Many Farms, Marblecnyn, Mcnary, Meadview, Mesqitecrk, Mohave Vly, Mormonlake, Munds Park, Page, Parker, Parker Dam, Payson, Peach Spg, Pearce, Phoenix, Pima, Pinedale, Pinetop, Pinonctnwd, Polacca, Portal, Poston, Prescott, Quartzsite, Red Valley, Robles, Rock Point, Roosevltlk, Rough Rock, Safford, Salome, San Simon, Sanders, Santa Rosa, Sasabe, Sedona, Seligman, Sells, Shonto, Show Low, Sierravist, Snowflake, Somerton, Springervl, St Johns, Sunizona, Supai, Teec Pos, Tombstone, Tontobasin, Toyei, Tsaile, Tuba City, W Sansimon, Wellton, Whiteriver, Wickenburg, Wide Ruins, Wikieup, Willcox, Williams, Windowrock, Winslow, Yarnell, Young, Yucca, Yuma

Projected List of NEW NPA: approx. 12 years (148 months)

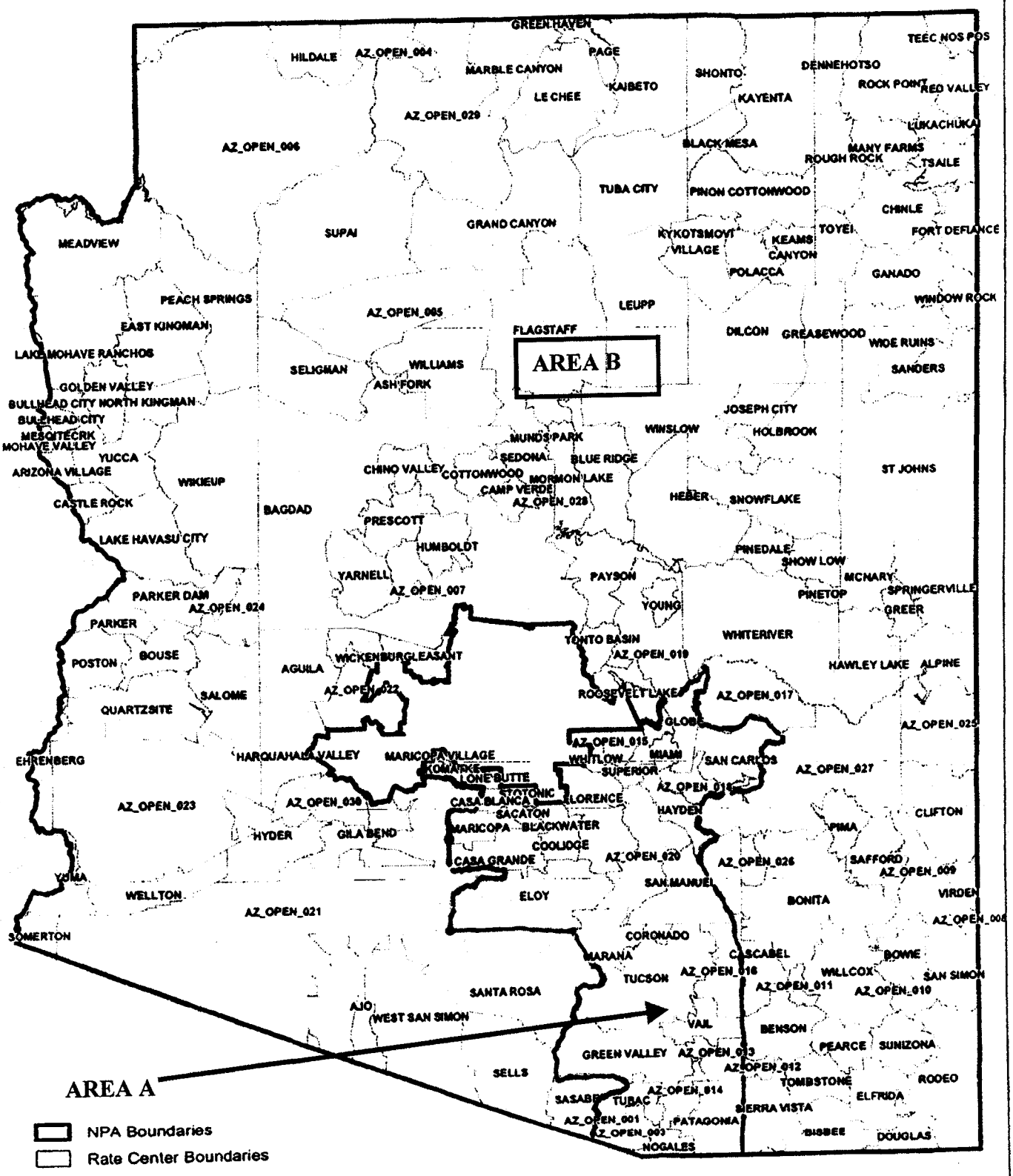
DIALING PLAN CHANGE:

Because this relief alternative provides for the introduction of a new area code via a geographic split, there will be no required dialing plan change. All customers may continue to place local calls using 7-digits within their home area code. All other calls will continue to require 1+10 digit dialing. A customer education plan, of duration and scope to be determined by the Arizona Public Service Commission, to adjust to changing to the new area code split arrangement must be implemented.

Alternative #2 – Two Way Split

NPA 520 Rate Center Map

LOCKHEED MARTIN



Produced by CDS Business Mapping 6/22/99

	Estimated Exhaust	Current NXXs
Area A (Tucson/Nogales Corridor)	~13.25 years (159 months)	288
Area B (Remaining Area)	~12.3 years (150 months)	316

520 AREA CODE
Industry-Recommended Relief Plan
Life Calculation for Alternative #2 (Geographic Split)

520 Area Code Assignment Summary		GROWTH FORECAST		
Assigned NXXs - Old Area Code	**604**	Year:	2000	79
Special Use NXXs - Old Area Code	**33**	Assigned to Date in 1999:		38
520 NXXs Available for Assignment	**163**	Projected Growth in 1999:		79
Maximum NXXs Available Per Area Code	**767**			
DESCRIPTION OF PLAN SERVING AREA		**PROJECTED LIFE / EXHAUST**		
The Tucson-Nogales Corridor geographic area will be assigned the 520 area code and the other area will be assigned the new area code.		**Projected Life:**		
		520 Area Code		13 years
		New Area Code		12 years

SUMMARY OF INDUSTRY-RECOMMENDED RELIEF ALTERNATIVE

ALTERNATIVE 3
OVERLAY

520 NPA / NEW NPA

The geographic area served by the 520 area code will continue to be served by the 520 area code and a new overlay area code will serve the same area. All toll calls will continue to be dialed using 1+10 digit dialing. All local calls will change to 10-digit dialing instead of the existing 7-digit dialing.

Projected Life: approx. 12 years (149 months)

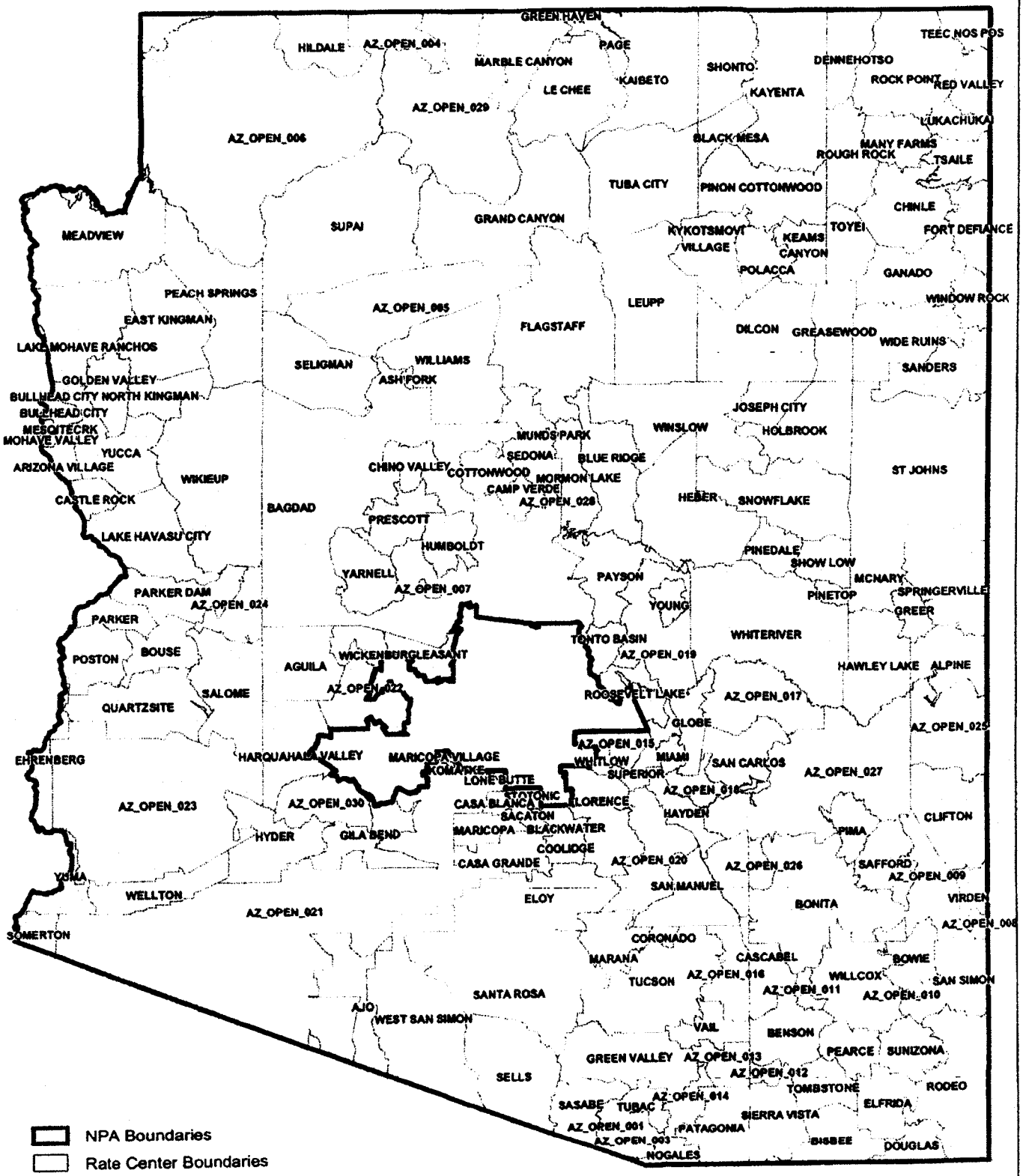
DIALING PLAN CHANGE:

