Draft Letter to Parties Responding to Auction Ads

August 3, 2001

Re: Sale of Metricom (Ricochet) Assets

Dear Mr. Doe :

Attached is additional information on Metricom, Inc.

Metricom, Inc. filed for bankruptcy under Chapter 11 of the Bankruptcy Code in the U.S. Bankruptcy Court, Northern District of California, San Jose Division on July 2, 2001(Docket # 01-53291-ASW). Nightingale & Associates, LLC (N&A) has been engaged by the Company to assist in the sale of the Company or selected assets.

The Company's assets are being sold pursuant to the terms of a Motion To Establish Notice, Sales and Bidding Procedures which was approved by the Bankruptcy Court. A copy of the Order Establishing Notice, Sales And Bidding Procedures For Sale of Substantially All Of Debtors' Assets Free And Clear Of Leins, Claims, Rights And Interests is attached for your information. The Court has set August 16, 2001 as the auction date on which offers to purchase Metricom, Inc. or any substantial part of its assets will be received by the Court. THE WCS SPECTRUM WILL BE AUCTIONED AS A SEPARATE ASSET on the August 16th date. This auction will not be a traditional auction sale of the company's individual physical assets. Such a traditional auction will be scheduled at a later date, if necessary. If you have any interest in participating in the auction, you should familiarize yourself with the sale order and plan to be in San Jose on August 16th for the auction. The auction will be held at Metricom, Inc., 333 West Julian Street, San Jose, CA 95110.

The information accompanying this letter is based on data provided by the Company from its internal records. Some of it may be based on activity before the bankruptcy, when the Company was in its "normal" operating mode, while other information relates to the period after the bankruptcy filing. The current level of activity in the Company, including the number of employees and the number of locations operating, may differ materially from what is being sent to you, and circumstances may change again before the August 16th hearing. As an interested party, you have the sole responsibility for updating yourself as to the condition of the Company at the time you make an offer to purchase any assets.

Neither the Company nor N&A, or any of their respective affiliates or representatives, makes any representation or warranty, express or implied, as to the accuracy or completeness of the information contained herein or any other written or oral communication transmitted or made available to a prospective investor in all or any portion of Metricom, and each of the Company and N&A and their respective affiliates and representatives expressly disclaim any and all liability based, in whole or in part, on

such information, errors herein or omissions therefrom. The auction is with RESERVE, "AS IS-WHERE IS-WITHOUT WARRANTY OR REPRESENTATION," and is subject to bidding and sales procedures established by the Bankruptcy Court for the Northern District of California in Case Nos. 01-53291-ASW et seq.

All inquiries pertaining to the purchase of the Company or any assets should be directed to me at the following address:

Kevin I. Dowd
CEO
Metricom, Inc.
333 West Julian Street
San Jose, CA 95110
Tel. 408-282-4244
Fax 408-282-3036

or

Margaret Sheneman
Murphy Sheneman Julian & Rogers
101 California Street
San Francisco, CA 94111
Tel. 415-398-4700
Fax. 415-421-7879

Very truly yours,

Kevin I. Dowd

COPY

MURPHY SHENEMAN JULIAN & ROGERS
A Professional Corporation
MARGARET SHENEMAN (S.B. No. 072718)
ERIC E. SAGERMAN (S.B. No. 155496)
KEITH A. MCDANIELS (S.B. No. 189213)
BRIAN Y. LEE (S.B. No. 197233)
101 California Street, Suite 3900
San Francisco, CA 94111
Telephone Number: (415) 398-4700
Facsimile Number: (415) 421-7879

Reorganization Counsel for the Debtors
METRICOM, INC.
METRICOM FINANCE, INC.
METRICOM INVESTMENTS DC, INC.
METRICOM DC, L.L.C.
METRICOM NEW YORK, L.L.C.

UNITED STATES BANKRUPTCY COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

In re:METRICOM, INC., a Delaware corporation, and certain affiliated entities, METRICOM FINANCE, INC.,METRICOM INVESTMENTS DC, INC.,METRICOM DC, L.L.C. and METRICOM NEW YORK, L.L.C. Debtors.	Chapter 11 Jointly Administered for Administrative Purposes under Case No. 01-53291-ASW Tax I.D. # 77-0294597 Tax I.D. # 77-0529272 Tax I.D. # 77-0427605 Tax I.D. # 52-1971291 Tax I.D. # 77-0575223

ORDER ESTABLISHING NOTICE, SALES AND BIDDING PROCEDURES FOR SALE OF SUBSTANTIALLY ALL OF DEBTORS' ASSETS FREE AND CLEAR OF LIENS, CLAIMS, RIGHTS AND INTERESTS

Hearing Date: July 25, 2001
Time: 2:00 p.m.
Place: 280 South First Street
San Jose, California 95113

MURPHY SHENEMAN JULIAN & ROGERS
A Professional Corporation

The Court considered (a) the "Motion by Debtors to Establish Notice, Sales and Bidding Procedures With Respect to the Sale of Substantially all of Debtors' Assets Free and Clear of Liens, Claims, Rights and Interests" (the "Sales Procedures Motion") dated July 12, 2001, filed by Metricom, Inc. and affiliated debtors and debtors in possession (collectively, "Debtors") in the above-captioned, voluntary chapter 11 bankruptcy cases, (b) all papers filed in connection with the Sales Procedures Motion, (c) the other relevant pleadings, documents, and papers of record in this case, and (d) the representations of counsel at the time of the hearing. Appearances are noted in the record of the Court. Capitalized terms used but not defined herein shall have the meanings assigned to them in the Sales Procedures Motion.

The Court finds that (a) the notice, bidding and sales procedures described in this Order (the "Sales Procedures") and approved hereby are calculated to maximize the purchase price realizable for the sale of the assets of Debtors' respective estates; (b) the Sales Procedures are fair and reasonable under the circumstances of Debtors' cases; (c) approval of the Sales Procedures Motion and Sales Procedures is in the best interests of the Debtors' respective estates and creditors; and (d) the scope, timing and manner of notice of the Sales Procedures Motion was adequate and sufficient under the circumstances of these cases.

Based upon the foregoing, and other good cause appearing therefor,

IT IS HEREBY ORDERED:

1. The Sales Procedures Motion is granted as set forth herein.

2. The notice, sales and bidding procedures set forth herein are hereby approved. Attached hereto as Exhibit A is a summary of the Timeline for Sales Procedures set forth in this Order.

3. Due Diligence. Any party interested in bidding for the Assets of Debtors may conduct reasonable due diligence upon the signing of a non-disclosure agreement ("NDA") acceptable to Debtors providing, inter alia, that (a) such party will not disclose to any third parties non-public information regarding Debtors or their affairs and (b) such party is not relying upon the scope or accuracy of any information supplied by

Debtors or upon Debtors with respect to any matter pertinent to the Assets or the sale. Debtors will, at their option, establish and maintain a due diligence room, prepare and provide due diligence packages to interested parties who sign an NDA, and otherwise take such action as may be appropriate to permit such parties to conduct due diligence.

4. Letters of Intent. Any party interested in bidding upon all or a portion of the assets of Debtors shall provide to Debtors a proposed letter of intent or other form of bid ("LOI") setting forth the principal terms of the offer for Debtors' Assets, including, but not limited to, (a) the purchase price or total investment for the Assets and the proposed method of payment, (b) the identification of the Assets subject to the LOI, including those executory contracts and leases in the Debtors' Schedule G that the bidder may wish to have assigned, (c) the proposed closing date, which shall occur no later than three business days after the date of the Final Sale Hearing (defined below), (d) whether such sale or investment should be accomplished by motion pursuant to 11 U.S.C. §§ 363 and 365 or by means of a plan of reorganization, (e) the bidder's mark up of Debtors' proposed Asset Purchase Agreement (the "APA" described in paragraph 6 below), showing any material variations proposed by the bidder, and (f) such other terms as may be necessary to enable Debtors and any Official Committees to make a full and fair evaluation of the offer contained in the LOI.

A. The LOI of any interested party must be delivered to Debtors and their counsel no later than 5:00 p.m. on Wednesday, August 1, 2001, with a copy to counsel and financial advisors of the Trade Creditors' and Bondholders' representatives at the addresses on the Sale Service List attached hereto as Exhibit B, unless Debtors and at least one group of the Bondholders or the Trade Creditors group on the Official Committee extends the time for delivery of an LOI to a date certain (the "LOI Date"). For purposes of this Order only, (i) the Bondholders group on the official Committee shall be Banc One, Aspen Advisors, Lehman Brothers, and GSC Recovery II L.P., and (ii) the Trade Creditors group on the official Committee shall be Sanmina Corporation, Whalen & Company, Sierra Wireless Data, and General Dynamics.

B. The LOI must state that the offer contained therein (1) shall

remain open and irrevocable until one business day after the last date set for Debtors to determine which LOI(s), if any, to accept, (2) by the date of the Auction, shall not be subject to any contingencies or conditions to closing, including any financing or due diligence contingencies, except entry of the Final Sale Order after the Final Sale Hearing, (3) does not include the requirement that Debtors make or give any representations or indemnities, and (4) includes the agreement by the bidder to bear all expenses of supporting continued business operations from and after the third business day after the date of the Final Sale Hearing (defined below) if the sale contemplates a transfer of any aspect of Debtors' businesses as a going concern.

5. Selection of Lead Bidders; Sale With Reserve. After consultation with any Official Committees, Debtors may, but are not required to, select a lead bidder or lead bidders for all or a portion of Debtors' Assets from the LOIs received by Debtors. Debtors shall select a lead bidder(s), if any, by sending written notice to any lead bidders so selected by 5:00 p.m. on Monday, August 6, 2001. In the event Debtors determine not to select any lead bidder(s), Debtors reserve the right to conduct, on the date of the Auction, an "open auction" with no lead bidder and no Asset Purchase Agreement, on the terms of a term sheet proposed by Debtors and subject to all other applicable terms hereof. The Assets are offered for sale "with reserve." That is, Debtors are not required to accept any offer for sale of the Assets. Debtors reserve the right to withdraw all or a portion of the Assets from sale prior to acceptance of any bids for the Assets and confirmation thereof by the Court at the time of the Final Sale Hearing. Debtors reserve the right to reject all bids if, in the exercise of Debtors' reasonable business judgment, after consultation with the Official Committees, no bid represents fair and adequate consideration. Debtors may reject all LOIs, and the bidding procedures shall not constitute an offer by Debtors to sell any particular Assets.

6. Asset Purchase Agreements. By Friday, July 27, 2001, Debtors shall send to the representatives of the Official Committee members and to all potential bidders the Debtors' proposed draft Asset Purchase Agreement (the "APA"). Subject to the

opportunity of interested parties to overbid at the Auction as set forth herein, Debtors, at Debtors' option, may negotiate the terms of asset purchase agreement(s) or investment agreements which are based on or may be different from the APA (each, an "Asset Purchase Agreement") with lead bidder(s) who submit LOIs that Debtors determine to accept as lead bids, but each Asset Purchase Agreement shall be subject to overbids at the Auction, as described below, and shall be subject to Court approval. **Debtor and each lead bidder for an Asset shall conclude negotiations over the terms of the applicable Asset Purchase Agreement by 5:00 p.m. on Thursday, August 9, 2001 (although Debtors reserve the right not to execute an Asset Purchase Agreement at all). Debtors shall file any Asset Purchase Agreements with lead bidders with the Court and serve copies of such agreements, together with the announcement of Deposits required under Paragraph 15.A. hereof, upon the Sale Service List (defined below) on Friday, August 10, 2001 or as soon as practicable thereafter.**

7. Auction. The sale of Debtors' assets will be conducted by auction (the "Auction") commencing at 10:00 a.m. on Thursday, August 16, 2001. The Auction shall be held at the offices of Metricom, Inc. at 333 West Julian Street in San Jose, California 95110. The Auction may be concluded in one day or it may continue through Friday, August 17, 2001, or be recessed and recommenced, as the Debtors, after consultation with the Official Committee(s), may determine in the exercise of their reasonable business judgment would maximize the highest and best prices for Assets, subject to rulings of the Court and availability on the Court's calendar. The Debtors shall make arrangements with the Court Calendar Clerk with respect to the availability of a Bankruptcy Judge in San Jose on August 16 and 17, 2001, in the event judicial determinations are requested with respect to the Auction process and/or to conduct the Initial Sale Hearing immediately after the conclusion of the Auction.

8. Identification of Winning Bidders. As soon as possible upon the conclusion of the Auction, Debtors shall make their recommendations to the Court as to the names of the bidders, if any, who in the exercise of the Debtors' reasonable business

judgment, after consultation with any Official Committees, offered the highest and best prices for the Assets at the Auction and a summary of the essential terms of the winning bids, including the purchase price and the Assets to be purchased. Debtors reserve the right in the exercise of their reasonable business judgment, after consultation with any Official Committee(s), to recommend to the Court at the Initial Sale Hearing which bids represent the highest and best bids for Debtors' assets and to recommend winning bidders and back-up bidders. The Bondholders-group and the Trade Creditors group of the Official Committee each reserve the right to make their own recommendations to the Court. The Court will make the final determination as to the highest and best price bid for any Asset or combination of Assets.

9. **Initial Sale Hearing.** The initial sale hearing (the "Initial Sale Hearing") shall be held on ~~Thursday,~~ Monday August ~~16~~ 20, 2001 at 2 pm ~~, or Friday, August 17, 2001,~~ immediately upon conclusion of the Auction, for the purpose of confirming the winning bids for Debtors' Assets. With respect to any winning bids actually confirmed by the Court at the Initial Sale Hearing, Debtors will either (a) serve and file one or more motions to approve the sale of Assets free and clear of liens, claims, rights and interests pursuant to 11 U.S.C. § 363(f) and to approve the assumption and assignment of executory contracts and unexpired leases pursuant to 11 U.S.C. § 365 (the "Sale Motions"), or (b) file a plan of reorganization which provides for such sale and assumption and assignment, subject to the plan confirmation process of Chapter 11. All briefs regarding any dispute on the sale shall be filed and served by facsimile 9 AM, August 20, 2001.

10. **Final Sale Hearing.** If at the Initial Sale Hearing the Court determines the sale shall proceed by Motion (as contrasted with a plan), the final hearing on the Sale Motions, if any, shall be set for Tuesday, September 4, 2001 (the "Final Sale Hearing"), subject to the Court's calendar, and the Final Sale Hearing shall also be the hearing to determine whether and under what conditions (including cures of defaults) the Debtors shall be authorized to assume and assign executory contracts and unexpired leases to the winning bidders. The following briefing schedule shall apply to the Final Sale Hearing:

A. By Tuesday, August 21, 2001, the winning bidders, if any, shall file with the Court and serve upon the Debtors and parties to any executory contracts or unexpired leases that shall be assumed and assigned to such winning bidder pursuant to 11 U.S.C. § 365 evidence of adequate assurance of future performance by such bidder.

B. By Tuesday, August 21, 2001, Debtors shall file and serve the Sale Motions upon the Sale Service List by facsimile or overnight delivery.

C. By Tuesday, August 21, 2001, by inclusion in the Sale Motions or otherwise, Debtors' shall, by facsimile or overnight courier, notify parties to executory contracts and unexpired leases that have been designated for assumption and assignment of the cures of defaults, if any, that Debtors' allege are or may be required pursuant to 11 U.S.C. § 365(b) and (f). (Debtors are not responsible for paying any cure amounts or curing any defaults; the sole obligation to pay cure amounts and cure defaults under 11 U.S.C. § 365 shall be that of the winning bidder).

D. By ~~Tuesday, August 28, 2001,~~ Monday August 27, 2001 at 5pm PT any party objecting to the Final Sale Motion and any party to any executory contract or lease sought to be assigned to the winning bidder shall file and serve, by facsimile or overnight courier, upon Debtors, counsel for Debtors, the winning bidders, and representatives of the creditors on the Committee a brief written objection stating all reasons in opposition to the Final Sale Motion, and performance or amounts necessary to cure defaults (if any) under executory contracts and leases, together with a supporting memorandum of points and authorities.

E. Replies to any such objections shall be sent by facsimile to the Court's chambers and to the objecting party by ~~5:00~~ 5:00 p.m. by ~~Thursday,~~ Wednesday August ~~30~~ 29, 2001.

F. In the event the sale is to proceed as part of a plan of reorganization, Debtors shall comply with applicable law and rules regarding the plan confirmation process, unless otherwise directed by the Court.

11. Sale Service List. The "Sale Service List" shall include: (a) counsel for all secured creditors of record as of the Petition Date and any other parties asserting liens, claims, rights or other interests in any of the Assets to be sold to a winning bidder; (b) the

Debtor, the Debtors' counsel, and counsel to and financial advisors for the Trade Creditors group and the Bondholders group on any Official Committees at the addresses shown on Exhibit B attached hereto; (c) any party to an executory contract or unexpired lease that is the subject of an Asset Purchase Agreement and such party's counsel; (d) parties known to Debtors to be interested in bidding upon all or a portion of Debtors' assets; (e) the Office of the United States Trustee; (f) the Special Notice List authorized by the Case Management Order entered on July 13, 2001 in these cases; and (g) any other parties to whom the Court directs that notice be sent.

12. Terms of Bids and Overbids. All offers for purchase and all overbids must be in all cash, unless the Debtors and at least one group of the Trade Creditors or the Bondholders on the Official Committee agree that part of the consideration may be on non-cash terms. All overbids submitted at the Auction for any Asset must be on the same terms and conditions as set forth in the Asset Purchase Agreement for that Asset (or the terms of the Debtors' applicable APA if the auction is an "open auction" with no lead bidder), unless the Debtors and at least one group of the Trade Creditors or the Bondholders on the Official Committee agree that different terms will result in the highest and best price for the estate. The successful bidders for Debtors' assets shall be required to perform in accordance with the Asset Purchase Agreement(s) or the applicable APA, as the case may be. Without limiting the generality of the foregoing, and as shall more fully be set forth in the Asset Purchase Agreement(s) or the applicable APA, as the case may be, all Assets are being sold "AS IS—WHERE IS—WITH ALL FAULTS" and "WITHOUT WARRANTY OR REPRESENTATION OF ANY KIND." There shall be no contingencies to closing after the conclusion of the Auction, except (i) entry of the Final Sale Order after the Final Sale Hearing, and (ii) such other contingencies and conditions as Debtors and at least one group of Trade Creditors or Bondholders on the Official Committee may agree.

13. Opening Overbid; Minimum Incremental Overbids.

A. In the event the Debtors designate a Lead Bidder for any Asset under Paragraph 5 hereof, any initial competing overbid made at the Auction to purchase

said Asset shall be in a dollar amount that equals the sum of (x) the Topping Fee (defined below) plus (y) 2% of the cash portion of the initial purchase price set forth in the applicable Asset Purchase Agreement for the lead bidder. Each successive overbid at the Auction for any Asset(s) shall be in increments equal to the lesser of $250,000 or 2% of the cash portion of the initial purchase price set forth in the applicable Asset Purchase Agreement.

