

**Construction Phase**

**Table Data**

<b>Base traffic</b>	
Population growth Percentage	10%
<b>construction</b>	
Number of Construction Employees	900
construction employee carpool participation percentage	100%
Number of construction supervisors	57
supervisor Carpool avg number employees per car	1.5
number construction delivery trucks per day	73

**Traffic Volume Comparison**

Construction employee carpool percent		100%									
Construction Supervisor employees per car		1.5									
analysis period		base traffic volume		population Growth Traffic Volume		Project traffic volume		total traffic volume		Total Traffic volume	Traffic % from Project Volume
		vehicle type		vehicle type		vehicle type		vehicle type			
		1&2	3,4,&5	1&2	3,4,&5	1&2	3,4,&5	1&2	3,4,&5		
Construction Year, Non-peak Season	Weekday AM	160	16	16	2	38	99	214	117	331	41.39%
	Weekday PM	212	12	21	1	38	99	271	112	383	35.77%
	Weekend AM	222	10	22	1	0	0	244	11	255	0.00%
	Weekend PM	250	16	25	2	0	0	275	18	293	0.00%
Construction Year, peak Season	Weekday AM	194	36	19	4	38	99	251	139	390	35.13%
	Weekday PM	290	20	29	2	38	99	357	121	478	28.66%
	Weekend AM	212	16	21	2	0	0	233	18	251	0.00%
	Weekend PM	290	22	29	2	0	0	319	24	343	0.00%

**Assuming employees arrive between 7-8 AM and leave between 4-5 PM**

Number of minutes	60
percent of project trucks at this time	50%
Percentage of employees from south (section 2)	20%
Percentage of employees from North (section 1)	80%

**Traffic volume by Section travelled**

Assuming employees arrive between 7-8 AM and leave between 4-5 PM		total traffic volume		Estimated traffic from section 1		estimated traffic from section 2	
		vehicle type		vehicle type		vehicle type	
		1&2	3,4,&5	1&2	3,4,&5	1&2	3,4,&5
Construction Year, Non-peak Season	Weekday AM	214	59	171	47	43	12
	Weekday PM	271	56	217	45	54	11
	Weekend AM	244	6	195	5	49	1
	Weekend PM	275	9	220	7	55	2
Construction Year, peak Season	Weekday AM	251	70	201	56	50	14
	Weekday PM	357	61	286	49	71	12
	Weekend AM	233	9	186	7	47	2
	Weekend PM	319	12	255	10	64	2

**seconds between vehicles entering mine site or travelling section 1 or section 2**

Assuming employees arrive between 7-8 AM and leave between 4-5 PM		Seconds between vehicles entering Rosemont mine site		Seconds between vehicles travelling section 1 toward the mine		Seconds between vehicles travelling section 2 toward the mine	
		vehicle type		vehicle type		vehicle type	
		1&2	3,4,&5	1&2	3,4,&5	1&2	3,4,&5
Construction Year, Non-peak Season	Weekday AM	94.7	61.0	21.1	76.6	83.7	300.0
	Weekday PM	94.7	64.3	16.6	80.0	66.7	327.3
	Weekend AM	0.0	600.0	18.5	720.0	73.5	3600.0
	Weekend PM	0.0	400.0	16.4	514.3	65.5	1800.0
Construction Year, peak Season	Weekday AM	94.7	51.4	17.9	64.3	72.0	257.2
	Weekday PM	94.7	59.0	12.6	73.5	50.7	300.0
	Weekend AM	0.0	400.0	19.4	514.3	76.6	1800.0
	Weekend PM	0.0	300.0	14.1	360.0	56.3	1800.0

**Construction Phase**

**Table Data**

<b>Base traffic</b>	
Population growth Percentage	10%
<b>construction</b>	
Number of Construction Employees	900
construction employee carpool participation percentage	15%
Number of construction supervisors	57
supervisor Carpool avg number employees per car	1.5
number construction delivery trucks per day	73

