Inside the AGIA Report

Note: Employment totals are not restricted to gasline occupations.

A general progression of the gasline project. Phases

indicates the phase(s) that the occupation will be in

may, at times, overlap or run concurrently. A

significant demand.

Tuesday, December 18, 2007

Gasline Occupations A list of 113 occupations considered significant in constructing a natural gas pipeline. Gasline Phases Statewide Labor Force Indicators

Summary Statistics for All AGIA Occupations

Select statewide labor force indicators which estimate nonresidency and older worker information.

Training Levels

Counts of occupations by training requirements. The training level abbreviations used in the table are defined in footnote 11 at the end of the report.

Groups

The report is organized by ten occupational groups, each consisting of occupations that are related in broad terms by the nature of the functions performed.

▼

AGIA Occupations

Statistical data providing measurements relating to the statewide labor force. The occupational numbers in this

table are not industry or project specific (e.g. gasline

all industries combined.

construction), but are statewide numbers which include

The "n/a" means data are not available.

	Summary Statistics for All	Gā	asli	ne	Ph	ases	1						State	wide	Lab	or Fa	rce Ir	ıdica	tors						
	AGIA Occupations	P	De sign Permit Open Season Phases		7	Precon		Worker (2006) ²			nated Der 004-2014			LEX sys loyment (2006)		Pot	ential Sup (2006)			Employi jections 04-2014		Worl Demogr (200	raphics	Occup. Charact	
	❖ Percent of Workers Age 50+9 24.3% Training Levels ¹¹ STOTI MTOTI LTOTI WKEXP VOC AA BA BA+ 25 28 13 13 6 7 18 3	Phase	Phase 2	PI	Road and Bridge - Phase 1	construction and Construction	Total Number of Workers	Number of Nonresident Workers	Percent Nonresident Workers	Annual Openings due to Growth	Annual Openings due to Replacement	Total Annual Openings	Number of Job Position Postings ⁴	Number of Registrants	Ratio of Registrants to Job Position Postings	Qualified, but working another occupation ⁶	Workers currently employed in less skille occupations ⁷	UI Claimants previously working in occupation 8	Estimated Employment (2004)	Projected Employment (2014)	Growth Rate (Percent)	Percent Workers Age 45+	Percent Workers Age 50+	Average Hourly Wage (May 2006) ¹⁰	Training Levels ¹¹
	Safety			~ ·	2 1	D 0				Ü						Ħ.	1								
	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	1	1	~	~	~	232	70	30.2	4	3	7	35	68	1.9	28	5	7	104	147	41.3	56.6	38.1	\$35.92	BA
	Occupational Health and Safety Specialists		1	1		1	149	25	16.8	3	5	7	31	40	1.3	62	0	10	206	231	12.1	66.2	44.6	\$38.32	BA
	STOJT MTOJT LTOJT WkExp 1 0 0 0 0	VO 1	_	AA O	BA 2	BA+	3,132	536	17.1	See	footnot	e 3	691	965	1.4	1,010	465	331	See f	ootnot	e 3	42.3	30.4		
h	AGIA Totals						129,751	21,251	16,4	See	footnot	e 3	11,670	36,070	3,1	37,723	13,590	22,309	See f	ootnote	e 3	37.4	24.3		

An asterisck (*) means data are suppressed due to confidentiality

Group and AGIA Totals

Summarized counts and calculations on presented data. The occupational numbers in this table are not industry specific or project specific (e.g. gasline construction), but are statewide numbers which include all industries combined.