A customer education plan, of duration and scope to be determined by the Arizona Public Service Commission, to adjust to changing to mandatory 10-digit dialing (area code + phone number) for local calls will be implemented prior to the introduction of the new area code.

Alternative #3 – Overlay

NPA 520 Rate Center Map

LOCKHEED MARTIN



Produced by CDS Business Mapping 6/22/99

	Estimated Exhaust	Current NXXs
Overlay Area	~12.4 years (149 months)	604

520 AREA CODE
Industry-Recommended Relief Plan
Life Calculation for Alternative #4 (Overlay)

520 Area Code Assignment Summary		**GROWTH FORECAST**	
Assigned NXXs - Old Area Code	**604**	Year: 2000	79
Special Use NXXs - Old Area Code	**33**	Assigned to Date in 1999:	38
520 NXXs Available for Assignment	**163**	Projected Growth in 1999:	79
Maximum NXXs Available Per Area Code	**767**		
DESCRIPTION OF PLAN SERVING AREA		**PROJECTED LIFE / EXHAUST**	
No changes will occur to current customers in the 520 area code. However, telephone numbers for service installed after implementation of the overlay, may be assigned from the new area code in all 520 rate centers.		**Projected Life:**	
		520 Area Code	2 years
		New Area Code	10 years
		Total Life of Overlay	12 years

4

NANPA
520 NPA RELIEF INDUSTRY PLANNING MEETING
September 8, 1999 - 9:00 AM – 5:00 PM

U S WEST
General Purpose Room (First Floor)
5090 N. 40th Street
Phoenix, AZ 85018

NANPA – NPA Relief Planner – Bruce Armstrong

520 Area Code Relief Planning Meeting Attendees
9/8/99:

Name	Company
Joanne Edelman	Airtouch Cellular
Del Smith	Arizona Corp. Comm.
Stan Weeks	AT&T
Jill McGarry	Cellular One
Ken Henry	Cellular One
Ron Piriczky	Cellular One
Richard Smith	Cox Communications
Adriana Zavala	GST Telecom, Inc.
Geneva Stroshane	GTE
Suzanne Brooks	MCI Worldcom
Dennis Farrington	Midvale Telephone
Karen Williams	Midvale Telephone
Bruce Armstrong	NANPA
Craig Wiseman	NANPA
Raymond Greig	Sprint PCS
John Duffy	U S WEST
Charlene Barbknecht	U S WEST
Shirley Smith	VoiceStream Wireless

1. Introductions, Agenda Review

Bruce reviewed the agenda and explained the changes in the NANPA survey forms, reviewed and got agreement to the ground rules. He also reviewed the consensus decision-making process.

Del Smith of the Arizona Corporation Commission Staff asked if all the major companies providing service in the Tucson area were represented at this meeting. Bruce reviewed the list of code holders to compare with those present at the meeting. It was noted that Citizens Telephone Co. was not present due to other conflicts. Del expressed concerns that many code holders were not present and yet this could be the only industry meeting. Bruce advised that NANPA had sent notifications to all code holders as well as other interested parties and associations. Other than Citizens, Bruce received no other notification from companies that could not attend. Del suggested that a second meeting be held to give those not present at this meeting one more opportunity to attend. In response, it was noted that Del's suggestion would require the committee to stop its relief planning activities in order to provide for the necessary background and review all of the committee's previous work for the new attendees at another meeting. Some parties noted that this could be non-productive and unfair to the other attendees who also had busy schedules but had still been able to participate in this meeting. Bruce explained that those companies that could not attend this meeting would not be left out of the process because they would still be able to file formal comments with the ACC prior to any final ACC decision being made. However, this meeting is the official industry relief planning meeting and the results of this meeting will be forwarded to the ACC for their consideration.

Bruce described the new Document Distribution Service that has been developed by NANPA to distribute documents to the industry. The system will soon be available and Bruce explained how companies can sign up for distribution of NANPA documents. He asked people to sign up and request electronic distribution in lieu of faxes.

2. Review Generic Information for Planning

Bruce reviewed the forecasting procedures and the linear forecast chart of forecasted and actual CO code demand for the 520 NPA. He described the impact of the growth pool, which accounts for the footprint requirements of new service providers. NANPA uses the growth pool in the forecast to account for the footprint requirements projected for the next few years to provide a more accurate forecast of total CO code demand. The graph compares the actual growth to the projected growth to help determine if the forecast appears to be accurate. He explained that the forecast is produced based on a combination of historical demand and COCUS. Del asked if the forecast include any type of conservation measures. Bruce responded that it did not. He explained that impacts of conservation have been discussed, but until some type of conservation is implemented the forecast can not be adjusted. Until such time, we must move ahead with the relief planning process in order to meet the projected relief dates. If conservation methods become available during this process, then the relief date may be deferred.

Del requested that this group include conservation efforts in the committee's recommendation. Bruce explained that the purpose of this committee is to evaluate and recommend relief alternatives, not conservation measures. Bruce suggested that conservation methods must be addressed in another meeting. Suzanne Brooks discussed the conservation report issued by the 602 committee that she had chaired. There were other questions and comments from various participants regarding the report. Stan Weeks suggested that Del convene a meeting to discuss these issues. Suzanne recommended that we move forward with the planning process and defer the conservation issues to another meeting. Following this recommendation, Bruce reviewed the relief planning guidelines and the Attributes of Splits and Overlays.

3. Status and Composition of 520 NPA

The 520 NPA was born in March 1995. The current growth rate is approximately 5 codes per month, 56 codes per year. The growth pool is estimated to be 60 codes. There are approximately 160 rate centers. The actual quantity is in question because the rate center information in the LERG differs from the rate center information in the tariffs. There appear to be some rate centers on the borders that do not yet have NXX codes assigned and therefore do not appear in the LERG. The count of working NXX codes is accurate. The rate centers in question do not significantly impact the life calculations for the relief alternatives. It was noted that Nogales, Flagstaff, Yuma have multiple rate centers and these may be some or all of the rate centers that are defined in the tariffs but not listed in the LERG. It was also noted that Citizens is buying many U S WEST rural exchanges. The code assignment data for the last 11 months indicates that 80% of the assignments have been outside of the Tucson area.

4. Communities of Interest

Bruce reviewed communities of interest information. He explained that consideration of impacts of splitting communities should be part of the evaluation criteria. He asked the participants if any communities of interest were impacted in the proposed alternatives. Karen asked where Silver Bell was located. This is unassigned territory that soon may be served by her company. It was determined that Silver Bell is in the Tucson LATA.

5. Review Possible Relief Alternatives

Bruce began the review of the relief alternatives that were distributed in the Initial Planning Document.

Alternative 1 is a 2 way split along the Tucson LATA boundary. It is almost a 50/50 balanced split of NXXs. There are 301 NXXs in the Tucson LATA and 303 NXXs in the Phoenix LATA portion of the 520 NPA. The lives were approximately 12.3 and 13.2 years respectively for the two sides of the split. Bruce noted that the forecasted years to exhaust are measured from today's date. Therefore, when any new relief plan is implemented, the years to exhaust will be somewhat less than these estimates.

