



# Appendix K – NRSC Industry Subjective Evaluation

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<b>DAB Subcommittee Evaluation of the iBiquity Digital Corporation IBOC System  Part 1 – FM IBOC</b>		



November 7, 2001

To: NRSC Evaluation Working Group

From: iBiquity Digital Corporation

Re: FM Industry Evaluation

Attached to this memorandum are the results from the NRSC FM Industry Evaluation conducted September 5-7, 2001 at the NAB Radio Show in New Orleans. Sixty-one participants were trained, screened and tested. Of these 61 participants, 3 were excluded for failing the screening test, and 2 were excluded for not finishing the experiment. Thus, results from 56 participants are reported in the attached NRSC Industry Evaluation Performance and Compatibility Tables. Fifty-five males and 1 female participated. Table 1 is a breakdown of participants by age.

Table 1: Breakdown of participants by age

<b>18-29</b>	1
<b>30-39</b>	14
<b>40-49</b>	27
<b>50-59</b>	17
<b>60+</b>	2

Jennifer Devlin and Ellyn Sheffield of iBiquity conducted all training, screening and testing. All methodological practices used at Dynastat during the FM Test Program were followed as closely as possible, including method of presentation, analysis of screening results, and preparation of results (i.e., tables with confidence intervals).

A subset of the sound samples evaluated at Dynastat in the overall subjective evaluation program was compiled for the Industry Evaluation. Samples were taken from the field performance, field compatibility, lab performance and lab compatibility portions of the test program. No SCA audio samples were included. Samples were divided into three experiments, leveled and presented to participants over Sennheiser headphones. Data from all experiments were combined for analysis after testing was completed.

**FIELD PERFORMANCE WITH 1st ADJACENT INTERFERENCE  
(INDUSTRY EVALUATION)**

Receiver	D/U	Data	Classical			Country/Rock			Speech/VoiceOver		
			IBOC	Delphi	Pioneer	IBOC	Delphi	Pioneer	IBOC	Delphi	Pioneer
<b>WETA</b>	+23	MOS	4.6	3.9	3.8						
		Confid Interval (+/-)	0.15	0.26	0.22						
	+22	MOS						4.6	4.1	3.9	
		Confid Interval (+/-)						0.62	0.72	0.85	
	+20	MOS	4.6	2.9	3.0						
		Confid Interval (+/-)	0.22	0.28	0.30						
	+19	MOS						3.2	1.9	1.7	
		Confid Interval (+/-)						0.41	0.28	0.30	
	+14	MOS	4.6	2.4	2.6						
		Confid Interval (+/-)	0.31	0.36	0.36						
	+9	MOS						4.8	2.9	3.0	
		Confid Interval (+/-)						0.28	0.35	0.36	
<b>WNEW</b>	+16	MOS						3.8	1.5	1.1	
		Confid Interval (+/-)						0.34	0.28	0.10	
	+13	MOS						3.3	1.6	1.3	
		Confid Interval (+/-)						0.49	0.27	0.21	
<b>WPOC</b>	+19	MOS						4.0	4.1	3.9	
		Confid Interval (+/-)						0.42	0.25	0.43	
	+16	MOS				4.9	4.5	4.5			
		Confid Interval (+/-)				0.13	0.26	0.26			
	+13	MOS				4.4	3.9	3.7			
		Confid Interval (+/-)				0.29	0.31	0.39			

### FIELD PERFORMANCE WITH 2nd ADJACENT INTERFERENCE (INDUSTRY EVALUTAION)

Station	Lower/ Upper	D/U dB	Data	Classical			Country/Rock			Speech/VoiceOver		
				IBOC	Delphi	Pioneer	IBOC	Delphi	Pioneer	IBOC	Delphi	Pioneer
<b>KLLC</b>	Upper	-28	MOS				2.8	2.5	1.5			
			CI (+/-)				0.61	0.25	0.31			
		-23	MOS				2.9	2.3	2.1			
			CI (+/-)				0.49	0.3	0.28			
		-21	MOS				3.0	2.2	2.0			
			CI (+/-)				0.59	0.36	0.39			
-19	MOS								3.0	1.7	1.4	
	CI (+/-)								0.56	0.25	0.22	
-18	MOS				3.1	2.1	1.8					
	CI (+/-)				0.38	0.33	0.28					
-17	MOS								2.6	1.6	1.4	
	CI (+/-)								0.47	0.31	0.25	
<b>WD2XAB</b>	Lower	-2	MOS	4.5	2.4	2.1						
			CI (+/-)	0.4	0.36	0.5						
<b>WNEW</b>	Lower	-18	MOS							3.4	3.0	3.1
			CI (+/-)							0.26	0.31	0.37

