

## Appendix B

### List of California Cellular Carriers

<b>Company Name</b>	<b>Years of Service</b>	<b>Service Area</b>
Salinas Cell. Tel. Co.	5	Monterey County (Salinas MSA)
Santa Barbara Cell. (Cellular One)	6	Santa Barbara County (Santa Barbara MSA)
Santa Cruz Tel. Co.	5	Santa Cruz County (Santa Cruz MSA)
SLO Cell., Inc.	1	San Luis Obispo (RSA #5)
Stockton Cell.	6	Stanislaus County (Modesto MSA), San Joaquin County (Stockton MSA)
US West Cell. of CA Inc.	8	San Diego County (San Diego MSA)

**Appendix C**  
**Interlocking Ownership in California Cellular Markets**

## Appendix C

### Interlocking Ownership in California Cellular Markets

#### PacTel and McCaw Are

##### Partners In:

SF/San Jose/Oakland MSA  
Salinas MSA  
Santa Rosa MSA  
Vallejo MSA

##### Competitors In:

Modesto MSA  
Sacramento MSA  
Stockton MSA  
Redding MSA  
Yuba City MSA  
Colusa, Glenn, Tehama (RSA #8)  
Fresno MSA  
Visalia MSA  
Santa Barbara MSA  
Los Angeles MSA  
Oxnard MSA

#### PacTel and Contel Are

##### Partners In:

Modesto MSA  
Sacramento MSA  
Stockton MSA  
Redding MSA  
Yuba City MSA  
Chico MSA  
Colusa, Glenn, Tehama (RSA #8)  
Sierra, Nevada (RSA #10)  
Fresno MSA  
Bakersfield MSA  
Visalia MSA  
Kings County (RSA #12)  
Los Angeles MSA  
Oxnard MSA  
Santa Barbara MSA  
Del Norte, Humboldt, Siskiyou  
& Trinity (RSA #1)

##### Competitors In:

SF/San Jose/Oakland MSA  
Salinas MSA  
Santa Rosa MSA  
Vallejo MSA

## Appendix C

### Interlocking Ownership in California Cellular Markets

#### PacTel and Centennial Are

##### Partners In:

##### Competitors In:

Modesto MSA  
Sacramento MSA  
Stockton MSA  
Redding MSA  
Yuba City MSA  
Chico MSA  
Colusa, Glenn, Tehama (RSA #8)  
Sierra Nevada (RSA #10)  
Del Norte, Humboldt, Siskiyou  
& Trinity (RSA #1)

SF/San Jose/Oakland MSA  
Salinas MSA  
Santa Rosa MSA  
Vallejo MSA

#### PacTel and US Cell. Are

##### Partners In:

##### Competitors In:

Fresno MSA  
Bakersfield MSA  
Visalia MSA  
Kings County (RSA #12)  
Los Angeles MSA  
Oxnard MSA

Del Norte, Humboldt, Siskiyou,  
& Trinity (RSA #1)

#### Contel and US Cell. Are

##### Partners In:

##### Competitors In:

Fresno MSA  
Bakersfield MSA  
Visalia MSA  
Kings County (RSA #12)  
Los Angeles MSA  
Oxnard MSA

Del Norte, Humboldt, Siskiyou,  
& Trinity (RSA #1)

**Appendix D**  
**Market Concentration Indices**

## Appendix D

### Herfindahl-Hirshman Index for Wireless Services Providers

#### PCIA Forecasts

	1998		2003	
	Subscribers in Mill.	Percent	Subscribers in Mill.	Percent
Cellular	33.07	69%	52.3	54%
New PCS	8.55	18%	31.11	32%
ESMR/SMR	5.19	11%	8.95	9%
Satellite	1.32	3%	4.11	4%
<b>Total</b>	<b>48.13</b>	<b>100%</b>	<b>96.47</b>	<b>100%</b>

