

Appendix 4.8
Population, Employment, and Housing

Employment Model

**OARB Area Redevelopment EIR
Employment Model**

I. Employment Density by Land Use

Use Category	Job Density (1)	Comment
Warehouse and Distribution	0.8	(1)
Light Industrial/Manufacturing	2.5	(1)
R&D	2.5	(1)
Flex Industrial/Office (reuse)	2.4	(1)
Flex Industrial/Office (new)	2.6	(1)
General Office	3.75	(1)
Recreation	N/A	
Ancillary Retail	2.8	(1)
Commercial/Retail	2.5	(1)
Maritime	N/A	(2)
Wastewater Treatment	N/A	(3)
Job Training	2.0	(1)
Live/Work	1	(4)

- (1) Per 1000 SF gross building space, adapted from U.S. Bureau of Labor statistics. Note that Labor Bureau multipliers are intended to conservatively (under) estimate jobs benefits, and their use will result in fewer jobs than traffic multipliers, which are intended to conservatively (over) estimate traffic impacts.
 (2) Per Port of Oakland model, based on a combination of container throughput and rail operations
 (3) Estimate of total employment based on EBMUD WWTF operation and maintenance experience
 (4) Per live/work unit

II. Use Category: Occupation

Percent Occupation Type by Use Category (1)

Occupational Category	Warehouse and Distribution	Light Industrial/Manufacturing	R&D	Flex Industrial/Office	General Office	Recreation	Ancillary Retail	Commercial/Retail	Hotel, Job Training, Community Services	Maritime	Wastewater Treatment
Executive, administrative, management	0	5	10	10	16	N/A	14	5	5	3	4
Professional, paraprofessional, technical	5	20	65	50	19	N/A	14	1	1	11	75
Sales and related	0	0	0	0	14	N/A	46	75	4	0	0
Clerical, administrative support	10	5	10	10	50	N/A	7	10	15	3	11
Public and private services	10	10	5	5	1	N/A	3	0	70	16	10
Production construction, materials handling	75	60	10	25	0	N/A	16	9	5	67	0
Total:	100	100	100	100	100	0	100	100	100	100	100

(1) Adapted from California Employment Development Department and U.S. Bureau of Labor statistics

III. Indirect Job Multipliers for Alameda County

Use Category	Industry Sector	Indirect Multiplier (1)
Warehouse and Distribution	Trucking/Warehousing	1.3
Light Industrial/Manufacturing	Misc Manufacturing	1.28
R&D	Pharmaceutical	1.82
Flex Industrial/Office (reuse)	Professional Services	1.26
Flex Industrial/Office (new)	Professional Services	1.26
General Office (new)	FIRE & Manufacturing	1.85
Recreation	N/A	N/A
Ancillary Retail	Retail Trade	0.56
Hotel	Services	1.18
Marine Terminal Ops	Water Transportation	2.53
Wastewater Treatment	N/A	N/A
Other: Job Training	Education Services	1.16
Community Services	Social Services	1.11

(1) Adapted from U.S. Department of Commerce, Bureau of Economic Analysis statistics

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Floor Area Account	Square Feet, Each Sub-district				Total	% of Total SF	Jobs Generation Potential (Direct)		
	OARB	Maritime	16th/Wood	0			Use Category	Jobs Generated	Total Jobs
Warehouse and Distribution	300000	0	0	0	300000	7.3	Warehouse and Distribution	240	1.5
Light Industrial/Manufacturing	444000	0	305000	0	749000	18.3	Light Industrial/Manufacturing	1873	11.4
R&D	464000	0	0	0	464000	11.3	R&D	1160	7.1
Flex Industrial/Office	464000	0	1437000	0	1901000	46.5	Flex Industrial/Office	4943	30.1
General Office	600000	0	0	0	600000	14.7	General Office	2250	13.7
Recreation	N/A	0	N/A	0	N/A	N/A	Recreation	N/A	N/A
Ancillary Retail	25000	0	1300	0	26300	0.6	Ancillary Retail	74	0.4
Commercial/Retail	0	0	0	0	0	0.0	Commercial/Retail	0	0.0
Maritime	0	N/A	0	0	0	0.0	Maritime	5400	32.9
Other: Job Training	50000	0	0	0	50000	1.2	Other: Job Training	100	0.6
Live/Work (375 units)	0	0	N/A	0	0	0.0	Live/Work (375 units)	375	2.3
Total:	2347000	0	1743300	0	4090300	100.0	Total:	16414	100.0

Source: Maritime jobs from Port of Oakland 2002: spreadsheet dated March 15, 2002.