**ADJACENT INTERFERERS (INDUSTRY EVALUATION)**

Upper	Lower	Data	Rock			Voice Over		
			IBOC	Delphi	Pioneer	IBOC	Delphi	Pioneer
-31	-25	MOS	3.8	3.0	3.3			
		Confid Interval (+/-)	0.52	0.40	0.55			
-26	-33	MOS	4.0	3.3	3.8			
		Confid Interval (+/-)	0.42	0.39	0.47			
-24	-22	MOS				4.1	3.7	3.6
		Confid Interval (+/-)				0.26	0.29	0.27
-24	-12	MOS	3.9	2.2	1.9			
		Confid Interval (+/-)	0.40	0.32	0.38			
-18	-15	MOS	4.1	3.4	3.7			
		Confid Interval (+/-)	0.34	0.35	0.37			
-15	-33	MOS	3.6	2.9	2.6			
		Confid Interval (+/-)	0.27	0.28	0.31			
-14	-11	MOS				3.6	2.9	2.8
		Confid Interval (+/-)				0.37	0.33	0.42

## FIELD PERFORMANCE AT BLEND (INDUSTRY EVALUATION)

	Classical			Rock			Speech		
	IBOC	Delphi	Pioneer	IBOC	Delphi	Pioneer	IBOC	Delphi	Pioneer
MOS	2.9	2.3	2.2	3.7	3.2	3.6	2.5	2.2	2.1
Confid Interval (+/-)	0.21	0.20	0.21	0.22	0.28	0.25	0.28	0.31	0.24

## FIELD PERFORMANCE WITH MULTIPATH (INDUSTRY EVALUATION)

Station	Mutipath	Instensity	Data	Country			Rock			Voice Over			Speech		
				IBOC	Delphi	Pioneer	IBOC	Delphi	Pioneer	IBOC	Delphi	Pioneer	IBOC	Delphi	Pioneer
<b>KLLC</b>	Terrain Obstruct	Light	MOS				4.7	3.5	3.9						
			CI (+/-)				0.23	0.47	0.40						
	Mod	MOS				4.4	2.4	2.6	4.7	2.6	2.2				
			CI (+/-)				0.16	0.21	0.20	0.20	0.35	0.36			
		Severe	MOS				3.8	2.8	2.4						
			CI (+/-)				0.20	0.21	0.30						
<b>KWNR</b>	Spectral	Light	MOS	4.1	4.0	4.1				4.2	3.0	3.1			
			CI (+/-)	0.28	0.34	0.35				0.66	0.63	0.57			
	Mod	MOS	3.9	2.4	2.2				3.3	2.4	2.1				
			CI (+/-)	0.26	0.20	0.20				0.45	0.37	0.19			
		Severe	MOS	3.9	2.4	2.2				3.7	2.3	1.7	3.7	2.3	1.5
			CI (+/-)	0.37	0.35	0.29				0.47	0.31	0.29	0.33	0.21	0.20

## FIELD COMPATIBILITY - HOST (INDUSTRY EVALUATION)

		Classical		Country/Rock		Speech	
		No IBOC	IBOC	No IBOC	IBOC	No IBOC	IBOC
<b>Delphi</b>	MOS	3.7	4.0	3.6	4.0	3.1	3.4
	Confid Interval (+/-)	0.53	0.31	0.37	0.29	0.39	0.35
<b>Pioneer</b>	MOS	4.1	4.3	4.1	4.2	3.2	3.1
	Confid Interval (+/-)	0.33	0.39	0.38	0.32	0.35	0.32
<b>Sony</b>	MOS	3.8	3.9	4.1	4.2	2.4	2.6
	Confid Interval (+/-)	0.33	0.46	0.40	0.32	0.34	0.41
<b>Technics</b>	MOS	4.1	4.3	3.8	3.6	3.2	3.2
	Confid Interval (+/-)	0.35	0.30	0.26	0.39	0.38	0.38