B. In the event there is no designated lead bidder for an Asset, but there is an opening bid for the Asset at the Auction, each subsequent overbid shall be in the increment of the lesser of $250,000 or 2% of the cash portion of the previous bid.

14. Topping Fee. In the event a lead bidder who has executed an Asset Purchase Agreement with Debtors is overbid at the time of the Auction and is not the purchaser of Debtors' Assets, such lead bidder will be entitled to a "topping fee" (the "Topping Fee"), not to exceed 2% of the cash portion of the initial purchase price set forth in the applicable Asset Purchase Agreement and subject to negotiation. The Topping Fee will be paid only if and when Debtors receive 100% of the purchase price from the successful bidder for the Asset(s) which are the subject of the Asset Purchase Agreement. The lead bidder for an Asset will not be entitled to a Topping Fee if the lead bidder is the successful bidder for the Asset and the lead bidder's Asset Purchase Agreement is approved by the Court. Except for the Topping Fee that may become payable to a lead bidder who has executed an Asset Purchase Agreement with Debtors, no other fee, expense reimbursement, charge, or other amount shall be payable to any bidder in connection with the sale of Debtors' assets with respect to costs of investigation, due diligence or otherwise. No lead bidder is entitled to "credit bid" the amount of the Topping Fee when it enters a bid for Debtors' assets.

15. Qualified Bidders. In order to qualify as a bidder for Debtors' assets at the time of the Auction, each lead bidder and any overbidder must satisfy all of the following requirements prior to the Auction and any person who satisfies such requirements shall be a "Qualified Bidder" with respect to the Assets on which the Qualified Bidder makes a bid:

A. Earnest Money Deposit. All Deposits shall be delivered to Debtors by 12 noon on Wednesday, August 15, 2001. The bidder for any Asset must

deliver an earnest money deposit to Debtors by wire transfer, or in the form of a cashier's check (the "Deposit"), in a dollar amount equal to: (i) if a lead bidder is designated for an Asset, 10% of the lead bidder's price offered in the Asset Purchase Agreement for said Asset, or (ii) if no lead bidder is designated for an Asset, a dollar amount announced by the Debtors, after consultation with the Official Committees, which announcement shall be, by Friday, August 10, 2001, filed with the Court and served on the Sale Service List at the same time any Asset Purchase Agreements are served under Paragraph 6 hereof. The deposit of a winning bidder (including a winning lead bidder) will be applied to the final purchase price for the Assets. Each bidder shall be deemed to have granted to Debtors a lien and security interest in the Deposit to secure its obligations, if it is the successful bidder, to close the sale pursuant to the terms of the Asset Purchase Agreement, as it may be modified by the bids at the Auction. In the event a successful bidder (including a winning lead bidder) is unable to close the sale through no material fault of Debtors, Debtors shall be entitled to retain any Deposit made by the bidder without further order of the Court and notwithstanding any subsequent sale of Debtors' assets. The Debtors' retention of the Deposit of a successful bidder who fails to close shall be applied to Debtors' damages for the successful bidder's failure to close and shall not constitute liquidated damages and the Debtors retain all other rights, remedies, claims, counterclaims, and defenses, including the right to seek equitable or injunctive relief. In the event Debtors are unable to close the sale, the sole remedy of the winning bidder shall be limited to the return of any earnest money Deposit. The earnest money Deposits of each losing bidders (other than Back-up Bids) for any Asset shall be returned by Debtors to the losing bidders ~~when the Court enters a final order approving the sale of that Asset to the winning bidder~~ conclusion at the time of the ~~Final~~ Initial Sale Hearing.

B. Evidence of Financial Capabilities. Each bidder (including the lead bidder) must deliver to Debtors by 12 noon Wednesday, August 15, 2001 evidence acceptable to Debtors of the bidder's financial capabilities to fully consummate the purchase, including the party's ability to satisfy the requirements of 11 U.S.C. § 365 that it provide adequate assurance of future performance with respect to any executory contracts or

unexpired leases that will be included in the Assets bid upon by such party. The Debtors shall promptly deliver copies of such evidence to counsel and financial advisors for any Official Committee in these cases and to the parties to any leases or executory contracts which are the subject of the bid.

16. Advertising. Debtors shall advertise the date, time, and place of the Auction(s) in one or more publications with national distribution at least 10 calendar days prior to the Auction. In addition, Debtors will post a copy of this Order establishing the sales procedures on Debtors' web site, which is www.metricom.com. The Court authorizes the posting of this Order on the Court's web site. Debtors will send a copy of this Order establishing sales procedures to each potential investor and purchaser identified by either the Debtors' management, Debtors' accountants and financial advisors, or the financial advisors for the Committees as soon as practicable after entry of this Order.

17. Consultation with Committees.

A. On July 27, 2001 the Debtors shall inform the professionals for the group of Trade Creditors and professionals for the group of Bondholders on the Official Committee (the "Creditors' Representatives") about the status of discussions with the potential purchasers or investors.

B. After July 27, 2001, professionals for the Creditors' Representatives shall be permitted to make reasonable direct contact with the potential investors and purchasers in order for Creditors' Representatives to evaluate their ability and willingness to close a transaction and the terms and timing of such a transaction; provided that the Debtors retain the exclusive right to file a plan under Bankruptcy Code § 1121(b), unless the period of exclusivity is decreased pursuant to Order of this Court, and Debtors retain the exclusive right to file a motion to sell assets or to assign contracts under Bankruptcy Code § 363 or § 365; and based on the agreement of the Debtors and the Creditors' Representatives that it would be in the best interests of the estate, the Debtors' management is hereby authorized to lead all negotiations with potential buyers or investors prior to the Auction.

C. In the event both the group of Trade Creditors and the group of Bondholders on the Official Committee notify Debtors in writing before the Auction, that they conclude that there is no reasonable prospect that one or more potential buyers or investors would close transaction(s) within a time frame and on terms acceptable to both groups of creditors, then:

(1) Debtors may proceed with the Auction or may take the Auction off calendar or may move to this Court to reschedule the Auction; and

a. (2) Debtors have agreed to meet with the Creditors' Representatives and that Debtors will implement an orderly termination of the Debtors' business operations and a business plan to promptly liquidate assets, which may include the piecemeal sales of assets and assignments of contracts accordingly to the procedures set forth in this Order.

18. Stay. The stay against execution of this Order or any Order sought by Debtors and entered in connection with the Initial Hearing or Final Sale Hearing, as provided by Rules 6004(g) and 6006(d) of the Federal Rules of Bankruptcy Procedure, is hereby waived so that no such stay is applicable with respect to any assets sold or executory contracts or unexpired leases assumed and assigned pursuant hereto.

DATED: JUL 25 2001

ARTHUR S. WEISSBRODT

The Honorable Arthur S. Weissbrodt
UNITED STATES BANKRUPTCY JUDGE

DRAFT 7/20/01

TIMELINE FOR SALES PROCEDURES ORDER
For Metricom, Inc.

Event	Date
Hearing on Sales Procedures	Wed, July 25, 2001 2:00 p.m.
Serve Notice of Entry of Order Approving Sales Procedures	As soon as practicable after 7/25/01 entry of order
Debtors send proposed Asset Purchase Agreement (APA) to proposed Bidders	Fri., July 27, 2001
Creditors Representatives may contact bidders to evaluate prospects	Fri., July 27, 2001
L/D for bidders to submit LOI/Bids and to mark up material variations on APA and Schedule G Executory Contracts and Leases	Wed, August 1, 2001
L/D for Debtor to select and notify lead bidders	Mon., August 6, 2001
Execution of Asset Purchase Agreement(s) with lead bidders	Thurs., August 9, 2001
Debtors file Asset Purchase Agreement with Court and serve upon Sale Notice List. Debtors file and serve announcement of required Deposit Amounts	Fri., August 10, 2001
Bidders must deliver Deposits and evidence of capabilities to perform contracts and leases	Wed., August 15, 2001, Noon
Auction	Thurs., August 16 at 10:00 a.m. to Fri., August 17, 2001
Initial Sale Hearing to confirm winning bidder and make deposit non-refundable	At Auction Conclusion, August ~~16~~ 20, 2001 at 2pm All briefs regarding any dispute on the Sale shall be filed & served by ~~Fax~~ 9 AM Aug 20, 2001
Winning Bidders file/serve evidence of adequate assurance performance of contracts & leases	Tues., August 21, 2001
Debtors file/serve Sale Motions & Contract Assignment Motion	Tues., August 21, 2001
Creditors file/serve objections to Sale Motions and contract cures and assumptions	~~Tues., August 28, 2001~~ MM Aug 27, 2001 at 5pm 4:15
Debtors file/serve Reply to Objections	~~Thurs., August 30, 2001~~ Wed Aug 29, 2001 at 5pm 4:15

EXHIBIT A

DRAFT 7/20/01

Final Sale Hearing (To obtain order (a) Approving Asset Purchase Agreement, (b) Authorizing assumption and assignment of designated contracts and leases, and determining contract cures and (c) Providing for sale to be free and clear of liens, rights and interests)	Tues., September 4, 2001 10 30 Am
Closing of Transactions	Fri., September 7, 2001 (3 business days after Final Sale Hearing)

EXHIBIT B
TO SALE PROCEDURES ORDER

SALE SERVICE LIST

Metricom, Inc.
333 West Julian Street
San Jose, CA 95110
Attn: Dale W. Marquart Esq.
Tel: (408) 282-4143
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email: dmarquart@metricom.com

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Nightingale & Associates, LLC
c/o Metricom, Inc.
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Fax: (408) 282-3074
Cell: (914) 525-8607
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Nightngle1@aol.com

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email: msheneman@msjr.com

Murphy Sheneman Julian & Rogers
2049 Century Park East, Suite 2100
Los Angeles, CA 90067
Attn: Eric E. Sagerman, Esq.
Tel: (310) 788-3700
Fax: (310) 788-3777
Cell: (310) 666-2757
email: esagerman@msjr.com

Advisors to Bondholders

Houlihan Lokey Howard & Zukin
1930 Century Park West, 2nd Floor
Los Angeles, CA 90067-6803
Attn: Andrew B. Miller, Esq.
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Fax: (310) 553-4024
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Houlihan Lokey Howard & Zukin
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Phone: (310) 553-8871
DD: (310) 712-6507
Fax: (310) 553-4024
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Advisors to Trade Creditors

E & Y Capital Advisors LLC
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Palo Alto, CA 94304
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1451 California Avenue
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DD: (650) 849-4768
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U.S. Trustee

Office of the United States Trustee
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The Sale Service List shall also include the persons specified in Paragraph 11 of this Order, as set forth in Exhibit B-1.

For pleadings and notices served after August 3, 2001, the Sale Service List shall include all persons who submit a Letter of Intent on a timely basis under Paragraph 4 of this Order.

EXHIBIT B-1
TO SALES PROCEDURES ORDER

[Names & contact information for persons described in Paragraph 11 of Order]

SECURED CREDITORS SERVICE LIST

(UCC Secured Parties)
In re Metricom, Inc., et al.
6331/SL002.axc.wpd (rev. 07/24/01)

Hewlett-Packard
Finance & Remarketing Div.
Attn: Officer/Managing or General Agent
1360 Kifer Road
Sunnyvale, CA 94086

Hewlett-Packard
Finance & Remarketing Div.
Attn: Officer/Managing or General Agent
333 Logue Avenue, Bldg. 32
Mountain View, CA 94043

AT&T Capital Serv. Corp.
Attn: Officer/Managing or General Agent
1830 W. Airfield Drive
DFW Airport, TX 75261

Digital Financial Services
Div. of GE Capital Corp.
Attn: Officer/Managing or General Agent
1400 Computer Drive
Westborough, MA 01581

Hewlett-Packard
Finance & Remarketing Div.
Attn: Officer/Managing or General Agent
20 Perimeter Summit Blvd.
Atlanta, GA 30319

Telogy, Inc.
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3885 Bohannon Drive
Menlo Park, CA 94025

Green Tree Vendor
Services Corp.
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95N Rt. 1 17 S.
Paramus, NJ 07653

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Atlanta, GA 30338

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Bellevue, WA 98004

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POTENTIAL BIDDERS
SERVICE LIST

[Confidential]

SPECIAL NOTICE LIST
MCOM 6331

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Columbus, OH 43215

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Attn.: Peter Roberts, CFO
David Sutcliffe, Andrew Harries
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As Indenture Trustee
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Executive Summary

Background Information

Metricom, Inc. is a leading provider of high-speed, mobile wireless data services. Operating under the brand-name *Ricochet*, the company provides wireless network services that enables the user access to corporate local area networks (LANs), wide-area networks (WANs), internet service providers (ISPs) and various personal digital assistants (PDAs) at or above future 2.5G and 3G speeds, and at a cost structure substantially below 2.5G and 3G estimates. The company's network is deployed in 17 cities, covering 56 million in population, and currently has 50,000 subscribers with a $28.50 ARPU.

Relying upon fund raising, primarily through available capital markets, the company's primary strategic goal from 1998 through 2000 has been the completion of the network build-out program that was sufficient to trigger various third-party marketing agreements in a timely schedual. A cash-crisis has resulted from a shortfall of revenue due to a failure to reach the necessary penetration required to trigger the third party marketing effort, and the cost overruns from the network build-out.

From 1998 through 2000, the build-out of a network of 17 cities was completed. A detailed footprint map by GSA is enclosed in the Network Description section. A table of current subscriber information by GSA is available, below, in the Deployment Summary.

During 2001, the shortcomings of the execution of the business plan became apparent, and the company began restructuring, including a senior management change. While significant operational problems surfaced, various test-marketing efforts were undertaken to validate the company's marketing initiatives as well as identify a near-term marketing plan to accelerate revenues.

Additional information can be obtained at the Company's Web Site (www.metricom.com) or by reviewing the Company's fillings with the Securities and Exchange Commission (www.sec.gov).

Metricom, Inc. is seeking to raise $200-250 million in strategic capital to restructure, fund on-going operations and execute a business plan allowing the company's continued pursuit of the wDSL consumer market (see Business Plan). Should an investor be interested in some part of the company's assets, the company will entertain qualified bids for those assets.

The company has filed a voluntary petition for protection under Chapter 11 of the US Bankruptcy Code, on July 2, 2001, to, in part, facilitate the sale process. Concurrent with the commencement of the bankruptcy case, the company has filed a sale procedures motion outlining the process under which the assets are to be sold. This sale motion outlines a timetable that requires all due diligence to be completed by July, 20, 2001 and submittal of any letters of intent by July 27, 2001.

Company Overview

Metricom provides secure, high-speed, wireless data services over the Company's patented MicroCellular Data Network (MCDN) Ricochet™ network. Metricom networks are deployed in 17 general service areas (GSA) domestically covering approximately 56 million potential subscribers (POPS) with Ricochet wireless service. The company has approximately 50,000 paying subscribers with average revenue per user (ARPU) of $28.50. The company employs 450 people nationwide.

At 128kpbs sustained to the user, Ricochet is the fastest most flexible wireless technology available today and the only service capable of delivering full media support for Internet access. With Ricochet, Metricom delivers wireless data service that exceeds the optimistic burst speed projections for 2.5G and 3G wireless technologies that have yet to be deployed. At actual installation costs of $33,000 per square mile, Metricom has a substantially better economic model. With software enhancements only, requiring no changes to the deployed network equipment, the company expects to reach speeds of 256kpbs in the next year. Beyond it's leadership in wireless technology, the Company has

more than [5] years of experience with the backend systems required to deliver uninterrupted service at varying speeds in multiple product and pricing models.

The Company has strong business and distribution partnerships with Novatel Wireless, Sierra Wireless, Compaq, Ricoh, Microsoft, Wireless WebConnect, GoAmerica, AplusNet, Worldcom, and Earthlink.

In a world where connectivity isn't an option Metricom is in a unique position with a focused, data-only wireless strategy building a business based on actual subscriber experience.

Immediate Opportunity

The company has recently completed market testing that has identified a market segment capable of bridging the current viability gap. In the last 4 months the company has done primary market research to identify 3 market segments (consumer, "prosumer", & enterprise), understands their requirements, and revised it's products and distribution strategy to address them. In this period the company introduced 2 new products and tested them in market demonstrations in San Diego and San Francisco. With these introductions the company saw sudden and dramatic improvements in new subscribers acquisition without loss in existing business. While the results are not conclusive, they are strong early indicators that the company has yet to fully exploit the technology's ability to generate cash from operations.

Based on these demonstrated results and coupled with other operating experience, the company has developed a revised business plan that more appropriately matches network expansion with revenue growth without compromising the upside of additional domestic and international expansion of the network.

Marketing Strategies Engaged by Metricom

The 28.8 kbps market: 1995 – 2000

Metricom introduced its Ricochet 28.8 kbps service to the San Francisco Bay market in 1995 with virtually no retail presence and nominal marketing support. The sale was direct and targeted primarily to the mobile business professional and secondarily to university students (given the deeper penetration of the Internet at universities at that time versus the general population). From the consumer perspective, the Internet was in its nascent stage and so the notion of a Wireless Internet was even more novel.

Ricochet's 28.8 kbps service rolled out to the Seattle and Washington D.C. markets in 1997, also with the direct sale approach, no retail presence and virtually no marketing support. The mobile professional was able to then purchase service for the combined three markets services with no local-only option being available.

At this time, Ricochet's primary competitors were dial-up Internet Service Providers (ISPs) such as AOL and Prodigy. Ricochet was priced at $29.95 per month to compete against these alternatives.

As of December 31, 1999, there were 29,658 subscriptions to the 28.8 kbps service in the three markets. Thereafter, selling of this service was ceased to accommodate the introduction of Ricochet 128 kbps.

Introduction of 128 kbps high-speed Internet access

Ricochet's technology evolved to provide the marketplace with a high-speed access option, 128 kbps, that could effectively compete against higher speed dial-up service (56 kpbs) as well as DSL and cable modem. Significant 1999 funding ($600,000,000) from WorldCom and Vulcan Ventures enabled Metricom to deploy the 128 kbps service beginning in July, 2000 in San Diego and Atlanta, to a total of 13 markets by the end of 2000. Given this expansion and availability of marketing funds, Metricom launched its first in earnest marketing supported endeavors beginning in July 2000 that ran through the end of the year.

Marketing focused on development of a wholesale to reseller (RASPs: Ricochet Authorized Service Providers) program, creating partnerships with six ISPs as resellers: Wireless WebConnect, Juno, GoAmerica, Aether, IP Communications and WorldCom. At this time, Metricom's Ricochet marketing strategy was to gain distribution through resellers, build the Ricochet brand through mass media and rely upon resellers to pull sales through the retail channel at the consumer level. The Ricochet service was offered at an MSRP of $74.95 to $79.95.