Summary Statistics for All	Ga	slin	e Ph	ases ¹						9	State	wide	Lab	or Fo	rce Iı	ndica	itors						
AGIA Occupations ❖ Percent Nonresident Workers² 16.4%	Po (S	esign/ ermit/ Open eason Phases		Precor		Worker (2006) ²	Data		nated Der 004-2014		Empl	LEXsys oyment (2006)		Pote	ential Sup (2006)	ply	Pro	Employs ojections 04-2014	;	Wor Demog (20		Occup Charac	pation teristics
 Percent of Workers Age 45+9 37.4% Percent of Workers Age 50+9 24.3% 			Road and B	Preconstruction and	Total Number Workers	Number workers	Percent Workers	Annual (Growth	Annual (Replace	Total Ar	Number of Job Postings ⁴	Number	Ratio of Reg Job Position	Qualified, another o	Workers curemployed in occupations	UI Clain working	Estimated (2004)	Projected (2014)	Growth	Percent Age 45+	Percent Age 50+	Average (May 20	Training
Training Levels ¹¹ STOJT MTOJT LTOJT WkExp VOC AA BA BA+ 25 28 13 13 6 7 18 3	Phase 1	Phase 2	nd Bridge - Phase 1 through Operations	Operations and Construction	mber	of Nonresident	Percent Nonresident Workers	Openings due to	Annual Openings due to Replacement	Annual Openings	of Job Position s ⁴	of Registrants ⁵	of Registrants to osition Postings	d, but working in occupation ⁶	s currently ed in less skilled ions ⁷	UI Claimants previously working in occupation 8	ed Employment	d Employment	Rate (Percent)	Percent Workers Age 45+	Percent Workers Age 50+	Average Hourly Wage (May 2006) ¹⁰	Levels 11
Crafts																							
Carpenters			✓	✓	5,173	879	17.0	53	79	132	404	1,655	4.1	1,198	178	1,791	4,855	5,383	10.9	34.6	20.0	\$25.73	LTOJT
Cement Masons and Concrete Finishers			✓	✓	430	131	30.5	*	*	*	13	166	12.8	80	30	188	*	*	*	28.0	15.4	\$26.72	МТОЈТ
Construction and Building Inspectors			✓	✓	262	65	24.8	6	5	10	13	76	5.8	56	20	27	210	265	26.2	67.8	51.4	\$31.54	WkExp
Construction Laborers			✓	✓	8,367	1,626	19.4	63	48	111	635	2,564	4.0	2,332	858	3,015	3,605	4,232	17.4	24.2	13.8	\$20.57	МТОЈТ
Construction Managers			✓	✓	1,045	174	16.7	39	31	69	54	277	5.1	197	32	87	1,681	2,066		63.7	44.3	\$39.87	BA
Crushing, Grinding, and Polishing Machine Setters, Operators, and Tenders				✓	132	25	18.9	4	3	7	7	14	2.0	19	3	35	101	141	39.6	14.9	7.9	\$22.66	МТОЈТ
Electricians			✓	✓	2,767	669	24.2	31	43	74	152	416	2.7	431	160	697	2,164	2,471	14.2	32.7	20.0	\$29.93	LTOJT
Explosives Workers, Ordnance Handling Experts, and Blasters				✓	44	9	20.5	*	*	*	3	23	7.7	17	7	5	*	*	*	39.5	34.2	\$23.86	МТОЈТ
Fence Erectors			✓	✓	110	10	9.1	n/a	n/a	n/a	6	31	5.2	18	10	41	n/a	n/a	n/a	21.4	9.7	*	МТОЈТ
First-Line Supervisors/Managers of Construction Trades and Extraction Workers			✓	✓	1,641	533	32.5	45	34	80	27	230	8.5	334	108	162	2,013	2,467	22.5	57.3	37.2	\$37.24	WkExp
First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand				✓	387	45	11.6	4	7	11	61	109	1.8	91	16	47	284	325	14.4	39.5	25.3	\$21.20	WkExp
First-Line Supervisors/Managers of Production and Operating Workers				< <	816	273	33.5	7	21	28	24	82	3.4	282	40	191	995	1,062	6.7	50.2	30.9	\$30.94	WkExp
Helpers, Construction Trades, All Other			✓	✓	741	168	22.7	*	*	*	16	327	20.4	208	136	183	*	*	*	22.0	13.7	*	STOJT
HelpersCarpenters				✓	406	59	14.5	*	*	*	33	152	4.6	109	80	133	*	*	*	14.4	9.1	\$14.88	STOJT
HelpersElectricians			✓	✓	180	24	13.3	*	*	*	17	122	7.2	63	51	44	*	*	*	16.8	8.1	\$15.65	STOJT
HelpersExtraction Workers				✓	216	52		*	*	*	1	51	51.0	83	65	39	*	*	*	17.9	8.4	\$26.84	STOJT
HelpersInstallation, Maintenance, and Repair Workers				✓	1,079	178		11	15	26	187	396		389	262	267		562	23.8	33.8			STOJT

Summary Statistics for All	Ga	sline Pl	nases¹						9	State	wide	Lab	or Fo	rce Ir	ndica	tors						
AGIA Occupations ❖ Percent Nonresident Workers² 16.4%	Per O Se	rmit/ pen ason nases	Precon		Worker (2006) ²	Data		nated Der 004-2014		Empl	LEXsys oyment (2006)		Pote	ential Sup (2006)	ply	Pro	Employa ections 04-2014		Wor Demog (20			pation eteristics
 Percent of Workers Age 45+9 37.4% Percent of Workers Age 50+9 24.3% 		Road and Bridge through	ction	Total Number Workers	Number workers	Percent i Workers	Annual C Growth	Annual Openings Replacement	Total An	Number - Postings	Number	Ratio of Reg Job Position	Qualified, another o	Workers curemployed in occupations	UI Claim: working	Estimated (2004)	Projected (2014)	Growth Rate	Percent Workers Age 45+	Percent Workers Age 50+	Average (May 200	Training
Training Levels ¹¹ STOJT MTOJT LTOJT WkExp VOC AA BA BA+ 25 28 13 13 6 7 18 3	Phase 1	Bridge - Phase 1 rough Operations Phase 3 Phase 2	Con	mber o	of Nonresident	Percent Nonresident Workers	Openings due to	penings due to nent	Annual Openings	Number of Job Position Postings ⁴	Number of Registrants ⁵	of Registrants to osition Postings	d, but working in occupation ⁶	currently d in less skilled ons ⁷	UI Claimants previously working in occupation ⁸	d Employment	d Employment	Rate (Percent)	Workers	Workers	Average Hourly Wage (May 2006) ¹⁰	Levels ¹¹
Crafts (Continued	d)																					
HelpersPipelayers, Plumbers, Pipefitters, and Steamfitters		✓	✓	423	167	39.5	*	*	*	19	119	6.3	202	0	103	*	*	*	16.8	9.8	*	STOJT
HelpersProduction Workers			1 1	154	29	18.8	4	9	12	159	378	2.4	38	19	9	302	339	12.2	16.7	12.1	\$12.32	STOJT
Highway Maintenance Workers		✓		129	19	14.7	*	*	*	34	86	2.5	32	7	37	*	*	*	47.1	32.8	\$24.74	МТОЈТ
Insulation Workers, Floor, Ceiling, and Wall			✓	232	55	23.7	*	*	*	49	46	0.9	31	0	42	*	*	*	20.6	11.3	*	МТОЈТ
Insulation Workers, Mechanical			✓	230	88	38.3	*	*	*	34	30	0.9	23	0	29	*	*	*	36.4	17.9	\$25.51	МТОЈТ
Millwrights			✓	216	52	24.1	*	*	*	9	38	4.2	60	18	33	*	*	*	53.1	37.9	\$26.74	LTOJT
Painters, Construction and Maintenance		✓	✓	809	183	22.6	13	14	27	95	331	3.5	164	49	240	909	1,038	14.2	27.7	14.3	\$20.75	МТОЈТ
Plumbers, Pipefitters, and Steamfitters		✓	1	2,130	484	22.7	22	34	57	153	286	1.9	325	46	474	1,492	1,716	15	32.7			
Sheet Metal Workers			✓	453	45	9.9	*	*	*	17	59	3.5	65	34	159	*	*	*	32.4		\$24.49	
Structural Iron and Steel Workers		✓	✓	288	78	27.1	*	*	*	21	94		125	33	111	*	*	*	31.5			LTOJT
Welders, Cutters, Solderers, and Brazers		✓	✓	1,004	349	34.8	11	18	28	141	412	2.9	229	55	170	628	734	16.9	40.4			LTOJT
Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders		✓	✓	59	15	25.4	*	*	*	0	28	n/a	15	0	11	*	*	*	37.0	23.9		МТОЈТ
STOJT MTOJT LTOJT WkExp 7 10 7 4	VOC	C AA BA	A BA+	29,923			See	footnot	e 3	2,384	8,598	3.6	7,216	2,317		See 1	footnot	e 3	32.9		11/4	1111001
Equipment Operators	U	U 1	. U																			
Bus and Truck Mechanics and Diesel Engine Specialists		✓	✓	844	141	16.7	10	18	28	98	160	1.6	241	6	104	707	807	14.1	41.9	24.4	\$24.41	VOC
Crane and Tower Operators		✓	✓	187	61	32.6	2	3	5	20	23	1.2	34	3	23	116	136	17.2	53.6		*	LTOJT
Excavating and Loading Machine and Dragline Operators		✓	✓	365	66	18.1	6	7	13	20	238		102	12	154	256	315		46.9		\$23.53	МТОЈТ