Del asked if the growth factor for each side of split is the same. Bruce explained that the linear forecast uses proportional growth rates for all rate centers so the growth rate on either side of this split will theoretically be the same. However, because the number of rate centers in the rural part of the state that have a single NXX is larger than the number in the Tucson LATA, it might not actually look like a linear growth in each rate center. It is proportional to each rate center based on per cent of working codes. Del asked if the growth should be based on historical growth per rate center. Bruce explained that using only historical rate center growth might be misleading. For instance, a rate center that had one NXX for many years and then suddenly gets another code, would, under historical forecasting, receive another code each year. Forecasting using only long term historical data would continue to place most growth in Tucson yet 80 per cent of the growth for the last 11 months has actually occurred outside of Tucson. Comments from other participants supported Bruce's assumption.

Alternative 2. This is a 2 way split that follows the interstate corridor from the south side of the Phoenix calling area down Interstate 10 and then along Interstate 19 to Nogales. The estimated exhaust for this alternative is 13.2 and 12.3 years respectively. The growth assumptions are the same as described in Alternative 1.

Alternative 4. This is a 2 way split following the rate center boundaries of the Tucson local calling area. The estimated lives for this alternative are over 20 years and approximately 8.5 years. It was noted that there was a significant disparity between the exhaust projections of the two sides of the split. Del noted that he believes that the future growth will occur in the Tucson area and that a higher growth rate might provide a different result for this alternative. The growth assumptions are the same as described in Alternative 1.

Alternative 3. This is an overlay over the entire 520 area. The calculated life is approximately 12 years. The overlay will require end users to dial 10 digits on all local calls.

6. Additional Relief Alternative Contributions

Bruce asked if anyone wanted to modify any of the existing alternatives or propose any new ones. There were no additional alternatives offered for review.

Karen Williams, Midvale Telephone, asked it would be appropriate to design split areas based on conservation alternatives. For example, the Tucson local calling area could be one area because it is a candidate for rate center consolidation and pooling. This led to a discussion regarding when or if rate center consolidation and pooling would be available in the 520 area. Del stated that Tucson MSA will be pooling (*i.e.*, LNP) capable in the future and there was no information available on rate center consolidation. Bruce reiterated that conservation methods were not an issue for this relief planning meeting. Conservation is used to extend the life of an existing NPA, not as an alternative for NPA relief.

Suzanne asked if any of the proposals affected 911. Bruce mentioned that the present 911 system can only handle 4 NPAs because of the analog ANI 8 digit system and that adding another NPA to the 520 area would add the 5th NPA to the existing 911 system. He mentioned that he had attended a 911 meeting in Colorado and this issue had been discussed there. The 911 network providers are aware that this is a problem that must be resolved. Bruce described the problem as follows: The 911 system is designed to forward the telephone number of the calling party to a 911 router where the system determines which 911 emergency center the call is to routed to. The information sent to the 911 router to identify the calling party consists of the seven digit telephone number (NXX-XXXX) and another digit that is added to identify the NPA of the originating line. This digit is called the NPD. The existing non-SS7 911 system is limited to only 4 different digits {0, 1, 2, and 3}to identify the NPA). There are several solutions to this problem. One is to send 10 digit ANI. However, in a non-SS7 environment this could increase the post dial delay to as much as 14 seconds. This long of a delay is not acceptable. Past experience has shown that, especially on an emergency call, customers, when faced with 14 seconds of silence, will hang up and try again. Another possible option is to expand the existing capability to more than 4 digits. This requires software changes in all end office switching equipment. A third option is to convert the existing 911 system to SS7, thereby allowing the digits to be sent "out of band" which will significantly reduce the post dial delay.. These and other options must be explored by the local service providers, the emergency service providers and the Arizona Corporation Commission before any changes can be made. Suzanne expressed concerns about selecting a relief alternative before the fix for the 911 system has been determined. She recommended that the committee not select a relief alternative until it is known which of the alternatives may adversely affect the 911 system. In response, Bruce explained that all of the proposed alternatives affected the 911 system because all of the alternatives require the addition of a new NPA, which will be the 5th NPA in the 911 system. Suzanne suggested that USW determine what the impact will be in the Arizona 911 system and report back to committee. Bruce suggested that this concern is not a show stopper but will be an additional expense to the affected companies.

During lunch, Charlene Barbknecht contacted a USW technical support person who stated that all three of the Arizona 911 tandems (two in Phoenix and one in Tucson) were already serving 4 NPAs and therefore adding another NPA will cause modifications to all tandems. Therefore, the issue will have to be addressed no matter what alternative this committee selects. Bruce suggested that exhaust of 520 is a little over 2 years away and USW will have to have modifications to the 911 system in place by then. This situation is not unique to 520. There are several areas in the NANP facing the same problem (Washington and Colorado for example). We should assume it will be resolved and should not delay consideration of the relief alternatives awaiting a solution.

7. Develop Pros and Cons of Alternatives

Prior to the lunch break, Suzanne recommended that Alternative 2 be eliminated based on preliminary information that indicated Alternative 2 would adversely impact the 911

system. Seconded by Stan Weeks. Richard Smith suggested that it was too early to eliminate without knowing the answer to the 911 issues. Bruce suggested that U S WEST try to find an answer to the 911 issues during lunch. ***(Note: Results of this investigation are provided in previous section)***

Following the discussion, Suzanne modified her motion from eliminating Alternative 2 to eliminating Alternative 3, an overlay, based on the huge area that is affected. This overlay requires not only people in the cities to dial 10 digits but also the people in the outlying rural areas. Seconded by Richard Smith. Comments for and against eliminating this alternative included: Why overlay and force 10 digit dialing? It is too early to eliminate and force number changes? An overlay is the most customer friendly since on one needs to change their phone number, keep it on the table. Consensus was not reached to eliminate Alternative 3. Opposed Airtouch, AT&T, U S WEST, GTE, Cellular One.

Joanne Edelman proposed that Alternative 4 (split along the boundary of the Tucson local calling area) be eliminated because it splits communities of interest and has unbalanced lives. Cellular One seconded. Richard Smith asked if the split line could be revised to reduce the disparity between the two areas. In response, Bruce explained that a revision would have to be a new alternative. Following the discussion, consensus was reached to eliminate Alternative 4. Opposed- COX, Abstain-U S WEST.

Next the committee reviewed Alternatives 1 and 2 to clarify geographic issues and dialing patterns of each area in these alternatives in an attempt to find an alternative that would appeal to all customers. Comment made that no matter what alternative is selected, any change will not appeal to the public. Other comments related to consideration of local calling areas, county seats, etc. Bruce explained that he had considered these issues when he developed the alternatives. Comment that a split would require customers to change their telephone numbers just 5 years after they previously changed them which is not compliant with the guidelines which recommend eight years. Comment that number changes should occur in metro area where the growth has caused the exhaust.

Following this discussion, Richard Smith proposed that all three remaining alternatives, 1, 2, and 3 be submitted to the ACC. Seconded by Airtouch. Group Discussion. Group not ready to stop discussion and take these alternatives to ACC. We should wait until we can have another meeting so additional service providers can attend. All code holders were notified prior to this meeting. We came here to make decisions and the other companies had the same opportunity. We would have to start all over in order to bring any new people up to the same level that we are at now. We should study county seats and other community issues before we make a decision. We are not going to agree to splits on municipal boundaries. Additional discussion clarified the 911 issues and eliminated the concerns that a decision should be postponed until 911 resolution was identified and industry was notified. Comment that from a end user perspective, Alternative 1, a split along the LATA boundary, is confusing to the customer because they do not identify LATA boundaries with any specific geographic area. On the other hand, Alternative 2 is a split along the interstate corridor and is recognizable to the public.Therefore, public education will be easier. Comment made that the Tuscon LATA

line is only meaningful to the industry. A vote was taken and there was no consensus to take all three alternatives to the ACC.

Motion from Raymond Greig: Take Alternative 2, a 2 way split and Alternative 3, an overlay to the ACC. Consensus was reached. Opposed- Cellular One, US WEST. Abstain Midvale. Additional discussion was held to see if the concerns of those opposed to this motion could be resolved. However, following the discussion no changes were made.

Joanne Edelman's motion: If Alternative 2 , a split, is selected as the relief alternative, the 520 NPA should stay in Area A. Seconded by Sprint. Karen- rural areas suffer more hardship and should not have to change their NPA. Joanne asked to delay decision on this subject until the next meeting.

8. Additional Issues

Set aside codes: Raymond Greig proposed the industry set aside 10 NXX codes for compliance with FCC Order 96-333. . Seconded by Joanne Edelman. Consensus reached. Opposed None. Abstentions - None.