Because the company was expecting distribution to come from WorldCom and its RASP partners, marketing was focused on brand development. The company expended considerable resources in the development and implementation of a multi-market TV advertising campaign. The effectiveness of these advertisements was never fully measured.

Marketing efforts were targeted at the Mobile Professional with key messaging being "freedom from the office—empowering the mobile professional with the choice to work where and when they want." The product was offered as a 128 kbps national service available in all 13 markets.

Local media were employed with television being the primary medium supported by radio, newspaper print and out of home.

From the inauguration of the 128 kbps service in June2000 to the end of the year, 12,185 subscriptions of the high-speed service were created. As of 12/31/00, 21,843 28.8 kbps subscriptions and 34,028 total subscriptions were active.

2001: First Quarter test in Atlanta and Dallas

Lacking any substantial subscriber growth, limited marketing support by the RASPS, and no marketing by WorldCom, the company attempted to get more involved in growing subscribers and engaged in limited marketing tests in Atlanta and Dallas. Marketing messages used in the test markets focused less on brand building and more on product features, benefits and offers. Advertising which had previously been RASP-neutral was refined to drive the consumer to specific RASPs WorldCom in Atlanta, and GoAmerica in Dallas, for the Ricochet Wireless solution. A higher level of coordination at retail was undertaken with Metricom providing sales support such as service demonstrations at the point of purchase.

The target of Mobile Professional remained the same with umbrella messaging continuing to be "freedom from the office."

As with the previous market implementation of 128 kbps, pricing for Atlanta and Dallas ranged between $74.95 and $79.95 MSRP.

Results: Subscription activations of the 128 kbps national service were 1070 in Atlanta and 555 in Dallas during the 13-week program.

With less than satisfactory results in the market tests the company engaged outside expertise to develop a market segmentation of potential buyers and outline a set of products, programs, and price points that could yield results sufficient to justify further investment and sustain operations. Through primary market research the company identified 3 potential buying segments: Consumer, Prosumer and Enterprise.

2001: Second Quarter test in San Diego

The previously untapped Home Consumer market segment was identified as offering high revenue potential given its currently broad scope, rate of growth and Ricochet's 128 kbps benefits versus competitors. With key competitors, DSL and Cable, the Home Consumer often experiences coverage and provisioning issues. Ricochet 128 kbps offers immediate gratification: the ability for the consumer to choose to obtain high-speed Internet access and install the service immediately. This immediate gratification is counter to the consumer experience currently with competitors. An additional benefit to the Home Consumer is flexibility: Ricochet can easily be moved from room-to-room and even out of doors. It is ideal for Home Consumers not wishing to establish a costly, permanent Internet connection (such as renters, those in transition) and it is portable. If the consumer wishes to use the Home product in a mobile fashion, that too, is possible with Ricochet. No other Internet Access provider can offer this option.

A 128 kpbs local offering was made in a six-week program to the Home Consumer market beginning in May and running through June 2001. Pricing of the local service was $44.95 and of

the national service was $69.95 MSRP. Primary objective of the marketing effort was to drive sales through a direct benefits message (rather than build brand). Media employed were sales-directed retail print, direct response television, promotional radio and place-based (doorhangers to highly-targeted neighborhoods) with all messaging effectively asking for the order and emphatically defining Ricochet to the Home Consumer.

An additional marketing strategy was implemented to leverage the inherent viral aspect of the Ricochet service. This was executed through community grassroots influencers introducing Ricochet to other opinion leaders, as well as demonstration programs at retail and community events.

Results: Within San Diego, subscription activations (net adds) during the 6-week campaign were 1360 for the 128 kbps local service and 330 for the 128kbps national service for a total net addition of 1690 subscriptions.

As of 6/24/01, total Ricochet subscriptions were 50,621: 16,835 for the original 28.8 kbps service, 33,786 for the 128 kbps service.

Network Description

Basic Elements

- 63,000 compact, inexpensive "poletop" radios that communicate with users' computers
- 1,600 leased Wired Access Points (WAP's) which are in turn connected to poletop radios via a wireless link
- WAPs are linked to Metricom's Network Interface Facilities via high-speed dedicated wire connections
- Metricom's Network Interface Facilities (NIFs) aggregate traffic to/from all WAP's and provide high-speed connections to the internet and other networks
- Metricom's two Network Operations Centers (NOCs) provide central management of entire network

Technical Summary

Ricochet II RF Network

Spectrum

- 26 MHz 902-928 MHz
- 83.5 MHz 2400 – 24083.5 MHz
- 5 – 10 MHz WCS 2315-2320 and 2345-2350 MHz

WAP

Coverage:

- 10.5 sq. miles (radius = 1.8 miles)
- 70 poletops (7 PTR/sq mi.)

Bandwidth Capacity

- WAP: 12 – 32 ERADIOS (typical initial install 12 radios)
- ERADIO provides 1.5 128kbps user circuits
- Raw RF Data Rate: 750kbps –1Mbps

Subscriber Capacity

- 100 to 250 active subscribers
- 800 to 2000 paying subscribers

Poletop

Coverage

- 7 poletops per sq. mile: system average
- 5 to 40 poletops per sq. mile (radius = 0.25 miles) dependent on morphology

Bandwidth Capacity

- 176 kbps average throughput in the field
- 220 kbps average throughput in the lab

Subscriber Capacity

- 5 to 8 active internet users

Gateway

User Throughput

- 28 kbps to unlimited

Subscriber Model

- 12% duty cycle
- 8:1 paying to active ratio
- 500MB monthly download

Ricochet 2

Average Capital Cost per Square Mile

7 poletop radios per square mile @ $2,000 per radio installed

1 Wired Access Point per 10 square miles @ $180,000 per WAP installed

Total Cost per square mile =

WAP = $180K/10 square miles =	$18K
Poletop = $2K x 7 square miles =	$14K
NIF = $550K/600 square miles =	$ 1K
Total Average	$33K per square mile

Average Operating Cost per Square Mile

Rent & Power:	$2,000 per month per WAP = $2000/sq mile/month $10 per month per Poletop x 7 = $70 per square mile/month $10,000 per month per NIF = $16 per square mile/month
Comm:	$900 per month per WAP (2 T-1 lines per WAP) = $90 per square mile per month $20 allocated cost from NIF (avg 60 WAP's/NIF @ $12K/month
Total	Approximately $400 per month per square mile

Breakeven Subscribers

Breakeven subs to cover operating costs:
@ $25/ARPU = average 16 sub per square mile

Breakeven subs to cover operating and capital costs (assuming 4 yr life):
@ $25/ARPU = average 44 subs per square mile

Deployment Summary

Market	Approximate Total Population Coverage	Current Subscribers 28K	64K	128 K Local	National	Total
Atlanta	1,200,000				1,964	1,964
Baltimore	1,800,000	8			268	276
Chicago	2,700,000				102	102
Dallas/Fort Worth	3,800,000	18			2,533	2,551
Denver	1,300,000	2			420	422
Detroit	3,300,000				315	315
Houston	2,600,000				1,115	1,115
Los Angeles	11,600,000	139			2,714	2,853
Minneapolis	1,800,000				635	635
New York City	9,300,000	31			4,937	4,968
Philadelphia	4,000,000	2			613	615
Phoenix	2,100,000				1,176	1,176
Salt Lake City	200,000	1			56	57
San Diego	2,100,000	18		1,112	1,467	2,597
San Francisco	5,200,000	9,937	262		10,704	20,903
Seattle	2,400,000	2,789			537	3,326
Washington DC	1,500,000	2,623			852	3,475
Other	-	988	-	-	1,361	2,349
Totals	56,900,000	16,556	262	1,112	31,769	49,699

Summary of Installed WAPs and Poletops Units and Installed Costs to Date

	City Code	Installed WAP Units[Note1]	Installed WAP $[Note 2]	Installed Poletop Radios Units[Note1]	Installed Poletop Radios $[Note 2]
Operational	Atlanta	114	9,404,090	2,812	6,408,883
	Baltimore	85	9,033,663	1,699	3,305,455
	Chicago	115	13,785,971	2,462	14,746,588
	Denver	46	5,122,264	1,371	2,767,842
	Detroit	89	7,951,555	3,547	9,418,469
	Dallas/Ft. Worth	107	11,308,923	5,913	12,595,956
	Houston	87	10,842,263	3,458	7,971,892
	Los Angeles	103	13,857,374	10,285	26,240,074
	Minneapolis	77	9,480,746	2,743	7,920,759
	New York City	111	15,607,918	5,225	13,618,842
	Philadelphia	109	12,113,648	4,468	8,757,399
	Phoenix	57	7,906,094	3,405	6,912,775
	Seattle	70	8,892,801	2,741	5,571,630
	San Diego	64	7,688,063	3,187	6,303,393
	San Franciscio	92	11,683,710	7,166	13,837,096
	Salt Lake City	35	3,282,191	1,162	2,354,882
	Washington, DC	70	7,459,488	2,910	5,420,191
	Sub-Total	**1,431**	**165,420,762**	**64,554**	**154,152,126**
Phase 2	Boston	51	4,267,594	293	1,633,546
	Kansas City	33	3,064,302	941	5,019,521
	Miami	22	1,434,383	2	17,026
	St. Louis	6	1,241,618	0	5,512
	Sub-Total	**112**	**10,007,897**	**1,236**	**6,675,605**
	Total	**1,543**	**$175,428,659**	**65,790**	**$160,827,731**

Note 1 - Data as of June 25, 2001

Note 2 - Data as of April 30, 2001

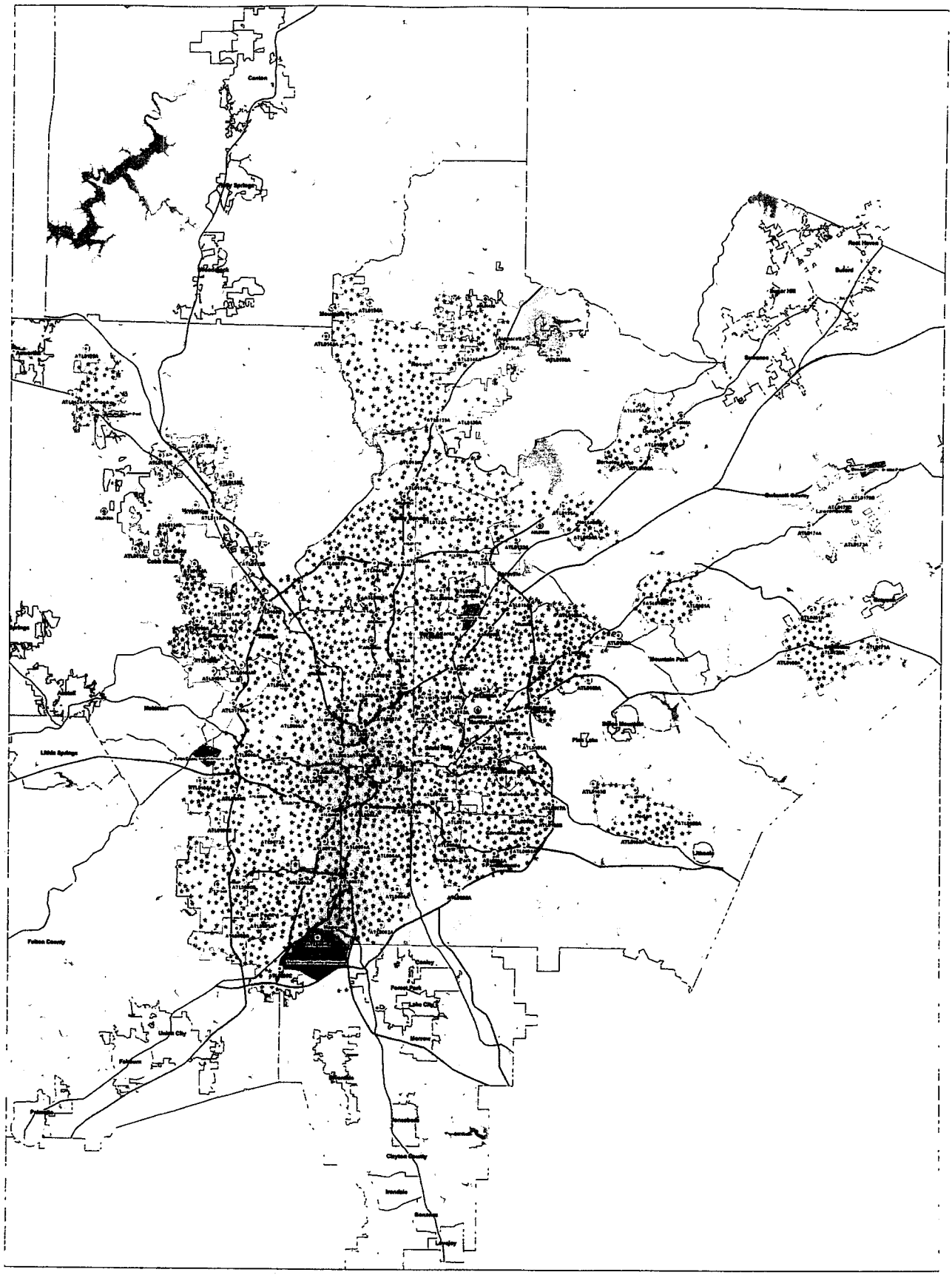
Metricom. Inc.
Warehoused Radios
Installed Radios Excluded

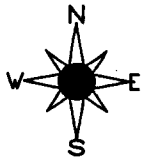
			PTR		Eradio		WCS		Gray PTR			
	GSA	City/State	108746-100		108746-200		108746-300		108746-400		Total Spares & Boms	Total
			QTY	$	QTY	$	QTY	$	QTY	$	$	$
ATL	ATL	Atlanta, GA									$ 401,235	$ 401,235
ATL	ATL	Atlanta, GA			36	$ 59,744						$ 59,744
ATL	OPSATL	Atlanta, GA			12	$ 19,915						$ 19,915
AUS	AUS	Austin, TX			24	$ 39,829						$ 39,829
BAL/WDC	BAL/WDC	Jessup, MD									$ 791,759	$ 791,759
BAL/WDC	BAL/WDC	Jessup, MD	426	$ 720,182	40	$ 66,382						$ 786,544
BAL/WDC	OPSBAL	Baltimore, MD			416	$ 690,373						$ 690,373
BOS	BOS	Boston, MA	4,313	$ 7,291,213	72	$ 119,488						$ 7,410,700
CHI	CHI	Chicago, IL									$ 360,753	$ 360,753
CHI	CHI	Chicago, IL			380	$ 630,629	4	$ 4,808				$ 635,437
DEN	DEN	Denver, CO									$ 135,840	$ 135,840
DEN	DEN	Denver, CO	864	$ 1,460,609	40	$ 66,382						$ 1,526,991
DEN	OPSDEN	Denver, CO			8	$ 13,276						$ 13,276
DET	DET	Detroit, MI									$ 184,008	$ 184,008
DET	DET	Detroit, MI	384	$ 649,160	84	$ 139,402						$ 788,562
DET	OPSDET	Detroit, MI			8	$ 13,276						$ 13,276
DFW	DFW	Dallas, TX									$ 368,200	$ 368,200
DFW	DFW	Dallas, TX	1,536	$ 2,596,639	284	$ 471,312						$ 3,067,951
DFW	OPSDFW	Dallas, TX			8	$ 13,276						$ 13,276
DWS	DWS	Elizabeth, NJ									$ 1,784,323	$ 1,784,323
HOU	HOU	Houston, TX									$ 166,222	$ 166,222
HOU	HOU	Houston, TX	1,344	$ 2,272,059	80	$ 132,764						$ 2,404,823
HOU	OPSHOU	Houston, TX			35	$ 58,084						$ 58,084
KAN	KAN	Kansas City, MO									$ 259,059	$ 259,059
KAN	KAN	Kansas City, MO			232	$ 385,016						$ 385,016
LAC	LAC	Los Angeles, CA									$ 1,000,649	$ 1,000,649
LAC	LAC	Los Angeles, CA	1,439	$ 2,432,658	814	$ 1,350,874						$ 3,783,532
LAC	OPSLAC	Los Angeles, CA			8	$ 13,276						$ 13,276
MAR	MARCONI MIL	Milwaukee, WI			1,872.00	$ 3,106,678						$ 3,106,678
MAR	MARCONI NC	Welcome, NC					510	$ 613,035				$ 613,035
MIA	MIA	Miami, FL									$ 395,927	$ 395,927
MIA	MIA	Miami, FL			511	$ 848,030						$ 848,030
MIL	MIL	Milwaukee, WI	1,536	$ 2,596,639								$ 2,596,639
MIN	MIN	Minneaplois, MN									$ 133,376	$ 133,376
MIN	OPSMIN	Minneaplois, MN			8	$ 13,276						$ 13,276
NYC	NYC	Edison, NJ									$ 787,395	$ 787,395
NYC	NYC	Edison, NJ	7,716	$ 13,044,052	656	$ 1,088,865	52	$ 62,506				$ 14,195,223
NYC	OPSNYC	New York City, NY			8	$ 13,276						$ 13,276
OMA	OMA	Omaha, NE	2,535	$ 4,285,468								$ 4,285,468
PHI	OPSPHI	Philadelphia, PA			16	$ 26,553						$ 26,553
PHI	PHI	Philadelphia, PA									$ 385,964	$ 385,964
PHI	PHI	Philadelphia, PA	2,670	$ 4,513,688	12	$ 19,915						$ 4,533,603
PHX	PHX	Phoenix, AZ									$ 559,380	$ 559,380
PHX	PHX	Phoenix, AZ	1,056	$ 1,785,189	180	$ 298,719						$ 2,083,908
PUG	OPSPUG	Seattle, WA			8	$ 13,276						$ 13,276
PUG	PUG	Seattle, WA									$ 406,929	$ 406,929
PUG	PUG	Seattle, Wa	480	$ 811,450	408	$ 677,096	228	$ 274,063				$ 1,762,609
SDC	OPSSDC	San Diego, CA			8	$ 13,276						$ 13,276
SDC	SDC	San Diego, CA									$ 188,799	$ 188,799
SDC	SDC	San Diego, CA	416	$ 703,256	12	$ 19,915						$ 723,171
SFC	OPSSFC	San Francisco, CA			28	$ 46,467						$ 46,467
SFC	SFC	San Francisco, CA									$ 579,797	$ 579,797
SFC	SFC	San Francisco, CA	576	$ 973,740	216	$ 358,463						$ 1,332,202
SJC	MANHATTAN	San Jose, CA	3,682	$ 6,224,495	1,245.00	$ 2,066,140						$ 8,290,634
SJC	MSL	San Jose, CA	169	$ 285,698	5	$ 8,298	111	$ 133,425	55	$ 95,312		$ 522,733
SJC	NAVL	Fremont, CA									$ 4,780,144	$ 4,780,144
SJC	NORTH AM	San Jose, CA			649	$ 1,077,048	10	$ 12,020				$ 1,089,068
SJC	RECON	San Jose, CA					3	$ 3,606				$ 3,606
SJC	TEST	San Jose, CA	168	$ 284,007	6	$ 9,957						$ 293,965
SLC	OPSSLC	Salt Lake City, UT			8	$ 13,276						$ 13,276
SLC	SLC	Salt Lake City, UT									$ 248,966	$ 248,966
SLC	SLC	Salt Lake City, UT	672	$ 1,136,029	84	$ 139,402	8	$ 9,616				$ 1,285,048
SNS	SNS	Warsaw, IN									$ 3,667,821	$ 3,667,821
STL	STL	St Louis, MO									$ 3,181	$ 3,181
STL	STL	St Louis, MO			316	$ 524,418						$ 524,418
												$ -
Total			31,982	$ 54,066,211	8,837	$ 14,665,443	926	$ 1,113,080	55	$ 95,312	$ 17,587,527	$ 87,527,572