OARB Area Redevelopment EIR
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Occupational Characteristics of Direct Employment				Jobs Generation Potential (Indirect)				Jobs Generation Potential (Direct + Indirect)			
Occupational Category	Jobs Generated	% of Total Jobs		Use Category	Jobs Generated	% of Total Jobs		Use Category	Jobs Generated	% of Total Jobs	
Executive, administrative, management	1241	7.6		Warehouse and Distribution	312	1.0		Warehouse and Distribution	552	1.2	
Professional, paraprofessional, technical	5020	30.6		Light Industrial/Manufacturing	2397	8.1		Light Industrial/Manufacturing	4269	9.3	
Sales and related	353	2.1		R&D	2111	7.1		R&D	3271	7.1	
Clerical, administrative support	2035	12.4		Flex Industrial/Office	6228	21.0		Flex Industrial/Office	11170	24.2	
Public and private services	1475	9.0		General Office	4163	14.0		General Office	6413	13.9	
Production construction, materials handling	6290	38.3		Recreation	N/A	N/A		Recreation	N/A	N/A	
				Ancillary Retail	41	0.1		Ancillary Retail	115	0.2	
Percent of jobs that are:				Commercial/Retail	0	0.0		Commercial/Retail	0	0.0	
Professional:	38.1			Maritime	13662	46.0		Maritime	19062	41.3	
Non-professional:	61.9			Other: Job Training	116	0.4		Other: Job Training	216	0.5	
				Live/Work	694			Live/Work	1069	2.3	
Total:	16414	100.0		Total:	29723	97.7		Total:	46137	100.0	

**OARB Area Redevelopment EIR
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Jobs Generation Potential (Direct)

Use Category	Jobs Generated, Each Sub-district			Total
	OARB	Maritime	16th/Wood	
Warehouse and Distribution	240	0	0	240
Light Industrial/Manufacturing	1110	0	763	1873
R&D	1160	0	0	1160
Flex Industrial/Office	1206	0	3736	4943
General Office	2250	0	0	2250
Recreation	N/A	0	N/A	0
Ancillary Retail	70	0	4	74
Commercial/Retail	0	0	0	0
Maritime	1330	4070	0	5400
Other: Job Training	100	0	0	100
Live/Work (375 units)	0	0	375	375
Total:	7466	4070	4877	16414

Jobs Generation Potential (Indirect)

Use Category	Jobs Generated, Each Sub-district			Total
	OARB	Maritime	16th/Wood	
Warehouse and Distribution	312	0	0	312
Light Industrial/Manufacturing	1421	0	976	2397
R&D	2111	0	0	2111
Flex Industrial/Office	1520	0	4708	6228
General Office	4163	0	0	4163
Recreation	N/A	N/A	N/A	0
Ancillary Retail	39	0	2	41
Commercial/Retail	0	0	0	0
Maritime	3365	10297	0	13662
Other: Job Training	116	0	0	116
Live/Work	0	0	694	694
Total:	13047	10297	6379	29723

Jobs Generation Potential (Direct + Indirect)

Use Category	Jobs Generated, Each Sub-district			Total
	OARB	Maritime	16th/Wood	
Warehouse and Distribution	552	0	0	552
Light Industrial/Manufacturing	2531	0	1739	4269
R&D	3271	0	0	3271
Flex Industrial/Office	2726	0	8444	11170
General Office	6413	0	0	6413
Recreation	N/A	N/A	N/A	N/A
Ancillary Retail	109	0	6	115
Commercial/Retail	0	0	0	0
Maritime	4695	14367	0	19062
Other: Job Training	216	0	0	216
Live/Work	0	0	1069	1069
Total:	20513	14367	11257	46137

**OARB Area Redevelopment EIR
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Local Jobs

	OARB Development Areas				
	Gateway	Port	Maritime	16th/Wood	Total
2000	890	440	1850	100	3280
2020	6150	188	2760	4820	13918
Difference	5260	-252	910	4720	10638

Source: HEG 2001.

Note: Local jobs are those jobs actually located within each redevelopment district.