Summary Statistics for All	Gas	line	Pha	ases ¹						9	State	wide	Lab	or Fo	rce In	dica	tors						
AGIA Occupations ❖ Percent Nonresident Workers ² 16.4% ❖ Percent of Workers Age 45+9 37.4%	Perm Ope Seaso Phas	nit/ en on	ול	Precon		Worker (2006) ²	Data		nated Dem 004-2014)		Emple	LEXsys oyment l (2006)		Pote	ential Supp (2006)	oly		Employa jections 04-2014	,	Worl Demogr (200	aphics	Occup Charac	pation teristics
 ❖ Percent of Workers Age 151 ⇒ Percent of Workers Age 50+9 24.3% 			Road and Bridge through (Preconstruction and	Total Number Workers	Number of Workers	Percent l Workers	Annual O Growth	Annual O Replacen	Total Anı	Number of Postings	Number o	Ratio of I Job Posit	Qualified, another c	Workers cun employed in occupations	UI Claima working	Estimated (2004)	Projected (2014)	Growth F	Percent Workers Age 45+	Percent Workers Age 50+	Average Hourly (May 2006)	Training Levels
Training Levels ¹¹ STOJT MTOJT LTOJT WkExp VOC AA BA BA+ 25 28 13 13 6 7 18 3	Phase 2 Phase 1	Phase 3	idge – Phase 1 ugh Operations	Operations and Construction	umber of	Number of Nonresident Workers	Percent Nonresident Workers	Openings due to	Openings due to ement	Annual Openings	of Job Position §4	of Registrants ⁵	Ratio of Registrants to Job Position Postings	d, but working in occupation ⁶	currently d in less skilled ons ⁷	UI Claimants previously working in occupation ⁸	Estimated Employment (2004)	1 Employment	Rate (Percent)	Workers	Vorkers	Hourly Wage)6) ¹⁰	Levels ¹¹
Equipment Operators (Continued	i)																						
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers				✓	802	89	11.1	20	27	47	17	97	5.7	217	81	57	1,089	1,285	18	62.6	39.2	\$31.62	WkExp
Industrial Machinery Mechanics				✓	208	34	16.3	4	9	12	70	61	0.9	61	23	42	431	467	8.4	54.9	36.4	\$27.67	LTOJT
Maintenance Workers, Machinery			~	✓	289	74	25.6	*	*	*	29	141	4.9	135	109	55	*	*	*	50.4	36.0	\$16.95	STOJT
Mobile Heavy Equipment Mechanics, Except Engines			✓	✓	796	180	22.6	18	18	36	55	135	2.5	193	10	76	842	1,019	21	42.7	27.5	\$27.69	VOC
Operating Engineers and Other Construction Equipment Operators			✓	✓	4,192	767	18.3	82	71	153	140	586	4.2	941	366	1,448	2,741	3,561	29.9	49.9	31.0	\$27.32	МТОЈТ
Paving, Surfacing, and Tamping Equipment Operators			1	✓	98	15	15.3	*	*	*	18	106	5.9	60	10	70	*	*	*	29.1	23.3	*	МТОЈТ
Pile-Driver Operators			1	✓	131	31	23.7	*	*	*	2	10	5.0	28	17	50	*	*	*	37.7	27.4	\$25.12	МТОЈТ
Truck Drivers, Heavy and Tractor-Trailer			✓	✓	3,090	421	13.6	40	55	95	381	1,065	2.8	710	142	712	3,380	3,781	11.9	48.8	33.6	\$21.12	МТОЈТ
Group Totals STOJT MTOJT LTOJT WkExp 1 5 2 1	VOC 2	AA 0	BA 0	BA+	11,002	1,879	17.1	See	footnote	3	850	2,622	3.1	2,722	779	2,791	See f	ootnot	e 3	49.2	31.8		
Material Handling	_	Ţ,	Ü	J																			
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators				✓	473	46	9.7	7	15	22	4	69	17.3	227	28	97	635	702	10.6	60.3	41.0	\$31.48	WkExp
Laborers and Freight, Stock, and Material Movers, Hand				✓	6,531	1,228	18.8	27	120	146	371	768	2.1	2,247	1,270	1,364		3,932	7.2	25.7			STOJT
Order Clerks				✓	374	17	4.5	*	*	*	12	48	4.0	169	83	38	*	*	*	30.3			STOJT
Stock Clerks and Order Fillers				✓	2,891	378	13.1	0	124	124	492	1,221	2.5	947	377	326	3,348	3,202	-4.4	23.9			STOJT
Group Totals STOJT MTOJT LTOJT WkExp 3 0 0 1	VOC 0	AA 0	BA 0	BA+	10,269			See	footnote			2,106	2.4	3,590		1,825		Cootnot		27.1	16.9		
Logistics	U	U	U	U																			
Bus Drivers, Transit and Intercity				✓	1,068	276	25.8	6	11	17	130	215	1.7	349	79	267	523	580	10.9	61.0	45.6	\$15.90	MTOJT