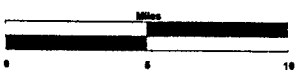
Metricom, Inc.
Warehoused WAPS by Location
Installed WAPS not Included

	City/State	108944-000	INDOOR R2WAP	108946-000	A,F,WAP,ISM OUTDOOR	108948-000	A,F,WAP,WCS INDOOR	108950-000	A,F,WAP,WCS OUTDOOR	109237-000	A,F,WAP,COMBO OUTDOOR	109239-000	A,F,WAP,COMBO INDOOR	Total Cabinets	Total $
		QTY	$	QTY	$	QTY	$	QTY	$	QTY	$	QTY	$		
ATL	Atlanta, GA	1	$ 10,213	22	$ 363,680							2	$ 155,236	25	$ 529,129
BAL	Jessup, MD			12	$ 198,371									12	$ 198,371
BOS	Boston, MA	10	$ 102,132	2	$ 33,062					3	$ 200,384	3	$ 232,854	18	$ 568,431
CHI	Chicago, IL	1	$ 10,213	62	$ 1,024,915			1	$ 77,618					64	$ 1,112,746
DEN	Denver, CO			3	$ 49,593			1	$ 77,618			1	$ 77,618	5	$ 204,829
DET	Detroit, MI	1	$ 10,213	8	$ 132,247									9	$ 142,460
DFW	Dallas, TX	2	$ 20,426	23	$ 380,210			3	$ 232,854			5	$ 388,090	33	$ 1,021,581
HOU	Houston, TX			6	$ 99,185	1	$ 66,795	1	$ 77,618	1	$ 66,795	3	$ 232,854	12	$ 543,247
KAN	Kansas City, MO	5	$ 51,066	14	$ 231,432									19	$ 282,498
LAC	Los Angeles, CA	19	$ 194,050	39	$ 644,705					7	$ 467,562	18	$ 1,397,124	83	$ 2,703,441
MARCONI		68	$ 694,495	304	$ 5,025,391	16	$ 1,068,713	91	$ 7,063,238	1	$ 66,795	4	$ 310,472	484	$ 14,229,103
MIA	Miami, FL	9	$ 91,918	35	$ 578,581									44	$ 670,500
MIN	Minneapolis, MN	3	$ 30,639	2	$ 33,062									5	$ 63,701
MSL	San Jose, CA			10	$ 165,309									10	$ 165,309
NYC	Edison, NJ	12	$ 122,558	25	$ 413,272					6	$ 400,768	18	$ 1,397,124	61	$ 2,333,722
PHI	Philadelphia, PA	2	$ 20,426	9	$ 148,778					1	$ 66,795	1	$ 77,618	13	$ 313,617
PHX	Phoenix, AZ	1	$ 10,213	19	$ 314,087							5	$ 388,090	25	$ 712,390
PUG	Seattle, WA	2	$ 20,426	27	$ 446,334	2	$ 133,589	13	$ 1,009,034	27	$ 1,803,454	26	$ 2,018,068	97	$ 5,430,905
SDC	San Diego, CA			12	$ 198,371					2	$ 133,589	4	$ 310,472	18	$ 642,432
SFC	San Francisco, CA			36	$ 595,112	1	$ 66,795	5	$ 388,090	3	$ 200,384	3	$ 232,854	48	$ 1,483,234
SLC	Salt Lake City, UT	1	$ 10,213	5	$ 82,654					1	$ 66,795	4	$ 310,472	11	$ 470,134
STL	Saint louis, MO			39	$ 644,705									39	$ 644,705
WDC	Jessup, MD	10	$ 102,132	42	$ 694,297									52	$ 796,429
Total		147	1,501,335	756	12,497,353	20	1,335,892	115	8,926,070	52	3,473,319	97	7,528,946	1,187	35,262,914

Atlanta - Launch Footprint as of 6/26/2001







IBM WAPs LR : 106
WCS WAPs LR : 0
COMBO WAPs LR : 0
IBM WAPs Not LR : 48
WCS WAPs Not LR : 0
COMBO WAPs Not LR : 0
R2 polygon: 2012

Legend

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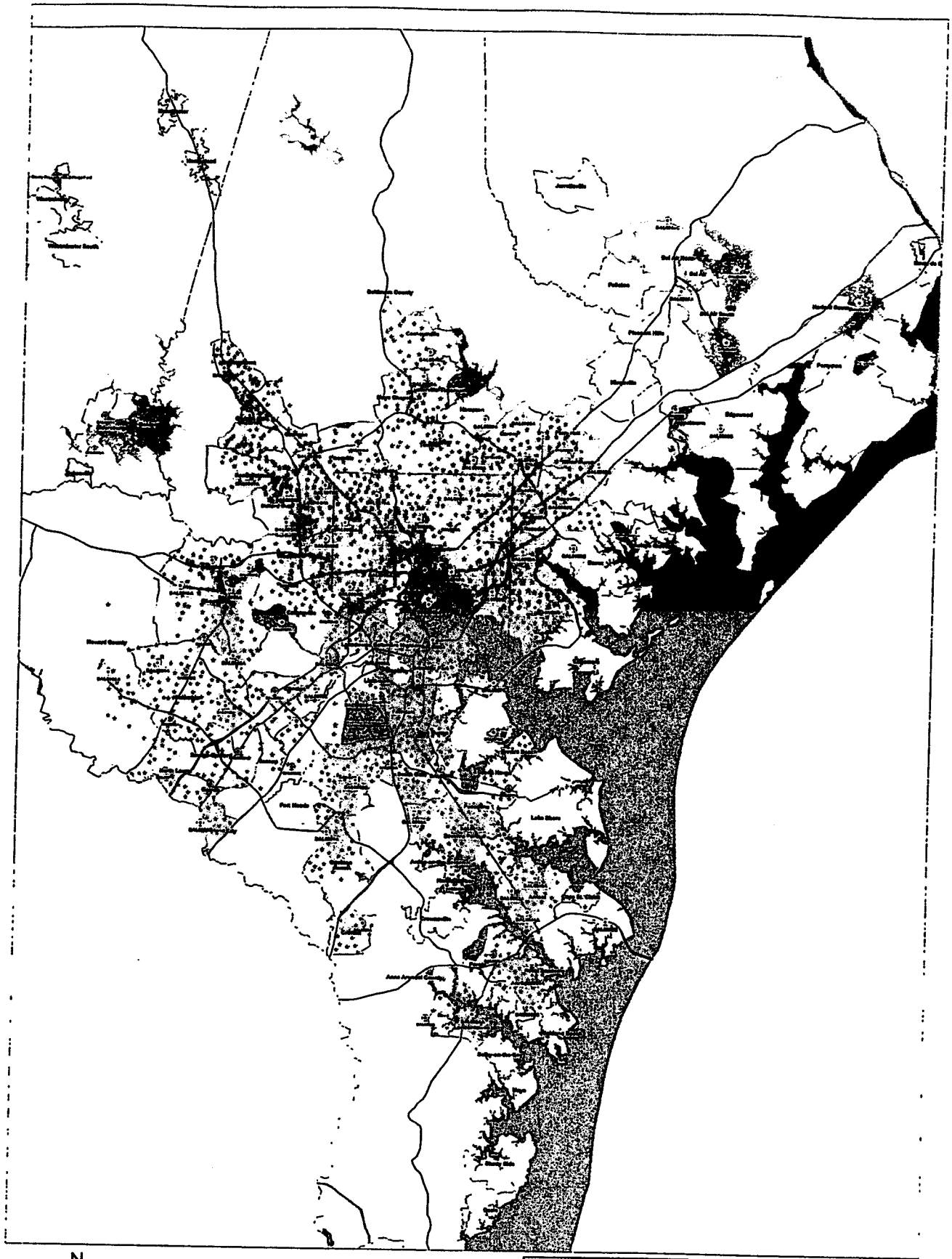
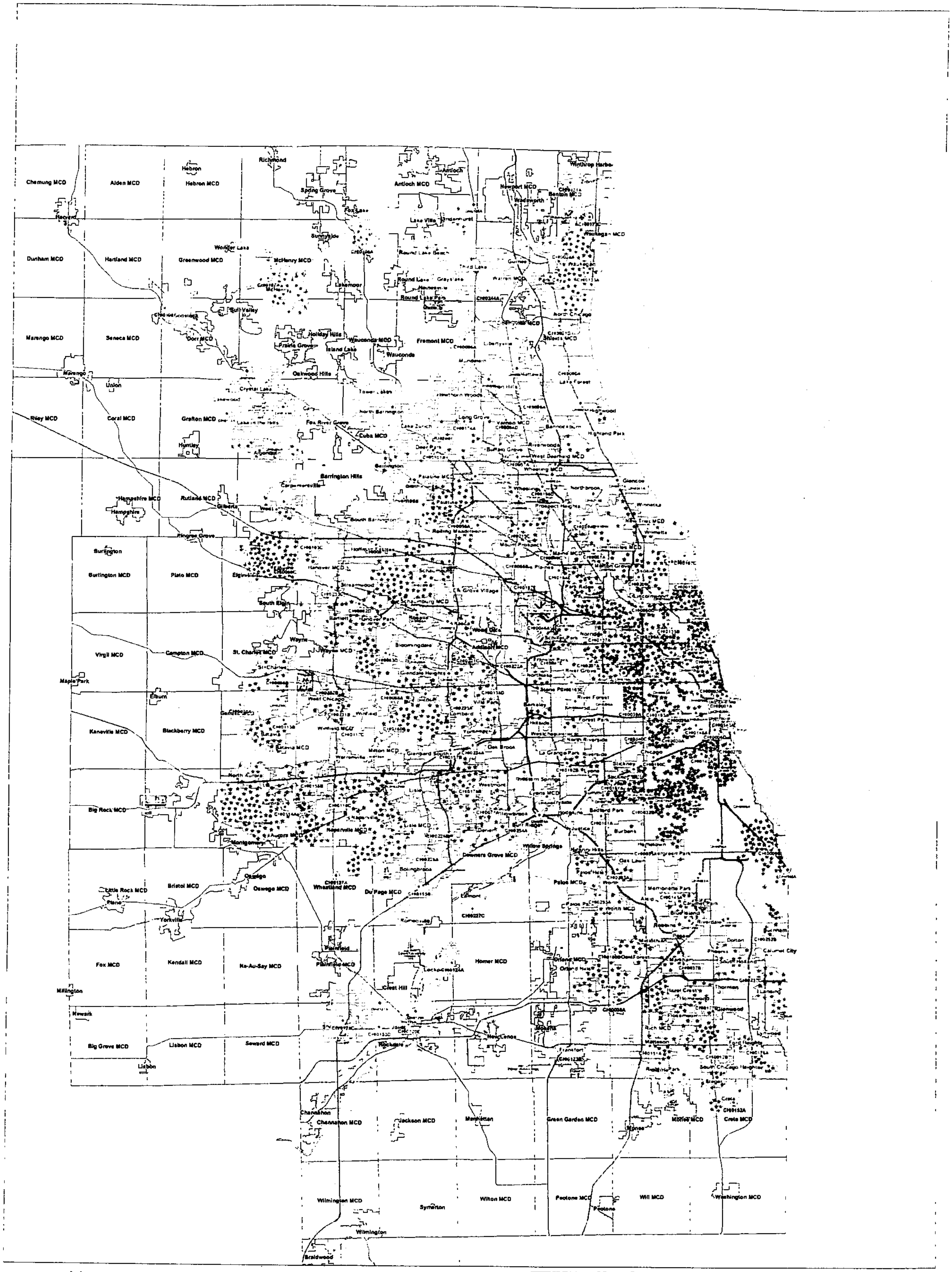
GSA Region: Atlanta

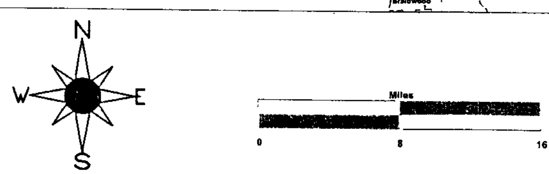
Revision Dates: 04/26/2001

Baltimore - Launch Footprint as of 6/26/2001



Chicago - Launch Footprint as of 6/26/2001





ISM WAPs Lit : 105
WCS WAPs Lit : 0
COMBO WAPs Lit : 0
ISM WAPs Not Lit : 169
WCS WAPs Not Lit : 0
COMBO WAPs Not Lit : 0
R2 poletops: 2463

Legend

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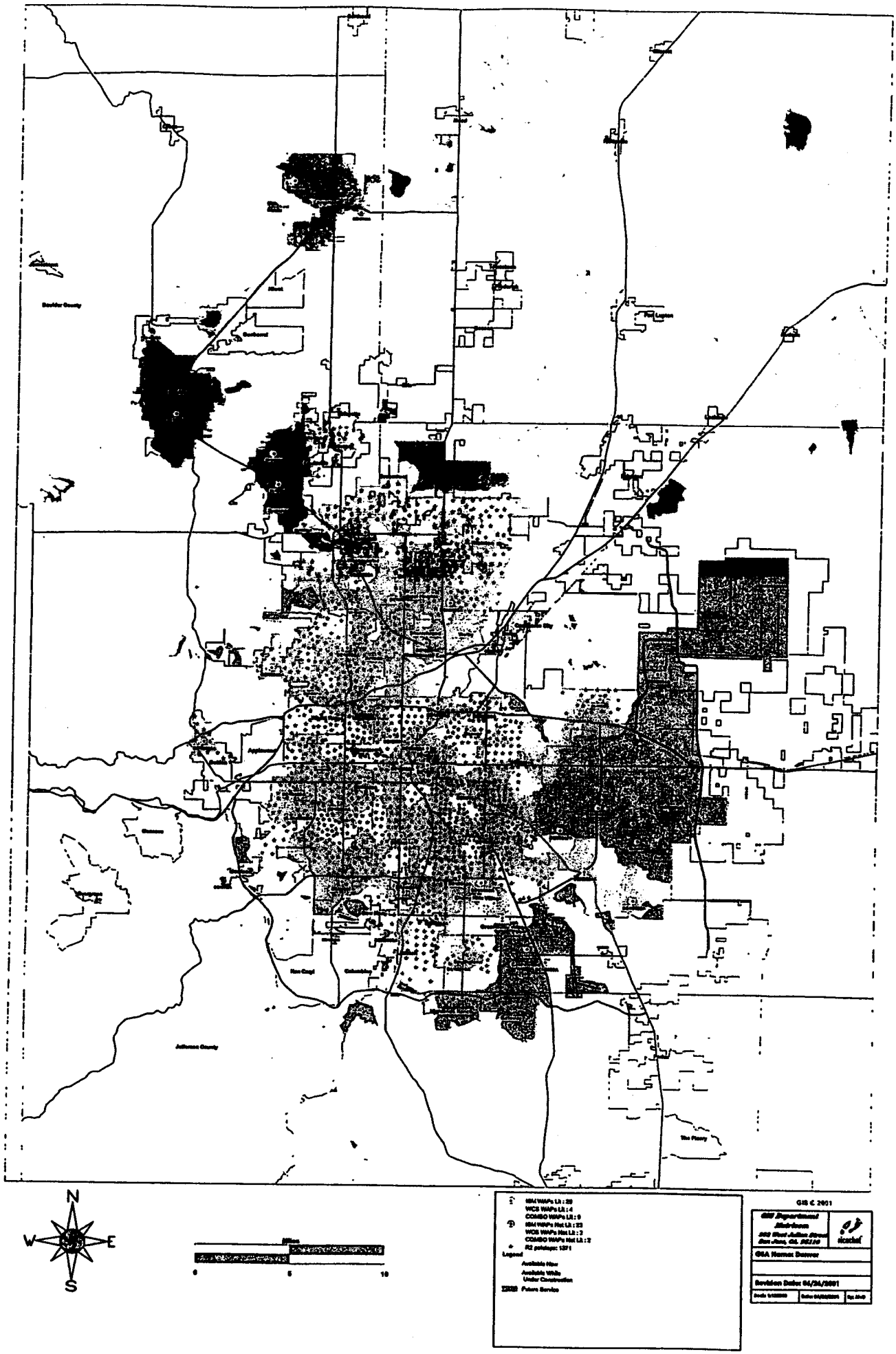
ricochet