**Traffic Volume Comparison**

Construction employee carpool percent		15%									
Construction Supervisor employees per car		1.5									
analysis period		base traffic volume		population Growth Traffic Volume		Project traffic volume		total traffic volume		Total Traffic volume	Traffic % from Project Volume
		vehicle type		vehicle type		vehicle type		vehicle type			
		1&2	3,4,&5	1&2	3,4,&5	1&2	3,4,&5	1&2	3,4,&5		
Construction Year, Non-peak Season	Weekday AM	160	16	16	2	803	77	979	95	1074	81.94%
	Weekday PM	212	12	21	1	803	77	1036	90	1126	78.15%
	Weekend AM	222	10	22	1	0	0	244	11	255	0.00%
	Weekend PM	250	16	25	2	0	0	275	18	293	0.00%
Construction Year, peak Season	Weekday AM	194	36	19	4	803	77	1016	117	1133	77.67%
	Weekday PM	290	20	29	2	803	77	1122	99	1221	72.07%
	Weekend AM	212	16	21	2	0	0	233	18	251	0.00%
	Weekend PM	290	22	29	2	0	0	319	24	343	0.00%

<b>Assuming employees arrive between 7-8 AM and leave between 4-5 PM</b>	
Number of minutes	60
percent of project trucks at this time	50%
Percentage of employees from south (section 2)	20%
Percentage of employees from North (section 1)	80%

**Traffic volume by Section travelled**

Assuming employees arrive between 7-8 AM and leave between 4-5 PM		total traffic volume		Estimated traffic from section 1		estimated traffic from section 2	
		vehicle type		vehicle type		vehicle type	
		1&2	3,4,&5	1&2	3,4,&5	1&2	3,4,&5
Construction Year, Non-peak Season	Weekday AM	979	48	783	38	196	10
	Weekday PM	1036	45	829	36	207	9
	Weekend AM	244	6	195	5	49	1
	Weekend PM	275	9	220	7	55	2
Construction Year, peak Season	Weekday AM	1016	59	813	47	203	12
	Weekday PM	1122	50	898	40	224	10
	Weekend AM	233	9	186	7	47	2
	Weekend PM	319	12	255	10	64	2

**seconds between vehicles entering mine site or travelling section 1 or section 2**

Assuming employees arrive between 7-8 AM and leave between 4-5 PM		Seconds between vehicles entering Rosemont mine site		Seconds between vehicles travelling section 1 toward the mine		Seconds between vehicles travelling section 2 toward the mine	
		vehicle type		vehicle type		vehicle type	
		1&2	3,4,&5	1&2	3,4,&5	1&2	3,4,&5
Construction Year, Non-peak Season	Weekday AM	4.5	75.0	4.6	94.7	18.4	360.0
	Weekday PM	4.5	80.0	4.4	100.0	17.4	400.0
	Weekend AM	0.0	600.0	18.5	720.0	73.5	3600.0
	Weekend PM	0.0	400.0	16.4	514.3	65.5	1800.0
Construction Year, peak Season	Weekday AM	4.5	61.0	4.4	76.6	17.7	300.0
	Weekday PM	4.5	72.0	4.0	90.0	16.1	360.0
	Weekend AM	0.0	400.0	19.4	514.3	76.6	1800.0
	Weekend PM	0.0	300.0	14.1	360.0	56.3	1800.0

**operational Phase Year 5 (2015) for employees working 8-hour days 5 days a week**

**Table Data**

<b>Base traffic</b>		
Population growth factor year 5 type 1&2	21.20%	annual rate of 13%
Population growth factor year 5 type 3,4,5	18.75%	annual rate of 11.5%

<b>Operations employees</b>	
General and administrative (40 hour week)	40
Operational employees (12 hour shift)	284
Mill employees (12 hour shift)	96
SX-EW employees (12 hour shift)	28
SX-EW employees (40 hour week)	8
Total Number of operations employees	456
<b>Operations employee carpool participation percentage</b>	
other employees	4
number operation trucks per hour	4

