

EMWIN-Denver Task Force

Progress Meeting

Westminster Public Safety Center

October 30, 2003

EMWIN-Denver Project Chronology

2002:

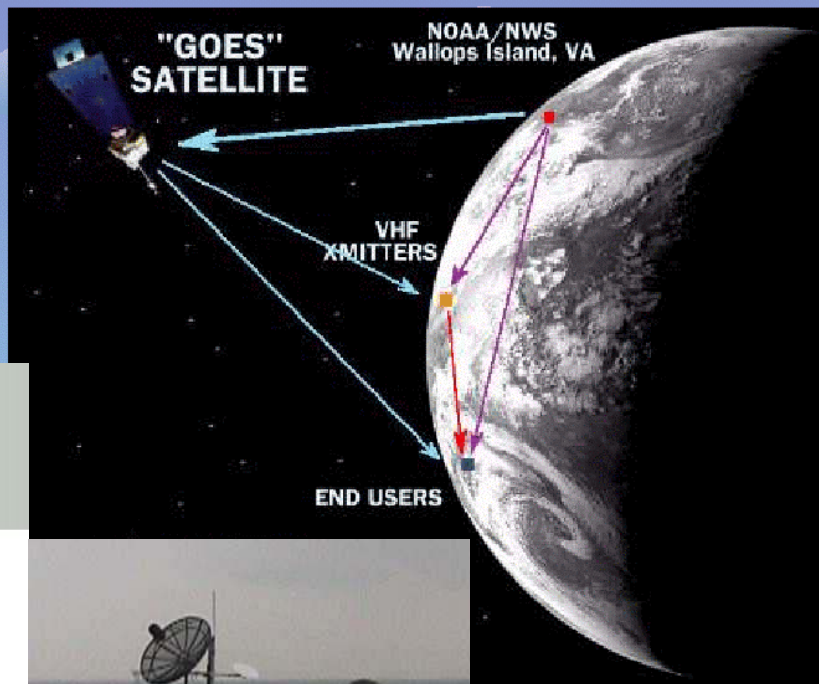
- Apr** Kevin Stewart fact-finding trip to Houston
(w/Harris County OEM, Appraisal District, Read Communications)
- Nov** UDFCD sponsors EMWIN Workshop at Colorado OEM
*(w/Frank Gutierrez, **Jim Robinson**, David Read from Houston)*

2003:

- Feb** UDFCD Board approves \$15k implementation assistance
- Mar** UDFCD hires Fort Worth consultant **Ray Bartik**
- Apr** Project scoping meeting held at Westminster
(Ray meets with EMWIN Task Force)
- May** DHS grant funding application includes EMWIN
- July** Ray completes preliminary design report
- Oct** Task Force meeting

Resolution No. 3

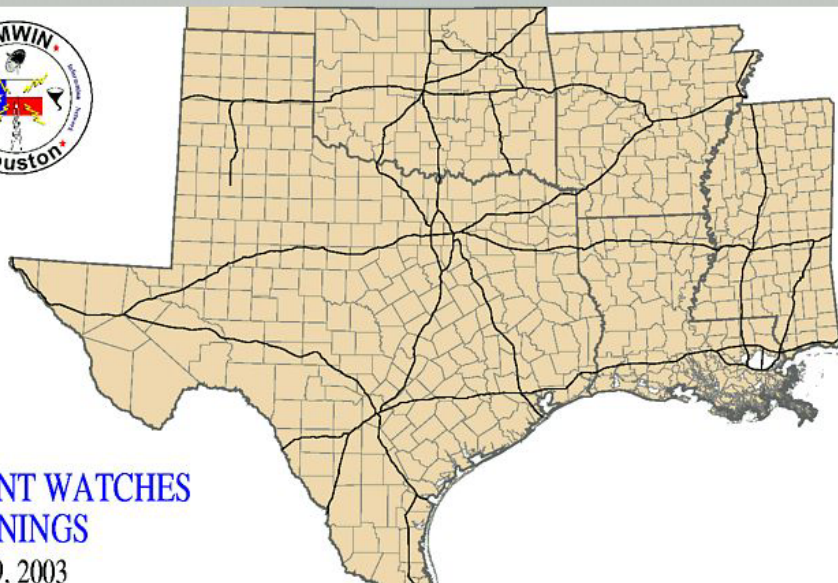
Authorization to Develop an Emergency Managers Weather Information Network