#### CASE I: Maximum Frequency Aggregation

##### Assumptions:

- (1) Each 10 MHz of frequency garners equal market share.
- (2) Incumbent cellular carriers will each manage to acquire 10 Mhz of frequency.
- (3) There are three viable PCS service providers per FCC's Modifications to PCS Band Plan.  
See June 9, 1994 News Report - FCC

Assumed market share for 10 MHz Add'nl Freq.	1%		3%		
	Percent	HHI	Percent	HHI	
Cellular 1	10	36%	1284	30%	888
Cellular 2	10	36%	1284	30%	888
PCS - A	40	6%	35	11%	116
PCS - B	30	4%	20	8%	65
PCS - C	30	4%	20	8%	65
ESMR		11%	116	9%	86
Satellite		3%	8	4%	18
<b>Total</b>	<b>120</b>	<b>100%</b>	<b>2767</b>	<b>100%</b>	<b>2125</b>

## Appendix D

### Herfindahl-Hirshman Index for Wireless Services Providers

#### PCIA Forecasts

	1998		2003	
	Subscribers in Mill.	Percent	Subscribers in Mill.	Percent
Cellular	33.07	69%	52.3	54%
New PCS	8.55	18%	31.11	32%
ESMR/SMR	5.19	11%	8.95	9%
Satellite	1.32	3%	4.11	4%
<b>Total</b>	<b>48.13</b>	<b>100%</b>	<b>0</b>	<b>96.47</b>

#### CASE II: Minimum Frequency Aggregation

##### Assumptions:

- (1) Each 10 MHz of frequency gamers equal market share.
- (2) Incumbent cellular carriers do not acquire any additional spectrum.
- (3) There are six viable PCS service providers per FCC's Modifications to PCS Band Plan. See June 9, 1994 News Report - FCC
- (4) There are three viable ESMR/SMRs.

	Assumed market share for 10 MHz Add'l Freq.	1%		3%	
		Percent	HHI	Percent	HHI
Cellular 1		34%	1180	27%	735
Cellular 2		34%	1180	27%	735
PCS - A	30	4%	20	8%	65
PCS - B	30	4%	20	8%	65
PCS - C	30	4%	20	8%	65
PCS - D	10	1%	2	3%	7
PCS - E	10	1%	2	3%	7
PCS - F	10	1%	2	3%	7
ESMR 1		4%	13	3%	10
ESMR 2		4%	13	3%	10
ESMR 3		4%	13	3%	10
Satellite		3%	8	4%	18
<b>Total</b>	<b>120</b>	<b>100%</b>	<b>2473</b>	<b>100%</b>	<b>1733</b>

**Appendix E**  
**Market Share Data**

**Redacted**

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**Appendix E**

**Average Reseller Market Share**

<b>Year</b>	<b>LA</b>	<b>Bay Area</b>	<b>Average</b>	<b>Sacramento</b>	<b>San Diego</b>	<b>Average</b>	<b>Santa Barbara</b>
<b>1989</b>							
<b>1990</b>							
<b>1991</b>							
<b>1992</b>							
<b>1993</b>							

Redacted

## Appendix E

### Market Shares Within Los Angeles MSA

	Retail:		Resellers:		Including Wholesale Customers	
	LACTC	LASMSA	LACTC	LASMSA	LACTC	LASMSA
1989						
1990						
1991						
1992						
1993						

### Market Shares Within S.F. Bay Area MSA

	Retail:		Resellers:		Including Wholesale Customers	
	BACTC	GTE Mobilnet LP	BACTC	GTE Mobilnet LP	BACTC	GTE Mobilnet LP
1989						
1990						
1991						
1992						
1993						

### Market Shares Within San Diego MSA

	Retail:		Resellers:		Including Wholesale Customers	
	US West	AirTouch	US West	AirTouch	US West	AirTouch
1989						
1990						
1991						
1992						
1993						

Redacted

## Appendix E

### Market Shares Within Sacramento MSA

	Retail:		Resellers:		Including Wholesale Customers	
	SCTC	SVLP			SCTC	SVLP
1989						
1990						
1991						
1992						
1993						