GSA Name: Chicago

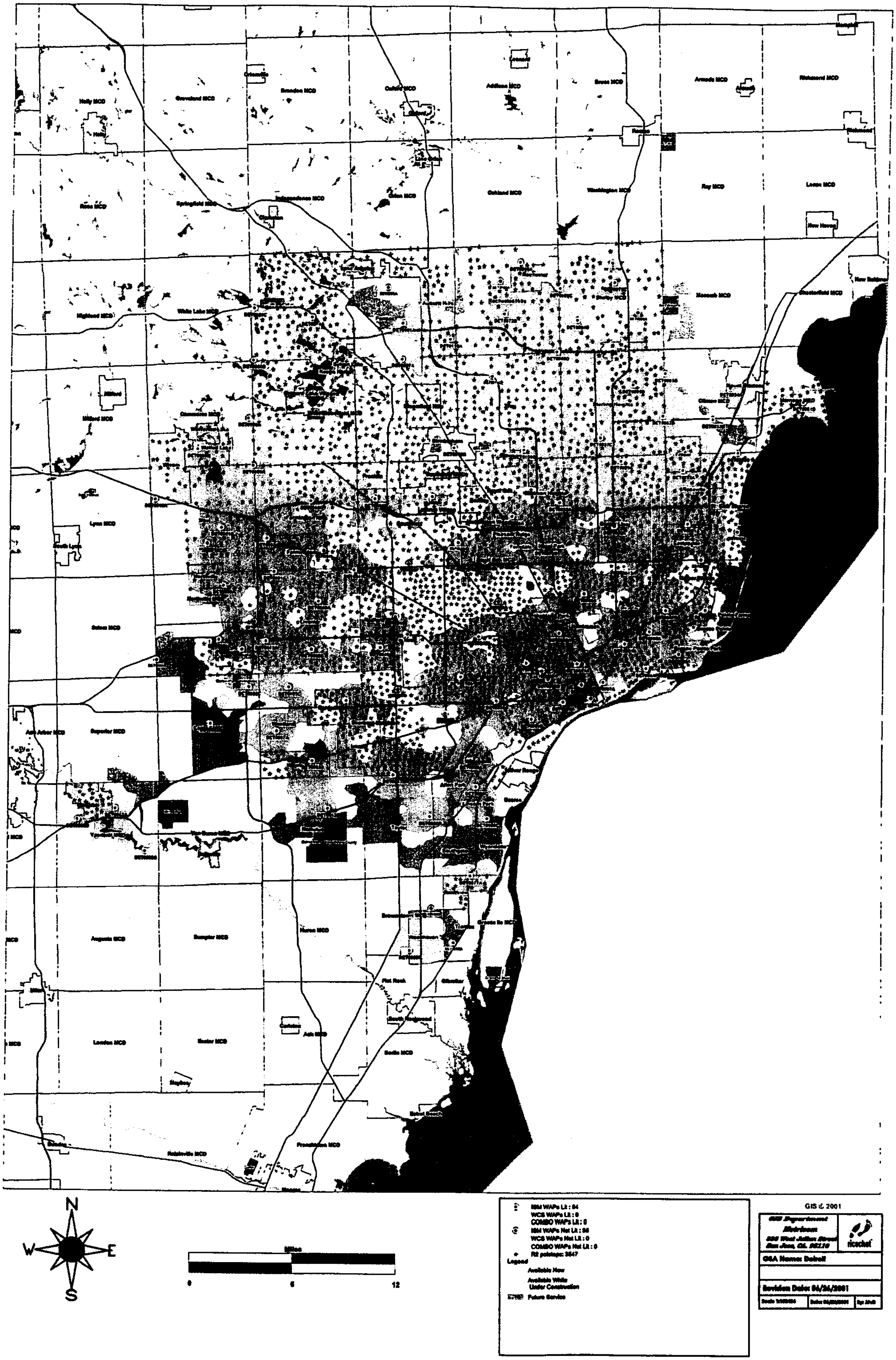
Revision Date: 06/26/2001

Scale 1:218111	Date: 06/26/2001	By: JJvD

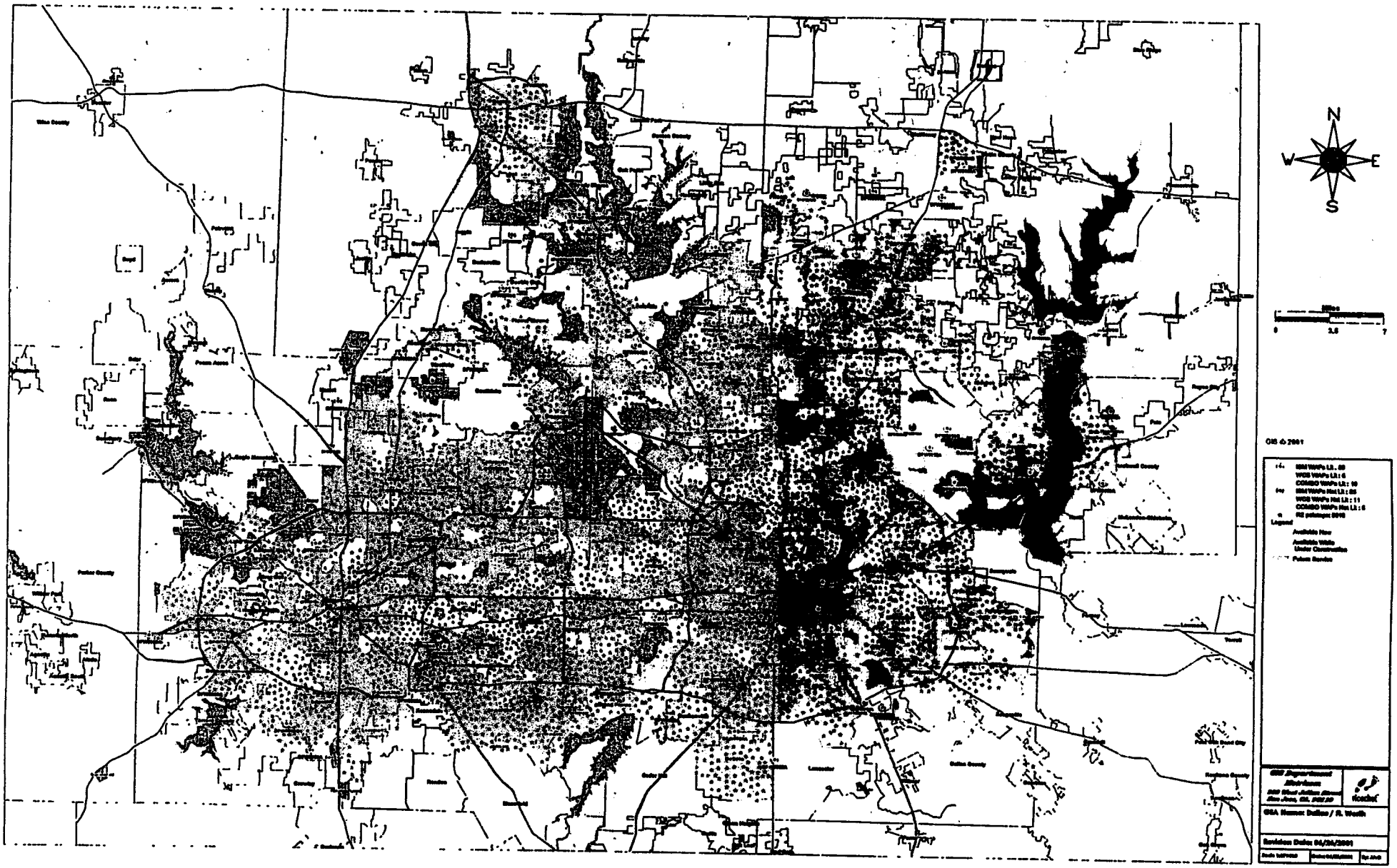
Denver - Launch Footprint as of 6/26/2001



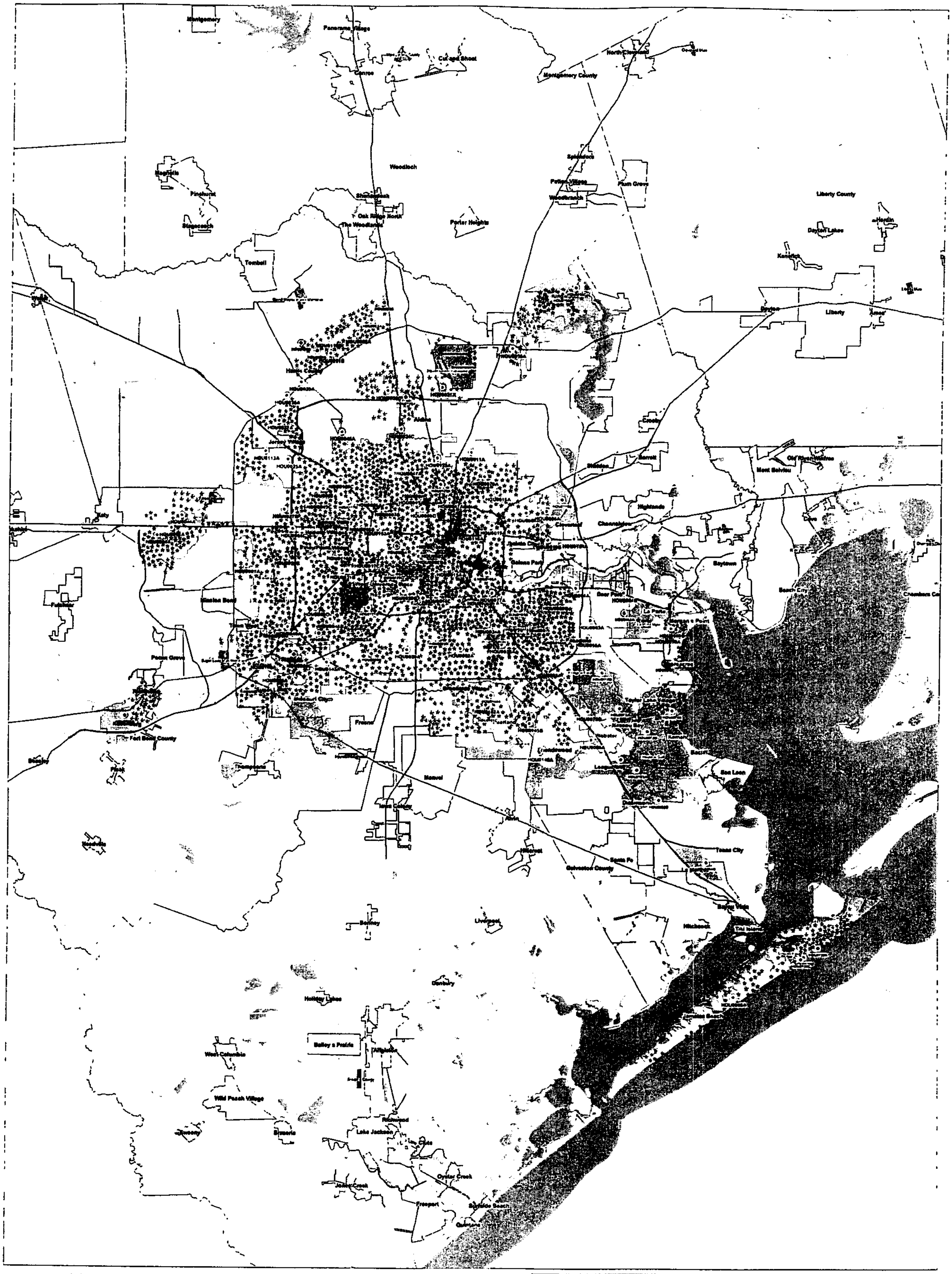
Detroit - Launch Footprint as of 6/26/2001

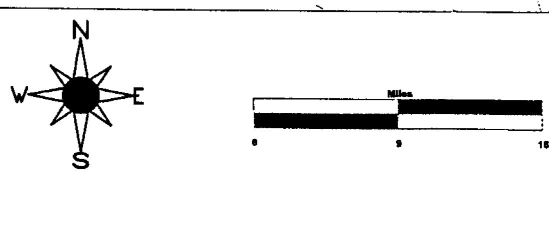


Dallas / Ft. Worth - Launch Footprint as of 6/26/2001



Houston - Launch Footprint as of 6/26/2001





ISM WAPs Lit : 60
WCS WAPs Lit : 9
COMBO WAPs Lit : 11
ISM WAPs Not Lit : 62
WCS WAPs Not Lit : 3
COMBO WAPs Not Lit : 5
R2 poletops: 3458

Legend

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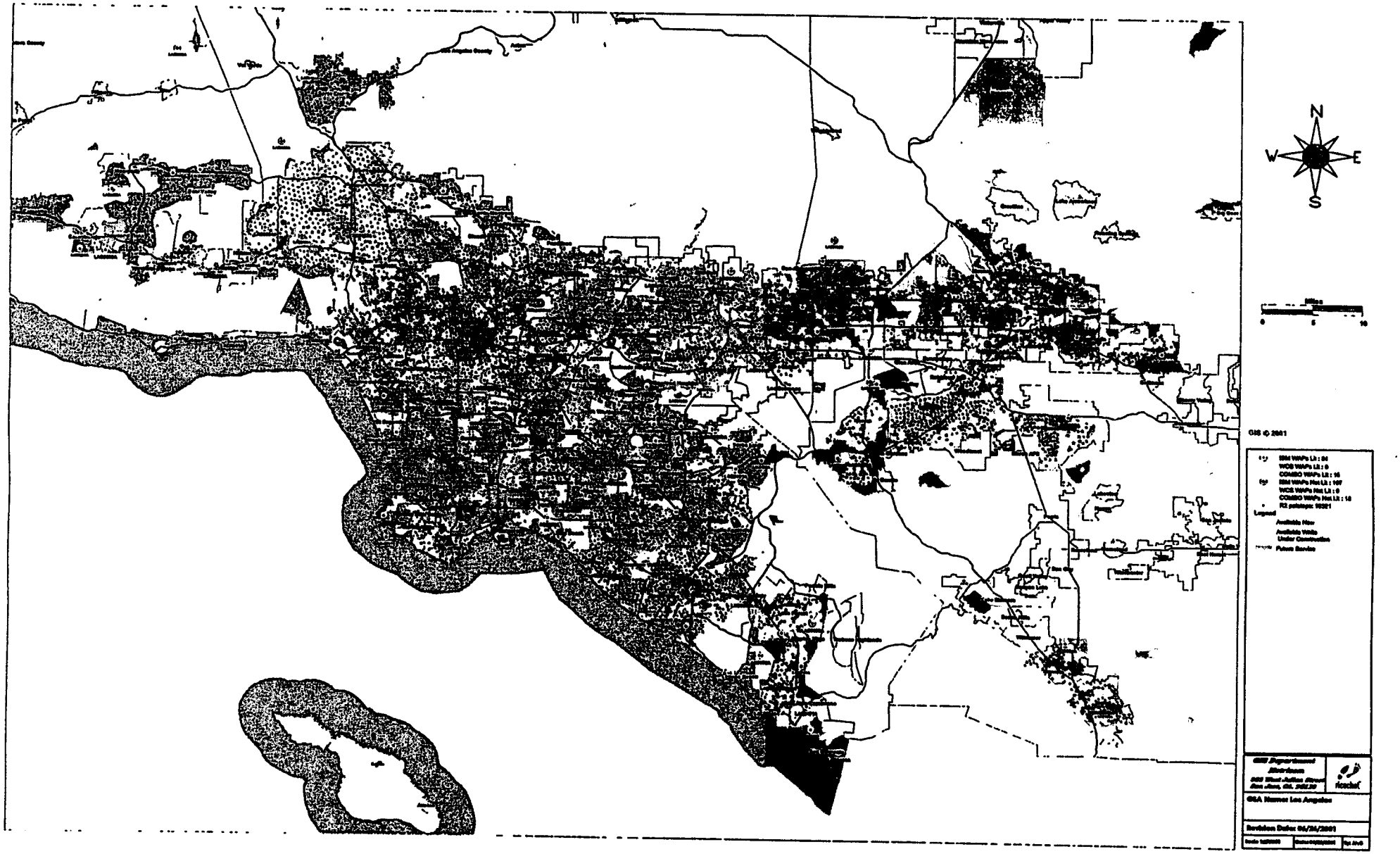
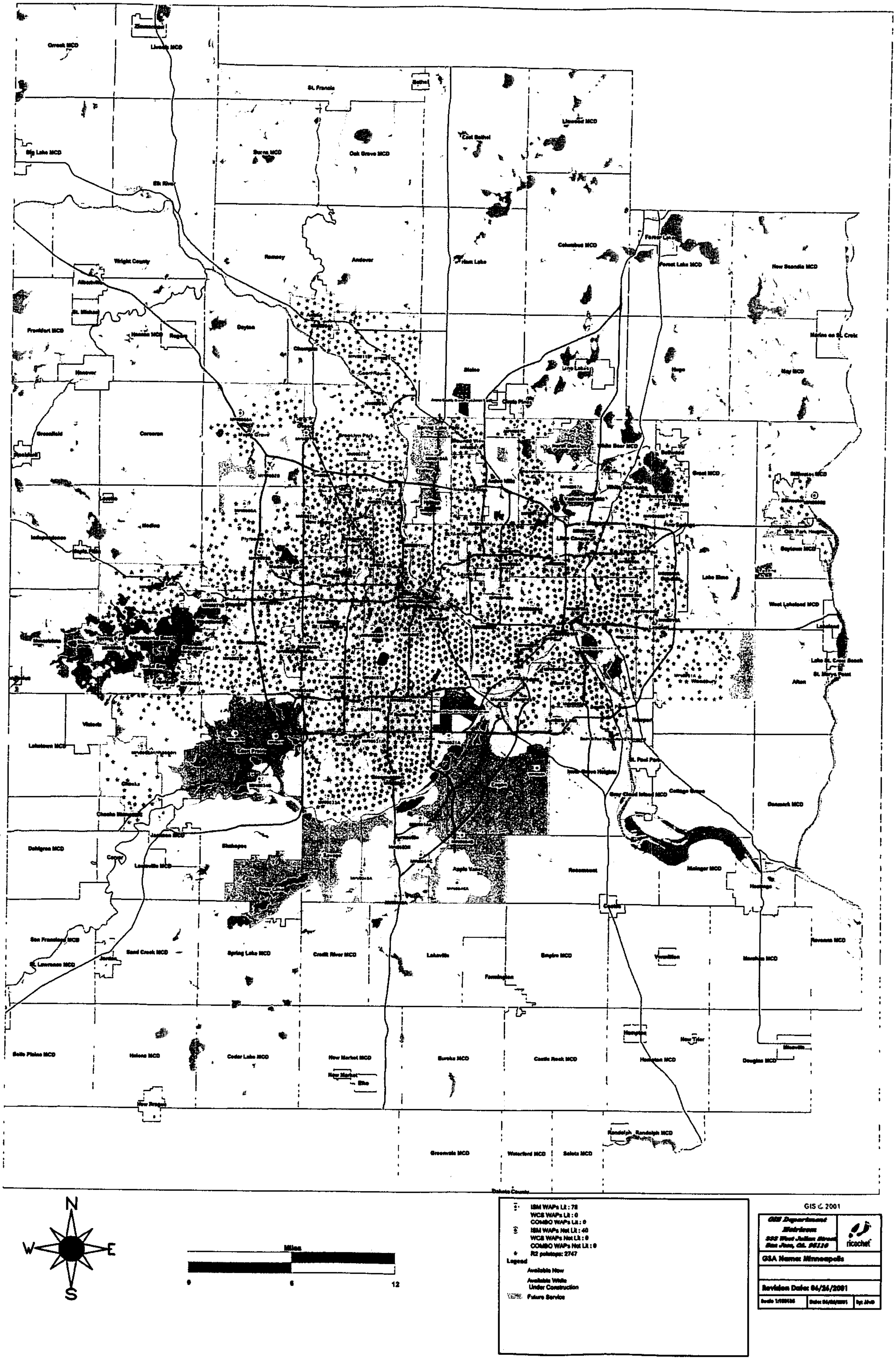
GSA Name: Houston