Summary Statistics for All	Ga	asl	ine Ph	ases ¹						9	State	wide	Lab	or Fo	rce In	dica	tors						
AGIA Occupations ❖ Percent Nonresident Workers² 16.4% ❖ Percent of Workers Age 45+9 37.4%	F	Design Permi Open Seaso Phase	t/ n n	Precon		Worker (2006) ²			nated Dem 004-2014)		Emplo	LEXsys oyment (2006)		Pote	ential Supp (2006)	ply		Employ jections 04-2014	;	Wor Demogr (200	aphics	Occup Charact	pation teristics
 ❖ Percent of Workers Age 43+3 ❖ Percent of Workers Age 50+9 24.3% 			Road and Bridge through	struction a	Total Number Workers	Number of Workers	Percent Workers	Annual C Growth	Annual C Replacer	Total An	Number Postings	Number	Ratio of Regi Job Position	Qualified, another o	Workers cun employed in occupations	UI Claimants working in oc	Estimate (2004)	Projecte (2014)	Growth I	Percent Workers Age 45+	Percent Workers Age 50+	Average Hourly (May 2006)	Training
Training Levels ¹¹ STOJT MTOJT LTOJT WkExp VOC AA BA BA+ 25 28 13 13 6 7 18 3	Phase 1		ridge - Phase 1 ugh Operations Phase 3	Operations Preconstruction and Construction	umber of	of Nonresident	Percent Nonresident Workers	Openings due to	Openings due to ement	Annual Openings	Number of Job Position Postings ⁴	of Registrants ⁵	f Registrants to sition Postings	ed, but working in occupation ⁶	currently d in less skilled ons ⁷	nants previously in occupation 8	Estimated Employment (2004)	Projected Employment (2014)	Growth Rate (Percent)	Workers	Workers	Hourly Wage O6) ¹⁰	Training Levels ¹¹
Logistics (Continue	d)																						
Dispatchers, Except Police, Fire, and Ambulance			✓	✓	575	53	9.2	2	12	14	49	190	3.9	166	41	79	567	587	3.5	37.2	23.7	\$20.41	МТОЈТ
Purchasing Agents, Except Wholesale, Retail, and Farm Products			✓	✓	368	45	12.2	6	12	18	8	45	5.6	104	30	29	499	556	11.4	54.1	37.5	\$27.74	WkExp
Truck Drivers, Light or Delivery Services			1	✓	1,705	278	16.3	41	20	60	281	537	1.9	635	354	256	2,127	2,534	19.1	33.7	21.6	\$15.86	STOJT
Group Totals STOJT MTOJT LTOJT WkExp 1 2 0 1	VO 0		AA BA		3,716	652	17.5	See	footnote	3	468	987	2.1	1,254	504	631	See f	ootnot	e 3	43.5	29.8		
Operations	Ű		v	, ,	<u> </u>																		
Gas Compressor and Gas Pumping Station Operators				✓	79	9	11.4	*	*	*	7	27	3.9	103	41	25	*	*	*	28.0	20.0	n/a	МТОЈТ
Gas Plant Operators				✓	60	4	6.7	*	*	*	4	18	4.5	10	5	5	*	*	*	41.7	25.0	\$26.27	LTOJT
Plant and System Operators, All Other				✓	284	32	11.3	*	*	*	0	55	n/a	136	35	29	*	*	*	44.9		\$27.24	LTOJT
Group Totals STOJT MTOJT LTOJT WkExp 0 1 2 0	VO 0		AA BA	BA+	423	45	10.6	See	footnote	3	11	100	9.1	249	81	59	See f	ootnot	e 3	41.3	26.6		
Administration	, U		U	U																			
Bookkeeping, Accounting, and Auditing Clerks	✓	✓	/ /	✓	5,125	345	6.7	44	102	146	356	1,127	3.2	1,489	590	521	5,423	5,865	8.1	41.8	26.9	\$18.08	MTOJ
Budget Analysts		✓	✓		141	3	2.1	2	4	5	16	30		53	11	6	226	241		50.0		\$30.65	
Computer and Information Systems Managers	✓	✓	✓	✓	345	21	6.1	12	10	22	31	114	3.7	78	2	16	540		22.6	57.1		\$38.21	BA+
Computer Programmers	✓	✓	✓	✓	656	65		0	17	17	34	85	2.5	108	29	13	715	662		49.8		\$29.90	
Computer Support Specialists	✓	✓	✓	✓	1,088	66		16	12	27	93	433	4.7	236	110	40	955	1,112		26.1		\$22.58	
Computer Systems Analysts	✓	✓	✓	✓	469	42		14	9	23	26	81	3.1	124	51	15	793	928		46.1		\$34.63	
Cost Estimators	1	+			+07	42	9.0	14	7	23	20	01	3.1	124	31	13	173	920	1/	70.1	۵1.4	ψυτ.υυ	DA