**operational Phase Year 5 (2015) for employees working 8-hour days 5 days a week**

**Construction employee carpool percent 100%**

analysis period		base traffic volume		population Growth Traffic Volume		Project traffic volume		total traffic volume		Total Traffic volume	Traffic % from Project Volume
		vehicle type		vehicle type		vehicle type		vehicle type			
		1&2	3,4,&5	1&2	3,4,&5	1&2	3,4,&5	1&2	3,4,&5		
<b>Construction Year, Non-peak Season</b>	Weekday AM	160	16	34	3	52	4	246	23	269	20.82%
	Weekday PM	212	12	45	3	52	4	309	19	328	17.07%
	Weekend AM	222	10	47	2	0	4	269	16	285	1.40%
	Weekend PM	250	16	53	3	0	4	303	23	326	1.23%
<b>Construction Year, peak Season</b>	Weekday AM	194	36	41	8	52	4	287	48	335	16.72%
	Weekday PM	290	20	61	4	52	4	403	28	431	12.99%
	Weekend AM	212	16	45	3	0	4	257	23	280	1.43%
	Weekend PM	290	22	61	5	0	4	351	31	382	1.05%

<b>Assuming employees arrive between 7-8 AM and leave between 4-5 PM</b>	
Number of minutes	60
Percentage of employees from south (section 2)	20%
Percentage of employees from North (section 1)	80%

**Traffic volume by Section travelled**

Assuming employees arrive between 7-8 AM and leave between 4-5 PM		total traffic volume		Estimated traffic from section 1		estimated traffic from section 2	
		vehicle type		vehicle type		vehicle type	
		1&2	3,4,&5	1&2	3,4,&5	1&2	3,4,&5
<b>Non-peak Season</b>	Weekday AM	246	23	197	18	49	5
	Weekday PM	309	19	247	15	62	4
	Weekend AM	269	16	215	13	54	3
	Weekend PM	303	23	242	18	61	5
<b>peak Season</b>	Weekday AM	287	48	230	38	57	10
	Weekday PM	403	28	322	22	81	6
	Weekend AM	257	23	206	18	51	5
	Weekend PM	351	31	281	25	70	6

**seconds between vehicles entering mine site or travelling section 1 or section 2**

Assuming employees arrive between 7-8 AM and leave between 4-5 PM		Seconds between vehicles entering Rosemont mine site		Seconds between vehicles travelling section 1 toward the mine		Seconds between vehicles travelling section 2 toward the mine	
		vehicle type		vehicle type		vehicle type	
		1&2	3,4,&5	1&2	3,4,&5	1&2	3,4,&5
<b>Non-peak Season</b>	Weekday AM	69.24	156.53	18.27	200	73.47	720
	Weekday PM	69.24	189.48	14.57	240	58.06	900
	Weekend AM	0	225	16.74	276.92	66.67	1200
	Weekend PM	0	156.53	14.88	200	59.02	720
<b>peak Season</b>	Weekday AM	69.24	75	15.65	94.74	63.16	360
	Weekday PM	69.24	128.58	11.18	163.64	44.44	600
	Weekend AM	0	156.53	17.48	200	70.59	720
	Weekend PM	0	116.13	12.81	144	51.43	600

**operational Phase Year 5 (2015) for employees working 8-hour days 5 days a week**

**Table Data**

<b>Base traffic</b>	
Population growth factor year 5 type 1&2	21.20%
Population growth factor year 5 type 3,4,5	18.75%

annual rate of 13%  
annual rate of 11.5%

<b>Operations employees</b>	
General and administrative (40 hour week)	40
Operational employees (12 hour shift)	284
Mill employees (12 hour shift)	96
SX-EW employees (12 hour shift)	28
SX-EW employees (40 hour week)	8
Total Number of operations employees	456
<b>Operations employee carpool participation percentage</b>	
	15%
other employees	4
number operation trucks per hour	4