Revision Date: 06/26/2001

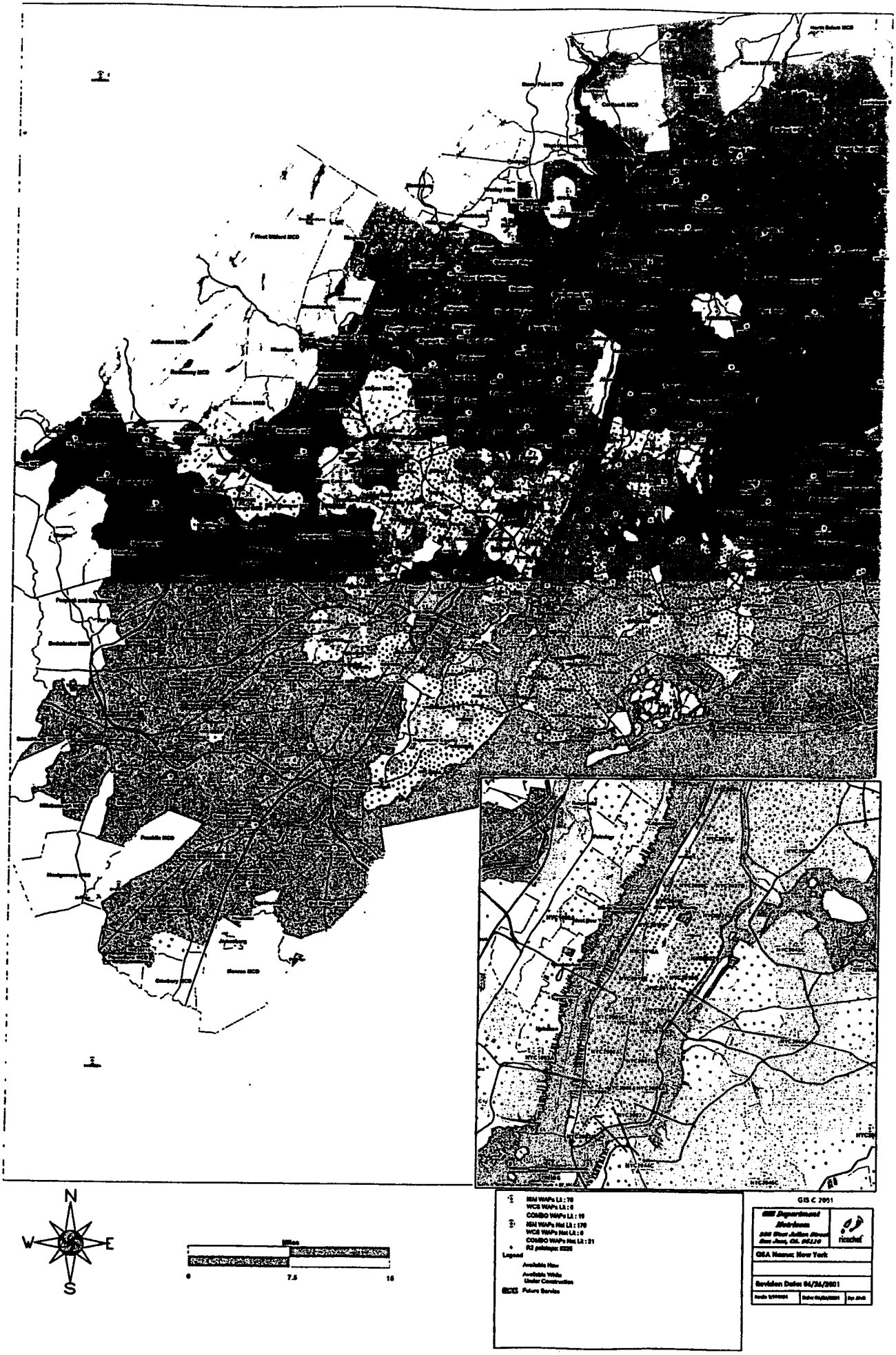
Los Angeles - Launch Footprint as of 6/26/2001



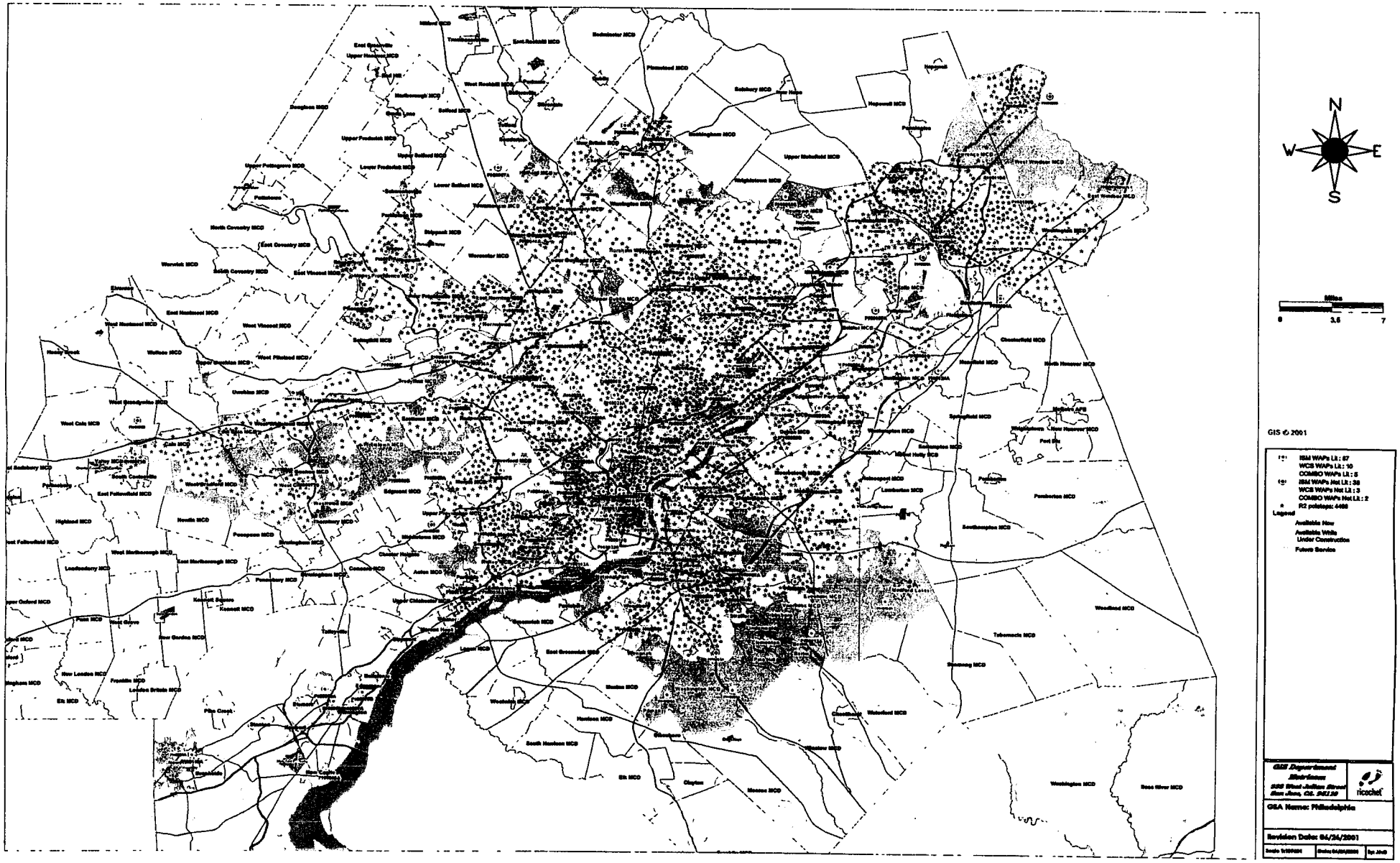
Minneapolis - Launch Footprint as of 6/26/2001



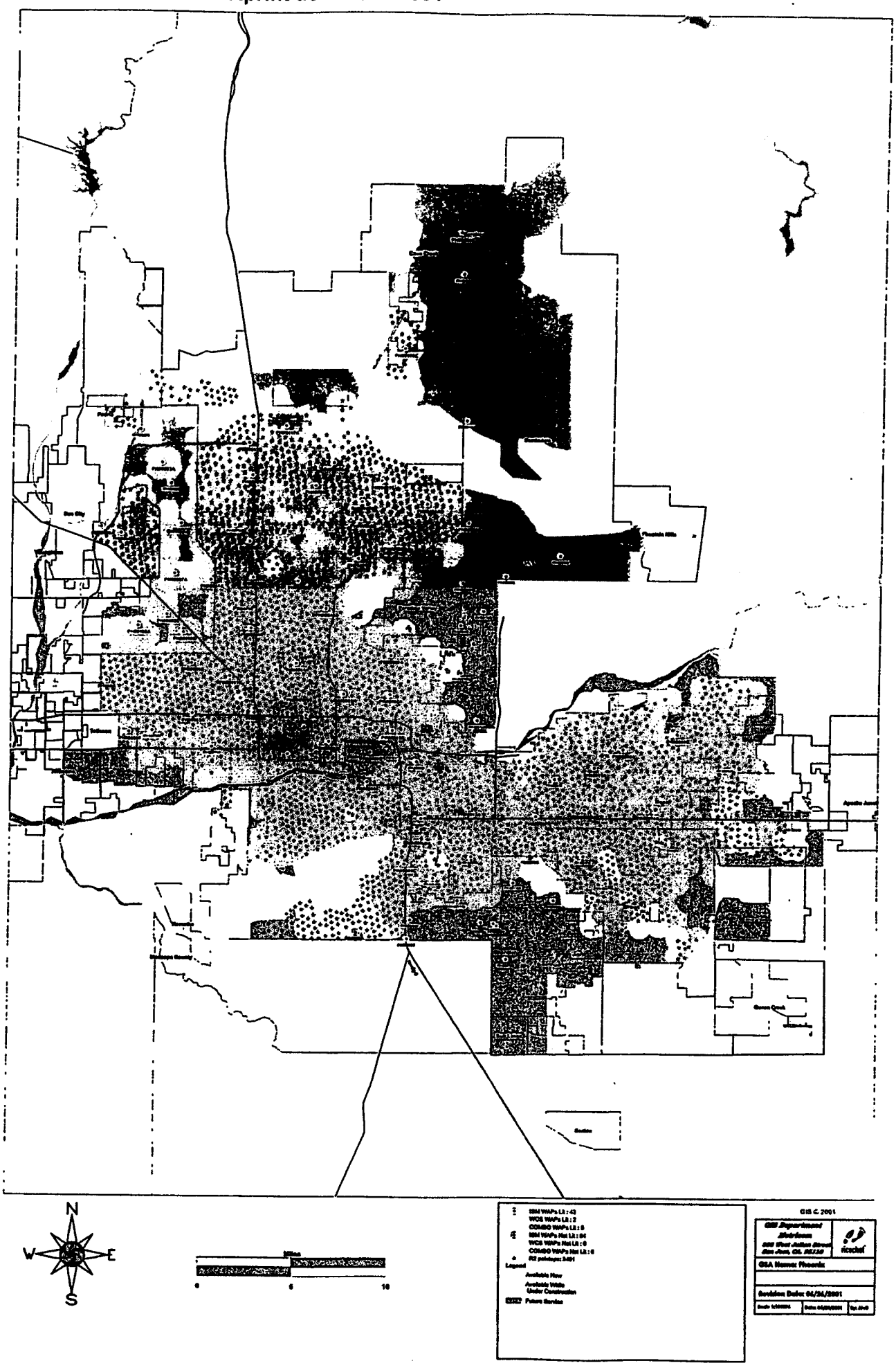
New York - Launch Footprint as of 6/26/2001



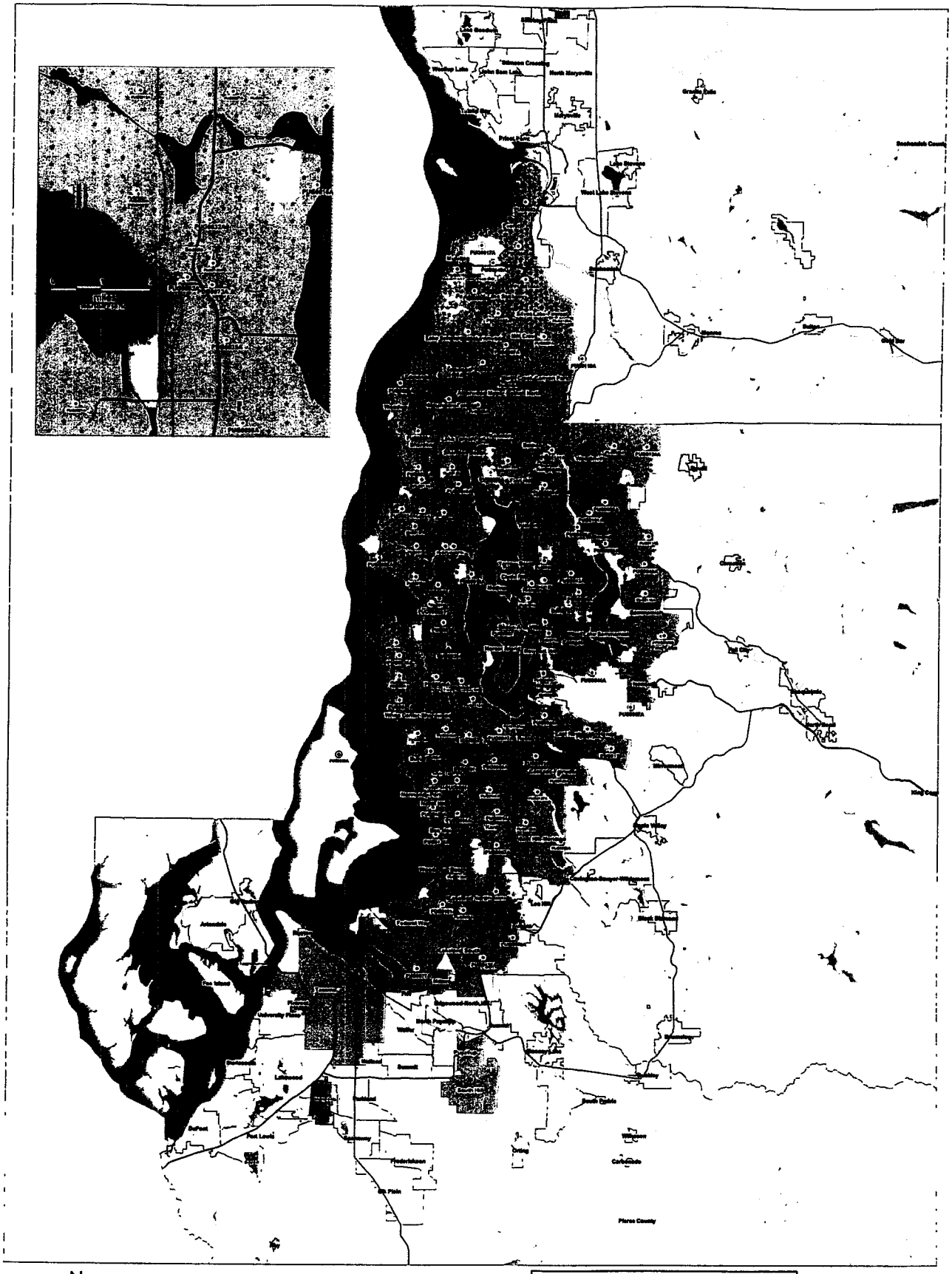
Philadelphia - Launch Footprint as of 6/26/2001



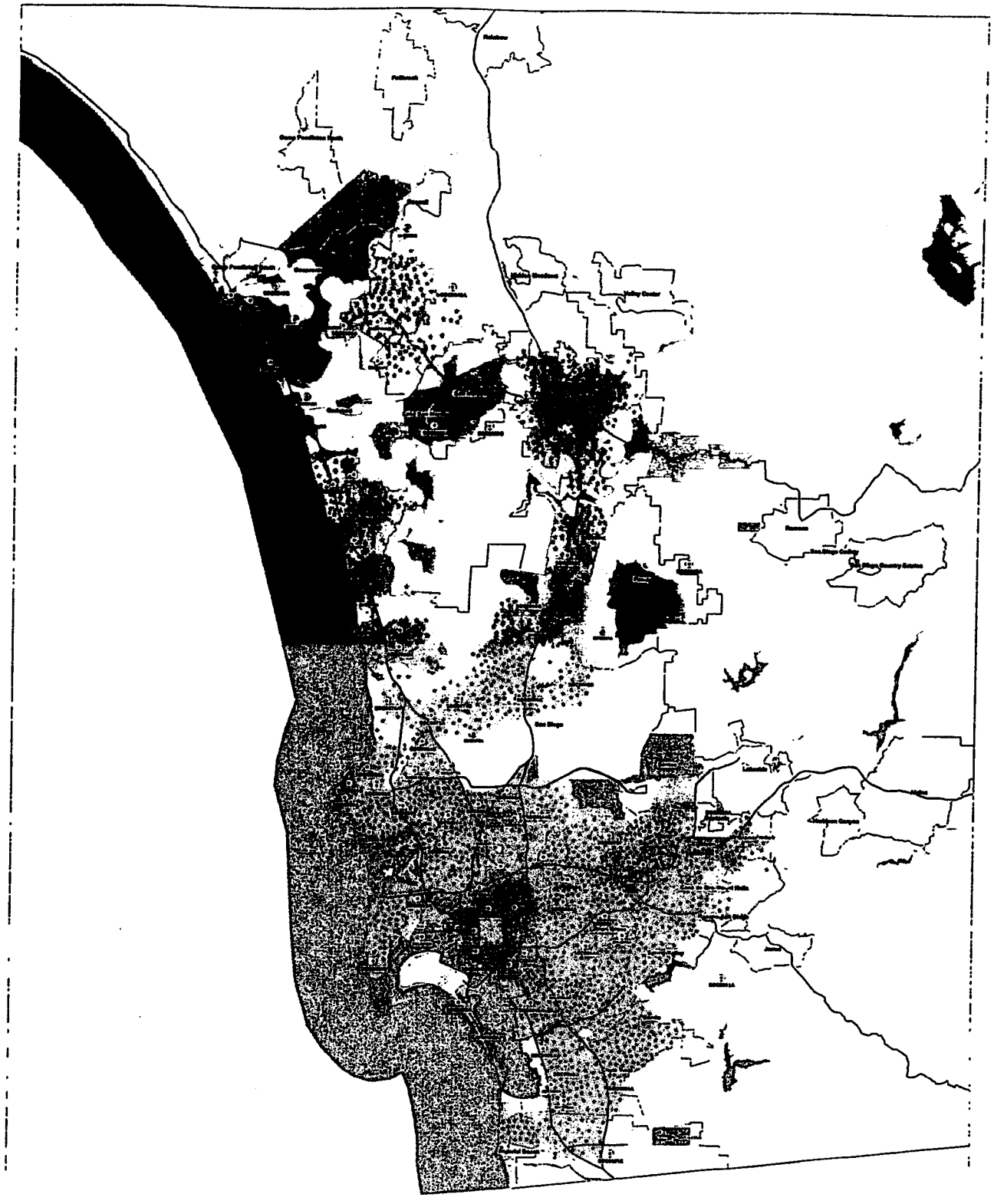
Phoenix - Launch Footprint as of 6/26/2001