The committee agreed to have a follow up conference call to set dates and continue discussion on Joanne's motion regarding who would retain the 520 NPA if a split is chosen by the ACC. Subsequent to the meeting NANPA scheduled a conference call for September 27, 1999 at. 8AM PDT, 9AM MDT, 10AM CDT. NANPA sent notification to all 520 code holders and interested parties.

Charlene agreed to take the 911 questions back to U S WEST to verify the 911 information that had been provided in this meeting. A U S WEST representative will provide available information on the September 27th conference call.

At this point it was suggested that the meeting be adjourned as several people had flights to catch.

Meeting adjourned 3:30 PM

520 Area Code Relief Planning Meeting Attendees 9/27/99:

Name	Company
Joanne Edelman	Airtouch Cellular
Del Smith	Arizona Corp. Comm.
John Badal	Arizona Competitve Telecom. Coalition
Stan Weeks	AT&T
Pat vanMidde	AT&T
Ron Piriczky	Cellular One
Wes Youmans	Citizens
Jose Jimenez	Cox Communications
Adriana Zavala	GST Telecom, Inc.
Geneva Stroshane	GTE
Suzanne Brooks	MCI Worldcom
Jose Crespo	Mountain Telecommunications
Bruce Armstrong	NANPA
Craig Wiseman	NANPA
Raymond Greig	Sprint PCS
John Duffy	U S WEST
Jack Ott	U S WEST

Introductions and review of guidelines:

The purpose of this conference call was to continue discussions from the September 8, 1999 520 Relief Planning Meeting. The issues discussed were the motion, made by Airtouch, relating to which area of Alternative 2, a 2 way split, should retain the 520 NPA. The committee also discused the impacts of area code relief on the existing 911 system and also determined the permissive dialing, mandatory dialing and relief dates for the recommended split and overlay relief alternatives.

The start of the meeting was delayed until 9:10AM to allow for late arrivals. Bruce reviewed conference call meeting protocols and the meeting agenda

Issues for discussion:

1. **Retention of the 520 NPA** - At the September 8th Relief Planning meeting. Joanne Edelman, Airtouch Cellular, proposed that, if the ACC selects Alternative 2, a 2 way split, as the relief alternative, the Tucson Corridor would retain use of the 520 NPA. Joanne Edelman asked to defer discussion on this motion until this conference call so

that additional data related to population densities, telephone subscriber counts, types of telephone customers, etc. within the two split areas could be reviewed.

Bruce reviewed the motion and the discussion that had occurred at the September 8th meeting. He advised the group that this motion recommends that the Tucson corridor area keep the 520 NPA. However, there are also 2 other options that the committee may also consider. One is to recommend that the rural area keeps the 520 NPA and the other is to recommend that the ACC decide which area would keep the 520 NPA if a split is selected as the relief alternative. .

Wes Youmans, Citizens, advised the committee that Citizens provides service to most of rural area. If the rural area is required to change to a new NPA, Citizens will have to spend more than 2 million dollars to convert its call processing equipment. This is for 53 existing switches. The cost may be more after Citizens acquires several switching offices from U S WEST . In addition, there are 7 PSAPs that are not served by the 911 selective router. Changing the area code in each of the line translations in these PSAPs will cost approximately $2 per number. There will also be additional costs for legacy systems, CRIS records, etc. This will result in an undue burden to rural rate payers.

Jack Ott asked if there was any information on the population in each of the two areas. This was in reference to Area A and Area B of the Alternative 2. Bruce reviewed demographic data that he had developed from the U.S Census Bureau web site. Approximately 55 % of population is in the Tucson corridor and approximately 45 % of the population is in rural area . The current population of the area contained in the 520 area code is approximately one-third of the state population. The population growth in the corridor area is 171,536 (20.1%) during the period 1990/1998. The population growth in the rural area of 520 was 169,798 (24.5%) during the same period.

Ron Piriczky, Cellular One: Wireless would prefer that Tucson keep 520 to avoid reprogramming cell phones. This would require the customers to bring their phones in to a designated location for reprogramming. This is difficult to manage and history has shown that some customers will not bring their phones in hoping that this will allow them to avoid the area code change. He stated that the majority of his customers were in the Tucson corridor area.

Jack Ott, U S WEST: U S WEST would prefer that the Tucson corridor area retain the520 NPA because the majority of customers are in the corridor area. This would be in compliance with NPA guidelines that recommend minimizing the affects of an area code change for the majority of customers, both residence and business, based on population distribution. This would include small business customers in the corridor area, which generally incurs most of the cost of converting to a new NPA.

Geneva Stroshane: The guidelines do not address what is happening in today's environment. They assume future area code changes will not occur for 10 to 12 years. However, area code changes are actually occurring much sooner. When we require the

rural areas to change their area code, we are affecting the people who can least afford the cost to change.

Adriana Zavala, GST: GST supports retaining the 520 NPA in the Tucson corridor. Pat vanMidde stated that AT&T also supports leaving 520 in the Tucson corridor. John Badal, Arizona Competive Telecom Coalition also supports leaving 520 in the Tucson corridor.

Geneva Stroshane, GTE- suggested that the ACC may decide to allow Wireless to continue to use their 520 NXX codes in the corridor area even if the rural area retains 520 NPA. During discussion it was mentioned that this arrangement is generally referred to as Grandfathering.

Joanne Edelman, Airtouch: When Grandfathering was done in Phoenix, it only applied to certain wireless NXX codes, not all wireless NXX codes.

Ray Greig, Sprint PCS: Sprint does not support Grandfathering because it requires 10-digit dialing between the wireline and wireless phones in same service area . Experience has demonstrated that customers want their wireless and wireline phones to be in same NPA.

Bruce asked if any other companies besides Citizens and GTE were opposed to recommending if the ACC selects Alternative 2 as the relief alternative, the 520 NPA will continue to serve customers in the Tucson Corridor. There were no other companies opposed. Therefore, Bruce declared that consensus was reached to recommend the 520 NPA serve the Tucson corridor area if a Alternative 2, a two way split, is selected as the relief alternative.

Wes Youmans asked where conservation efforts would be addressed. He said they were the driving force behind area code relief. Bruce explained that conservation and relief planning are separate and distinct issues and therefore conservation would not be addressed in this meeting. Conservation issues will have to be addressed directly between the ACC and the industry.

2. **Effect of Area Code Relief on 9-1-1 Service** – Information provided at the September 8th planning meeting suggests that adding a fifth NPA in Arizona will require modifications to the existing 9-1-1 system to provide the capability to process 911 calls from more than 4 NPAs.

Jack Ott: U S WEST has decided to upgrade the 3 U S WEST Arizona 911 selective routers to use Enhanced MF ANI routing. This will eliminate the need to use the single digit NPA identifier that currently limits the 911 system capacity to no more than 4 NPAs. The 911 selective routers must be digital switches in order to provide Enhanced MF ANI routing. Two of the routers have already been converted to digital and the third will be converted sometime in year 2000. In addition, the PSAPS will have to be

upgraded to receive 10 digit number identification. This is in addition to the U S WEST selective router upgrades. These changes are necessary regardless of whether the ACC selects a split or an overlay as the relief alternative.

Jack suggested that minutes from both the September 8th and today's meeting be sent to the E911 community. In addition, this committee's report to the ACC should include an explanation of the existing constraints, proposed solution and a recommendation that the ACC monitor the progress of the required upgrades. These upgrades must be completed before implementation of a new NPA.
There were no additional comments on this issue.

3. **Setting Place Dates** – The industry must determine permissive dialing, mandatory dialing and relief dates for each of the alternatives (Overlay and Split).

The committee reached unanimous consensus on the following dates:

For a split alternative, the three dates are:

Beginning of permissive dialing: **October 28, 2000**
Beginning of mandatory dialing: **April 28, 2001** (2 months before codes are activated)
End of mandatory dialing/ relief/ code activation date: **June 30, 2001**

For an overlay alternative:

Beginning of permissive 10 digit local dialing: **October 28, 2000**
Beginning of mandatory 10-digit local dialing: **April 28, 2001** (2 months before codes are activated).
Activation the overlay area code/relief date: **June 30, 2001**

Jack Ott advised that if an overlay is selected as the relief alternative, permissive dialing can be implemented immediately. This would allow alarm companies to begin CPE changes immediately after the new NPA is assigned. They would not have to wait for the official permissive date. However, the public would still be notified that permissive dialing would begin on October 28, 2000.

4. Other Issues :

Bruce reviewed items that would be included in report to the ACC. He mentioned that the draft will be distributed on or before October 25, 1999. Comments will be due no later than October 29, 1999 .The final report will be filed with the ACC on 11-8-99. Position papers should be delivered to Bruce no later than October 25,1999.

Jack Ott mentioned that ACC should be advised that rate center consolidation should not be implemented until after the ACC has selected a relief alternative. This would give the

ACC and the industry time to evaluate the impacts, such as location of split lines, prior to implementing rate center consolidation.

