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MAY - 6 1994

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

May 6, 1994

**EX PARTE**

Mr. William F. Caton  
Acting Secretary  
Federal Communications Commission  
1919 M Street, NW, Room 222  
Washington, DC 20554

RE: GEN Docket 90-314, Amendment of the Commission's Rules to Establish New Personal Communications Services

Dear Mr. Caton:

On Friday, May 6, 1994, on behalf of AirTouch Communications, Craig Farrill and I met with Rudolfo Baca, Legal Advisor to Commissioner Quello regarding the above-referenced proceeding. We discussed the above referenced proceeding and the attached materials were distributed.

Two copies of this notice were submitted to the Secretary of the FCC in accordance with Section 1.1206(a)(1) of the Commission's Rules.

Please stamp and return the provided copy to confirm your receipt. Please contact me at 202-293-4960 should you have any questions or require additional information concerning this matter.

Sincerely,

*Kathleen Abernathy*  
Kathleen Q. Abernathy

Attachment

cc: Rudolfo Baca

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FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY



# **AirTouch Communications Inc. Presentation to PCS Task Force**

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**Federal Communications Commission  
May 6, 1994**

**Craig Farrill  
Vice President  
Technology Planning & Development**

# Summary

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## **I AirTouch Communications**

Wireless company with global operations

## **II Market Strategy**

Lower costs and prices through digital technology and increased scale and scope

## **III PCS Proposal**

Minor changes to existing FCC order

## **IV Conclusions**



# I A. AirTouch Communications\*

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- **Headquarters:** San Francisco, California, U.S.A.
- **Principal Operations:** United States, European Community and the Pacific Rim
- **1993 Revenues:** \$988 Million U.S.
- **Cellular Subscribers:** 1.3 Million Worldwide
- **Paging Units in Service:** 1.4 Million Worldwide
- **Market Capitalization:** Approximately \$12 Billion U.S.

