2020 ILTA Terminal Employee Safety Survey Report

Injury and illness benchmarking data for the terminal industry

August 2020

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Survey Participants

3 Rivers Terminal
Andeavor
Apex Oil Company, Inc.
Asphalt Operating Services, LLC
Benchmark River and Rail Terminals, LLC
BW Terminals
Chemserve Terminal of Wilmington, LLC
CITGO Petroleum Corporation
Colonial Terminals, Inc.
Contanda
Energy Transfer, L.P.
Ergon Terminaling, Inc.
The Fikes
Flint Hills Resources, LP
Global Partners L.P.
Gulf Oil, L.P.
Intercontinental Terminals Company LLC
IMTT (International Matex Tank Terminals)
International Raw Materials
Jebro, Inc.
Jefferson Energy
Kinder Morgan Energy Partners, L.P.
LBC Houston, LP
LBC Baton Rouge
Marathon Petroleum Company
Martin Operating Partnership
MIPC, LLC
Moda Midstream LLC
Motiva Enterprises, LLC
Murphy Oil USA, Inc.
NuStar Energy L.P.
Oiltanking North America
Petro-Diamond Terminal Company
Phillips 66 Company
Plains All American
Saudi Aramco / ERDD
Seneca Petroleum Company
South Florida Materials Corp./Vecenergy
Sprague Operating Resources LLC
Tidewater Terminal Company
TransMontaigne Partners LP
U.S. Venture, Inc.
Vopak Americas
Wolf Lake Terminals
Zenith Energy Terminals

2020 ILTA Safety Award Recipients

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2019 Winners: 21

Five Consecutive Years ..... ***Error! Bookmark not defined.***

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2019 Winners: 21

Introduction

This report on ILTA terminal member safety performance is based on injury and illness data reported on the Occupational Safety and Health Administration (OSHA) Form 300A for calendar year 2019. Forty-five member companies participated in this year's survey. The report features aggregated terminal company and individual facility data for total recordable incident rates and days away from work, job transfer or restriction incident rates. It includes OSHA's latest national workplace injury and illness data from 2017 and 2018[1]. Additionally, it contains contractor incident and company throughput data. Finally, highlights of ILTA's 2020 Safety Recognition Program are included.

[1] OSHA's 2019 workplace injury and illness data will not be available until December 2020.

I. OSHA Workplace Injury and Illness Data for CY 2018

Injuries and Illnesses[2]

Approximately 2.8 million nonfatal injuries and illnesses were reported in U.S. private industry workplaces during 2018, representing a total recordable incident rate (TRIR) of 2.8 cases per 100 full-time equivalent (FTE) employees *(Figure 1, page 6)*. This rate is the same as the previous year, maintaining the steady decline of the last decade. The private sector cases with days away from work, job restriction, or transfer (DART) rate was 1.6. Nearly one-third of reported nonfatal occupational injuries and illnesses resulted in days away from work.

The Transportation and Warehousing sector (NAICS Code 48-49) reported an average TRIR of 4.5, a 31.8 percent decrease over the previous year's rate of 6.6. Within this sector, the TRIR for Warehousing and Storage (NAICS Code 493) was 5.1, with a DART rate of 3.9. The Petroleum and Petroleum Products Merchant Wholesalers sector (NAICS 4247), which includes petroleum bulk stations and terminals, reported less than 15 cases overall so a TRIR was not reported by OSHA. In 2017 OSHA reported a TRIR for this sector of 2.3. The DART rate for this sector was 1.7, up from 0.9 in the previous year.

Fatalities[3]

In 2018, workplaces nationwide reported over 5,000 fatal injuries, a rate of 3.5 fatalities per 100,000 full-time equivalent (FTE) employees. This represents a two percent increase over 2017. Transportation-related incidents were again the top cause of workplace fatalities, accounting for 40 percent of all occupational fatalities in 2018. These included motorized vehicles in roadway collisions and non-roadway incidents, as well as vehicular incidents involving pedestrians. Violence and other injuries by persons or animals were the second most common fatal events, overtaking falls, slips, and trips, which held the second slot in 2017. Contact with objects and equipment, exposure to harmful substances or environments, and fires and explosions also continue to be major causes of death in the workplace.

