

US EPA ARCHIVE DOCUMENT

## TRI Facility Distribution Charts

The percentage of the African American population in the three proximate areas near each site was normalized by taking a ratio to the state average of 30.8% African Americans. If a facility's proportion equals the state average, the ratio would be equal to 1. Various simple statistics (mean, median, 90th percentile, etc) were calculated, and the number of facilities were counted in categories based on the ratio, and the results displayed in a histogram.

For example, those facilities in the 1.25 -1.50 range had proportions of African-Americans between 25% and 50% higher than (or between 1.25 and 1.5 times) the state average, while facilities in the range of .25 -.50 had proportions between 50% and 75% lower (or .5 to .25 times) than the state average. These category counts are presented in the accompanying graphic image, similar to a histogram. Facilities with a total population size estimate of zero were excluded (and the number of included facilities was noted), and those with zero African-American populations were presented as a separate category.

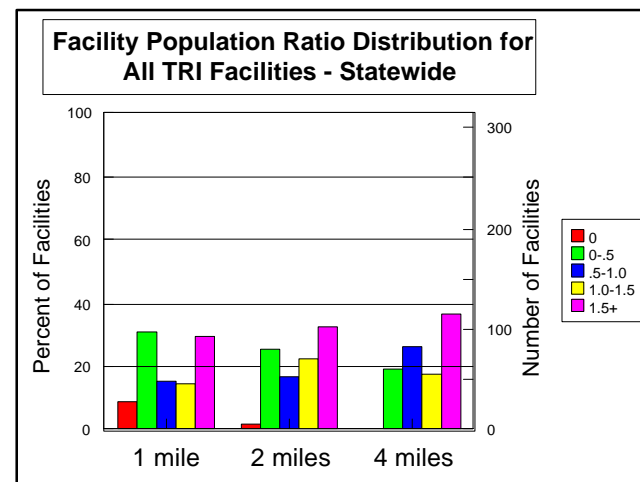
Using this approach, the proportion of African-Americans within 2 miles of the proposed Shintech facility is 80.2%, or 2.6 times the state average. This would place the facility above the 90th percentile for all TRI facilities statewide, and between the 75th and 90th percentiles for facilities releasing more than 100,000 lb to air.

The histograms allow comparison of the number and percent of facilities with proportions of African-Americans falling above and below the state average, and those much above or much below the average. While the associated data table includes the percent of the facilities which fall into each category, the bar chart includes axes showing both the percentage of facilities (on the left) and the number of facilities (on the right).

## Statewide Facility Distribution Data

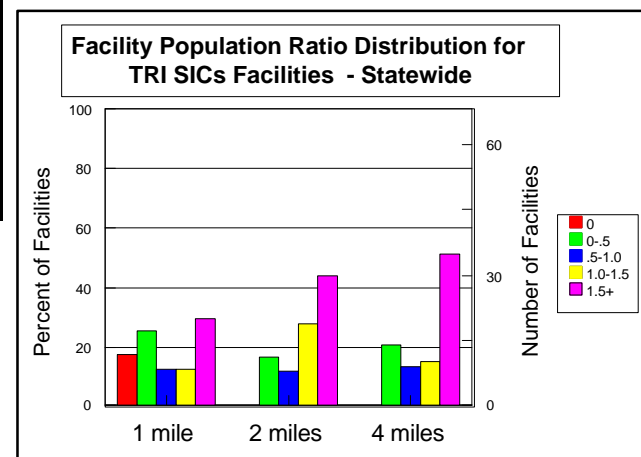
D1. All TRI	Ratio of Facility proximate percent African-American population to state average (30.8%)								
	#Facil*	Min	Max	Mean	10%tile	25%tile	50%tile	75%tile	90%tile
1 mile	306	0.00	3.25	1.07	0.00	0.18	0.78	1.80	2.71
2 miles	313	0.00	3.24	1.20	0.14	0.42	1.14	1.84	2.48
4 miles	314	0.00	2.76	1.20	0.25	0.63	1.14	1.78	2.17

Facility population ratio distribution						
Ratio to State/Distance	0	0-.5	.5-1.0	1.0-1.5	1.5 +	#Facil*
1 mile	9.15	30.7	15.4	14.7	30.1	306
2 miles	1.92	25.9	16.9	22.4	32.9	313
4 miles	0.32	19.1	26.4	17.8	36.3	314



D2. TRI SICs	Ratio of Facility proximate percent African-American population to state average (30.8%)								
	#Facil*	Min	Max	Mean	10%tile	25%tile	50%tile	75%tile	90%tile
1 mile	63	0.00	3.25	1.16	0.00	0.04	0.67	2.03	3.08
2 miles	68	0.00	3.24	1.55	0.13	0.83	1.40	2.44	2.76
4 miles	68	0.08	2.76	1.41	0.26	0.73	1.55	2.09	2.44