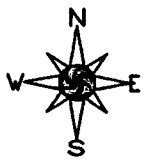


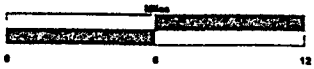
Puget Sound - Launch Footprint as of 6/26/2001

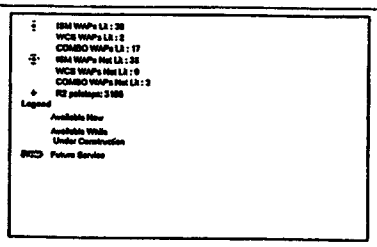


San Diego - Launch Footprint as of 6/26/2001

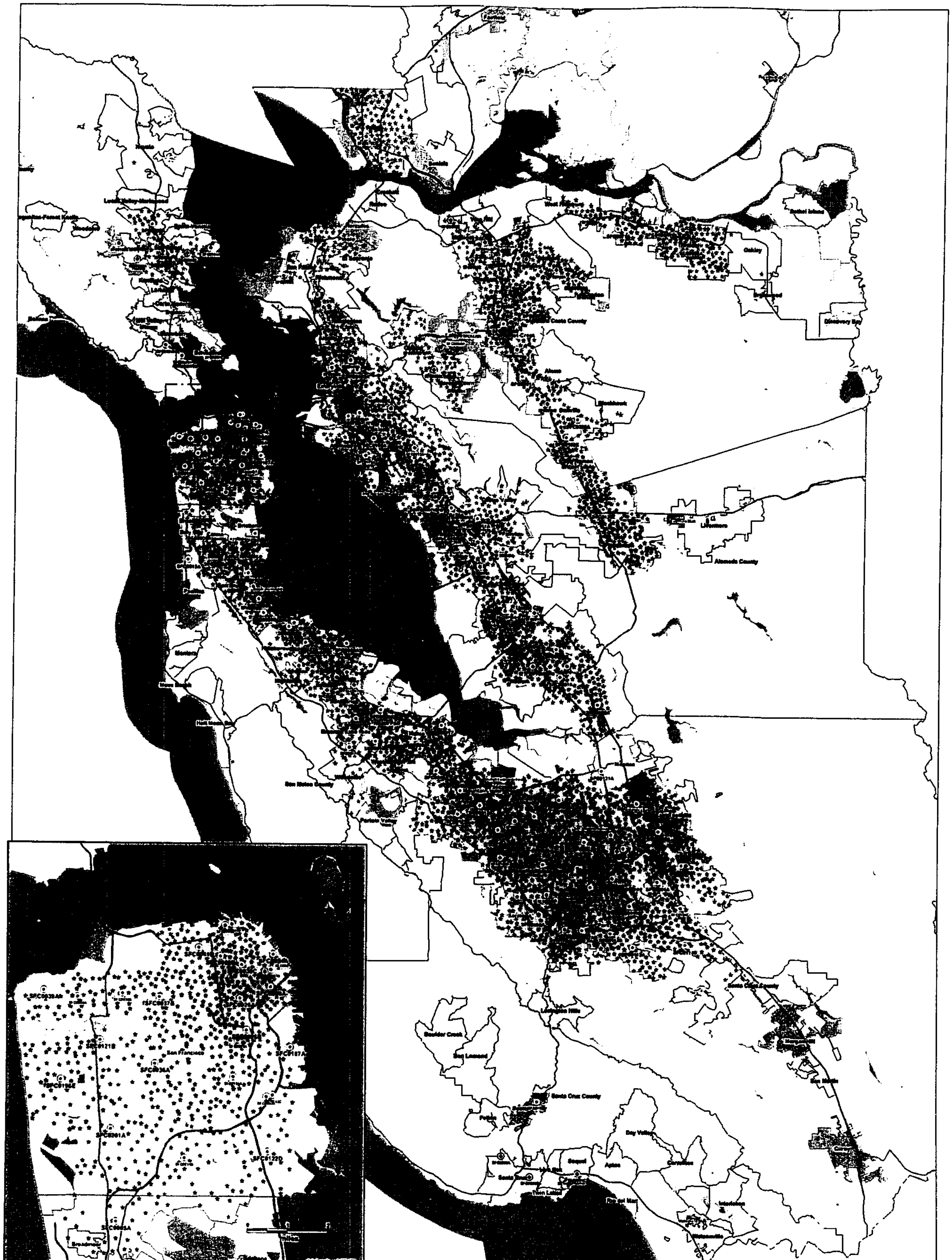


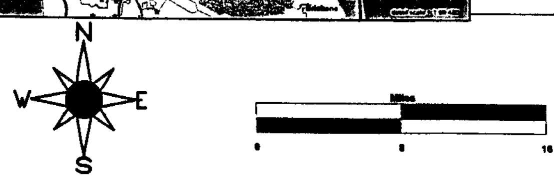






San Francisco - Launch Footprint as of 6/26/2001





ISM WAPs Lit : 73
WCS WAPs Lit : 4
COMBO WAPs Lit : 7
ISM WAPs Not Lit : 199
WCS WAPs Not Lit : 12
COMBO WAPs Not Lit : 7
R2 poletops: 6616

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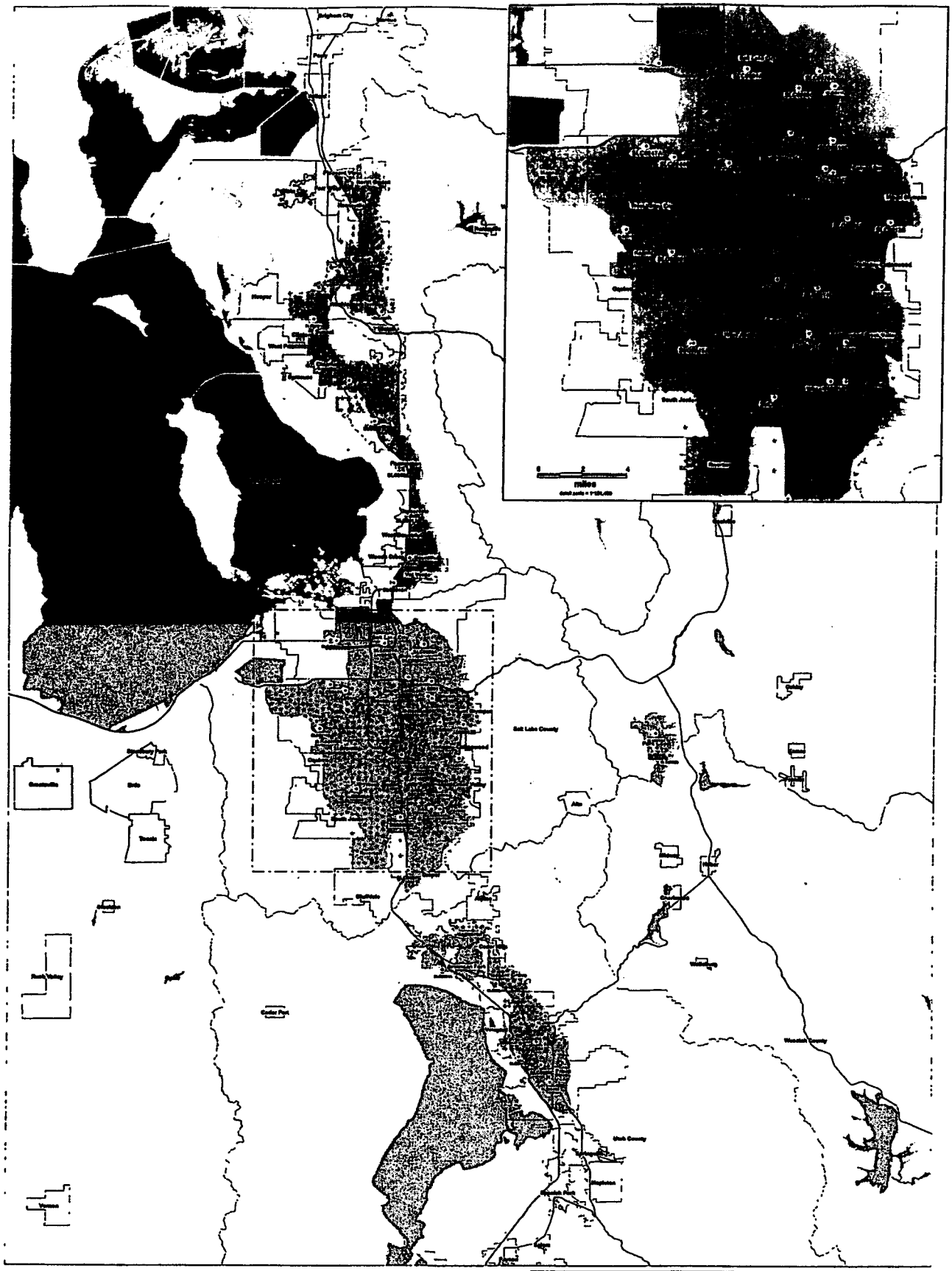
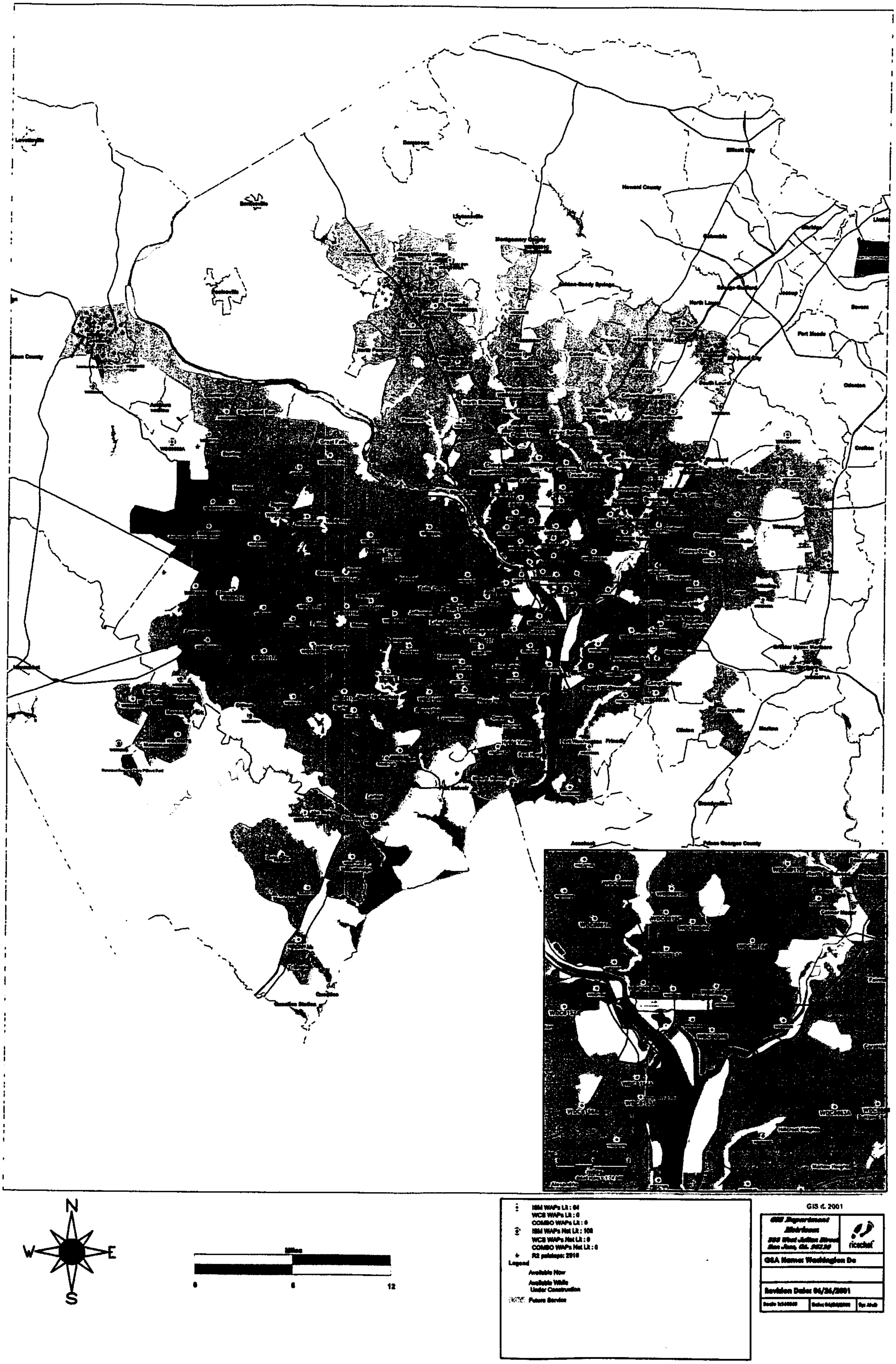
GSA Name: San Francisco

Revision Date: 06/26/2001

Salt Lake City - Launch Footprint as of 6/26/2001



Washington Dc - Launch Footprint as of 6/26/2001



Metricom Patents, Communication, et al.

The first section of this page is a list of the issued or almost issued Metricom patents used in current products.

The second section is a list of patents that are not in current products, but may be useful for future products.

The third section is a list of power meter patents.

The fourth section is a list of old patents still under discussion with Patent office

The fifth section is a list of Autobahn patents submitted to the patent office

The sixth section is a list of Autobahn patents to be disclosed.

Issued patent numbers or reference numbers, patent title, author(s), description, and enforcement priority; (RED) if high international priority. Search for yourself at the US Patent Office or let your fingers do the walking at the awesome IBM patent site.

Patents used in shipping products

4,939,726, & 5,115,433 Method and System for Routing Packets in A Packet Communication Network (Baran, Flammer, Kalkwarf) These are our basic Geographic Addressing patents. They protect aspects of routing in a coordinate-based (not necessarily geographical) addressing scheme. They are central to our tableless routing scheme and provide substantial protection from others trying to create a similar network. [1] (overseas: **4,939,726** also published as **0455959** in Germany, France, Great Britain, and Italy; **5,115,433** also filed as **0461279** in Switzerland, Germany, Denmark, France, Great Britain, Italy, Netherlands, Spain, Sweden)

5,570,084 Loose Source Routing Over Disparate Network Types in A Packet Communication Network (Bettendorff, Flammer, Galloway, Ritter) Teaches an address encapsulation scheme that flexibly and efficiently permits a variety of addressing schemes to be utilized as a single address (actually, more like a "path") in a packet. Used by Metricom to permit packets to enter one network, gateway through to another and emerge in yet a third with sufficient addressing information to permit immediate response. [1] (Pending in Canada and Europe.)

5,471,469 Method of Resolving Media Contention in Radio Communication Links (Flammer, Galloway) Allowed. Teaches a unique method for reduction of contention in multi-channel communication systems. Improves upon elegance and efficiency of "signaling channel/data carriage channel" systems. [1]

5,479,400 Transceiver Sharing Between Access and Inband Backhaul in a Wireless Digital Communication System (Dilworth, Flammer, Galloway) Protects the "in-band" backhaul aspect of the Ricochet system. It is the in-band backhaul that provides our dramatic packet cost advantage on wireless systems that provide wire to each of their cell sites (e.g. PCS or current cellular systems). [1] (also issued in Australia as **685643** and pending in Canada and Europe.)

5,130,987 **Method for Synchronizing A Wide Area Network without Global Synchronization** (Flammer) This is our *asynchronous hopping* patent. This method and apparatus teach the ability to synchronize nominally asynchronous nodes when the time to pass packets comes. Additional claims cover the acquisition process. Substantial protection is provided from other frequency hopping schemes that do not all 'hear' a central source for synchronization. [2] (also issued as **0447987** in Germany, France, and Great Britain).

5,515,369 **Method for Frequency Sharing and Frequency Punchout in Frequency Hopping Communications Network** (Flammer, Galloway, Paulsen) Teaches an elegant method which permits nodes capable of multi-channel communication to communicate near optimally with each other in the cases where each has different, overlapping sets of communication channels. This is useful where communication channels in one area cannot support traffic and can elsewhere. The trick is coordinating the disparate channel sets efficiently. [2] (also issued as **0450382** in Germany, France, and Great Britain.)

5,400,338 **Parasitic Adoption of Coordinate-Based Addressing by Roaming Node** (Flammer) This is a patent covering another aspect of our network, that of adopting the coordinates of the access point the subscriber device 'attaches' to. [1] (also pending in Japan.)

5,488,608 **Method and System for Routing Packets in A Packet Communication Network Using Locally Constructed Routing Tables** (Flammer) Furthers protection of the mesh network routing schemes in use by Metricom. Protects the local construction of routing tables in any packet based communication system. Basis of the efficiencies inherent in the Ricochet implementation of the "Scanner". [2] (also pending in Europe.)

5,453,977 **Method for Network Configuration Via Third Party Query** (Flammer, San Filippo) Teaches a near optimal method for acquisition improvement. Information "known" about radios in the vicinity are conveyed to the newly acquiring node when requested (third party query). This information permits selective targeted acquisition, a very packet efficient method. [1](also pending in Japan.)