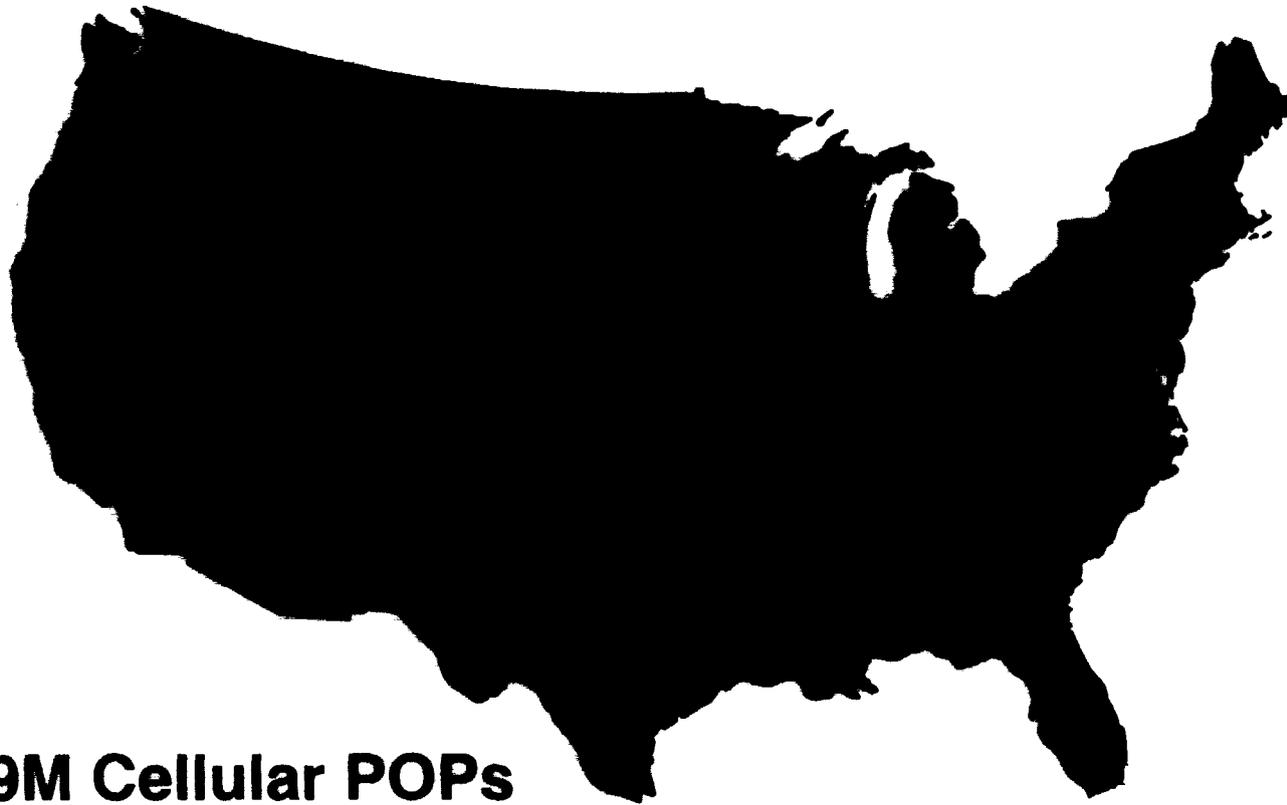
*\* 1993 Consolidated Results*



# I B. AirTouch Communications

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## *U.S. Wireless Businesses*



- **34.9M Cellular POPs**  
**1.1M Cellular Subs**
- ▲ **100 Paging Markets in 15 States**  
**1.3M Paging Units in Service**