## FIELD COMPATIBILITY - 1ST ADJACENT INTERFERENCE (INDUSTRY EVALUATION)

Receiver	D/U	Data	Classical		Country/Rock		Speech	
			No IBOC	IBOC	No IBOC	IBOC	No IBOC	IBOC
<b>Delphi</b>	+6	MOS Confid Interval (+/-)			3.7 0.33	3.6 0.37		
	-4	MOS Confid Interval (+/-)			3.0 0.36	3.0 0.39		
	-6	MOS Confid Interval (+/-)					2.6 0.43	2.5 0.31
	-9	MOS Confid Interval (+/-)	3.2 0.38	3.3 0.43				
	-11	MOS Confid Interval (+/-)			3.3 0.37	3.1 0.36		
	-14	MOS Confid Interval (+/-)			2.4 0.36	3.0 0.44		
<b>Pioneer</b>	+6	MOS Confid Interval (+/-)			4.0 0.40	4.1 0.35		
	-4	MOS Confid Interval (+/-)			3.4 0.42	3.1 0.37		
	-6	MOS Confid Interval (+/-)					1.9 0.28	2.2 0.37
	-9	MOS Confid Interval (+/-)	2.6 0.31	2.6 0.31				
	-11	MOS Confid Interval (+/-)			3.9 0.25	3.5 0.42		
	-14	MOS Confid Interval (+/-)			3.5 0.44	2.8 0.49		
<b>Sony</b>	+6	MOS Confid Interval (+/-)			3.0 0.37	3.1 0.46		
<b>Technics</b>	+6	MOS Confid Interval (+/-)			4.0 0.42	4.1 0.42		

**FIELD COMPATIBILITY - 1st ADJACENT MULTIPATH (INDUSTRY EVALUATION)**

Receiver	D/U	Data	Country/Rock	
			No IBOC	IBOC
Delphi	-1	MOS	2.8	3.1
		Confid Interval (+/-)	0.61	0.40
	-9	MOS	3.1	3.0
		Confid Interval (+/-)	0.38	0.34
Pioneer	-1	MOS	3.4	2.8
		Confid Interval (+/-)	0.51	0.37
	-9	MOS	3.4	3.1
		Confid Interval (+/-)	0.42	0.31

### LAB PERFORMANCE - AWGN WITHOUT AND WITH MULTIPATH (INDUSTRY EVALUATION)

Level of			CLASSICAL			ROCK			SPEECH																												
AWGN	Multipath Type	Data	IBOC	Delphi	Pioneer	IBOC	Delphi	Pioneer	IBOC	Delphi	Pioneer																										
<b>B-2dB</b>	Rural Fast	MOS	4.7	2.2	2.2																																
		Confid Interval (+/-)	0.25	0.29	0.35																																
	Terrain Obstructed	MOS																																			
		Confid Interval (+/-)																4.7	1.8	1.8																	
	Urban Fast	MOS																																			
		Confid Interval (+/-)																									4.6	3.6	3.5								
	Urban Slow	MOS																																			
		Confid Interval (+/-)																																		0.25	0.43
	MOS																																				
	Confid Interval (+/-)																																				
	MOS																																				
	Confid Interval (+/-)																																				

### LAB PERFORMANCE - CO CHANNEL, SINGLE AND DUAL ADJ (INDUSTRY EVALUATION)

1st Interferer	Level of 1st interferer	2nd interferer	D/U of 2nd interferer	Data	CLASSICAL					ROCK			
					IBOC	Delphi	Pioneer	Sony	Technics	IBOC	Delphi	Sony	Technics
Co-Channel	b-2dB	Upper 1st		MOS	4.0	failure	1.1	failure	1.0				
	CI (+/-)			0.54		0.13		0.09					
Lower 1st Adj	b-2dB			MOS						4.7	1.0	1.0	failure
				CI (+/-)						0.20	0.00	0.00	
Lower 2nd Adj	b-2dB	Upper 1st	+6db	MOS	3.9	4.0	4.1	1.1	2.3				
				CI (+/-)	0.47	0.47	0.55	0.17	0.42				
		Upper 2nd	-20dB	MOS	3.9	failure	failure	failure	2.7				
				CI (+/-)	0.47				0.46				
				MOS	4.4	failure	failure	failure	2.6				
				CI (+/-)	0.27				0.35				