5,903,566 **Method for Distributing Program Code to Intelligent Nodes in A Wireless Mesh Data Communication Network** (Flammer) Protects perhaps the most robust and efficient method for maintaining the code (firmware) and other configuration items in a wide area mesh network. Applicable to all forms of mesh networks. [1]

5,664,194 **Method for Autonomously Transferring Code to a Computer Without Accessing Local Memory by the Central Processing Unit** (Paulsen) Teaches an apparatus and method for uploading information to memory within a device without accessing (and therefore requiring operation of) the Central Processing Unit of the device. This is used to upload program code to a device *which has no operational code in it*; code can be uploaded into entirely blank program memory for subsequent execution by the Central Processor. [3]

5,007,052 **Method for Routing Packets by Squelched Flooding** (Flammer) This method and apparatus protects an efficient technique for broadcasting in a multi-channel mesh network. It is an evolution of public domain flooding schemes where maintenance information previously obtained permits optimal squelching of the duplicated packets. [3]

5,774,344 **RF Shield for Circuit Card having a Solid First Flange** (Casebolt) Teaches a simple, inexpensive, manufacturable way of shielding RF circuitry.[3]

5,706,221 **Method and Apparatus for Recovering Digital Data from Baseband Analog Signal** (Paulsen) Teaches an elegant way to optimize recovery of digital data from a FSK signal, used in the SE Modem. [3]

Patents not used in any current products, but may be useful

5,079,768 **Method for Frequency Sharing in Frequency Hopping Communications Network** (Flammer) This is a method for frequency sharing that permits a frequency hopping system to 'overlay' an existing system without interference. It works through adaptive and rapid avoidance of the existing systems signals. This method would allow our system to coexist with a GSM based cellular phone system anywhere in Europe, for instance. [2]

5,818,828 **Hybrid Multiple Access Protocol for Wireless Frequency Hopping Microcells with Adaptive Backhaul and Heartbeat** (Packer, Xu, Bettendorff) The infamous poll-mode patent. Teaches a way to improve fairness in our system. However, it also causes the performance to degrade in the single user case (due to additional latency) for Ricochet because the backhaul and the modem link are in the same band. With single hop, multi-band networks in the Ricochet2 system, it may be time to resurrect this protocol. [4]

5,636,216 **Method for Translating Internet Protocol Addresses to Other Distributed Network Addressing Schemes** (Galloway, Fox) Describes a method of using an Internet protocol-based backbone to transport packets between isolated networks having different types of addresses. This is used in Utilinet networks. It allows connection of separate Utilinet networks to a wired Internet protocol-based backbone and routes packets between them. [4]

5,465,398 **Automatic Power Level Control of A Packet Communication Link** (Flammer) Teaches an extremely low cost solution to Automatic Power Control (APC) in radio links. Adaptable and near optimal in implementations where there are computers controlling the links. [4]

5,406,249 **Method and Structure for Coupling Power-Line Carrier Current Signals Using Common Mode Coupling** (Pettus) Teaches how to build a system to transmit data on power lines. [4]

5,703,602 **Portable RF Antenna** (Casebolt) Teaches a novel low cost design for an antenna positioned on a portable device. [4]

5,479,176 **Multiple-Element Driven Array Antenna and Phasing Method** (Zavrel) Teaches the phasing method for the "8 square" antenna. Composed of 8 vertical monopoles, this antenna can be steered in any of four directions and derive performance improvement from the non-driven or *reflecting* elements. [4]

Power Meter Patents

4,835,463 & 4,939,451 **Wide Dynamic Range AC Current Sensor** (Baran, Knutson) Teaches how to make an accurate, inexpensive power meter. [5]

5,485,393 **Method and Apparatus for Measuring Electrical Parameters using a Differentiating**

Current Sensor and a Digital Integrator (Bradford) Teaches how to make an accurate, inexpensive, digital power meter. [5]

5,243,536 **Method and Apparatus for Measuring Volt-Amps Reactive Power** (Bradford) Teaches how to measure the instantaneous power accurately. [5]

5,223,790 & 5,338,332 **Current Sensor using Current Transformer with Sintered Primary** (Baran, Palmer) Teaches how to measure power over wide temperature ranges. [5]

Patents Under Review Previous to Autobahn

8/768821 Method for Emulating Point to Point Protocol (PPP) Over An Imperfect Mesh Network (Galloway) [2] This patent has been split into two pieces, one for the connection and one for the transport. It is currently under dispute and has been rejected as obvious by the examiner. However, since we had to build this ourselves and we couldn't buy it from anyone at the time, and it wasn't deployed anywhere on the planet, it didn't seem that obvious at the time... *Rejected by patent examiner (nonsensically because by siting prior art that happened after the filing date!) rebuttal sent on both date and logic of rejection.*

Autobahn Patent Possibilities

*Here is **individual disclosure.htm***

1. ***Format: Area - TTC Case # - State: Title, summary***
    - ***inventors***
    - ***innovativeness/importance***
    - ***Action items - name, action, date***

Filed Patents under examination (New patent ideas)

1. **MAC - Case #72 - Filed:** Varying the data link speed and or BW on a per-link basis, plus the method of using a *channel sounding* packet to increase link reliability and performance..
    - Bradford, Flammer
    - *3/4 Here it was felt that the novel wrinkle was our use of the receiving end telling the transmitter (in its first ACK) what data rate to use for the duration of the session.*
    - ***ACTION:* Add Paul Dietrich**
2. **Data link - Case # 77 - Filed:** "ACK handoff" at WAP (or any situation where high speed duplex interconnect occurs). Voting receivers handing off packets to optimal transmitter.
    - Flammer, Paulsen, Friday, Ritter
    - *4/4 - This was thought to be a great solution to a variety of WAP congestion and performance related issues. It removes the "interference factor" from the model for WAP-bound traffic and possibly ties with doing the same trick outbound to remove the WAP-created traffic interference factor as well. The effort to resolve media contention "out-of-band" is part of this disclosure.*
    - ***ACTION: under review at patent office***
3. **Antenna - Case #83 - Filed:** A microstrip antenna for fusion
    - Sanad, Knudsen

- 2/2
- ***ACTION*: under review at patent office**

4. **Presentation Layer - Case #84 - Filed:** Method of Communication with a Modem During a Connected State using Packets - Using the out-of-band communication between the modem and the PC; uses *TCP port* and other information (e.g. "AT" strings) and the knowledge that the modem has of the connection type (PPP) .
   - Ritter
   - *3/4*
   - ***ACTION: under review at patent office; no foreign filing***
5. **MAC - Case #87 - Filed:** Method and apparatus for virtual band splitting
   - Garces, Ritter, Friday
   - 3/4
   - ***ACTION: under review at patent office***
6. **Routing - Case #86 - Filed:** Optimizing Throughput to a Wired Access Point in a Mesh Network with Instantaneous Hand-off
   - Srivastava, Ritter, Friday
   - 3/3
   - ***ACTION: under review at patent office***
7. **Routing - Case #90 - Filed:** Method and apparatus for selecting a directional antennae in a wireless communication system.
   - Garces, Rayala, Khelghati
   - 2/3
   - ACTION: ***under review at patent office***
8. **Routing - Case #91 - Filed:** Method and apparatus for channel masking in a wireless communications system.
   - Garces
   - 2/3
   - ACTION: ***under review at patent office, no foreign filing***

New patent ideas:

1. **Physical - Case #80:** Changing packet speed in the middle of the packet; forward compatible gear shifting auto-identification; using the *polarity* of the Barker correlation to convey extra information; equalizer training
   - Bradford
   - *4/4 Ken thought this to be a real nice patent that would have applicability in other areas. There is a Sun/Tops speed changing patent/technique that we should look to avoid*
   - ***ACTION*: Mike Ritter to disclose**
2. **Data link - Case #78:** PRP, notification of "I'm available" upon return from "doing work"
   - Paulsen, Flammer, Ritter
   - *3/3 Write up the technique, perhaps in conjunction with Poll Mode and minislots.*
   - ***ACTION*: Ritter disclosure done, need to work with Ken to finish claims.**
3. **Routing - Case #75:** New-non-geographical routing - modified Bellman-Ford towards the WAP, loose source routing back.
   - Bettendorff, Rayala, Srivastava
   - **4/4**
   - ***ACTION: Sheela R. to disclose.* Scheduled visit to Ken Allen's office on the 1st of July.**
4. **Routing - Case #76: dual band access/backhaul:**
   - Friday, Ritter
   - **4/4**
   - ***ACTION:* Friday sent to Ken Allen to get filed**
5. **Data link, WCS** - Protocol for efficiently send packets through an extended data link over multiple hops using blind transmitters.
   - Lau, Khelghati, Allam, Rayala, Srivastava,
   - 3/3

- ***ACTION:*** Lau to Disclose

6. **Routing, WCS** - Method and apparatus to route packets through a blind transmitter
   - Chuang, Ritter, Bettendorff
   - 3/2
   - ACTION: Chuang (Ritter) to disclose
7. **MAC Case #88 - Dynamic, Tailored Channel Masking:** A method to intelligently hop around fixed interference sources. Primarily used to improve latency by minimizing packets lost to noise in the 2.4 GHz band
   - Garces, Friday, Srivastava, Ritter
   - 3/3
   - ***ACTION*: Garces to Disclose, Ritter to review Hughes-Hartogs patent**
8. **System - Geographic Broadcast System**
   - Ritter, Tymes, Anand
   - 3/3
   - **ACTION: LaRoy, Anand to Disclose.**
9. **System - Website Locator System by using reverse port and Advisor application with OOB**
   - Ritter, Tymes
   - 2/3
   - **ACTION: LaRoy to Disclose**
10. **Data link - Application using network Gateway to query modem while in the connected state.**
    - Ritter, Tymes
    - 2/3
    - **ACTION: LaRoy to Disclose**
11. **MAC - Case # 76: Channel dependent frequency reuse**
    - Garces, Dietrich
    - 2/3
    - **ACTION: Garces??**
12. **Routing - Case # 89: Method for choosing parent node for routing in a mesh network**
    - Srivastava, Raghu, Rayala
    - 3/3
    - **Action: Srivastava to disclose, Ritter/Rayala to review doc**
13. **Data link - Case # 92:** Method for enhancing mobility in a wireless mesh network
    - San Filippo, Garces, Srivastava, Nguyen (CT)
    - 2/4
    - **Action: Ken @ Townsend to file before July 15th.**
14. **System - Case # 93:** Scalable method for providing location information in a packet wireless network with privacy
    - Ritter, Ernohazy, Hariharan
    - 3/3
    - **Action: Anand to edit disclosure, work with Ken to file.**
15. **Routing - Method for removing self load in load balancing measurements for routing**
    - Will San Filippo
    - 3/3
    - Action: Will to work with Ken Allen to file.

Metricom's WCS Spectrum Summary

Summary

Merticom's network operates in the unlicensed 900 megahertz and 2.4 gigahertz frequency bands of spectrum. We may also operate in the 2.3 gigahertz frequency band pursuant to licenses purchased from the FCC in 1997. We have licensed wireless communication service, or WCS, spectrum covering areas with 127 million in population, according to 1990 population statistics.

Two areas have licenses for 20 MHz (Seattle and Portland; 7 million population), four have licenses for 5 MHz (Boston, New York, Buffalo and Philadelphia; 47 million population) and 15 have 10 MHz (St. Louis, Houston, Dallas -- Ft Worth, Denver, Omaha, Wichita, Tulsa, Oklahoma City, San Antonio, El Paso -- Albuquerque, Phoenix, Spokane -- Billings, Salt Lake City, San Francisco -- Oakland, and Los Angeles -- San Diego; 73 million population). This licensed spectrum provides us with the ability to transmit at higher power in those regions and thus attain greater network coverage with fewer wired access points.

In areas not covered by our licensed spectrum, we can achieve the same coverage results by deploying additional wired access points. We use the 900 megahertz band primarily for transmissions to and from a user's modem to a poletop radio and from a poletop radio to a network radio or wired access point, and the 2.4 gigahertz band primarily for communication between network radios and between poletop radios and wired access points. Wired access points that use the 900 megahertz band and the 2.4 gigahertz band are referred to as industrial, scientific and medical band wired access points, called ISM WAPs. Wired access points that use the 2.3 gigahertz band are referred to as WCS WAPs. We intend to use the 2.3 gigahertz band only for downstream (toward the subscriber) traffic from wired access points to poletop radios and only where we have licenses to use 2.3 gigahertz spectrum and when we cannot route the downstream traffic to the user in one radio hop using the 2.4 gigahertz band. We do not currently use or intend to use the 2.3 gigahertz band for upstream traffic.

Where did Metricom get WCS bandwidth and how much?

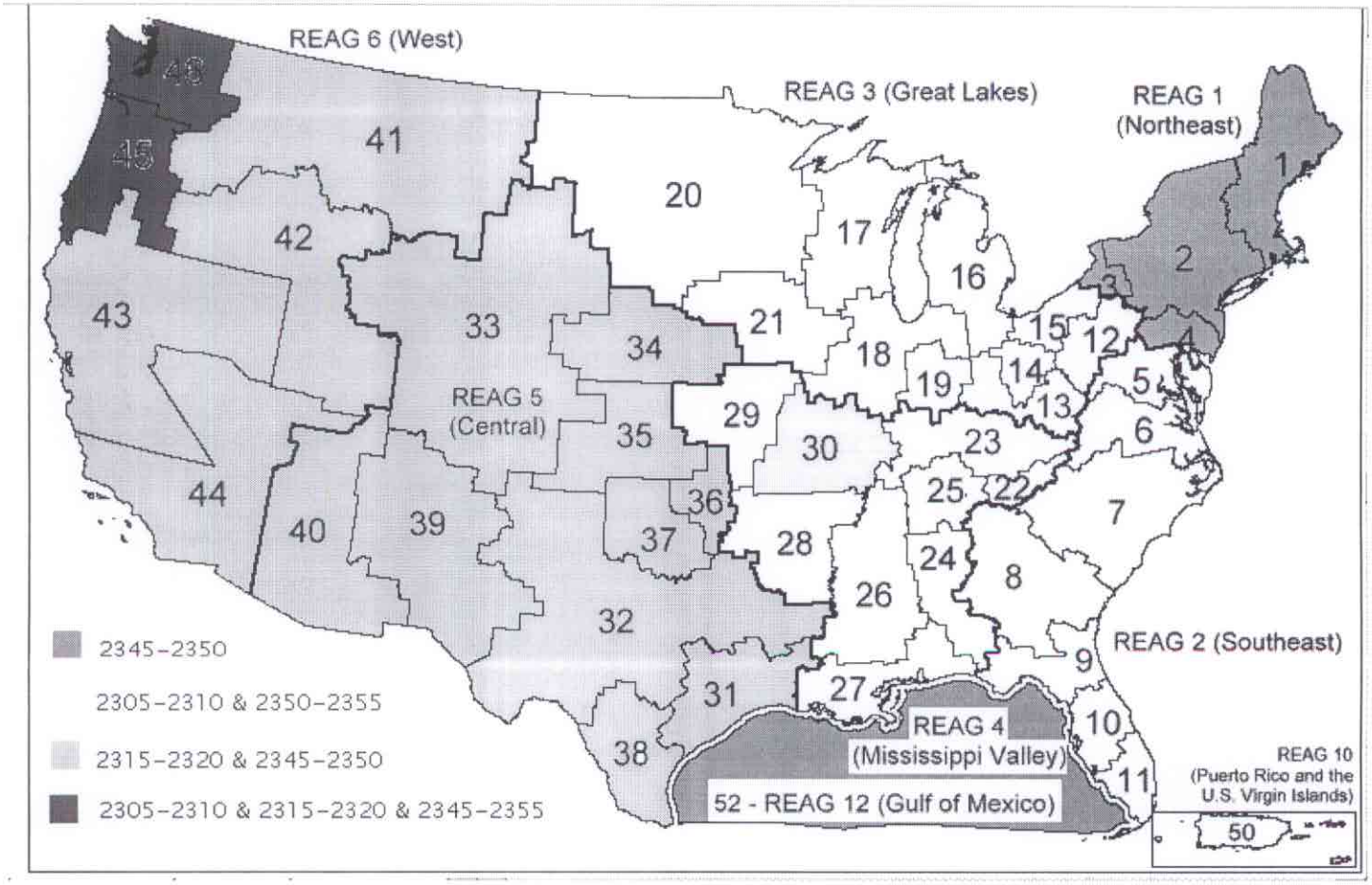
Each Region was designed to cover 20% of the US population.

Region	Band	Location
ME30	A	St. Louis
ME45	A	Portland
ME46	A	Seattle
RE01	D	Northeast
RE05	C,D	Central
RE06	C,D	West

What are the WCS Frequencies?

Ch. Block		Frequency Range
A	10MHz	2305-2310 and 2350-2355MHz
B	10MHz	2310-2315 and 2355-2360MHz
C	5MHz	2315-2320MHz
D	5MHz	2345-2350MHz

Map



What are the rules (summary form)?

Pursuant to provisions of the Omnibus Consolidated Appropriations Act of 1997, the FCC today adopted a Report and Order that amends the Commission's Rules to reallocate and assign the use of the frequencies at 2305-2320 and 2345-2360 MHz. To be known as the Wireless Communications Service (WCS).

The rules adopted today also give WCS licensees flexibility to provide a broad range of wireless services that are consistent with the allocation table and associated international agreements. The WCS spectrum is located on either side of the 25 MHz of spectrum allocated for satellite Digital Audio Radio Service ("satellite DARS"). In the Report and Order the Commission also adopted technical rules to protect satellite DARS reception from out-of-band emissions from WCS transmitters. The Commission noted that there is a substantial risk that these technical rules will make mobile operations on WCS spectrum technologically infeasible, at least for the foreseeable future.

Indicates that WCS licensees will be permitted to partition their service areas into smaller geographic service areas and to disaggregate their spectrum into smaller blocks without limitation, and that WCS spectrum holdings will not be considered for purposes of the CMRS spectrum cap. There also will be no eligibility restrictions for WCS spectrum, with the exception of applicable foreign ownership restrictions set forth in Section 310 of the Communications Act.

Provides that WCS licenses will be for a term of 10 years, and will carry a renewal expectancy similar to that afforded PCS and cellular licensees. In addition, WCS licensees will be required to provide "substantial service" within their 10-year license term.

Requires winning bidders for WCS licenses to designate in their long-form applications the type(s) of WCS service(s) they will provide. Their regulatory treatment will depend on these designations. WCS licensees that provide satellite DARS services will be governed by the rules to be adopted in IB Docket No. 95-91.

FCC AUTHORIZATIONS

Wireless Communications Service Licenses

Metricom obtained the following authorizations in 1997 through a competitive bidding process conducted by the FCC. Through the use of bidding credits, Metricom acquired all licenses for $1,447,034. Each license has a term of 10 years and expires on July 21, 2007. The FCC grants Metricom a right to renew each license for an additional 10-year period.

1. Call Sign KNLB207. Authorizes Metricom to operate on frequency block A for the St Louis Major Economic Area using 10 MHz of spectrum.

2. Call Sign KNLB295. Authorizes Metricom to operate on frequency block A for the Portland Major Economic Area using 10 MHz of spectrum.

3. Call Sign KNLB296. Authorizes Metricom to operate on frequency block A for the Seattle Major Economic Area on 10 MHz of spectrum.

4. Call Sign KNLB297. Authorizes Metricom to operate on frequency block D for the Northeast Regional Economic Area Grouping[1] on 5 MHz of spectrum.

5. Call Sign KNLB298. Authorizes Metricom to operate on frequency block C for the Central Regional Economic Area Grouping[2] on 5 MHz of spectrum.

6. Call Sign KNLB299. Authorizes Metricom to operate on frequency block D for the Central Regional Economic Area Grouping on 5 MHz of Spectrum.

7. Call Sign KNLB300. Authorizes Metricom to operate on frequency block C for the West Regional Economic Area Grouping [3] on 5 MHz of Spectrum.

8. Call Sign KNLB301. Authorizes Metricom to operate on frequency block D for the West Regional Economic Area Grouping on 5 MHz of Spectrum.

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[1] The Northeast Regional Economic Area Grouping encompasses the following Major Economic Areas: Boston; New York City; Buffalo; and Philadelphia.

[2] The Central Regional Economic Area Grouping encompasses the following Major Economic Areas: Houston; Dallas-Fort Worth; Denver; Omaha; Wichita; Tulsa; Oklahoma City; San Antonio; El Paso-Albuquerque; and Phoenix.

[3] The West Regional Economic Area Grouping encompasses the following Major Economic Areas: Spokane-Billings; Salt Lake City; San Francisco-Oakland-San Jose; Los Angeles-San Diego; Portland; and Seattle.