4:52:23 PM Wed, 29 Jan 2003 23:52:23 UTC

EMWIN Houston

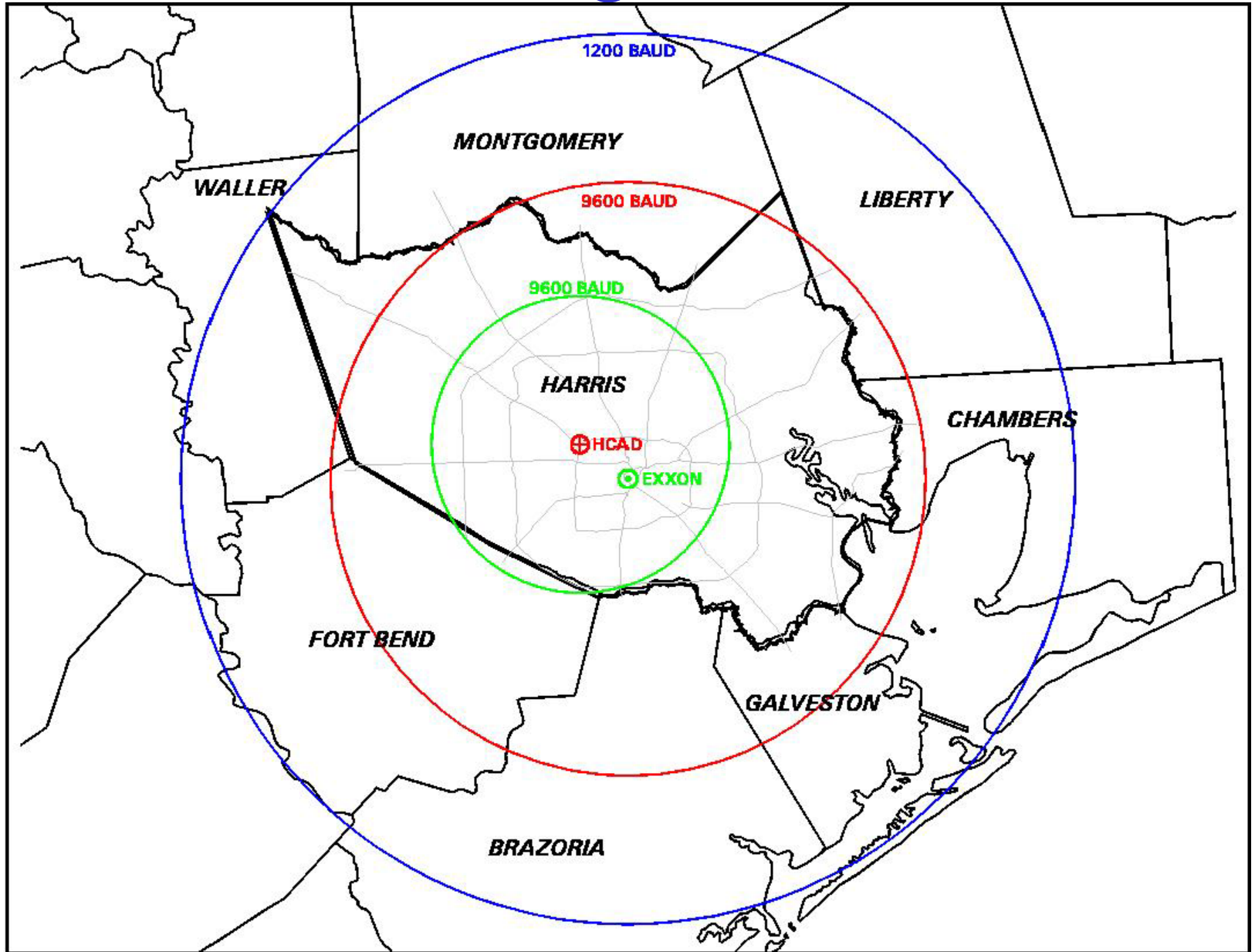
Broadcasting the NWS **E**mergency **M**anagers **W**eather **I**nformation **N**etwork in Southeast Texas