Jose Jimenez suggested that ACC be advised not to consider any conservation issues until a relief decision is made.

At this point, the committee had addressed all of the issues on the agenda.

The meeting was adjourned at 10:25 AM.

5

INITIAL PLANNING DOCUMENT FOR THE ARIZONA 520 NPA

August 11, 1999

Prepared by
Bruce Armstrong - Western Region Area Code Relief Planning
North American Numbering Plan Administrator (NANPA)

NPA Relief Alternatives and Assumptions

General Assumptions

1. The 520 area code was born on March 1995 as a split off of the 602 area code. Prior to 1995, the 602 area code was the sole area code in Arizona. The split in 1995 essentially placed the Phoenix greater metropolitan area into its own area code, retaining the 602 area code designation. Customer telephone numbers in the remaining geography of the state outside Phoenix were changed to the 520 area code.
2. Current NANPA forecasts predict that the linear growth rate for the 520 area code is about 4.7 central office codes per month (or approximately 56 codes per year). In addition to the linear growth, these same forecasts predict a need for an additional 60 codes for a growth pool (*i.e.*, central office codes necessary for market entry in new areas to establish a footprint). Together, the linear demand and the growth pool predict the exhaust date of 4th Quarter 2001 for the 520 area code.

Area Code Splits

1) *All split plans will require ten-digit local dialing between NPAs, if any rate areas across NPA boundaries remain in the same extended local calling area. Within an NPA, seven-digit dialing would be permitted.*

2) Code growth in each rate area will continue at the current average rate of growth (approximately 12% per year). This growth rate is the same for both sides of the split. [Note: Linear growth projections would produce differing results for lives of split alternatives.]

3) The 520 area code will exhaust in 27 months (4th Quarter 2001).

4) All end office and tandem NXX codes in the "New Area Code" area will change to the new area code.

Area Code Overlays

1) A new area code will be assigned to either part or all of the geographic area currently served by the 520 NPA. Customers will retain their current telephone numbers; however, ten-digit dialing will be required on all calls. Prefix codes (NXXs) in the overlay NPA will be assigned upon request with the effective date of the new area code. At exhaust of NXX codes in the existing 520 area code, all code assignments will be made in the overlay area code.

2) Code growth will continue in the overlay area at the current rate of growth (approximately 12% per year). [Note: Linear growth projections would produce differing results for lives of split alternatives.]

3) The 520 area code will exhaust in 27 months (4th Quarter 2001).

4) A fixed number of NXX codes will be reserved in the 520 NPA to comply with FCC Order No. 96-333.

ARIZONA NPA RELIEF ALTERNATIVES

Alternative #1A - Two-Way Split on LATA Boundary (Tucson LATA) - Tucson Retains 520 NPA

NPA	Projected Life	NXXs
520 (Tucson)	~8.75 years (105 months)	301
New NPA (Remainder)	~9 years (109 months)	303

Alternative #1B - Two-Way Split on LATA Boundary (Tucson) – Remainder of State Retains 520 NPA

NPA	Projected Life	NXXs
New NPA (Tucson)	~8.75 years (105 months)	301
520 (Remainder)	~9 years (109 months)	303

Note: Alternatives 1A and 1B are exactly the same except for which area retains the 520 NPA.

Alternative #2A - Two-Way Split – Tucson/Nogales Corridor – Tucson/ Nogales Retain the 520 NPA

NPA	Projected Life	NXXs
520 (Tucson/Nogales)	~9 years (109 months)	288
New NPA (Not Tucson/Nogales)	~8.75 years (105 months)	316

Alternative #2B - Two-Way Split – Tucson/ Nogales Corridor – Tucson/Nogales Does Not Retain the 520 NPA

NPA	Projected Life	NXXs
New NPA (Tucson/Nogales)	~9 years (109 months)	288
520 (Not Tucson/Nogales)	~8.75 years (105 months)	316

Note: Alternatives 2A and 2B are exactly the same except for which area retains the 520 NPA.

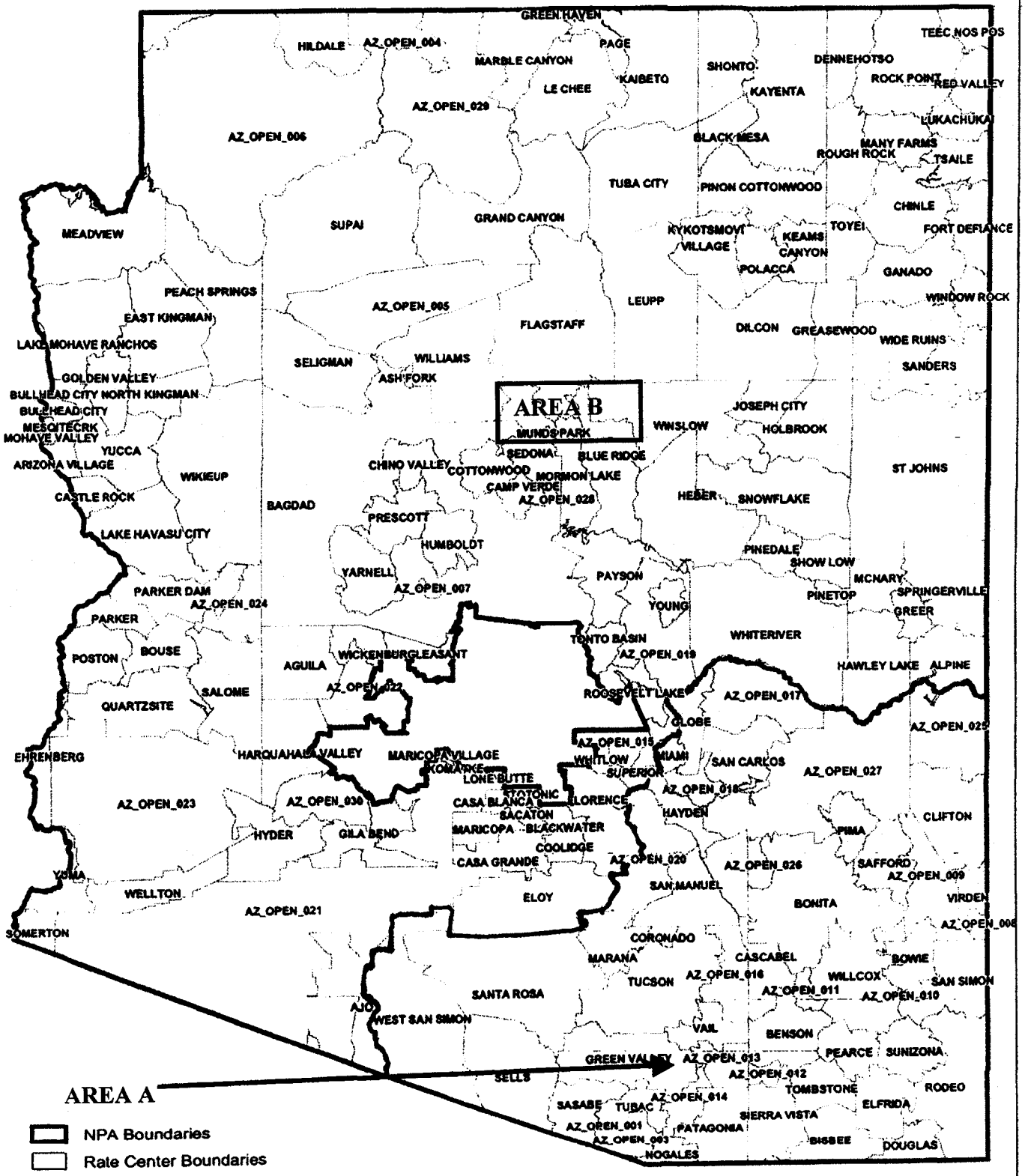
Alternative #3 - Overlay of Entire NPA

NPA	Projected Life	
Life of Overlay	~8.5 years (103 months)	