### Market Shares Within Fresno MSA

	Retail:		Resellers:		Including Wholesale Customers	
	FCTC	FMSA LP			FCTC	FMSA LP
1989						
1990						
1991						
1992						
1993						

### Market Shares Within Santa Barbara MSA

	Retail:		Resellers:		Including Wholesale Customers	
	SBCS	GTE LP			SBCS	GTE LP
1989						
1990						
1991						
1992						
1993						

**Redacted**

**Appendix E**

**Market Shares Within  
RSA 2**

**Retail:**  
Cal. RSA #2    Modoc RSA LP

**Resellers:**

**Including Wholesale  
Customers**

Cal. RSA #2    Modoc RSA LP

1989  
1990  
1991  
1992  
1993

**Market Shares Within  
RSA 7**

**Retail:**  
Century EC    Contel Cell.

**Resellers:**

**Including Wholesale  
Customers**

Century EC    Contel Cell.

1989  
1990  
1991  
1992  
1993

**Appendix F**  
**After-Tax Rates of Return**

## Appendix F

### After-Tax Rates of Return \*

Major Markets	1989	1990	1991	1992	1993
Los Angeles Cellular Tel. Co.	71.4%	58.5%	52.4%	51.6%	47.0%
Los Angeles SMSA LP	49.4%	43.4%	34.8%	28.0%	33.8%
Bay Area Cellular Tel. Co.	43.7%	48.1%	43.5%	31.1%	49.5%
GTE Mobilnet CA LP	22.8%	15.8%	16.4%	20.0%	18.1%
US WEST Cellular of Cal. **	5.2%	9.0%	-4.3%	-7.4%	2.9%
AirTouch - San Diego	33.0%	32.9%	23.9%	21.4%	30.4%
Average Return	37.6%	34.6%	27.8%	24.1%	30.3%
Medium-size markets					
Sacramento Cellular Tel. Co.	-2.9%	21.4%	22.1%	22.2%	17.4%
Sacramento Valley LP	17.6%	10.1%	2.8%	0.8%	6.4%
Fresno Cellular Tel. Co.	-19.6%	11.9%	24.0%	31.3%	25.7%
Fresno MSA Ltd. Partnership	missing	8.0%	7.6%	11.2%	10.7%
Santa Barbara Cell. Sys., Ltd.	-39.4%	-10.4%	-9.7%	5.0%	10.5%
GTE Mobilnet Santa Barb. LP	2.6%	2.0%	8.5%	6.7%	7.5%
Average Return	-8.4%	7.2%	9.2%	12.8%	13.0%
Rural Markets					
Cal. RSA #2, Inc.	missing	missing	-49.0%	-55.0%	missing
Modoc RSA LP	missing	-15.0%	-24.4%	-19.2%	-6.2%
Century El Centro Cellular	NA	NA	NA	NA	NA
Contel Cellular Inc. (RSA 7)	missing	-32.2%	-19.5%	6.0%	35.4%
Average Return	NA	-23.6%	-31.0%	-22.8%	14.6%

\* Ratemaking rates of return in California are generally based on a ratebase that excludes plant held for future use and construction work in progress, and would therefore result in higher reported ratemaking rates of return than those shown above.

\*\* U.S. West's losses in 1991 and 1992 can be attributed to extraordinarily high administrative and general expenses. In these two years, the company reported \$15.3 and \$15.4 million, respectively, in A&G expenses, an unexplained threefold increase from its \$5.1 million in A&G expenses in 1989.