**CURRENT WATCHES
& WARNINGS**

January 29, 2003

Broadcast Coverage for Houston Area



EMWIN System Design Proposal

Prepared for the

Urban Drainage and Flood Control District

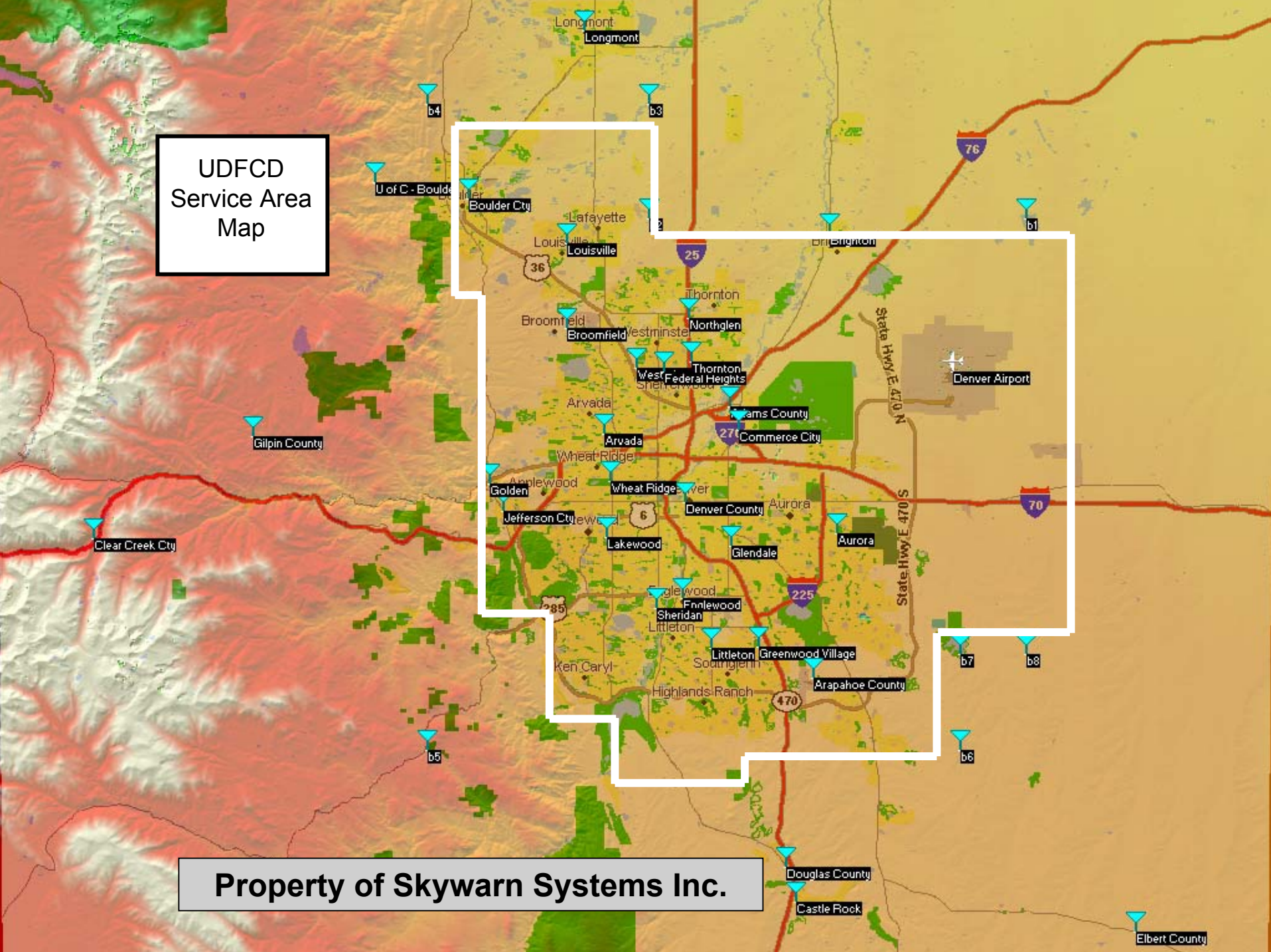


Prepared by

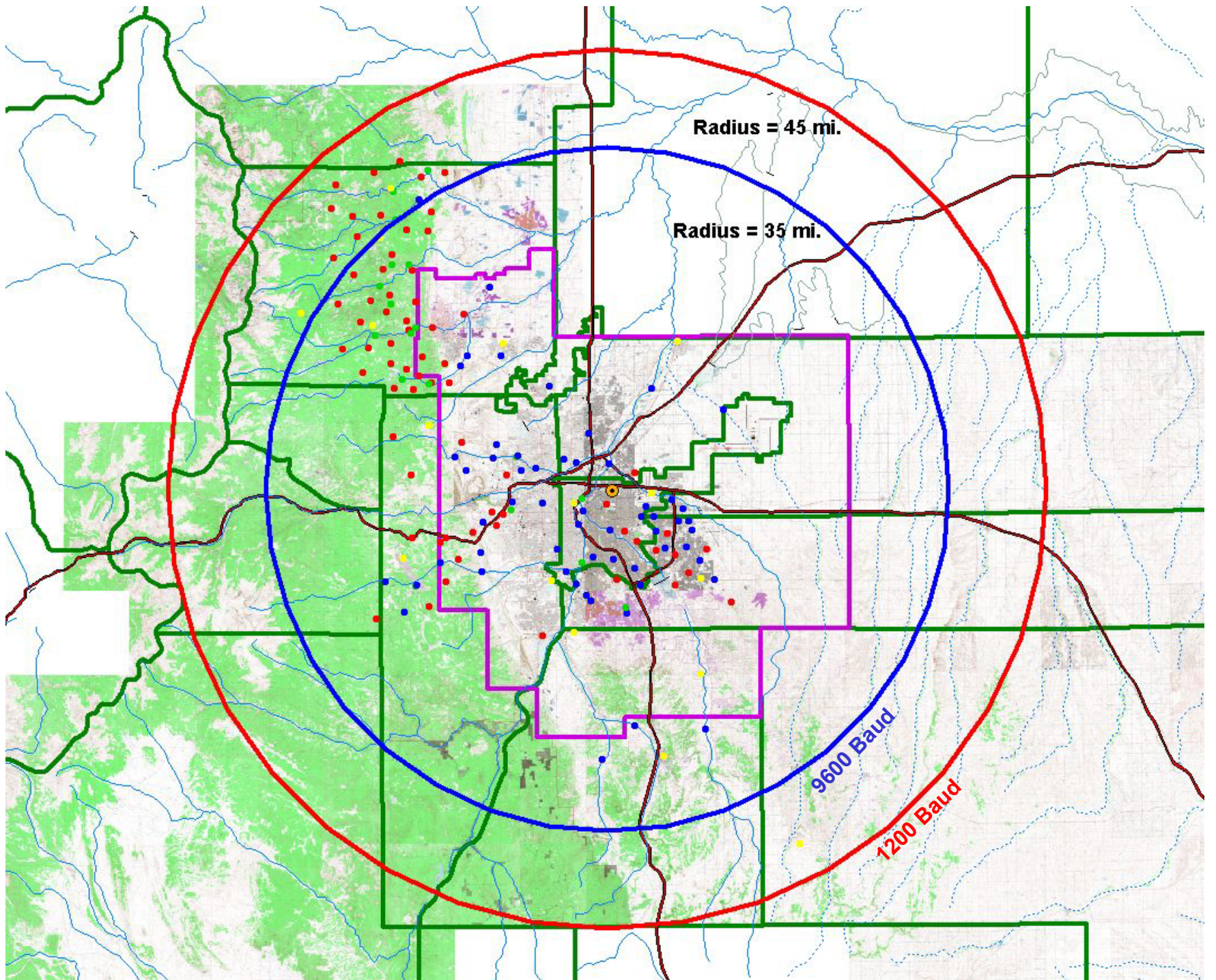