Summary Statistics for All	Gä	asl	ine	e Ph	ases						5	State	wide	Lab	or Fo	rce In	dica	tors						
AGIA Occupations ❖ Percent Nonresident Workers² 16.4% ❖ Percent of Workers Age 45+9 37.4%	F	Design Permi Open Seaso Phase	t/ n	,	Precons		Worker (2006) ²			nated Dema 004-2014)		Emplo	LEXsys oyment l (2006)		Pote	ential Supp (2006)	ply		Employ jections 04-2014	3	Wor Demogr (200		-	pation teristics
 ❖ Percent of Workers Age 50+9 24.3% 				Road and Bridge through	≅.	Total Number Workers	Number Workers	Percent l Workers	Annual C Growth	Annual C Replacer	Total An	Number Postings	Number	Ratio of Reg Job Position	Qualified, another c	Workers cun employed in occupations	UI Claimants working in o	Estimate (2004)	Projected (2014)	Growth I	Percent Workers Age 45+	Percent Workers Age 50+	Average Hourly (May 2006) ¹⁰	Training
Training Levels ¹¹ STOJT MTOJT LTOJT WkExp VOC AA BA BA+ 25 28 13 13 6 7 18 3	Phase 1	Phase 2	Phase 3	idge - Phase 1 ugh Operations	operations Id Construction	umber of	Number of Nonresident Workers	Nonresident	Openings due to	Openings due to ement	Annual Openings	Number of Job Position Postings ⁴	of Registrants ⁵	Registrants to ition Postings	d, but working in occupation ⁶	currently d in less skilled ons ⁷	UI Claimants previously working in occupation ⁸	Estimated Employment (2004)	d Employment	Rate (Percent)	Workers	Workers	Hourly Wage 06) ¹⁰	Levels ¹¹
Administration (Continued	d)																							
Database Administrators	✓	✓	✓		✓	99	8	8.1	4	1	5	25	59	2.4	26	3	6	121	160	32.2	46.3	26.3	\$33.58	BA
Employment, Recruitment, and Placement Specialists	✓	~	✓		✓ ✓	111	8	7.2	4	3	6	22	124	5.6	41	5	9	166	204	22.9	44.7	33.0	\$22.56	BA
Executive Secretaries and Administrative Assistants	✓	~	✓		~	4,460	397	8.9	38	64	102	565	1,765	3.1	1,550	569	443	3,362	3,740	11.2	41.2	28.3	\$18.93	МТОЈТ
File Clerks	✓	~	✓		✓	795	56	7.0	0	14	14	78	346	4.4	268	131	84	473	283	-40	24.8	16.8	\$12.68	STOJT
First-Line Supervisors/Managers of Office and Administrative Support Workers	✓	~	✓		✓	2,154	127	5.9	24	68	92	135	705	5.2	678	214	237	3,189	3,429	7.5	48.7	31.0	\$23.05	WkExp
Human Resources Assistants, Except Payroll and Timekeeping	✓	✓	✓		✓	406	19	4.7	8	11	19	70	249	3.6	127	69	45	518	594	14.7	32.3	18.3	\$18.43	STOJT
Payroll and Timekeeping Clerks	✓	~	1		✓	526	47	8.9	12	17	29	66	184	2.8	139	37	59	638	761	19.3	41.8	25.0	\$19.70	МТОЈТ
Receptionists and Information Clerks	✓	1	1		✓	3,547	396	11.2	50	70	120	474	1,961	4.1	1,392	743	375	2,861	3,356	17.3	25.9	17.5	\$13.77	STOJT
Training and Development Specialists			1		✓	239	10	4.2	5	5	9	30	98	3.3	87	12	26	310	355	14.5	50.2	33.3	*	BA
Group Totals STOJT MTOJT LTOJT WkExp 3 3 0 2			AA 1		A BA+	20,306	1,641	8.1	See	footnote	3	2,036	7,375	3.6	6,455	2,602	1,905	See f	ootnot	e 3	38.9	25.5		
Camps / Catering	J			J																				
Cooks, Institution and Cafeteria					✓	824	132	16.0	20	34	54	215	345	1.6	218	62	171	1,108	1,303	17.6	54.6	34.8	\$16.09	МТОЈТ
Cooks, Restaurant					✓	2,807			42	52	93	256	645	2.5	830	127	464				22.8			LTOJT
Dishwashers					✓	2,157	726		25	38	63	270	558	2.1	608	207	275				19.6	12.9		STOJT
Emergency Medical Technicians and Paramedics					✓	286	43	15.0	9	3	11	54	120	2.2	112	44	13	230	317	37.8	26.5	16.6	\$22.58	VOC
First-Line Supervisors/Managers of Food Preparation and Serving Workers					✓	755	97	12.8	14	21	36	88	329	3.7	230	27	79	897	1,039	15.8	35.0	20.4	\$15.29	WkExp
First-Line Supervisors/Managers of Housekeeping and Janitorial Workers					✓	440	56	12.7	11	10	21	44	535	12.2	98	11	52	403	514	27.5	45.7	28.1	\$17.97	WkExp