Fatal Injuries by Demographic[4]

In 2018, workers age 45 to 54 years experienced the highest number of fatal injuries among all age groups, a change from 2017 where the highest number of fatalities was among workers aged 55 to 64 years. Workers between 45 to 54 years accounted for 21.2 percent of fatalities among the different age groups and they accounted for roughly 20.8 percent of the overall workforce. Fatal incident rates for people 65 and older are the highest of all age ranges reported at 9.6 per 100,000 FTEs in 2018, a decrease from 10.1 in 2017. Employers reported the highest percentage of fatalities for Hispanic or Latino workers at 3.7 in 2018, no change from the previous year. African American and

[2] "Table 1. Incidence rates of nonfatal occupational injuries and illnesses by industry and case types, 2018", https://www.bls.gov/web/osh/summ1_00.htm, and "Table 2. Numbers of nonfatal occupational injuries and illnesses by industry and case types, 2018", https://www.bls.gov/iif/oshwc/osh/os/summ2_00_2018.htm.

[3] "Census of Fatal Occupational Injuries, 2018", https://www.bls.gov/charts/census-of-fatal-occupational- injuries. 2019 occupational fatality data will not be available until December 2020.

[4] National Census of Fatal Occupational Injuries News Release, Table 1, https://www.bls.gov/news.release/pdf/cfoi.pdf

Caucasian workers both have rates at 3.6 fatal incidents per 100,000 FTEs, an increase for African Americans of nearly 13% since 2017. Asians' fatal incident rates have increased less dramatically, from 1.6 in 2017 to 1.7 in 2018.

II. ILTA Safety Survey Performance Trends and Participation

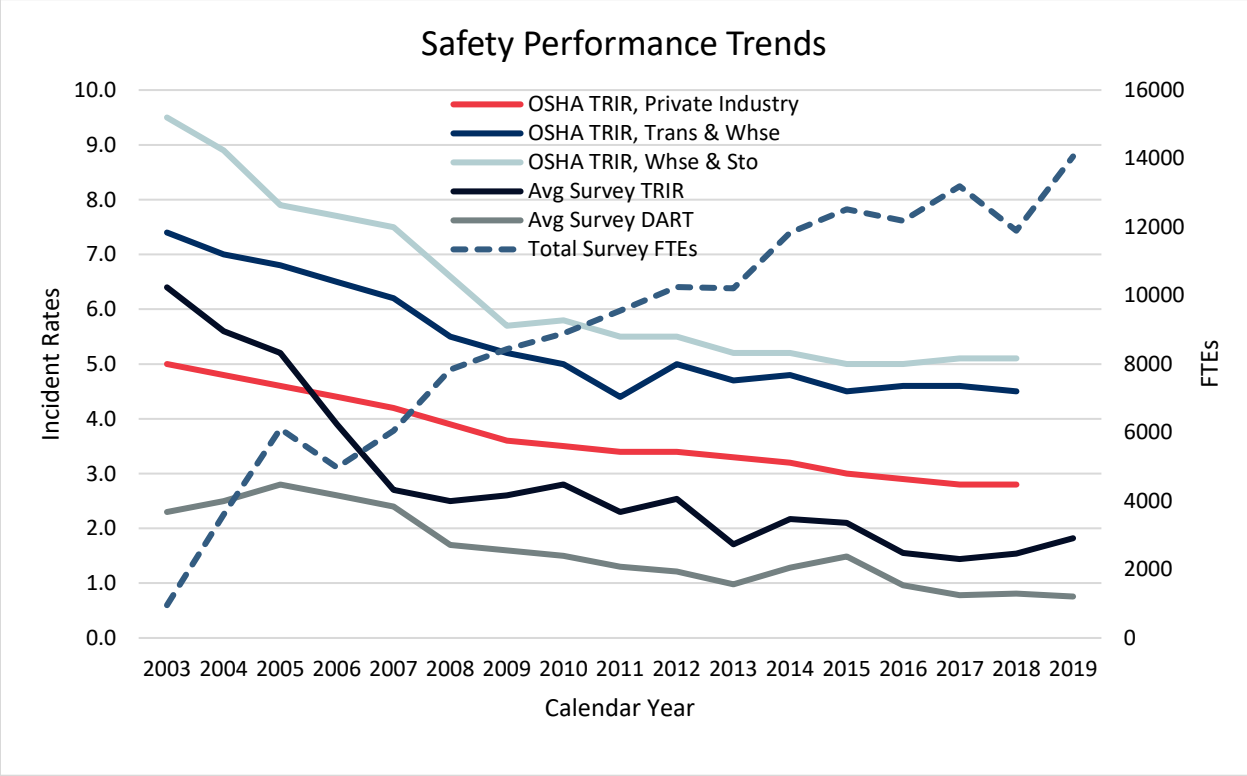


Figure 1: Workplace Injury/Illness Statistics (2003-2019)[5]

[5] OSHA TRIR rates by NAICS codes are not available until December 2020 and thus are not included in Figure 1.