**operational Phase Year 5 (2015) for employees working 8-hour days 5 days a week**

<b>Construction employee carpool percent</b>		15%									
<b>analysis period</b>		<b>base traffic volume</b>		<b>population Growth Traffic Volume</b>		<b>Project traffic volume</b>		<b>total traffic volume</b>		<b>Total Traffic volume</b>	<b>Traffic % from Project Volume</b>
		<b>vehicle type</b>		<b>vehicle type</b>		<b>vehicle type</b>		<b>vehicle type</b>			
		<b>1&amp;2</b>	<b>3,4,&amp;5</b>	<b>1&amp;2</b>	<b>3,4,&amp;5</b>	<b>1&amp;2</b>	<b>3,4,&amp;5</b>	<b>1&amp;2</b>	<b>3,4,&amp;5</b>		
<b>Construction Year, Non-peak Season</b>	<b>Weekday AM</b>	160	16	34	3	52	4	246	23	269	20.82%
	<b>Weekday PM</b>	212	12	45	3	52	4	309	19	328	17.07%
	<b>Weekend AM</b>	222	10	47	2	0	4	269	16	285	1.40%
	<b>Weekend PM</b>	250	16	53	3	0	4	303	23	326	1.23%
<b>Construction Year, peak Season</b>	<b>Weekday AM</b>	194	36	41	8	52	4	287	48	335	16.72%
	<b>Weekday PM</b>	290	20	61	4	52	4	403	28	431	12.99%
	<b>Weekend AM</b>	212	16	45	3	0	4	257	23	280	1.43%
	<b>Weekend PM</b>	290	22	61	5	0	4	351	31	382	1.05%

<b>Assuming employees arrive between 7-8 AM and leave between 4-5 PM</b>	
Number of minutes	60
Percentage of employees from south (section 2)	20%
Percentage of employees from North (section 1)	80%

**Traffic volume by Section travelled**

<b>Assuming employees arrive between 7-8 AM and leave between 4-5 PM</b>		<b>total traffic volume</b>		<b>Estimated traffic from section 1</b>		<b>estimated traffic from section 2</b>	
		<b>vehicle type</b>		<b>vehicle type</b>		<b>vehicle type</b>	
		<b>1&amp;2</b>	<b>3,4,&amp;5</b>	<b>1&amp;2</b>	<b>3,4,&amp;5</b>	<b>1&amp;2</b>	<b>3,4,&amp;5</b>
<b>Non-peak Season</b>	<b>Weekday AM</b>	246	23	197	18	49	5
	<b>Weekday PM</b>	309	19	247	15	62	4
	<b>Weekend AM</b>	269	16	215	13	54	3
	<b>Weekend PM</b>	303	23	242	18	61	5
<b>peak Season</b>	<b>Weekday AM</b>	287	48	230	38	57	10
	<b>Weekday PM</b>	403	28	322	22	81	6
	<b>Weekend AM</b>	257	23	206	18	51	5
	<b>Weekend PM</b>	351	31	281	25	70	6

**seconds between vehicles entering mine site or travelling section 1 or section 2**

<b>Assuming employees arrive between 7-8 AM and leave between 4-5 PM</b>		<b>Seconds between vehicles entering Rosemont mine site</b>		<b>Seconds between vehicles travelling section 1 toward the mine</b>		<b>Seconds between vehicles travelling section 2 toward the mine</b>	
		<b>vehicle type</b>		<b>vehicle type</b>		<b>vehicle type</b>	
		<b>1&amp;2</b>	<b>3,4,&amp;5</b>	<b>1&amp;2</b>	<b>3,4,&amp;5</b>	<b>1&amp;2</b>	<b>3,4,&amp;5</b>
<b>Non-peak Season</b>	<b>Weekday AM</b>	69.24	156.53	18.27	200	73.47	720
	<b>Weekday PM</b>	69.24	189.48	14.57	240	58.06	900
	<b>Weekend AM</b>	0	225	16.74	276.92	66.67	1200
	<b>Weekend PM</b>	0	156.53	14.88	200	59.02	720
<b>peak Season</b>	<b>Weekday AM</b>	69.24	75	15.65	94.74	63.16	360
	<b>Weekday PM</b>	69.24	128.58	11.18	163.64	44.44	600
	<b>Weekend AM</b>	0	156.53	17.48	200	70.59	720
	<b>Weekend PM</b>	0	116.13	12.81	144	51.43	600