July, 2003

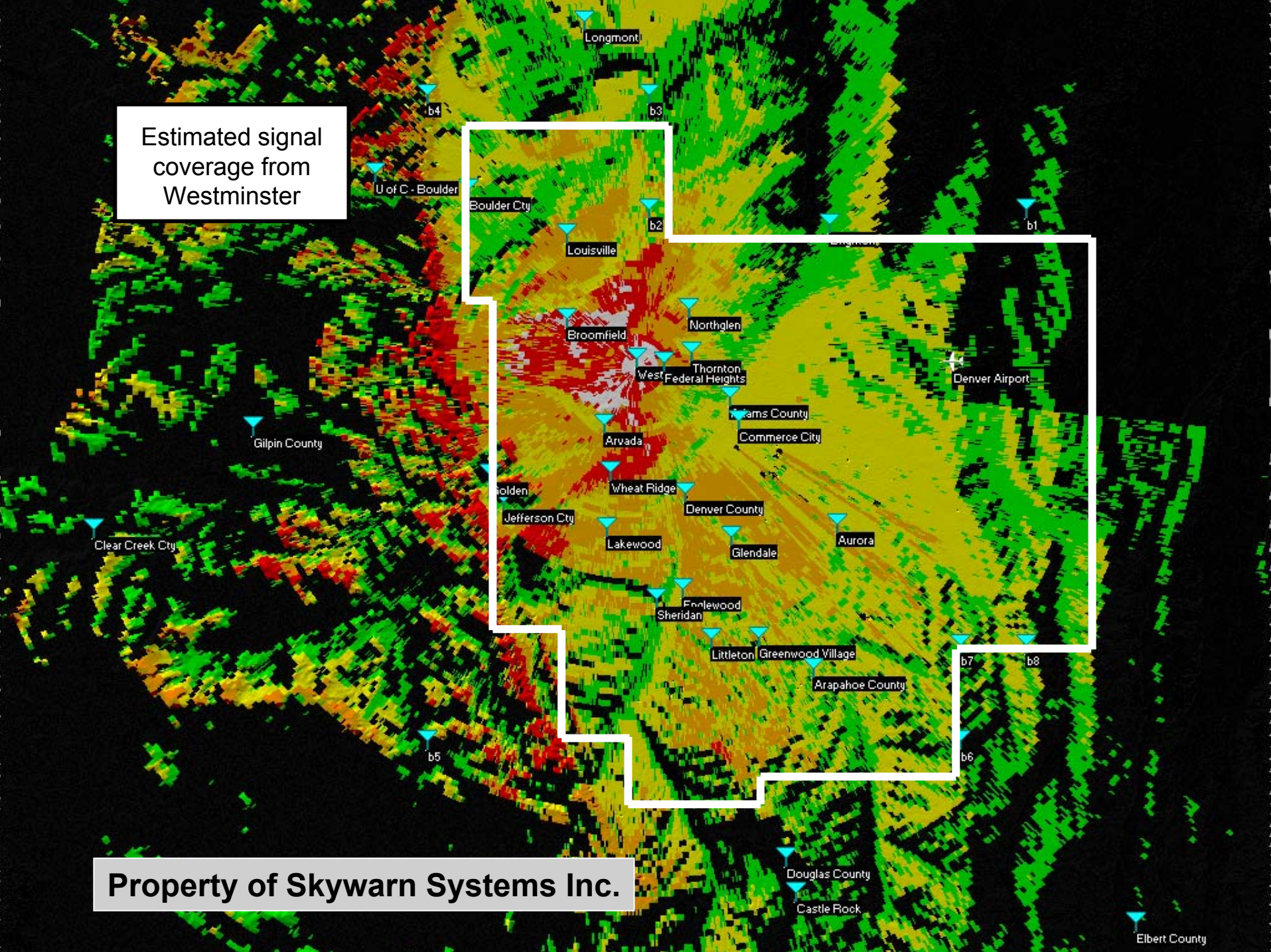
**UDFCD
Service Area
Map**



Property of Skywarn Systems Inc.