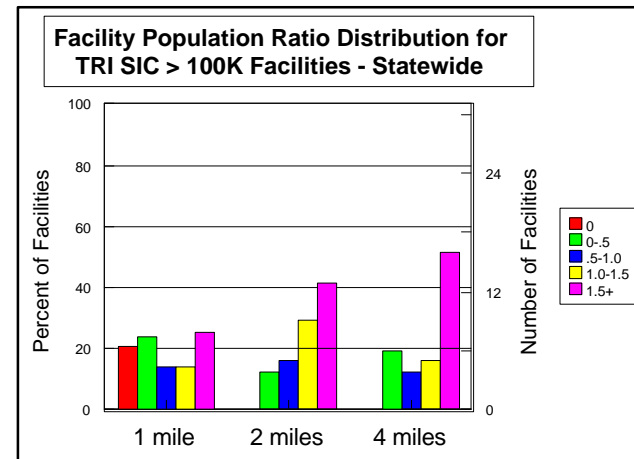
Facility population ratio distribution						
	0	0-.5	.5-1.0	1.0-1.5	1.5 +	#Facil*
1 mile	17.5	25.4	12.7	12.7	31.8	63
2 miles	0	16.2	11.8	27.9	44.1	68
4 miles	0	20.6	13.2	14.7	51.5	68



### Statewide Facility Distribution Data

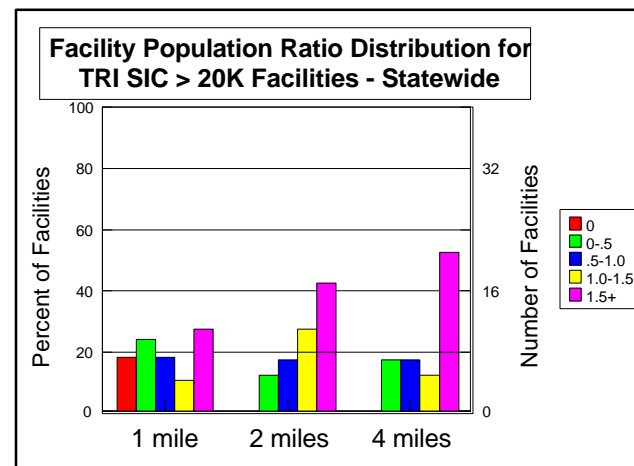
D3. TRI SIC > 100K	Ratio of Facility proximate percent African-American population to state average (30.8%)								
	#Facil*	Min	Max	Mean	10%tile	25%tile	50%tile	75%tile	90%tile
1 mile	29	0.00	3.24	1.05	0.00	0.03	0.65	1.84	2.79
2 miles	31	0.00	3.24	1.60	0.26	0.87	1.42	2.55	2.76
4 miles	31	0.08	2.63	1.46	0.27	0.79	1.70	2.14	2.48

Facility population ratio distribution						
	0	0-0.5	.5-1.0	1.0-1.5	1.5 +	#Facil*
1 mile	20.7	24.1	13.8	13.8	27.6	29
2 miles	0	12.9	16.1	29	41.9	31
4 miles	0	19.4	12.9	16.1	51.6	31



D4. TRI SIC > 20K	Ratio of Facility proximate percent African-American population to state average (30.8%)								
	#Facil*	Min	Max	Mean	10%tile	25%tile	50%tile	75%tile	90%tile
1 mile	38	0.00	3.25	1.12	0.00	0.04	0.62	2.00	3.21
2 miles	40	0.00	3.24	1.62	0.23	0.83	1.40	2.58	2.95
4 miles	40	0.08	2.63	1.48	0.26	0.82	1.71	2.20	2.48

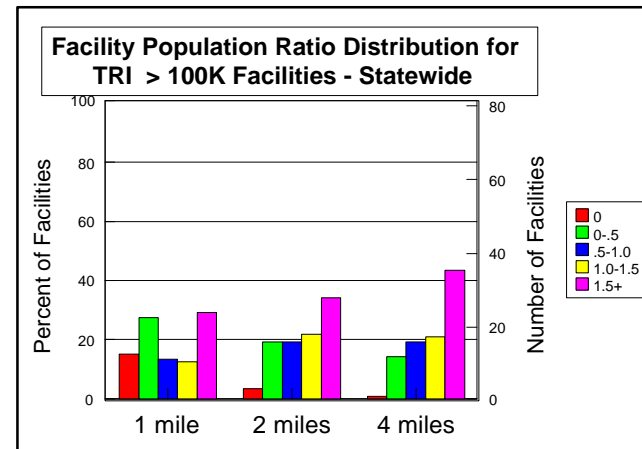
Facility population ratio distribution						
	0	0-0.5	.5-1.0	1.0-1.5	1.5 +	#Facil*
1 mile	18.4	23.7	18.4	10.5	29	38
2 miles	0	12.5	17.5	27.5	42.5	40
4 miles	0	17.5	17.5	12.5	52.5	40