### LAB PERFORMANCE - CO and 1ST ADJACENT WITH MULTIPATH (INDUSTRY EVALUATION)

1st Interferer	Level of interfer	2nd interferer	D/U of 2nd interfer	Type multi path	Data	CLASSICAL			ROCK		
						IBOC	Delphi	Pioneer	IBOC	Delphi	Pioneer
Co-Channel	B-8dB			RF	MOS				4.5	1.1	1.0
					CI (+/-)				0.31	0.16	0.10
				TO	MOS	4.6	1.2	1.1			
					CI (+/-)	0.22	0.17	0.14			
US	MOS				3.5	1.1	1.1				
	CI (+/-)				0.39	0.16	0.21				
UF	MOS				4.3	1.0	1.0				
	CI (+/-)				0.38	0.00	0.00				
Lower 1st Adj	B-8dB			RF	MOS	4.6	1.7	1.6			
					CI (+/-)	0.23	0.33	0.27			
				UF	MOS				4.7	2.0	2.1
					CI (+/-)				0.25	0.32	0.37
US	MOS	4.3	2.1	2.7							
	CI (+/-)	0.37	0.28	0.30							
TO	MOS				4.1	1.9	2.1				
	CI (+/-)				0.25	0.22	0.30				
		Upper 1st	+6	RF	MOS	4.6	2.9	3.2			
					CI (+/-)	0.25	0.33	0.48			
				TO	MOS	3.8	1.2	1.2			
					CI (+/-)	0.48	0.20	0.18			
UF	MOS	3.9	3.6	3.9							
	CI (+/-)	0.33	0.34	0.44							
US	MOS	4.4	2.9	3.2							
	CI (+/-)	0.36	0.35	0.32							

1st Interferer	Level of interfer	2nd interferer	D/U of 2nd interfer	Type multi path	Data	CLASSICAL			ROCK				
						IBOC	Delphi	Pioneer	IBOC	Delphi	Pioneer		
Lower 2nd Adj	B-8dB			RF	MOS CI (+/-)				4.4	2.8	2.8		
									0.30	0.34	0.34		
				TO	MOS CI (+/-)	3.9	2.4	2.2					
						0.42	0.34	0.38					
					US	MOS CI (+/-)				4.5	3.6	3.9	
										0.31	0.41	0.50	
					UF	MOS CI (+/-)				4.7	4.3	4.2	
										0.30	0.42	0.20	
		B-8dB	Upper 1st	+6	RF	MOS CI (+/-)				4.9	3.7	4.0	
										0.10	0.42	0.42	
	UF				MOS CI (+/-)	4.4	3.2	2.0					
						0.36	0.37	0.51					
					US	MOS CI (+/-)				3.5	3.1	3.0	
										0.39	0.29	0.36	
			Upper 2nd	-20	RF	MOS CI (+/-)	4.8	2.4	1.4				
		TO			MOS CI (+/-)						4.3	2.3	2.4
											0.33	0.35	0.36
				UF	MOS CI (+/-)				4.6	3.4	3.3		
									0.27	0.30	0.55		
				US	MOS CI (+/-)	4.1	3.2	3.3					
						0.38	0.46	0.43					

## LAB PERFORMANCE - IMPULSE NOISE (INDUSTRY EVALUATION)

Interferer	Level of interferer (dB)	AWGN	Level of AWGN	Data	CLASSICAL		
					IBOC	Delphi	Pioneer
		120Hz	B-2dB	MOS	4.8	3.1	4.1
				CI (+/-)	0.17	0.35	0.32
		330Hz	B-2dB	MOS	4.8	3.1	3.9
				CI (+/-)	0.17	0.49	0.43
		RPRF	B-2dB	MOS	4.4	3.0	3.0
				CI (+/-)	0.23	0.34	0.37
		2000Hz	B-2dB	MOS	4.7	3.8	3.4
				CI (+/-)	0.23	0.38	0.43
Upper 1st	+6	120Hz	B-2dB	MOS	4.3	2.4	2.8
				CI (+/-)	0.33	0.43	0.61

## LAB COMPATIBILITY - HOST (INDUSTRY EVALUATION)

Rx	AWGN	Data	Rock		Speech	
			No IBOC	IBOC	No IBOC	IBOC
Delphi	No Noise	MOS			4.0	3.9
		Confid Interval (+/-)			0.37	0.37
Pioneer	30K	MOS	4.8	4.6		
		Confid Interval (+/-)	0.24	0.34		
Pioneer	No Noise	MOS			4.1	4.0
		Confid Interval (+/-)			0.30	0.43
Pioneer	30K	MOS	4.5	4.7		
		Confid Interval (+/-)	0.28	0.20		
Sony	No Noise	MOS			3.9	2.6
		Confid Interval (+/-)			0.37	0.39
Sony	30K	MOS	4.3	4.4		
		Confid Interval (+/-)	0.37	0.46		
Technics	No Noise	MOS			4.0	3.9
		Confid Interval (+/-)			0.34	0.34
Technics	30K	MOS	4.5	4.7		
		Confid Interval (+/-)	0.35	0.26		