Redacted Version -- Revised 1/27/95 per FCC Order

**Appendix G**  
**Trends in Cellular Subscriber Units and Revenues**

**Appendix G**

**Trends in Cellular Subscriber Units and Revenues**

	1989	1990	1991	1992	1993
<b>Los Angeles Cellular Tel. Co.</b>					
Total Subscriber Units					
Subscriber Growth Rate	--	55%	31%	29%	35%
Sales Revenue	\$182,673,760	\$273,798,202	\$342,479,354	\$407,312,447	\$448,836,017
Revenue Growth Rate	--	50%	25%	19%	10%
Rate of Return	71.4%	58.5%	52.4%	51.6%	47.0%
<b>Los Angeles SMSA LP</b>					
Total Subscriber Units					
Subscriber Growth Rate	--	23%	24%	30%	37%
Sales Revenue	\$202,989,824	\$260,636,104	\$298,828,247	\$347,817,121	\$433,820,079
Revenue Growth Rate	--	28%	15%	16%	25%
Rate of Return	49.4%	43.4%	34.8%	28.0%	33.8%
<b>Bay Area Cellular Tel. Co.</b>					
Total Subscriber Units					
Subscriber Growth Rate	--	37%	33%	26%	34%
Sales Revenue	\$72,342,000	\$98,907,000	\$122,831,000	\$152,582,000	\$188,627,000
Revenue Growth Rate	--	37%	24%	24%	24%
Rate of Return	43.7%	48.1%	43.5%	31.1%	49.5%
<b>GTE Mobilnet of Calif. LP</b>					
Total Subscriber Units					
Subscriber Growth Rate	--	43%	27%	18%	31%
Sales Revenue	\$63,032,788	\$100,291,776	\$121,589,250	\$130,969,324	\$150,838,376
Revenue Growth Rate	--	59%	21%	8%	15%
Rate of Return	22.8%	15.8%	16.4%	20.0%	18.1%

**Appendix G**

**Trends in Cellular Subscriber Units and Revenues**

	1989	1990	1991	1992	1993
<b>US WEST Cellular of Cal.</b>					
Total Subscriber Units					
Subscriber Growth Rate					
Sales Revenue	\$44,158,550	\$33,230,894	\$36,103,918	\$38,889,589	\$47,819,119
Revenue Growth Rate	--	-25%	9%	8%	23%
Rate of Return	5.2%	9.0%	-4.3%	-7.4%	2.9%
<b>AirTouch -- San Diego</b>					
Total Subscriber Units					
Subscriber Growth Rate	--	39%	28%	29%	35%
Sales Revenue	\$28,112,420	\$39,066,633	\$44,893,601	\$53,188,256	\$65,588,899
Revenue Growth Rate	--	39%	15%	18%	23%
Rate of Return	33.0%	32.9%	23.9%	21.4%	30.4%
<b>Sacramento Cellular Tel. Co.</b>					
Total Subscriber Units					
Subscriber Growth Rate	--	71%	50%	27%	36%
Sales Revenue	\$19,090,440	\$33,044,776	\$42,554,973	\$50,381,631	\$60,565,457
Revenue Growth Rate	--	73%	29%	18%	20%
Rate of Return	-2.9%	21.4%	22.1%	22.2%	17.4%
<b>Sacramento Valley LP</b>					
Total Subscriber Units					
Subscriber Growth Rate	--	62%	33%	39%	37%
Sales Revenue	\$15,327,734	\$28,992,957	\$39,411,799	\$50,584,267	\$62,121,226
Revenue Growth Rate	--	89%	36%	28%	23%
Rate of Return	17.6%	10.1%	2.8%	0.8%	6.4%