Summary Statistics for All	Ga	asl	ine	Pha	ases ¹						5	State	wide	Lab	or Fo	rce In	dica	itors						
AGIA Occupations ❖ Percent Nonresident Workers ² 16.4% ❖ Percent of Workers Age 45+ ⁹ 37.4%	P S	Desigr Permit Open Season Phase	t/ n	71	Precon		Worker (2006) ²			nated Dem 004-2014)		Emple	LEXsys oyment l (2006)		Pote	ential Supp (2006)	ply	Pro	Employ ojections 04-2014	3	Wor Demog (20		Occup Charac	pation teristics
 ❖ Percent of Workers Age 50+9 Ż4.3% 				Road and E	Preconstruction a	Total Number Workers	Number of Workers	Percent Workers	Annual (Growth	Annual (Replace	Total A	Number Postings	Number	Ratio of Regi Job Position	Qualified, another o	Workers cui employed in occupations	UI Claimants working in o	Estimate (2004)	Projected (2014)	Growth	Percent Age 451	Percent Age 504	Average Hourly (May 2006) ¹⁰	Training Levels
Training Levels ¹¹ STOJT MTOJT LTOJT WkExp VOC AA BA BA+ 25 28 13 13 6 7 18 3	Phase 1	Phase 2	Phase 3	nd Bridge - Phase 1 through Operations	Operations and Construction	umber of s	of Nonresident	Percent Nonresident Workers	Openings due to	Openings due to ement	Annual Openings	Number of Job Position Postings ⁴	of Registrants ⁵	of Registrants to Position Postings	d, but working in occupation ⁶	currently ed in less skilled ions ⁷	UI Claimants previously working in occupation ⁸	Estimated Employment (2004)	d Employment	Rate (Percent)	Percent Workers Age 45+	Percent Workers Age 50+	Hourly Wage (06) ¹⁰	; Levels 11
Camps / Catering (Continue	d)																							
Food Preparation Workers					✓	3,521	621	17.6	62	85	147	282	770	2.7	824	287	319	2,391	3,015	26.1	24.2	16.0	\$11.66	STOJT
Food Service Managers					✓	520	80	15.4	26	15	41	252	378	1.5	326	35	71	912	1,170	28.3	39.1	23.6	\$16.82	WkExp
Janitors and Cleaners, Except Maids and Housekeeping Cleaners					✓	6,154	727	11.8	121	121	242	682	1,173	1.7	2,183	907	779	6,380	7,585	18.9	45.3	32.2	\$13.30	STOJT
Laundry and Dry-Cleaning Workers					✓	509	80	15.7	7	9	16	22	102	4.6	164	20	89	314	387	23.2	44.9	30.8	\$10.99	МТОЈТ
Maids and Housekeeping Cleaners					✓	4,680	1,254	26.8	83	57	140	710	1,100	1.5	1,229	355	787	2,727	3,556	30.4	35.6	23.7	\$10.47	STOJT
Maintenance and Repair Workers, General					✓	3,906	596	15.3	74	74	148	285	878	3.1	1,008	342	542	3,826			50.3	32.9	\$20.48	МТОЈТ
Group Totals STOJT MTOJT LTOJT WkExt WkExt	v VO	C	AA 0	BA 0	BA+	26,559	5,418	20.4	See	footnote	2 3	3,160	6,933	2.2	7,830	2,424	3,641	See f	footnot		37.3	24.7		
Office & Field Engineering	-		Ů.	Ū	Ü																			
Architectural and Civil Drafters	/	✓	✓			247	18	7.3	6	9	15	36	80	2.2	44	26	12	323	384	18.9	32.9	16.7	\$22.82	VOC
Cartographers and Photogrammetrists	✓	✓	✓		✓	91	9	9.9	*	*	*	3	18	6.0	15	2	2	*	*	*	44.2	26.7	\$27.42	BA
Chemical Engineers					✓	46	9	19.6	*	*	*	3	4	1.3	14	1	2	*	*	*	61.9		\$42.54	BA
Civil Engineering Technicians	✓	✓	✓		✓	505	50		8	7	16	17	41	2.4	141	75	38	342	425	24.3	37.8		\$26.75	AA
Civil Engineers	✓	✓	1	✓	✓	781	97	12.4	26	15	42	64	47	0.7	83	15	17				43.9		\$36.68	BA
Control and Valve Installers and Repairers, Except Mechanical Door					✓	87	43		3	3	6	5	17	3.4	45	32	7			27.7	37.5		\$25.69	
Electrical and Electronic Engineering Technicians	✓	✓	1		✓ ✓	298	79	26.5	5	6	11	37	91	2.5	77	12	8	286		16.8			\$30.03	AA
Electrical Engineers	✓	1	✓			269	44	16.4	6	4	10	30	24	0.8	46	3	12						\$40.74	BA
Engineering Managers	✓	1	~		✓	278	33		12	11	23	44	31	0.7	116	0	10				65.3		\$48.39	BA+