### LAB COMPATIBILITY - 2ND ADJACENT INTERFERENCE (INDUSTRY EVALUATION)

	Upper/Lower	D/U dB	AWGN	Data	Classical		Rock		Speech	
					No IBOC	IBOC	No IBOC	IBOC	No IBOC	IBOC
<b>Delphi</b>	Lower	-40	No Noise	MOS Confid Interval (+/-)			3.9 0.29	3.7 0.32		
			30K	MOS Confid Interval (+/-)			4.2 0.31	3.9 0.27		
		-20	30K	MOS Confid Interval (+/-)			4.6 0.31	4.7 0.23		
	Upper	-40	No Noise	MOS Confid Interval (+/-)					4.1 0.29	4.3 0.28
			30K	MOS Confid Interval (+/-)			4.1 0.31	3.8 0.43		
		-20	30K	MOS Confid Interval (+/-)	4.6 0.61	4.3 0.67				
<b>Pioneer</b>	Lower	-40	No Noise	MOS Confid Interval (+/-)			3.8 0.33	3.3 0.35		
			30K	MOS Confid Interval (+/-)			4.0 0.33	4.0 0.25		
		-20	30K	MOS Confid Interval (+/-)			4.8 0.20	4.6 0.25		
	Upper	-40	No Noise	MOS Confid Interval (+/-)					4.2 0.31	4.2 0.27
			30K	MOS Confid Interval (+/-)			3.9 0.41	3.9 0.39		
		-20	30K	MOS Confid Interval (+/-)	4.4 0.69	4.2 0.96				
<b>Sony</b>	Lower	-20	30K	MOS Confid Interval (+/-)			3.5 0.51	1.8 0.38		
	Upper	-20	30K	MOS Confid Interval (+/-)	2.2 0.83	1.9 0.52				
<b>Technics</b>	Lower	-40	No Noise	MOS Confid Interval (+/-)			3.7 0.37	1.2 0.19		
			30K	MOS Confid Interval (+/-)					2.7 0.36	1.3 0.21
		-20	30K	MOS Confid Interval (+/-)			4.4 0.40	4.5 0.25		

	Upper	-20	30K	MOS	4.6	4.5		
				Confid Interval (+/-)	0.22	0.27		

## LAB COMPATIBILITY --1ST ADJACENT INTERFERENCE (INDUSTRY EVALUATION)

Delphi	Condition	D/U dB	AWGN	Data	Classical		Rock		Speech		
					No IBOC	IBOC	No IBOC	IBOC	No IBOC	IBOC	
Delphi	Lower	+16	No Noise	MOS	4.6	4.2					
				Confid Interval (+/-)	0.30	0.27					
		30K	MOS					3.5	3.2		
			Confid Interval (+/-)					0.26	0.33		
		+6	30K	MOS	4.1	2.9					
				Confid Interval (+/-)	0.35	0.31					
	-4	No Noise	MOS			4.4	3.8				
			Confid Interval (+/-)			0.35	0.37				
		30K	MOS			3.9	3.2				
			Confid Interval (+/-)			0.29	0.48				
	Upper	+16	30K	MOS			4.4	4.3			
				Confid Interval (+/-)			0.30	0.38			
No Noise		MOS			4.2	4.6					
		Confid Interval (+/-)			0.37	0.31					
+6		30K	MOS					3.5	2.1		
			Confid Interval (+/-)					0.41	0.35		
-4	No Noise	MOS			4.5	3.9					
		Confid Interval (+/-)			0.27	0.35					
Pioneer	Lower	+16	No Noise	MOS	4.7	4.3					
				Confid Interval (+/-)	0.23	0.33					
		30K	MOS					3.3	2.6		
			Confid Interval (+/-)					0.34	0.35		
		+6	30K	MOS	3.9	2.8					
				Confid Interval (+/-)	0.38	0.35					
	-4	No Noise	MOS			4.5	3.6				
			Confid Interval (+/-)			0.31	0.47				
		30K	MOS			4.0	3.8				
			Confid Interval (+/-)			0.39	0.33				
	Upper	+16	30K	MOS			4.5	4.1			
				Confid Interval (+/-)			0.37	0.44			
	No Noise	MOS			4.1	4.0					

			Confid Interval (+/-)		0.46	0.44	
	+6	30K	MOS				3.4 2.0
			Confid Interval (+/-)				0.33 0.28
	-4	No Noise	MOS		4.4	3.4	
			Confid Interval (+/-)		0.30	0.42	
		30K	MOS	3.6	1.4		
			Confid Interval (+/-)	0.44	0.36		