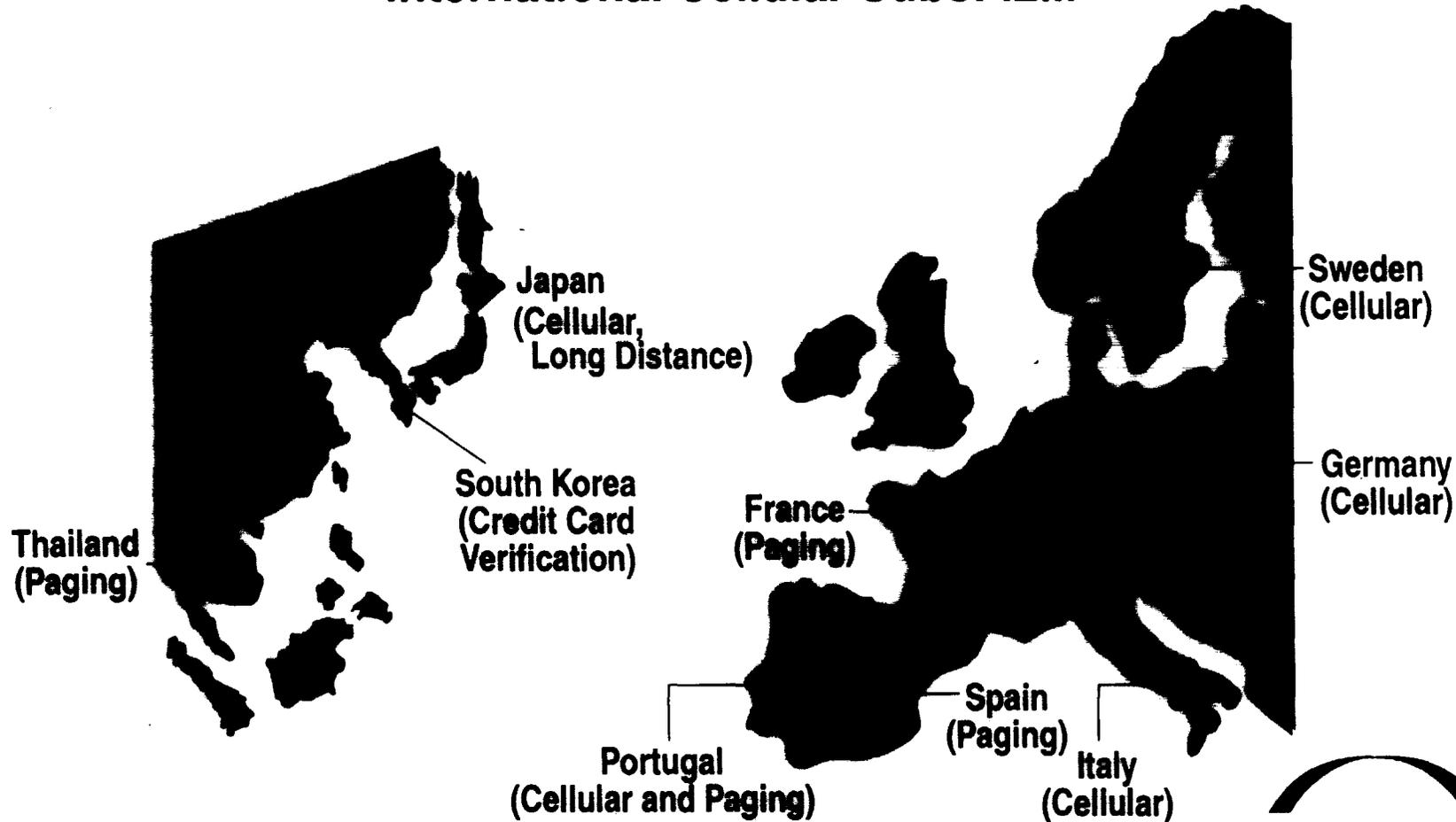


# I C. International Wireless Businesses

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International POPs: 46.3M

International Cellular Subs: .2M



# **I D. AirTouch Communications**

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## ***Commitment to PCS***

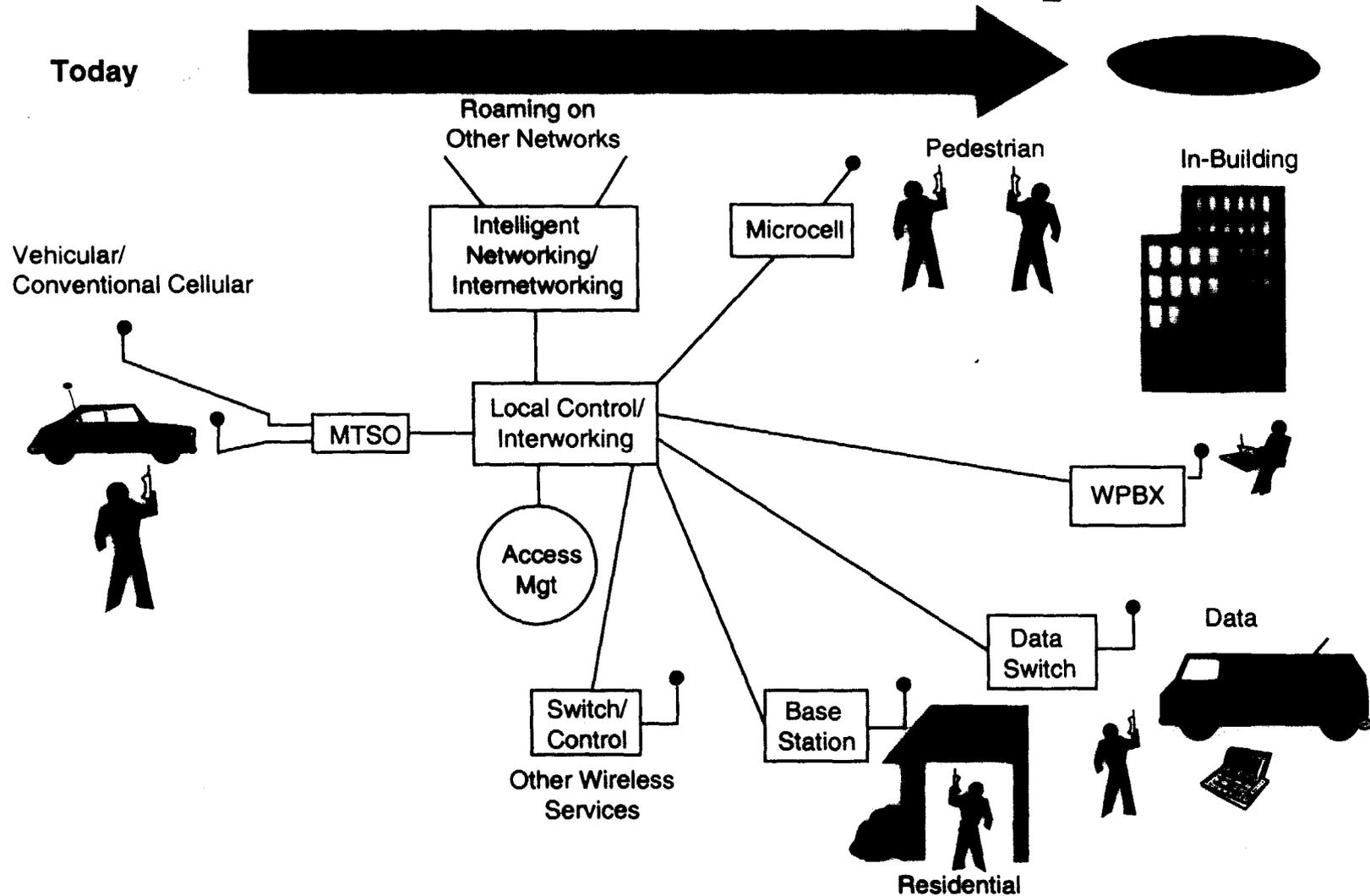
- **Pioneer Preference Applicant**
- **Leader in CDMA technology**
- **Sponsor of comprehensive PCS research**
  - Three and a half years of spectrum research, technology and market trials
  - \$43 million invested in PCS research
  - Ten trial systems built and operated
  - Large-scale PCS trial with >2000 customers
  - Through affiliate Telesis Technologies Lab (TTL)