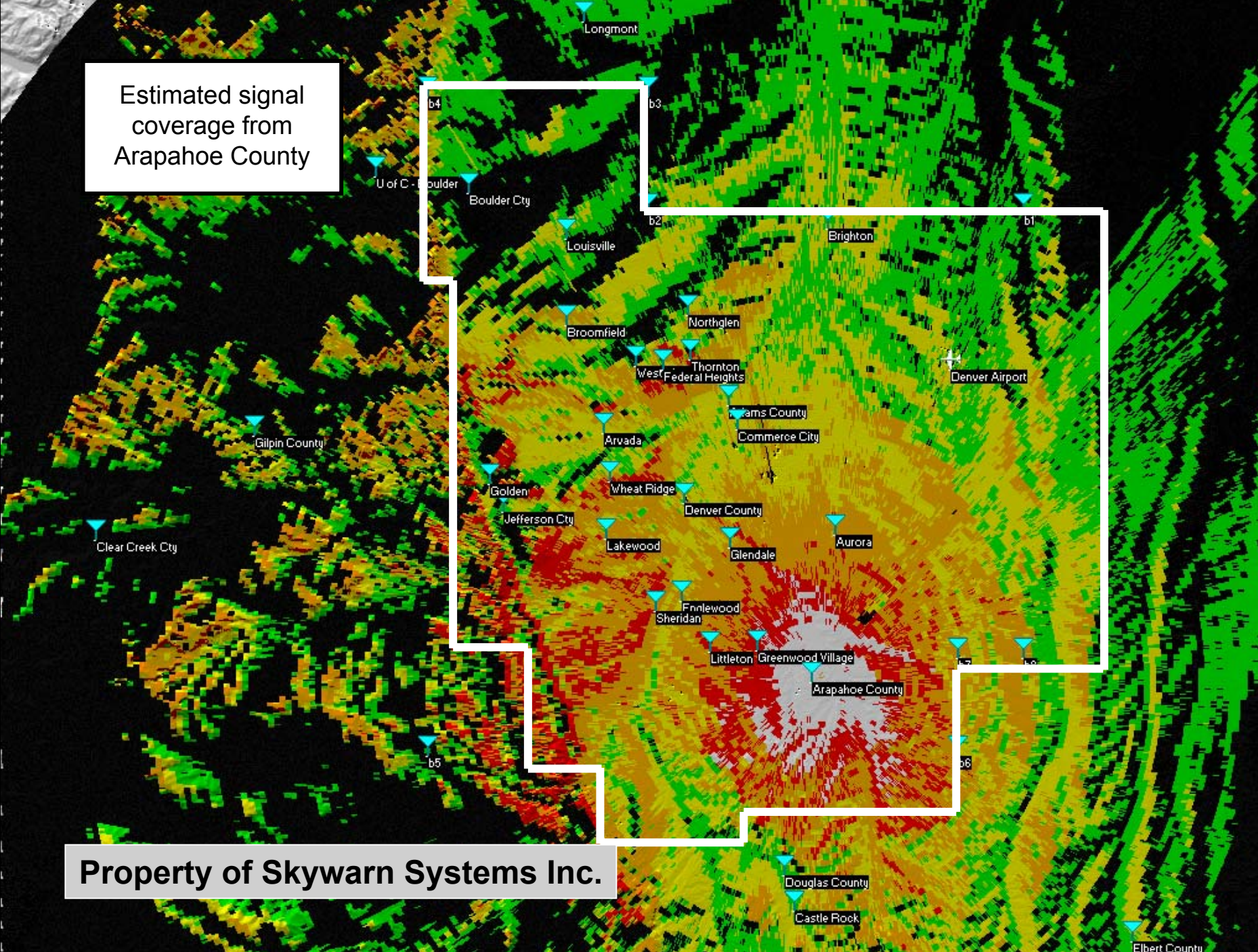
Estimated signal coverage from Westminster