## Appendix G

### Trends in Cellular Subscriber Units and Revenues

	1989	1990	1991	1992	1993
<b>Fresno Cellular Tel. Co.</b>					
Total Subscriber Units					
Subscriber Growth Rate	--	97%	48%	43%	38%
Sales Revenue	\$5,885,800	\$12,950,009	\$19,941,708	\$27,218,695	\$32,385,611
Revenue Growth Rate	--	120%	54%	36%	19%
Rate of Return	-19.6%	11.9%	24.0%	31.3%	25.7%
<b>Fresno MSA Ltd. Partnership</b>					
Total Subscriber Units					
Subscriber Growth Rate	--	72%	58%	87%	93%
Sales Revenue	\$0	\$19,849,770	\$23,882,227	\$25,117,520	\$30,379,722
Revenue Growth Rate	--	--	20%	5%	21%
Rate of Return	--	8.0%	7.6%	11.2%	10.7%
<b>Santa Barbara Cellular Systems, Ltd.</b>					
Total Subscriber Units					
Subscriber Growth Rate	--	58%	84%	45%	34%
Sales Revenue	\$1,739,030	\$3,386,164	\$5,269,574	\$7,460,611	\$10,183,931
Revenue Growth Rate	--	95%	56%	42%	37%
Rate of Return	-39.4%	-10.4%	-9.7%	5.0%	10.5%
<b>GTE Mobilnet of Santa Barbara</b>					
Total Subscriber Units					
Subscriber Growth Rate	--	115%	3%	28%	35%
Sales Revenue	\$3,640,992	\$6,329,360	\$10,268,172	\$4,874,453	\$12,181,279
Revenue Growth Rate	--	74%	62%	-53%	150%
Rate of Return	2.6%	2.0%	8.5%	6.7%	7.5%

**Appendix G**

**Trends in Cellular Subscriber Units and Revenues**

	1989	1990	1991	1992	1993
<b>Cal. RSA #2, Inc.</b>					
Total Subscriber Units					
Subscriber Growth Rate					
Sales Revenue	\$0	\$0	\$0	\$138,319	missing
Revenue Growth Rate	--	--	--	--	-100%
Rate of Return	--	--	-49.0%	-55.0%	missing
<b>Modoc RSA LP</b>					
Total Subscriber Units					
Subscriber Growth Rate	--	--	151%	42%	169%
Sales Revenue	\$0	\$9,736	\$131,435	\$180,140	\$369,009
Revenue Growth Rate	--	--	1250%	37%	105%
Rate of Return	--	-15.0%	-24.4%	-19.2%	-6.2%
<b>Century El Centro Cellular</b>					
Total Subscriber Units					
Subscriber Growth Rate					
Sales Revenue	\$0	\$0	NA	NA	NA
Revenue Growth Rate	--	--	NA	NA	NA
Rate of Return	--	--	NA	NA	NA
<b>Contel Cellular Inc. (RSA 7)</b>					
Total Subscriber Units					
Subscriber Growth Rate	--	--	1557%	85%	32%
Sales Revenue	\$0	\$0	\$1,068,062	\$1,007,504	\$2,201,687
Revenue Growth Rate	--	--	--	-6%	119%
Rate of Return	--	-32.2%	-19.5%	6.0%	35.4%

Redacted Version -- Revised 1/27/95 per FCC Order

**Appendix H**  
**Financial Data Per Subscriber Unit**

**Appendix H**

**Financial Data Per Subscriber Unit**

**Los Angeles Cellular Tel. Co.**

	Revenue	Operatng. Exp	Plant	Operatng. Inc.	Subscriber Growth
1989	\$1,329	\$540	\$751	\$789	--
1990	1,285	527	896	758	55%
1991	1,231	542	957	689	31%
1992	1,133	558	877	575	29%
1993	927	523	737	404	35%

**Los Angeles SMSA LP**

	Revenue	Operatng. Exp	Plant	Operatng. Inc.	Subscriber Growth
1989	1,296	627	993	669	--
1990	1,353	674	1,088	679	23%
1991	1,248	719	1,159	529	24%
1992	1,117	754	1,087	362	30%
1993	1,015	657	1,022	358	37%

**Bay Area Cellular Tel. Co.**

	Revenue	Operatng. Exp	Plant	Operatng. Inc.	Subscriber Growth
1989	1,128	591	950	536	--
1990	1,124	553	965	572	37%
1991	1,052	563	963	488	33%
1992	1,039	543	956	496	26%
1993	961	541	851	419	34%

**GTE Mobilnet CA LP**

	Revenue	Operatng. Exp	Plant	Operatng. Inc.	Subscriber Growth
1989	1,117	725	1,263	392	--
1990	1,242	950	1,357	291	43%
1991	1,186	867	1,476	318	27%
1992	1,086	702	1,392	384	18%
1993	957	596	1,416	360	31%