AirTouch intends to be a PCS provider in newly licensed spectrum



## II A. Market Strategy:

### *AirTouch PCS Vision Includes Expanded Range of Services in PCS and Cellular Spectrum*

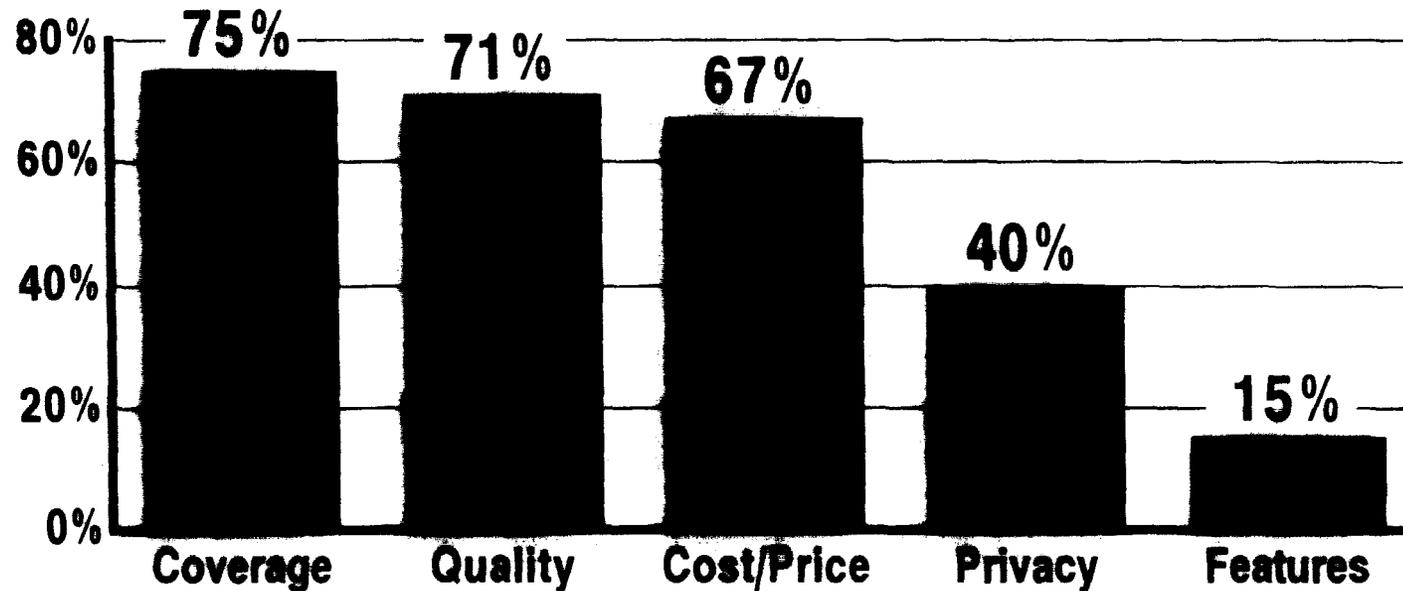


## II B. Market Strategy:

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### *Customer Requirements*

- What customers say is "extremely important" in buying wireless services:



Source: ATI Market Research



## II C. (1) Market Strategy:

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### *Meeting Cellular Customer Needs*

#### **Most Common Complaints**

#### **Solutions**

"I need good coverage everywhere I normally drive."



Improve coverage with microcells and digital radio technology

"I want calls that sound good and don't drop."



Optimizing cell performance, transition to digital

"My bill is too high."