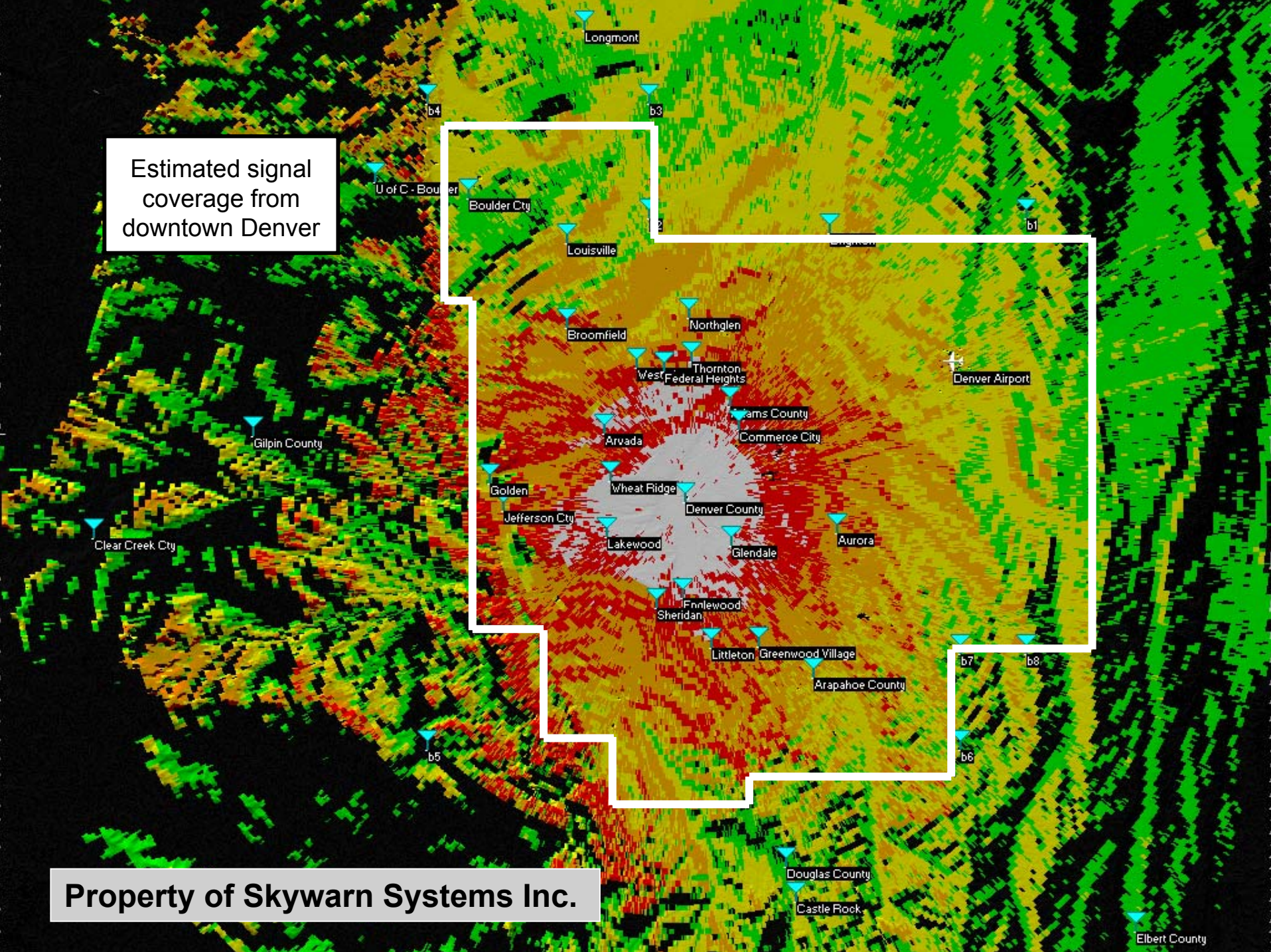
Property of Skywarn Systems Inc.

Elbert County

Estimated signal coverage from Arapahoe County



Estimated signal coverage from downtown Denver



Property of Skywarn Systems Inc.