Summary Statistics for All	Ga	asli	ine P	hases							State	wide	e Lab	or Fo	rce I	ndica	itors						
AGIA Occupations ❖ Percent Nonresident Workers ² 16.4% ❖ Percent of Workers Age 45+9 37.4%	P S	Design Permit Open Season Phase	n s	Precon		Worker (2006) ²			nated Der 004-2014			ALEXsys loyment (2006)	Data	Pote	ential Sur (2006)	pply	Pro	Employ ojections 004-2014	S	Wor Demog			pation eteristics
 ❖ Percent of Workers Age 43+9 ❖ Percent of Workers Age 50+9 24.3% 			# # A	Preconstruction and	Total Nu Workers	Number of Workers	Percent N Workers	Annual Openings Growth	Annual Openings Replacement	Total Anı	Number of Postings	Number o	Ratio of Reg Job Position	Qualified, another o	Workers cur employed in occupations	UI Claima working i	Estimated (2004)	Projected (2014)	Growth Rate	Percent Workers Age 45+	Percent Workers Age 50+	Average (May 200	Training
Training Levels ¹¹ STOJT MTOJT LTOJT WkExp VOC AA BA BA BA+ 25 28 13 13 6 7 18 3	Phase 1	Phase 2	Operation Phase	Operations and Construction Bridge - Phase 1	Number of ers	of Nonresident	Nonresident }	penings due to	penings due to ent	Annual Openings	of Job Position	of Registrants ⁵	Registrants to tion Postings	Qualified, but working in another occupation ⁶	currently 1 in less skilled ons ⁷	UI Claimants previously working in occupation 8	1 Employment	Employment	ate (Percent)	Vorkers	Vorkers	Average Hourly Wage (May 2006) ¹⁰	Levels ¹¹
Office & Field Engineering (Continued	d)																						
Engineering Technicians, Except Drafters, All Other	✓	✓	✓	✓	755	115	15.2	6	10	15	13	42	3.2	172	0	83	404	461	14.1	39.1	27.4	\$26.84	AA
Environmental Engineers	✓	✓	✓	✓	224	41	18.3	*	*	*	17	22	1.3	49	13	8	*	*	*	49.3	31.9	\$34.76	BA
Inspectors, Testers, Sorters, Samplers, and Weighers			✓	✓	337	69	20.5	*	*	*	14	104	7.4	69	27	50	*	*	*	32.6	23.2	\$23.64	МТОЈТ
Managers, All Other	1	1	✓		2,993	279	9.3	25	89	114	78	1,119	14.3	940	401	236	4,556	4,806	5.5	52.1	35.0	\$31.77	WkExr
Materials Engineers	✓	1	✓	✓	27	12	44.4	*	*	*	5	9		5	0	0	*	*	*	62.5	31.2	*	BA
Mechanical Drafters	1	1	✓		13	0	0.0	*	*	*	4	9	2.3	2	2	0	*	*	*	0.0	0.0	\$34.94	VOC
Mechanical Engineering Technicians	✓	✓	✓	✓	43	6	14.0	*	*	*	13	40	3.1	22	6	1	*	*	*	36.8	18.4	\$27.36	AA
Mechanical Engineers	1	1	✓	✓	274	110	40.1	14	11	24	43	75	1.7	52	6	40	388	523	34.8	40.5	23.2	\$40.04	BA
Office and Administrative Support Workers, All Other	1	1	✓ ✓		5,207	451	8.7	5	49	54	132	2,006		1,590	0	598	2,069			33.9		\$17.40	STOJT
Office Clerks, General		✓	✓ ✓	✓	8,097	988		50	153	202	402				1,711	940						\$14.64	
Procurement Clerks		1	✓	1	310	23	7.4	0	7	7	18	69		90	58	19		275		49.8		\$20.13	
Production, Planning, and Expediting Clerks		1	✓	✓	411	53	12.9	13	17	30	69	95		143	74	42						\$22.96	
Surveying and Mapping Technicians		1	✓	1	243	30	12.3	4	9	13	12	57		39	25	37		297				\$21.36	
Surveyors		1	✓	✓	554	100		13	15	28	25	83		94	4	148			31.3	45.2		\$28.12	
Telecommunications Equipment Installers and Repairers, Except Line Installers		✓	✓	✓	767	76	9.9	7	15	22	26	126		178	60	51	715			46.7		\$26.21	
Weighers, Measurers, Checkers, and Samplers, Recordkeeping				✓	99	14	14.1	*	*	*	1	40		29	19	12		*	*	35.2		\$13.67	
Group Totals STOJT MTOJT LTOJT WkExp 5 3 1 1	VO 2			BA BA+ 8 1	22,956			See	footnot		1,114	6,159			2,572			footnot	te 3	38.9			51071

Summary Statistics for All	Gā	asli	ne	Pha	ases	s^1						9	State	wide	Lab	or Fo	rce Ir	ndica	tors						
AGIA Occupations ❖ Percent Nonresident Workers² ❖ Percent of Workers Age 45+9 37.4% 	P S	Design Permit Open Season Phases	1	Н	Precon		Alaska (Worker (2006) ²	Data		nated Der 004-2014		Emplo	LEXsys oyment 1 (2006)		Pote	ential Sup (2006)	ply	Pro	Employa ojections 04-2014	;	Wor Demog		Occup Charac	
❖ Percent of Workers Age 45+9 37.4% ❖ Percent of Workers Age 50+9 24.3% Training Levels¹¹ STOJT MTOJT LTOJT WkExp VOC AA BA BA+ BA+ 25 28 13 13 6 7 18 3	Phase	Phase	Phase	Road and Bridge - Phase 1	Preconstruction and Construction	Operations	Total Number of Workers	Number of Nonresident Workers	Percent Nonresident Workers	Annual Openings due Growth	Annual Openings due Replacement	Total Annual Openings	Number of Job Position Postings ⁴	Number of Registrants	Ratio of Registrants to Job Position Postings	Qualified, but working another occupation ⁶	Workers currently employed in less stoccupations	UI Claimants previously working in occupation 8	Estimated Employment (2004)	Projected Employment (2014)	Growth Rate (Percent)	Percent Workers Age 45+	Percent Workers Age 50+	Average Hourly Wage (May 2006) ¹⁰	Training Levels ¹¹
Environmental	se 1	se 2	se 3	se 1	ction	ions		lent	t l	e to	e to	1gs	tion	nts ⁵	to	ng in	ly skilled	usly on ⁸	ent	ent	nt)			ge	
	1									1								1					<u> </u>		
Environmental Engineering Technicians		✓	✓		✓		243	35	14.4	*	*	*	14	42	3.0	74	26	33	*	*	*	36.3	21.9	*	AA
Environmental Science and Protection Technicians, Including Health		✓	✓		✓		198	23	11.6	*	*	*	42	113	2.7	65	16	30	*	*	*	33.9	26.1	\$17.55	AA
Environmental Scientists and Specialists, Including Health		✓	✓		✓		535	37	6.9	12	12	23	18	53	2.9	188	2	25	645	760	17.8	42.9	29.0	\$30.23	MA
Hazardous Materials Removal Workers		~	✓				449	80	17.8	*	*	*	1	7	7.0	154	42	285	*	*	*	31.2	15.7	*	МТОЈТ
Landscape Architects		~	✓		✓		40	3	7.5	*	*	*	2	10	5.0	12	2	10	*	*	*	27.0	21.6	\$34.17	BA
	VO 0		AA 2	BA 1	BA	_	1,465	178	12.2	See	footnot	e 3	77	225	2.9	493	88	383	See	footnot	e 3	36.7	23.4		
Safety																									
Health and Safety Engineers, Except Mining Safety Engineers and Inspectors	✓	✓	✓	✓	✓	T	232	70	30.2	4	3	7	35	68	1.9	28	5	7	104	147	41.3	56.6	38.1	\$35.92	BA
Occupational Health and Safety Specialists		✓	✓		✓	√	149	25	16.8	3	5	7	31	40	1.3	62	0	10	206	231	12.1	66.2	44.6	\$38.32	BA
Occupational Health and Safety Technicians					✓		71	17	23.9	*	*	*	3	28	9.3	22	0	5	*	*	*	38.1	20.6	\$28.39	VOC
Security Guards					✓		2,680	424	15.8	0	51	51	622	829	1.3	898	460	309	2,349	2,335	-0.6	40.0	29.3	\$13.76	STOJT
Group Totals STOJT MTOJT LTOJT WkExp 1 0 0 0	VO 1	C	AA 0	BA 2	BA 0	_	3,132	536	17.1	See	footnot	e 3	691	965	1.4	1,010	465	331	See	footnot	e 3	42.3	30.4		
Grand Totals	1		v		J		29,751	21,251	16.4	See	footnot	e 3	11,670	36,070	3.1	37,723	13,590	22,309	See	footnot	e 3	37.4	24.3		