Lower costs through digital technology, increased scale/scope of operations and process reengineering

"I need to be able to use my phone everywhere I travel outside my home market"



Simplified roaming, inter-carrier operational standards



## II C. (2) Market Strategy:

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### Most Common Complaints

### Solutions

"My battery dies after an hour."



Battery saver (digital cellular),  
long-life battery technology

"I want to know who's calling  
me before I answer."



Calling number display, call  
screening and short message  
services

"I have too many phone numbers."



One number for all subscribers

"I don't like to dial while driving."



Voice activated dialing



## **II D. Market Strategy:**

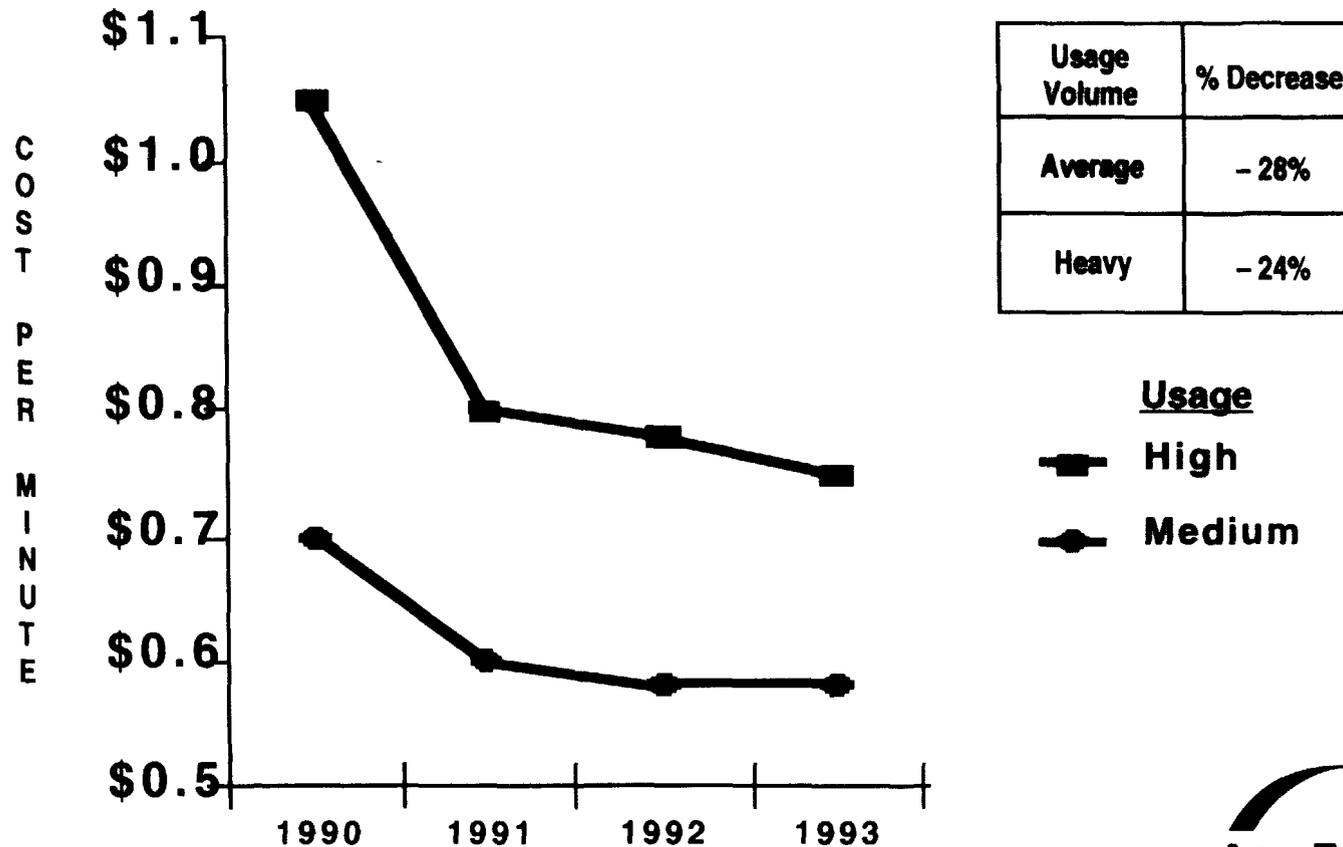
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### ***Lower Costs and Prices***