### Statewide Facility Distribution Data

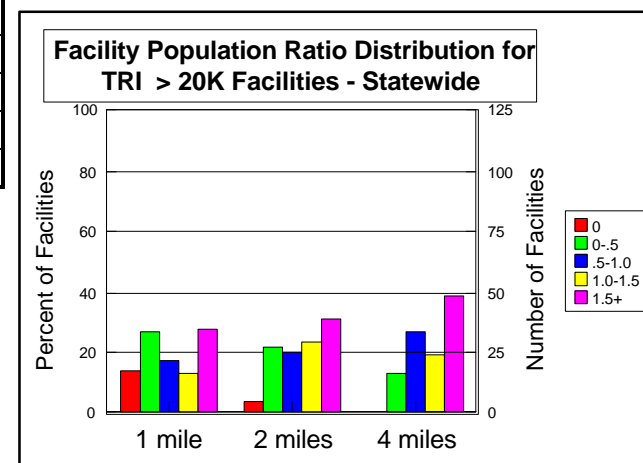
<b>D5. TRI &gt; 100K</b>		Ratio of Facility proximate percent African-American population to state average (30.8%)							
	#Facil*	Min	Max	Mean	10%tile	25%tile	50%tile	75%tile	90%tile
1 mile	79	0.00	3.24	1.06	0.00	0.11	0.73	1.82	2.93
2 miles	81	0.00	3.24	1.31	0.06	0.57	1.23	2.17	2.74
4 miles	81	0.00	2.65	1.32	0.25	0.74	1.36	1.93	2.28

Facility population ratio distribution						
	0	0-.5	.5-1.0	1.0-1.5	1.5 +	#Facil*
1 mile	15.2	27.8	13.9	12.7	30.4	79
2 miles	3.7	19.8	19.8	22.2	34.6	81
4 miles	1.23	14.8	19.8	21	43.2	81



<b>D6. TRI &gt; 20K</b>		Ratio of Facility proximate percent African-American population to state average (30.8%)							
	#Facil*	Min	Max	Mean	10%tile	25%tile	50%tile	75%tile	90%tile
1 mile	122	0.00	3.25	1.06	0.00	0.15	0.78	1.80	2.89
2 miles	125	0.00	3.24	1.25	0.06	0.45	1.20	1.88	2.68
4 miles	125	0.00	2.65	1.27	0.26	0.70	1.24	1.91	2.23

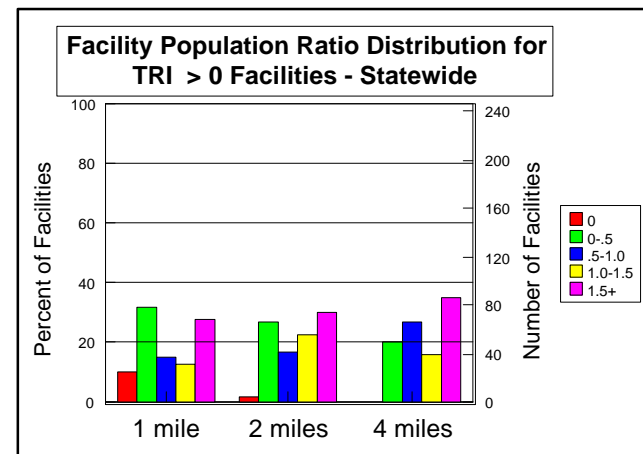
Facility population ratio distribution						
	0	0-.5	.5-1.0	1.0-1.5	1.5 +	#Facil*
1 mile	13.9	27	17.2	13.1	28.7	122
2 miles	4	21.6	20	23.2	31.2	125
4 miles	0.8	13.6	27.2	19.2	39.2	125