Alternative #1 – Two Way Split

NPA 520 Rate Center Map

LOCKHEED MARTIN



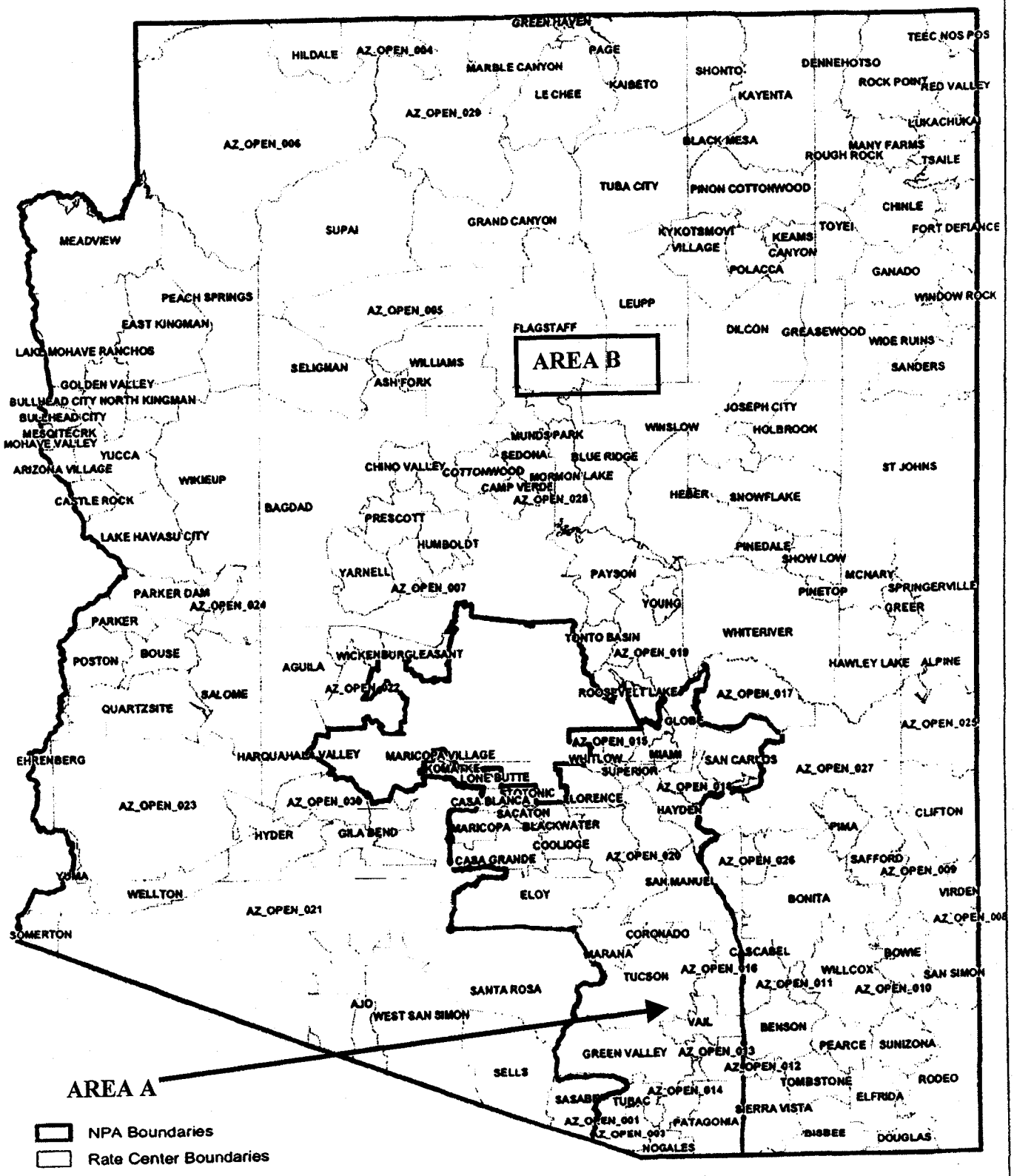
Produced by CDS Business Mapping 6/22/99

	Estimated Exhaust	Current NXXs
Area A (Tucson LATA)	~12.3 years (148 months)	301
Area B (Remaining Area)	~13.25 years (159 months)	303

Alternative #2 – Two Way Split

NPA 520 Rate Center Map

LOCKHEED MARTIN



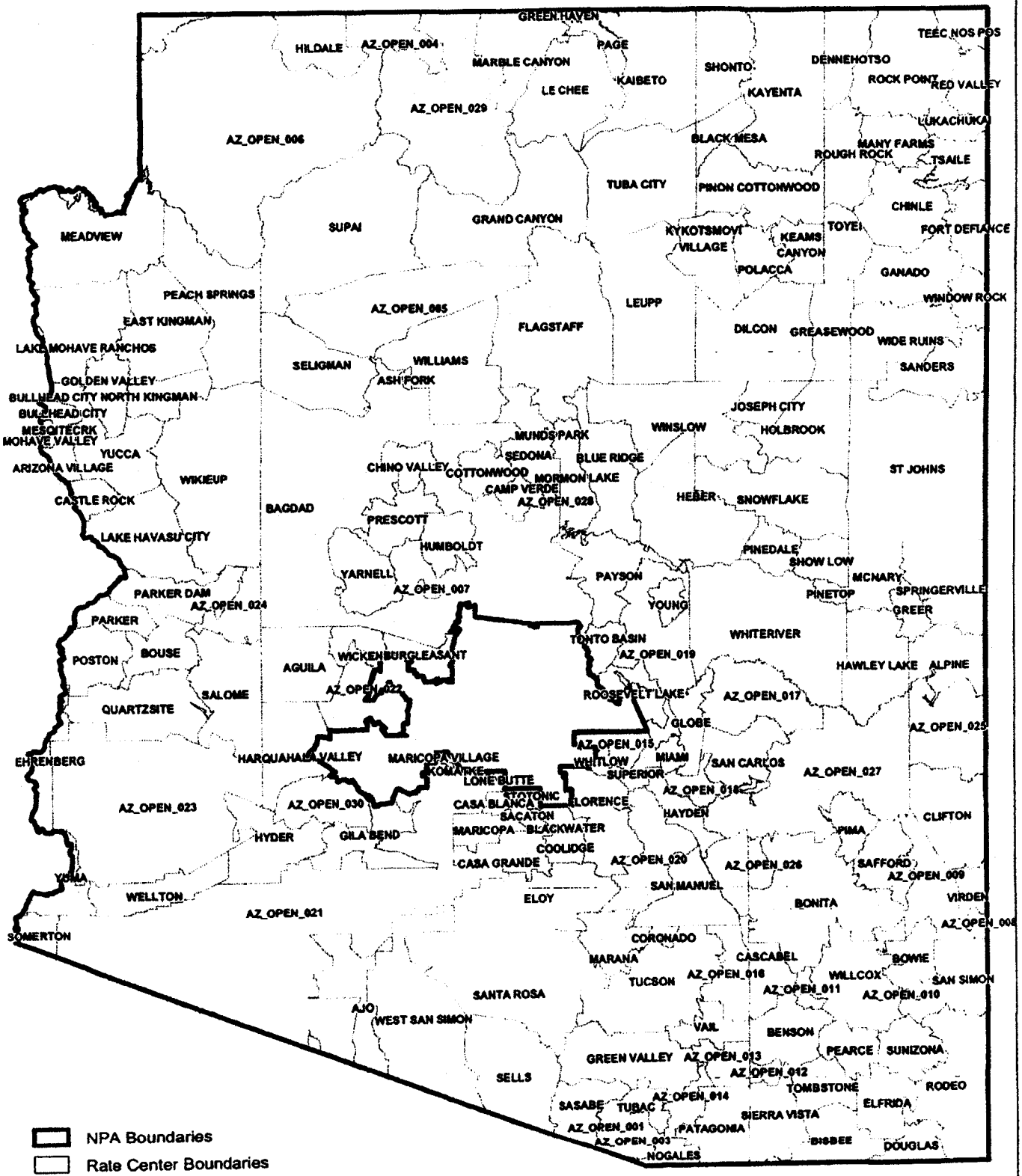
Produced by CDS Business Mapping 6/22/99

	Estimated Exhaust	Current NXXs
Area A (Tucson/Nogales Corridor)	~13.25 years (159 months)	288
Area B (Remaining Area)	~12.3 years (150 months)	316