**12 hour shift operational Phase Year 5 (2015)**

**Table Data**

Base traffic		
Population growth factor year 5 type 1&2	21.20%	annual rate of 13%
Population growth factor year 5 type 3,4,5	18.75%	annual rate of 11.5%

Operations employees			
General and administrative (40 hour week)	40		employees per 12 hour shift
Operational employees (12 hour shift)	284	71	1/2 on a given day, 1/2 on a given shift
Mill employees (12 hour shift)	96	24	1/2 on a given day, 1/2 on a given shift
SX-EW employees (12 hour shift)	28	7	1/2 on a given day, 1/2 on a given shift
SX-EW employees (40 hour week)	8	<b>102</b>	total 12 hour shift employees per shift
Total Number of operations employees	456		
<b>Operational employee carpool participation percentage</b>			
	<b>100%</b>		
other employees	4		
number operation trucks per hour	4		copper concentrate trucks
number supply trucks per hour	3		

**12 hour shift Traffic Volume Comparison**

Construction employee carpool percent		100%									
analysis period		base traffic volume		population Growth Traffic Volume		Project traffic volume		total traffic volume		Total Traffic volume	Traffic % from Project Volume
		vehicle type		vehicle type		vehicle type		vehicle type			
		1&2	3,4,&5	1&2	3,4,&5	1&2	3,4,&5	1&2	3,4,&5		
Construction Year, Non-peak Season	Weekday AM	160	16	34	3	21	7	215	26	241	11.62%
	Weekday PM	212	12	45	3	21	7	278	22	300	9.33%
	Weekend AM	222	10	47	2	21	7	290	19	309	9.06%
	Weekend PM	250	16	53	3	21	7	324	26	350	8.00%
Construction Year, peak Season	Weekday AM	194	36	41	8	21	7	256	51	307	9.12%
	Weekday PM	290	20	61	4	21	7	372	31	403	6.95%
	Weekend AM	212	16	45	3	21	7	278	26	304	9.21%
	Weekend PM	290	22	61	5	21	7	372	34	406	6.90%

Assuming employees arrive between 5-6 AM and leave between 5-6 PM	
Number of minutes	60
Percentage of employees from south (section 2)	20%
Percentage of employees from North (section 1)	80%

**Traffic volume by Section travelled**

Assuming employees arrive between 5-6 AM and leave between 5-6 PM		total traffic volume		Estimated traffic from section 1		estimated traffic from section 2	
		vehicle type		vehicle type		vehicle type	
		1&2	3,4,&5	1&2	3,4,&5	1&2	3,4,&5
Non-peak Season	Weekday AM	215	26	172	21	43	5
	Weekday PM	278	22	222	18	56	4
	Weekend AM	290	19	232	15	58	4
	Weekend PM	324	26	259	21	65	5
peak Season	Weekday AM	256	51	205	41	51	10
	Weekday PM	372	31	298	25	74	6
	Weekend AM	278	26	222	21	56	5
	Weekend PM	372	34	298	27	74	7

**seconds between vehicles entering mine site or travelling section 1 or section 2**

Assuming employees arrive between 5-6 AM and leave between 5-6PM		Seconds between vehicles entering Rosemont mine site		Seconds between vehicles travelling section 1 toward the mine		Seconds between vehicles travelling section 2 toward the mine	
		vehicle type		vehicle type		vehicle type	
		1&2	3,4,&5	1&2	3,4,&5	1&2	3,4,&5
Non-peak Season	Weekday AM	171.43	138.47	20.93	171.43	83.72	720
	Weekday PM	171.43	163.64	16.22	200	64.29	900
	Weekend AM	171.43	189.48	15.52	240	62.07	900
	Weekend PM	171.43	138.47	13.9	171.43	55.38	720
peak Season	Weekday AM	171.43	70.59	17.56	87.8	70.59	360
	Weekday PM	171.43	116.13	12.08	144	48.65	600
	Weekend AM	171.43	138.47	16.22	171.43	64.29	720
	Weekend PM	171.43	105.89	12.08	133.33	48.65	514.29