Notes

- 1. <u>Gasline Phases</u> Gasline construction activities and the demand for workers in various occupations will vary over time, depending on the project's phase. Phases are not always sequential. Road and Bridge upgrades, maintenance, and repair will occur over the entire life of the gasline project. Some Phase 3 activities will overlap with preconstruction and construction activities. For a more complete description of each phase, see the document <u>Project Phases: AGIA Gasline Construction.</u>
- 2. Number of Workers/Residency Alaska wage records identify workers in private sector, state and local government covered by unemployment insurance within Alaska. Workers are assigned to the occupation in which they earned the most money in 2006, so a person will be counted only once, even if they worked in multiple occupations. The duration of a worker's employment is not a factor in the count of workers a person is counted as a worker once they earn any wages covered under Alaska's unemployment insurance system. Alaska worker residency is determined by matching the Alaska Department of Revenue Permanent Fund Dividend (PFD) file with the Alaska Department of Labor and Workforce Development wage file. The PFD file is a list of Alaskans who either applied for or received a PFD. Workers included in the wage file are considered Alaska residents if they applied for a 2006 PFD or 2007 PFD. This data is methodologically different than the employment data. For more information on how the worker and the employment data differ, please contact the Research and Analysis Section of the Alaska Department of Labor and Workforce Development at 907.465.4518.
- 3. Estimated Demand/Employment Projections Ten year occupational employment projections are produced biennially, and provide the data for Estimated Demand and the Alaska Employment Projections. Estimated and projected employment data includes self-employed workers in that occupation. Self-employment is not normally captured in other measures of employment published by the Alaska Department of Labor, Research and Analysis Section. Growth openings occur when new jobs are created in the economy. Replacement openings occur when workers leave an occupation. Replacement openings can occur for many reasons, including retirement, leaving the state, or changing careers. Total openings are the sum of growth and replacement openings, and may not total due to rounding. Some occupational projections will fall outside of statistical error measurement guidelines or will disclose confidential information about an employer, and are therefore suppressed. Because of suppressed data, totals for AGIA groups and overall totals cannot be calculated. This data is methodologically different than the employment data. For more information on how the worker and the employment data differ, please contact the Research and Analysis Section of the Alaska Department of Labor and Workforce Development at 907.465.4518.
- 4. <u>Job Postings</u> Total count of available jobs by occupation posted by employers on ALEXsys in 2006. ALEXsys is the State of Alaska's online job seeker/workforce services system.
- 5. Registrants Total count of ALEXsys registrants by occupation in 2006. Registrants may identify their interest in or qualification for multiple occupations on their application so individuals may be counted multiple times in this calculation.
- 6. <u>In Another Occupation</u> Workers were considered qualified for the listed occupation if they had four quarters of prior experience in the years 2004 thru 2006 in that occupation. Workers may be considered qualified for more than one occupation.
- 7. <u>In Less Skilled Occupation</u> Each worker's primary occupation in 2006 was compared with all occupations in which they had four quarters of prior experience in the years 2004 thru 2006. If the worker had four quarters of experience in an occupation, but was employed in 2006 in an occupation requiring less education, training or experience, then they are counted as potential supply since they are currently "underemployed".
- 8. UI Claimants Unemployment insurance claimants with an active claim in 2006. Claimants were matched with 2005 UI wage records to determine their primary prior occupation.
- 9. <u>Age</u> Worker age is determined by matching 2006 workers with historical PFD files. Only those workers with age data are used to determine the percent of workers older than age 45 or 50. Occupations with a significant number of nonresident workers will have less reliable age information since age data is not available for nonresident workers.
- 10. <u>Average Hourly Wage</u> Average Hourly Wage data comes from the Research and Analysis Section of the Alaska Department of Labor and Workforce Development, through the Occupational Employment Statistics Survey, a cooperative agreement with the U.S. Bureau of Labor Statistics, and represent statewide average wages for the occupation.
- 11. Training Levels Training requirements are based on the U. S. Department of Labor's Bureau of Labor Statistics data. The education groups are as follows:
 - STOJT Short Term On-the-Job Training, typically requiring less than one month of training to attain average job performance.
 - MTOJT Moderate Term On-the-Job Training, typically requiring between one and twelve months of combined on-the-job experience and informal training.
 - LTOJT Long Term On-the-Job Training, typically requiring more than 12 months of on-the-job training or combined work experience and formal classroom instruction for workers to develop the necessary skills to attain average job performance.
 - WkExp Work Experience in a related occupation is generally required to meet these job requirements. Some occupations are supervisory or managerial in nature.
 - VOC Vocational training at the postsecondary level, with program durations from several weeks to more than a year, is required to attain average job performance.
 - AA Associate Degree, requiring completion of a degree program of at least two years of full-time equivalent academic work, is required to attain average job performance.
 - BA Bachelor's degree, requiring completion of a degree program of at least four years but no more than five years of full-time equivalent academic work, is required to attain average job performance.
 - BA+ Bachelor's degree plus some combination of additional work experience or continued education beyond the bachelor's degree is required to attain average job performance in these occupations.