- **Scale and scope in domestic operations will provide decrease in cost per subscriber**
  - Seek PCS alliances
- **Deployment of digital will provide for capital and operating efficiencies**
  - PCS interoperability
- **Revenue per user will decline with increase in consumer penetration**
- **Competitors will drive prices down**
  - Includes numerous major national players including MCI/Nextel, AT&T McCaw, cable television, and telcos
- **Changes in distribution strategies and operational efficiencies will allow lower revenue users to be profitable**

## II E. Market Strategy: Lower Prices

***In a study of California cellular markets over the past 4 years, the average Cost per Minute (adjusted for CPI in CA) declined 28%***



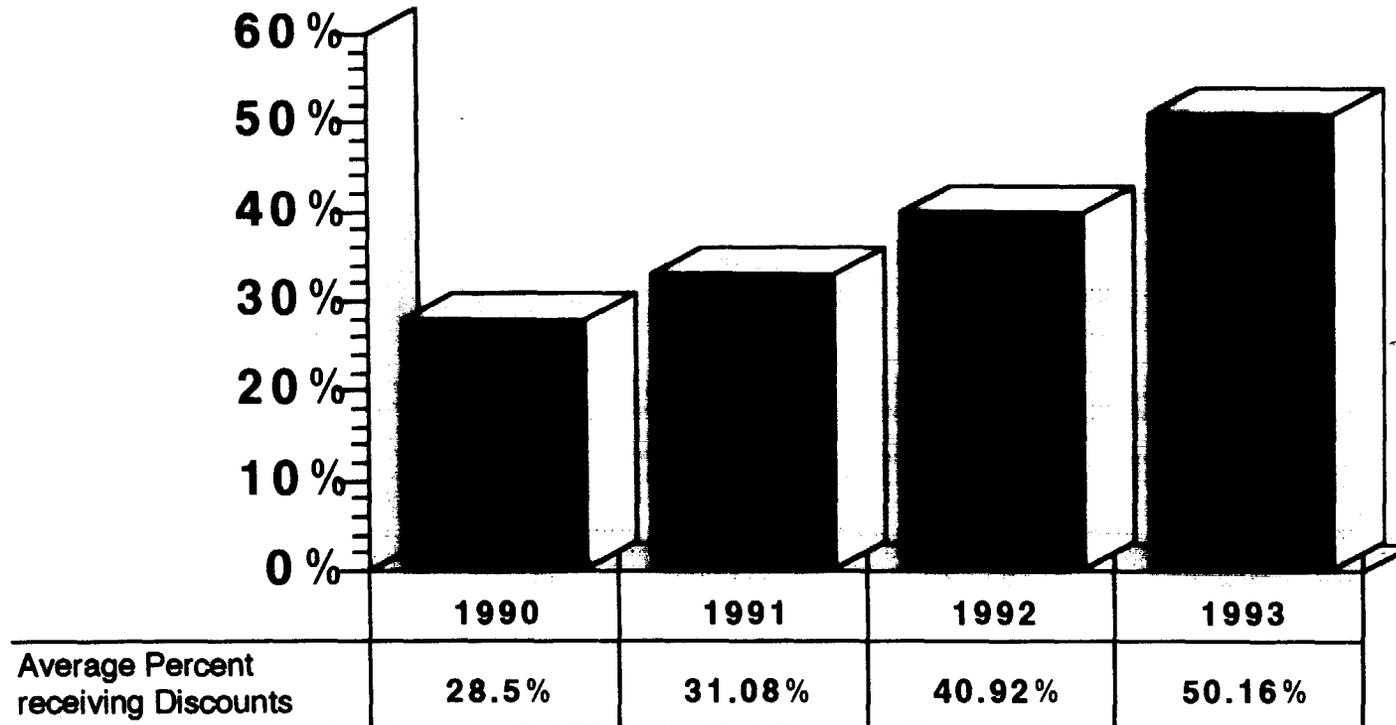
Source: Cellular Carriers Association of California



## II F. Market Strategy:

### *Expanded Pricing Options*

- In California, more than half of cellular customers receive discounts from tariff rates:



## **II G. Market Strategy:**

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### ***PCS Participation for Growth and Flexibility***