Alternative #3 – Overlay

NPA 520 Rate Center Map

LOCKHEED MARTIN



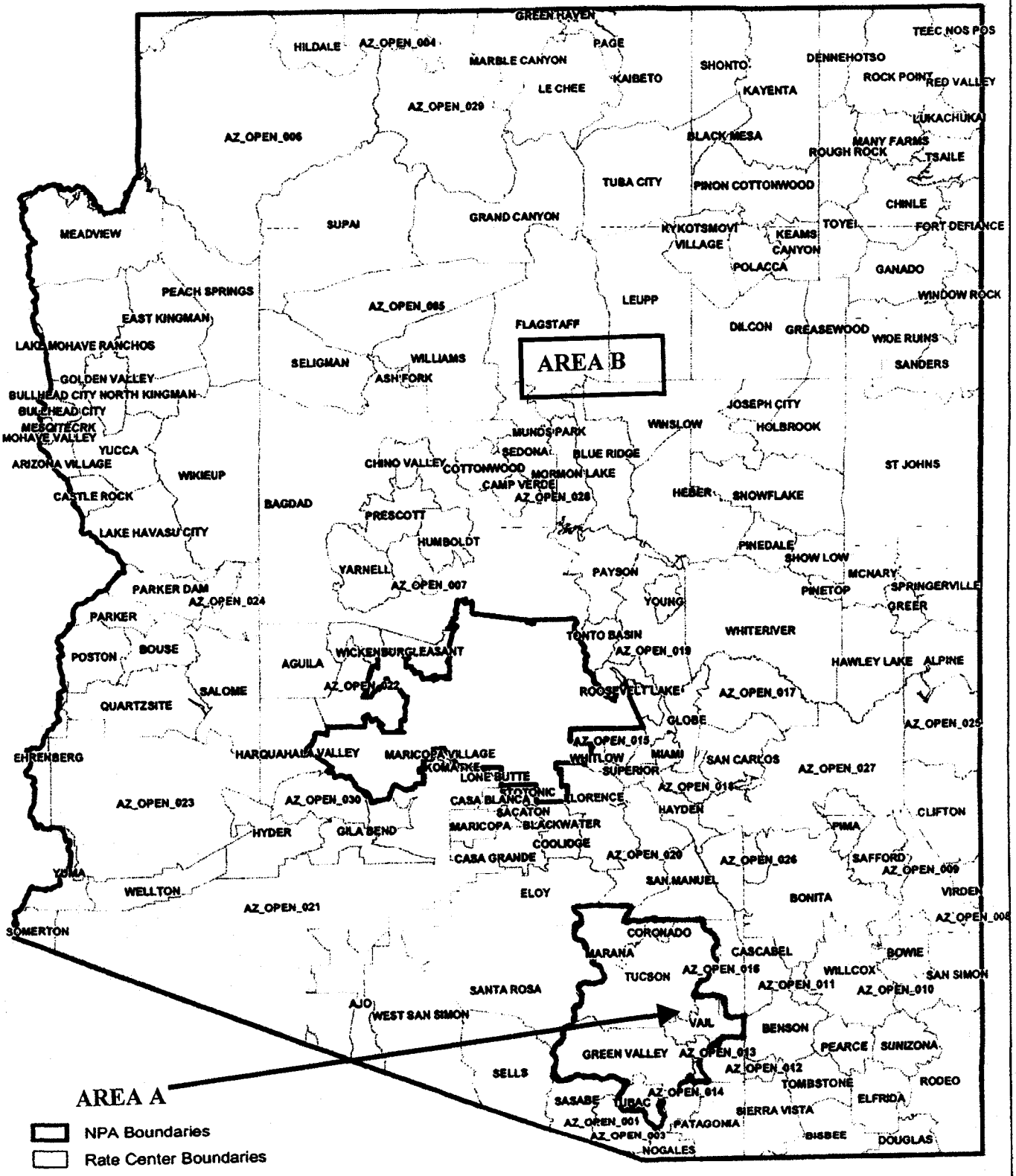
Produced by CDS Business Mapping 6/22/99

	Estimated Exhaust	Current NXXs
Overlay Area	~12.4 years (149 months)	604

Alternative #4 – Two Way Split

NPA 520 Rate Center Map

LOCKHEED MARTIN



Produced by CDS Business Mapping 6/22/99

	Estimated Exhaust	Current NXXs
Area A (Tucson Calling Area)	>20 years (243 months)	213
Area B (Remaining Area)	~8.5 years (102 months)	391

6

CODE GROWTH FOR 520 NPA BY RATE CENTER

Assigned through 7/31/99
am (Pacific)

	Code Growth by Month by Rate Center												Current
RATE CENTER	9/98	10/98	11/98	12/98	1/99	2/99	3/99	4/99	5/99	6/99	7/99	Totals	7/99 NXXs
AGUILA												0	1
AJO												0	1
ALPINE												0	1
ARIZONA VILLAGE												0	1
ASH FORK												0	1
BAGDAD												0	1
BENSON												0	2
BISBEE												0	2
BLACK MESA												0	1
BLACKWATER												0	1
BLUE RIDGE		1										1	2
BONITA												0	1
BOUSE												0	1
BOWIE												0	1
BULLHEAD CITY												0	1
BULLHEAD CITY NORTH												0	3
CAMERON												0	1
CAMP VERDE												0	7
CASABLANCA												0	1
CASAGRANDE	2	1	2				1	1	1	1	1	10	20
CASCABEL												0	1
CASTLEROCK												0	1
CHINLE												0	1
CHINO VLY	1											1	1
CIBOLA												0	1
CLIFTON												0	2
COLORADO CITY												0	1
COOLIDGE												0	1
CORONADO												0	2
COTTONWOOD												0	8
DENNEHOTSO												0	1
DILCON												0	1
DOUGLAS	2							1				3	5
DUNCAN												0	1
EAST KINGMAN												0	2
EHRENBERG												0	1
ELFRIDA												0	1
ELOY										1		1	5
FLAGSTAFF	3	1						1		2	11	18	27
FLORENCE												0	1
FORT DEFIANCE												0	1
FREDONIA												0	1
GANADO												0	1
GILA BEND												0	2
GLOBE												0	8
GOLDEN VALLEY												0	1
GRAND CANYON												0	3
GREASEWOOD												0	1
GREEN HAVEN												0	1
GREEN VALLEY												0	4
GREER												0	1
HARQUAHALA VALLEY												0	1

CODE GROWTH FOR 520 NPA BY RATE CENTER

Assigned through 7/31/99
am (Pacific)

	Code Growth by Month by Rate Center												Current
RATE CENTER	9/98	10/98	11/98	12/98	1/99	2/99	3/99	4/99	5/99	6/99	7/99	Totals	7/99 NXXs
HAWLEYLAKE												0	1
HAYDEN												0	3
HEBER												0	1
HOLBROOK				1								1	3
HUMBOLDT	1											1	10
HYDER												0	1
JOSEPH CITY												0	1
KAIBITO												0	1
KAYENTA												0	1
KEAMS CANYON												0	1
KINGMAN									1			1	6
KOMATKE												0	1
KYKOTSMOVI VILLAGE												0	1
LAKE HAVASU CITY												0	5
LAKE MOHAVE												0	1
LAKE PLEASANT												0	1
LE CHEE												0	1
LEUPP												0	1
LITTLEFLD												0	1
LONE BUTTE												0	1
LUKACHUKAI												0	1
MANY FARMS												0	1
MARANA				1								1	10
MARBLE CANYON												0	1
MARICOPA												0	2
MARICOPA VILLAGE												0	1
MCNARY												0	1
MEADVIEW												0	1
MESQITECRK												0	1
MIAMI												0	1
MOHAVE VALLEY		1										1	2
MORMONLAKE												0	1
MUNDS PARK												0	1
NOGALES							1	2		1	1	5	20
PAGE												0	9
PARKER												0	1
PARKER DAM												0	1
PATAGONIA												0	2
PAYSON										1		1	10
PEACH SPG												0	1
PEARCE												0	1
PHOENIX												0	1
PIMA												0	1
PINEDALE												0	1
PINETOP												0	3
PINON COTTONWOOD												0	1
POLACCA												0	1
PORTAL												0	1
POSTON												0	1
PRESCOTT	1	1	1							2		5	25
QUARTZSITE												0	2
RED VALLEY												0	1

CODE GROWTH FOR 520 NPA BY RATE CENTER

Assigned through 7/31/99
am (Pacific)

	Code Growth by Month by Rate Center												Current
RATE CENTER	9/98	10/98	11/98	12/98	1/99	2/99	3/99	4/99	5/99	6/99	7/99	Totals	7/99 NXXs
ROBLES												0	1
ROCK POINT												0	1
ROOSEVELT LAKE												0	1
ROUGH ROCK												0	1
SACATON												0	2
SAFFORD												0	5
SALOME												0	1
SAN CARLOS												0	1
SAN MANUEL												0	4
SAN SIMON												0	1
SANDERS												0	1
SANTA ROSA												0	1
SASABE												0	1
SEDONA										2		2	6
SELIGMAN					1							1	2
SELLS												0	2
SHONTO												0	1
SHOW LOW												0	4
SIERRA VISTA												0	13
SNOWFLAKE		1										1	2
SOMERTON												0	1
SPRINGERVILLE												0	1
ST JOHNS												0	1
STOTONIC												0	1
SUNIZONA												0	1
SUPAI												0	1
SUPERIOR												0	2
TEEC NOS POS												0	1
TOMBSTONE												0	1
TONTO BASIN												0	1
TOYEI												0	1
TSAILE												0	1
TUBA CITY												0	1
TUBAC												0	1
TUCSON		2	1	2		1	4		2	3	1	16	193
VAIL												0	2
WELLTON												0	1
WEST SAN SIMON	1											1	1
WHITERIVER		1										1	3
WHITLOW												0	1
WICKENBURG		1							1			2	3
WIDE RUINS												0	1
WIKIEUP												0	1
WILLCOX												0	4
WILLIAMS												0	1
WINDOW ROCK												0	4
WINSLOW												0	6
YARNELL												0	1
YOUNG												0	1
YUCCA												0	1
YUMA	3	2								1		6	26