**Statewide Facility Distribution Data**

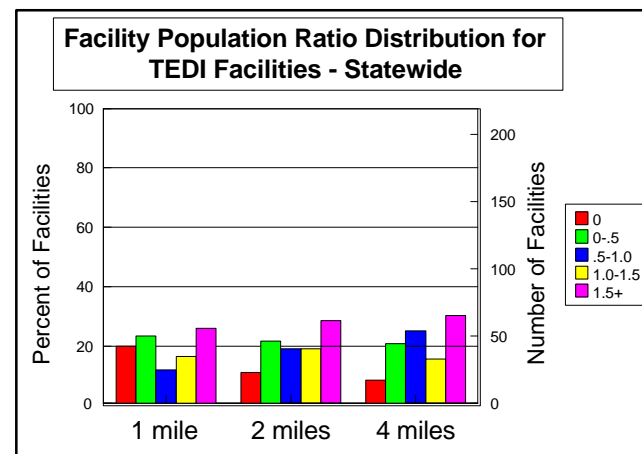
<b>D7. TRI &gt; 0</b>		Ratio of Facility proximate percent African-American population to state average (30.8%)							
	#Facil*	Min	Max	Mean	10%tile	25%tile	50%tile	75%tile	90%tile
1 mile	238	0.00	3.25	1.05	0.00	0.16	0.72	1.71	2.88
2 miles	245	0.00	3.24	1.18	0.09	0.39	1.12	1.84	2.52
4 miles	246	0.00	2.76	1.18	0.21	0.61	1.04	1.82	2.17

Facility population ratio distribution						
	0	0-.5	.5-1.0	1.0-1.5	1.5 +	#Facil*
1 mile	10.1	32.4	15.6	13	29	238
2 miles	2.45	26.9	16.7	23.3	30.6	245
4 miles	0.41	20.7	27.2	15.8	35.8	246



<b>D8. All TEDI</b>		Ratio of Facility proximate percent African-American population to state average (30.8%)							
	#Facil*	Min	Max	Mean	10%tile	25%tile	50%tile	75%tile	90%tile
1 mile	196	0.00	3.25	1.05	0.00	0.07	0.79	1.79	2.87
2 miles	206	0.00	3.24	1.12	0.00	0.22	0.98	1.70	2.62
4 miles	218	0.00	2.76	1.05	0.01	0.38	0.92	1.70	2.17

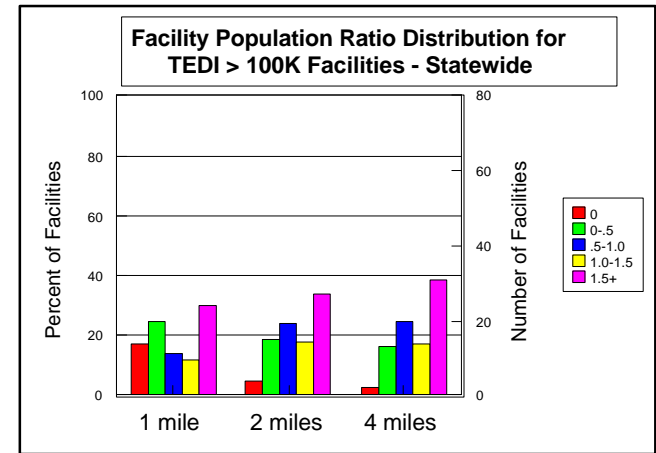
Facility population ratio distribution						
	0	0-.5	.5-1.0	1.0-1.5	1.5 +	#Facil*
1 mile	19.9	23	11.7	16.3	29.1	196
2 miles	10.7	21.4	18.9	18.5	30.6	206
4 miles	8.72	20.2	25.2	15.6	30.3	218



### Statewide Facility Distribution Data

<b>D9. TEDI &gt; 100K</b>		Ratio of Facility proximate percent African-American population to state average (30.8%)							
	#Facil*	Min	Max	Mean	10%tile	25%tile	50%tile	75%tile	90%tile
1 mile	76	0.00	3.25	1.10	0.00	0.14	0.75	1.95	2.96
2 miles	79	0.00	3.24	1.27	0.06	0.53	1.14	2.05	2.75
4 miles	80	0.00	2.65	1.23	0.16	0.61	1.16	1.89	2.26

Facility population ratio distribution						
	0	0-.5	.5-1.0	1.0-1.5	1.5 +	#Facil*
1 mile	17.1	25	14.5	11.8	31.6	76
2 miles	5.06	19	24.1	17.7	34.2	79
4 miles	2.5	16.2	25	17.5	38.8	80



<b>D10. TEDI &gt; 20K</b>		Ratio of Facility proximate percent African-American population to state average (30.8%)							
	#Facil*	Min	Max	Mean	10%tile	25%tile	50%tile	75%tile	90%tile
1 mile	132	0.00	3.25	1.14	0.00	0.15	0.90	2.02	2.92
2 miles	136	0.00	3.24	1.25	0.06	0.53	1.17	1.89	2.67
4 miles	139	0.00	2.68	1.21	0.16	0.65	1.10	1.85	2.20

Facility population ratio distribution						
	0	0-.5	.5-1.0	1.0-1.5	1.5 +	#Facil*
1 mile	15.2	22.7	15.2	14.4	32.6	132
2 miles	6.62	17.6	19.9	22.1	33.8	136
4 miles	4.32	13.7	27.3	18	36.7	139