#### **■ Cellular Carriers require PCS spectrum in-region**

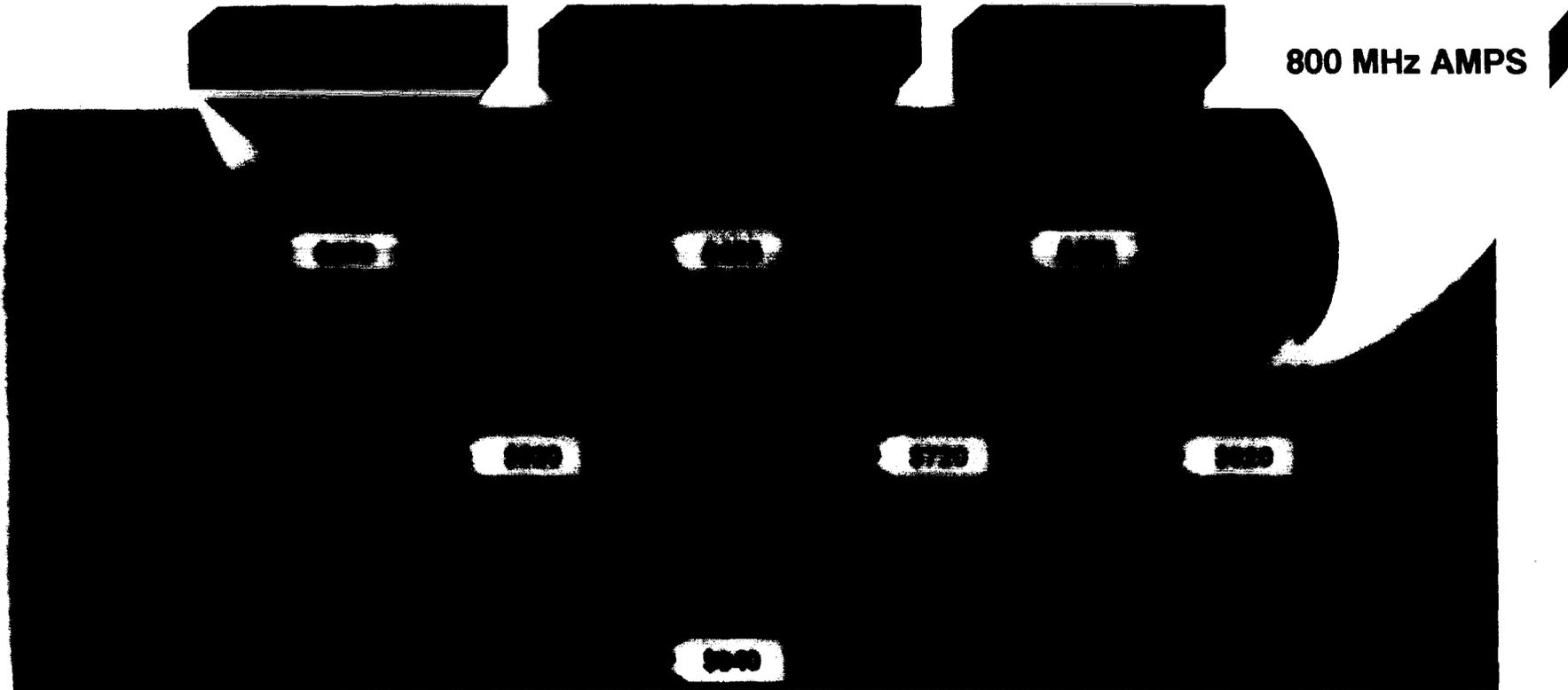
- Serve exploding demand; offer new services and technology
- Flexible transition to digital technology

#### **■ Benefits of cellular participation in PCS development**

- Ensure continued U.S. superiority in international telecommunications marketplace
- Operational and marketing experience: speed services to market
- Multi-tiered services from common network
- Scale economies and experience curve effects result in lower costs and promote broad deployment

## II H. Market Strategy:

### *Interoperability Drives Consumer Prices*



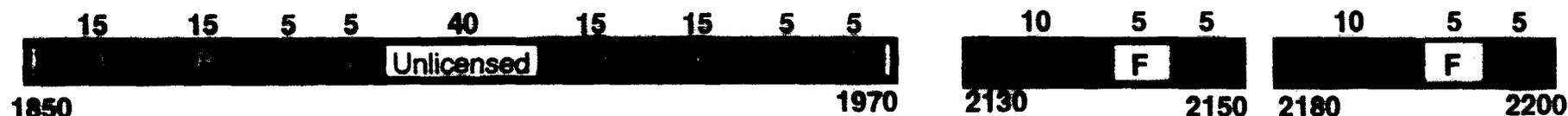
Example

GS-1311

Interoperability in each Frequency Band is  
key to the lowest price to the customer:  
"The Fewer Modes, the Lower the Price"