**Appendix D
Preliminary Equipment List****

QTY	ITEM	UNIT PRICE	EXT. PRICE
1	100W VHF reconditioned transmitter	\$3,200.00	\$3,200.00
1	Transmit antenna 6dB gain	662.00	662.00
1	Bandpass cavity	600.00	600.00
1	single isolator 125 w	395.00	395.00
1	100 feet 7/8" feedline	754.00	754.00
2	3 foot flex jumpers	109.50	219.00
1	6 foot jumper	120.00	120.00
1	9600 bps modulator	345.00	345.00
	SUBTOTAL Transmitter		6,295.00
1	WX13 rx and 6' mesh dish	1,595.00	1,595.00
1	snow cover - 6 foot	159.00	159.00
1	non-penetrating roof mount	95.00	95.00
1	shipping	75.00	75.00
	SUBTOTAL Satellite Rcvr		1,924.00
2	Dell Computer Model 2350	1,250.00	2,500.00
1	DSL / Cable Modem	122.00	122.00
1	Ethernet Router	125.00	125.00
1	KVM Switch	99.00	99.00
2	Serial cables	14.00	28.00
3	Ethernet Cables - 6 ft	10.00	30.00
1	Ethernet cable - 25 ft.	18.00	18.00
1	RS-232 switchover unit	350.00	350.00
	SUBTOTAL Computer Equipt.		2,846.00
	TOTAL		\$11,065.00

Project Implementation—Phase I

Some questions to answer today:

1. Is this project a go? **YES!**
2. Who will host the downlink equipment?
(Westminster?, District, others options?)
3. Who will host the rebroadcast equipment?
(Westminster?, Xcel?, Quest?, Arapco?, others?)
4. Should District proceed with procuring equipment now?
5. How do we fund high-speed Internet connections?
(Qwest DSL?, Comcast Cable?, other partners?)
6. Who can help with installation?
(cost or in-kind services?)
7. What other equipment is needed and who will provide it?
8. Who will host the EMWIN-Denver website?
9. What is a reasonable time frame?

EMWIN-Houston System Review

EMWIN-Denver Progress Meeting

Westminster Public Safety Center

October 30, 2003

EMWIN Houston - Method of Dissemination

Graphics data
downloaded
from internet



EMWIN data
received from
GOES 8 or 10

GRAPHICS DOWNLOAD



Graphics data sent
to Retransmission
Engine

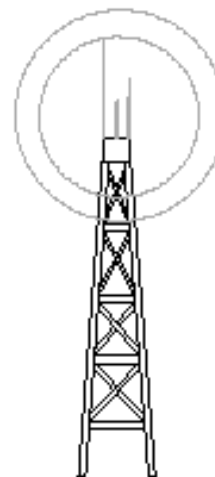


RETRANSMISSION ENGINE

Combined data
sent via phone
line downtown



EXXON
BLDG



TRANSMIT
ANTENNA
Retransmitted
at 150.435 MHz

Broadcast User Base in Houston

- Harris County Government Offices
- Galveston and Fort Bend County EOCs
- Area Cities
- Harris County Sheriff and Constable Patrol Vehicles
- Refineries and Manufacturing Plants
- Lifeflight Dispatcher
- Six Flags Astroworld
- Skywarn Volunteers
- PBS Stations
- Independent School Districts

Houston Control Point Data Connections

- Dedicated T-1 circuit for webserver, mailserver, and image acquisition
- Ethernet connection to 168.7125 transmit encoder on HCAD building
- Two-wire leased circuit to ExxonMobil for 1200 baud datastream
- Four-wire leased circuit for 9600 baud data

Houston Downlink Antennas



Houston Downlink Requirements

- 2, WX-13 GOES EMWIN Receivers
- 1, WX-13ATX Automatic Signal Loss Switchover Unit
- 1, WX-96ENC, 9600 Baud Encoder for Data Transmission
- 2, 6' Mesh Dishes /w Snow Covers
- Total Estimated Cost: \$3,962

Main Antennas at ExxonMobil



9600 Baud Equipment Cabinet