**12 hour shift operational Phase Year 5 (2015)**

**Table Data**

Base traffic	
Population growth factor year 5 type 1&2	21.20%
Population growth factor year 5 type 3,4,5	18.75%

annual rate of 13%  
annual rate of 11.5%

Operations employees		
General and administrative (40 hour week)	40	employees per 12 hour shift
Operational employees (12 hour shift)	284	71
Mill employees (12 hour shift)	96	24
SX-EW employees (12 hour shift)	28	7
SX-EW employees (40 hour week)	8	102
Total Number of operations employees		456
Operational employee carpool participation percentage		15%
other employees		4
number operation trucks per hour		4
number supply trucks per hour		3

1/2 on a given day, 1/2 on a given shift  
1/2 on a given day, 1/2 on a given shift  
1/2 on a given day, 1/2 on a given shift  
total 12 hour shift employees per shift

copper concentrate trucks

**12 hour shift Traffic Volume Comparison**

Construction employee carpool percent		15%									
analysis period		base traffic volume		population Growth Traffic Volume		Project traffic volume		total traffic volume		Total Traffic volume	Traffic % from Project Volume
		vehicle type		vehicle type		vehicle type		vehicle type			
		1&2	3,4,&5	1&2	3,4,&5	1&2	3,4,&5	1&2	3,4,&5		
Construction Year, Non-peak Season	Weekday AM	160	16	34	3	90	7	284	26	310	31.29%
	Weekday PM	212	12	45	3	90	7	347	22	369	26.29%
	Weekend AM	222	10	47	2	90	7	359	19	378	25.66%
	Weekend PM	250	16	53	3	90	7	393	26	419	23.15%
Construction Year, peak Season	Weekday AM	194	36	41	8	90	7	325	51	376	25.80%
	Weekday PM	290	20	61	4	90	7	441	31	472	20.55%
	Weekend AM	212	16	45	3	90	7	347	26	373	26.01%
	Weekend PM	290	22	61	5	90	7	441	34	475	20.42%

Assuming employees arrive between 5-6 AM and leave between 5-6 PM	
Number of minutes	60
Percentage of employees from south (section 2)	20%
Percentage of employees from North (section 1)	80%

**Traffic volume by Section travelled**

Assuming employees arrive between 5-6 AM and leave between 5-6 PM		total traffic volume		Estimated traffic from section 1		estimated traffic from section 2	
		vehicle type		vehicle type		vehicle type	
		1&2	3,4,&5	1&2	3,4,&5	1&2	3,4,&5
Non-peak Season	Weekday AM	284	26	227	21	57	5
	Weekday PM	347	22	278	18	69	4
	Weekend AM	359	19	287	15	72	4
	Weekend PM	393	26	314	21	79	5
peak Season	Weekday AM	325	51	260	41	65	10
	Weekday PM	441	31	353	25	88	6
	Weekend AM	347	26	278	21	69	5
	Weekend PM	441	34	353	27	88	7

**seconds between vehicles entering mine site or travelling section 1 or section 2**

Assuming employees arrive between 5-6 AM and leave between 5-6 PM		Seconds between vehicles entering Rosemont mine site		Seconds between vehicles travelling section 1 toward the mine		Seconds between vehicles travelling section 2 toward the mine	
		vehicle type		vehicle type		vehicle type	
		1&2	3,4,&5	1&2	3,4,&5	1&2	3,4,&5
Non-peak Season	Weekday AM	40	138.47	15.86	171.43	63.16	720
	Weekday PM	40	163.64	12.95	200	52.17	900
	Weekend AM	40	189.48	12.54	240	50	900
	Weekend PM	40	138.47	11.46	171.43	45.57	720
peak Season	Weekday AM	40	70.59	13.85	87.8	55.38	360
	Weekday PM	40	116.13	10.2	144	40.91	600
	Weekend AM	40	138.47	12.95	171.43	52.17	720
	Weekend PM	40	105.89	10.2	133.33	40.91	514.29