**AIRTOUCH™**  
Communications

# III A&B. PCS Proposal: Benefits



- **Minor change from September 1993 order**
  - Minimizes risk of further reconsideration, stays, or delays
- **Allows more efficient aggregations up to 40 MHz**
- **Enables cellular entities to bid for spectrum bands C through G**
  - Results in higher auction revenues for government (higher bids/band)
  - Improves interoperability with 800 MHz cellular
  - Increases diversity of customer-driven PCS services
  - Retains 10 MHz limit within region for cellular entities
- **Permits designated entities to aggregate up to 40 MHz, if set asides maintained**

## III C. PCS Proposal:

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### ***All BTAs***

#### ■ **Basic trading areas (BTA) have clear benefits**

- Speedier build-out, most responsive to customer needs
- Increased auction revenues from separately valued local markets
- More opportunities for new diverse entrants

#### ■ **Regional (MTA) and national licenses provide no benefits**

- MTAs not rationally related to mobile service markets
- Standardization and seamless roaming achieved through cellular-like alliances

#### ■ **Aggregation of small service areas enables services to respond to marketplace demand**

#### ■ **A combination of MTA and small serving areas impedes competitive opportunities**

- Licensees of smaller areas disadvantaged in marketplace

## **III D. PCS Proposal:**

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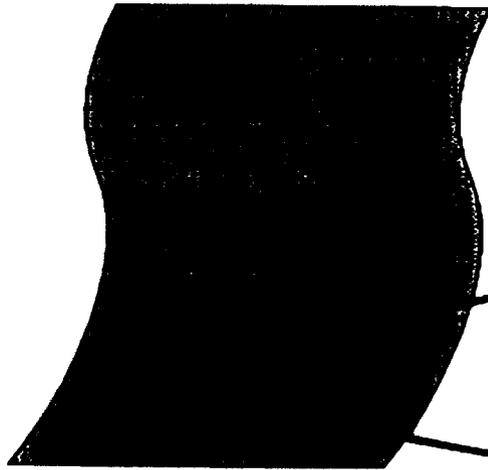
### ***Price Preferences Instead of Set Asides***

- **Price preferences encourage partnerships with designated entities, increasing their participation in PCS**
- **Price preferences avoid difficult issues related to unjust enrichment from sales in the after-market**
- **Price preferences increase government revenues**
- **Set asides create less valuable licenses, with difficulty in attracting capital**
- **Set asides reduce competition in bidding in all bands**



## III E. Minimum Compatibility Requirements

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**“.....PCS licensee agrees and is required to operate within the minimum compatibility requirements for the 1800 MHz / 2100 MHz PCS frequency bands established by the PCS industry.....”**

GS-1318

- **FCC licenses for PCS would include a minimum compatibility condition**
- **Requirements are established by the currently existing PCS industry standards bodies**
- **Minimum compatibility requirements should be established for the 1800 MHz frequency band and for the 2100 MHz frequency band**



## **III E. Minimum Compatibility Requirements**

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### ***Benefits Include***

- **Protection against interference between different PCS carriers in same or adjoining geographic area**
- **Ensures that emergency voice and data calls (E911) can be placed on any PCS network in a PCS frequency band using similar technologies**
- **Ensures that industry standards are uniform across the country and that subscriber equipment is compatible on similar networks**
- **Ensures flexibility within each frequency block, enabling a wide range of services to evolve**



# IV. Conclusions

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## ■ **AirTouch Communications is a future PCS operator**

- Low cost operations
- Wide geographic presence
- Innovative products and services

## ■ **BTA's are preferred**

- Building blocks approach
- Quicker build out of coverage area
- MTA's may limit rural coverage build out

## ■ **Price preferences instead of set asides**

- Encourages partnerships
- Does not lessen value of licenses

## ■ **Spectrum Allocation**

- 1800 MHz: 30,30,10,10
- 2100 MHz: 20,10,10

## ■ **Minimum Compatibility Requirements**

- PCS license requirement
- Determined by PCS industry
- Ensures interoperability and non-interference