Arizona 520 NPA
Rate Centers

Rate Center	NXXs
AGUILA	1
AJO	1
ALPINE	1
ASH FORK	1
AZ VILLAGE	1
BAGDAD	1
BENSON	2
BISBEE	2
BLACK MESA	1
BLACKWATER	1
BLUE RIDGE	1
BONITA	1
BOUSE	1
BOWIE	1
BULLHDCYN	1
BULLHEADCY	3
CAMERON	1
CAMP VERDE	1
CASABLANCA	1
CASAGRANDE	22
CASCABEL	1
CASTLEROCK	1
CHINLE	1
CHINO VLY	1
CIBICUE	1
CIBOLA	1
CLIFTON	2
COLORADOCY	1
COOLIDGE	1
CORONADO	2
COTTONWOOD	8
DENNEHOTSO	1
DILCON	1
DIR ASST	1
DOUGLAS	5
DUDLEYVL	1
DUNCAN	1
E KINGMAN	3
EHRENBERG	1
ELFRIDA	1
ELGIN	1
ELOY	2
FLAGSTAFF	38
FLORENCE	1
FREDONIA	1
FTDEFIANCE	1
FTHUACHUCA	2
GANADO	1
GILA BEND	2
GLOBE	8
GOLDEN VLY	1
GRANDCNYON	3
GREASEWOOD	1
GREEN VLY	4
GREENHAVEN	1
GREER	1
HARQUHLVLY	1
HAWLEYLAKE	1
HAYDEN	1
HEBER	1
HOLBROOK	2
HUMBOLDT	1
HYDER	1
JOSEPHCITY	1
KAIBITO	1
KAYENTA	1
KEAMSCNYON	1
KEARNY	1
KINGMAN	5
KOMATKE	1
KYKTSMOVLG	1
LE CHEE	1
LEUPP	1
LITTLEFLD	1
LKHAVASUCY	5
LKMHVRNCHS	1
LKPLEASANT	1
LONE BUTTE	1
LUKACHUKAI	1
MAMMOTH	1
MANY FARMS	1
MARANA	3
MARBLECNYN	1
MARCOPAVLG	1
MARICOPA	2
MCNARY	1
MEADVIEW	1
MESQITECRK	1
MIAMI	1
MOHAVE VLY	1
MORMONLAKE	1
MUNDS PARK	1
NOGALES	18
ORACLE	1
PAGE	9
PARKER	1
PARKER DAM	1
PATAGONIA	1
PAYSON	10
PEACH SPG	1
PEARCE	1
PIMA	1
PINE	1
PINEDALE	1
PINETOP	3
PINONCTNWD	1
POLACCA	1
PORTAL	1
POSTON	1
PRESCOTT	26
QUARTZSITE	2
RED VALLEY	1
ROBLES	1
ROCK POINT	1
ROOSEVLTLK	1
ROUGH ROCK	1
SACATON	2
SAFFORD	5
SALOME	1
SAN CARLOS	1
SAN MANUEL	2
SAN SIMON	1
SANDERS	1
SANTA ROSA	1
SASABE	1
SEDONA	7
SELIGMAN	2
SELLS	2
SHONTO	1
SHOW LOW	4
SIERRAVIST	11
SNOWFLAKE	1
SOMERTON	1
SPRINGERVL	1
ST JOHNS	1
STANFIELD	1
STOTONIC	1
SUNIZONA	1
SUPAI	1
SUPERIOR	2
TEEC POS	1
TOMBSTONE	1
TONTOBASIN	1
TOYEI	1
TSAILE	1
TUBA CITY	1
TUBAC	1
TUCSON	193
VAIL	2
W SANSIMON	1
WELLTON	1
WHITERIVER	1
WHITLOW	1
WICKENBURG	4
WIDE RUINS	1
WIKIEUP	1
WILLCOX	4
WILLIAMS	1
WINDOWROCK	3
WINSLOW	6
YARNELL	1
YOUNG	1
YUCCA	1
YUMA	27

HISTORICAL COCUS DATA FOR THE 520 NPA:

AS OF JAN. 1:	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Jun-99
RESERVED CODES	0	19	13	1	6	7	14	15	15	11	11
PROTECTED CODES	19	19	5	5	5	0	1	2	2	1	1
PLANT TEST CODES	17	15	15	28	19	5	3	3	3	3	3
CELLULAR CODES	7	11	18	22	23	44	61	76	91	104	110
PAGER CODES	2	3	3	4	5	6	8	13	17	18	19
SPECIAL CODES	5	7	7	8	8	8	6	6	6	5	5
PCS CODES	0	0	0	0	0	0	0	4	9	14	20
CLEC CODES	0	0	0	0	0	0	0	3	9	44	47
REGULAR CODES	259	276	284	287	294	298	316	331	354	362	366
TOTAL WORKING	309	350	345	355	360	368	409	453	506	561	581

AVG GROWTH FCTR (CELLULAR) - 0.373	LAST 2 YRS - 0.170	LAST YEAR - 0.143
AVG GROWTH FCTR (PAGER) - 0.290	LAST 2 YRS - 0.183	LAST YEAR - 0.059
AVG GROWTH FCTR (REGULAR) - 0.038	LAST 2 YRS - 0.046	LAST YEAR - 0.023

NOTE: "AVG GROWTH FCTR" = AVG ANNUAL GROWTH WHERE "0.373" EQUALS 37.3% ANNUAL GROWTH RATE

Arizona 520 NPA
Central Office Code Holders

Count of NXX	Type						
Code Holder	CAP	CLEC	ICO	PCS	RBOC	WIRELESS	Grand Total
ACCIPITER COMMUNICATIONS INC			1				1
AMERICAN COMMUN. SVCS., INC OF ARIZONA	3						3
ARIZONA TELEPHONE CO.			10				10
AT&T - LOCAL - AZ		1					1
AT&T LOCAL		3					3
AT&T WIRELESS SERVICES, INC.						7	7
BROOKS FIBER COMMUNICATIONS - TUSCON, INC.		2					2
CENTURY EL CENTRO CELLULAR CORP.						2	2
CENTURYTEL OF THE SOUTHWEST, INC. - AZ			3				3
CITIZENS TELECOMM CO OF THE WHITE MOUNTAINS INC			17				17
CITIZENS UTILITIES RURAL COMPANY, INC.			22				22
COMMNET CELLULAR, INC.- ARIZONA						3	3
CONTINENTAL TEL CO OF CALIFORNIA, INC.			6				6
COPPER VALLEY TELEPHONE, INC.			4				4
ELECTRIC LIGHTWAVE, INC. - ARIZONA	15						15
FORT MOJAVE TELECOM, INC.			2				2
FRONTIER LOCAL SERVICES - AZ		1					1
GILA RIVER TELECOMM, INC.			7				7
GST NET - AZ, INC.		7					7
MCIMETRO, ATS, INC.		1					1
MIDVALE TELEPHONE EXCHANGE, INC.			2				2
MOHAVE CELLULAR, L.P., DBA CITIZENS MOHAVE CELL						3	3
MOUNTAIN TELECOMMUNICATIONS, INC. - CLEC		20					20
NAVAJO COMMUNICATIONS CO. - AZ			25				25
NETWORK SERVICES LLC						8	8
NEXTEL COMMUNICATIONS						6	6
PAGENET						5	5
RIO VIRGIN TELEPHONE CO., INC.			1				1
SAN CARLOS APACHE TELECOMMUNICATIONS UTILITY, INC.			1				1
SMITH BAGLEY INC. DBA CELLULAR ONE OF NE ARIZONA						3	3
SOUTH CENTRAL UTAH TELEPHONE ASSOCIATION, INC.			2				2
SOUTHWESTCO WIRELESS, INC. - ARIZONA						39	39
SOUTHWESTERN TELEPHONE CO.			2				2
SPRINT SPECTRUM L.P.				14			14
TABLE TOP TELEPHONE CO., INC.			6				6
TELEPORT COMMUNICATIONS GROUP - PHOENIX	1						1
TOHONO O'ODHAM UTILITY AUTHORITY			3				3
TRI STATE RADIO PAGING, INC.						6	6
TRIAD CELLULAR - UTAH, L.P.						1	1
US WEST COMMUNICATIONS - MOUNTAIN BELL					262		262
US WEST COMMUNICATIONS, INC.						4	4
US WEST NEW VECTOR GRP INC. DBA AIRTOUCH CELL						45	45
VALLEY TELECOMMUNICATIONS COMPANY						3	3
VALLEY TELEPHONE COOPERATIVE, INC.			6				6
VOICESTREAM WIRELESS CORPORATION						4	4
WAYNE MARKIS DBA HANDY PAGE						1	1
Grand Total	19	35	120	14	262	140	590

August 1999 LERG Data