<b>Sony</b>	Lower	+16	No Noise	MOS Confid Interval (+/-)	3.1 2.9 0.73 0.55			
			30K	MOS Confid Interval (+/-)		2.0 2.0 0.32 0.29		
		+6	30K	MOS Confid Interval (+/-)	1.4 1.4 0.27 0.22			
			-4	No Noise	MOS Confid Interval (+/-)		1.1 1.0 0.17 0.00	
		30K		MOS Confid Interval (+/-)		2.0 1.6 0.38 0.26		
		Upper	+16	30K	MOS Confid Interval (+/-)		2.9 3.2 0.45 0.43	
	No Noise			MOS Confid Interval (+/-)		3.9 3.8 0.47 0.46		
	+6		30K	MOS Confid Interval (+/-)		1.3 1.3 0.21 0.20		
			-4	No Noise	MOS Confid Interval (+/-)		1.9 1.7 0.25 0.25	
	30K			MOS Confid Interval (+/-)	1.0 1.0 0.00 0.00			
	<b>Technics</b>		Lower	+16	No Noise	MOS Confid Interval (+/-)	4.6 4.6 0.25 0.25	
		30K			MOS Confid Interval (+/-)		3.5 3.1 0.38 0.37	
+6		30K		MOS Confid Interval (+/-)	3.3 3.2 0.33 0.30			
		-4		No Noise	MOS Confid Interval (+/-)		4.2 4.1 0.27 0.33	
30K				MOS Confid Interval (+/-)		3.8 4.0 0.44 0.29		
Upper		+16		30K	MOS Confid Interval (+/-)		4.4 3.9 0.37 0.32	
			No Noise	MOS Confid Interval (+/-)		3.9 3.8 0.38 0.41		
		+6	30K	MOS Confid Interval (+/-)		2.1 1.8 0.31 0.31		
			-4	No Noise	MOS		3.7 3.4	

			Confid Interval (+/-)		0.33	0.33	
		30K	MOS	1.5	1.3		
			Confid Interval (+/-)	0.36	0.22		

## LAB COMPATIBILITY - MULTIPATH (INDUSTRY EVALUATION)

<b>Urban Fast</b>										
	<b>Lower/ Upper</b>	<b>D/U dB</b>	<b>AWGN</b>	<b>Data</b>	<b>Classical</b>		<b>Rock</b>		<b>Speech</b>	
					<b>No IBOC</b>	<b>IBOC</b>	<b>No IBOC</b>	<b>IBOC</b>	<b>No IBOC</b>	<b>IBOC</b>
Dephi	Lower	+6	00K	MOS	2.6	1.8				
				Confid Interval (+/-)	0.36	0.28				
			30K	MOS			3.7	2.7		
				Confid Interval (+/-)			0.37	0.32		
	Upper	+6	00K	MOS			3.6	3.4		
				Confid Interval (+/-)			0.40	0.34		
30K			MOS	2.4	1.5					
			Confid Interval (+/-)	0.31	0.25					
Pion	Lower	+6	00K	MOS	3.1	1.6				
				Confid Interval (+/-)	0.30	0.30				
			30K	MOS			3.7	2.6		
				Confid Interval (+/-)			0.40	0.45		
	Upper	+6	00K	MOS			3.3	3.6		
				Confid Interval (+/-)			0.41	0.33		
30K			MOS	2.6	1.4					
			Confid Interval (+/-)	0.31	0.31					
<b>Urban Slow</b>										
Delp	Lower	+6	00k	MOS	2.8	1.9				
				Confid Interval (+/-)	0.42	0.28				
			30K	MOS					2.9	2.2
				Confid Interval (+/-)			0.35	0.33		
	Upper	+6	00K	MOS			3.5	3.6		
				Confid Interval (+/-)			0.40	0.42		
30K			MOS	2.9	2.2					
			Confid Interval (+/-)	0.40	0.37					
Pion	Lower	+6	00K	MOS	3.4	2.0				
				Confid Interval (+/-)	0.25	0.31				
			30K	MOS					2.7	1.7
			Confid Interval (+/-)			0.35	0.31			
Upper	+6	00K	MOS			4.2	3.8			
			Confid Interval (+/-)			0.31	0.45			

			30K	MOS	3.1	2.0		
				Confid Interval (+/-)	0.30	0.40		