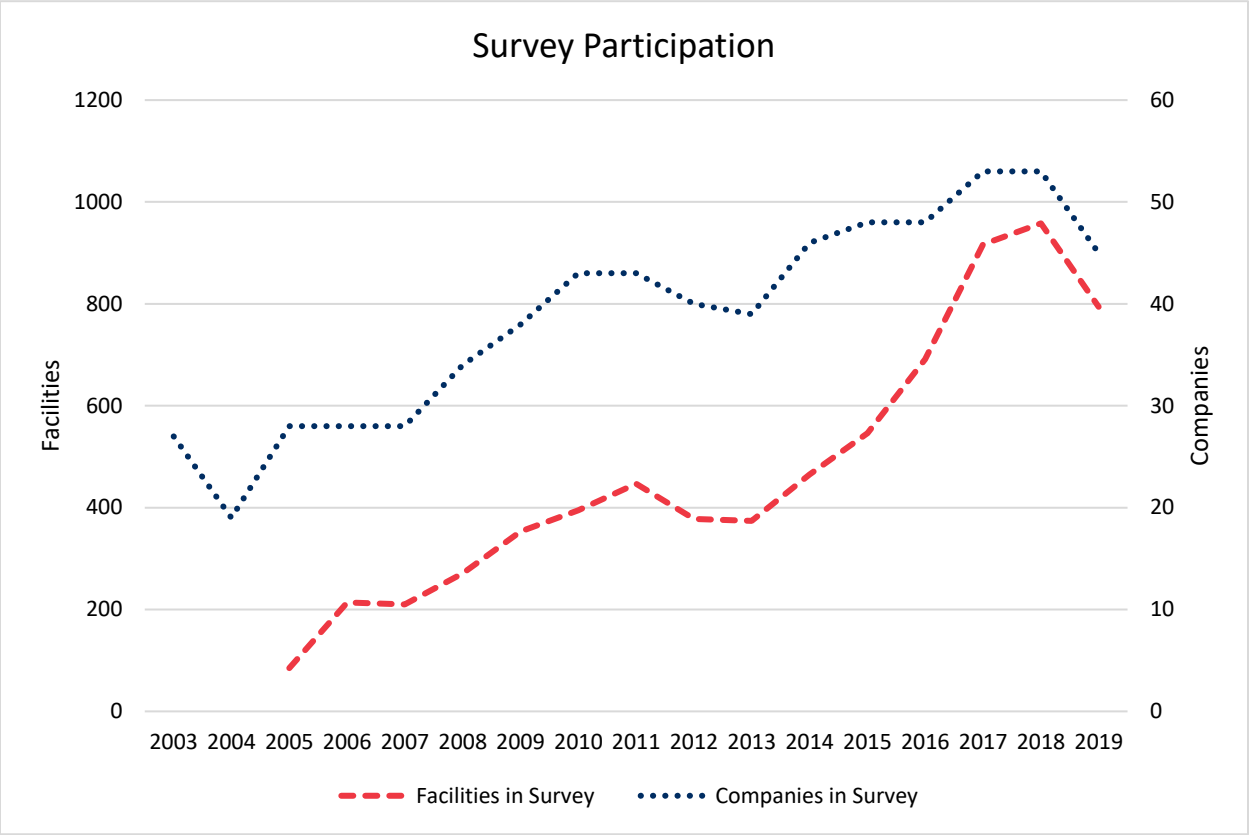


Figure 2: ILTA Safety Survey Participation (2003-2019)[6]

III. 2018 ILTA Terminal Member Safety Performance

Survey Participation

2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
45	52	53	48	48	46	39	40	43	43	38	34	28	28	28

Table 1: Number of Survey Participants in ILTA's Annual Terminal Member Safety Survey

Forty-five terminal companies submitted injury and illness data for the 2020 survey, which covers incidents from calendar year 2019[7]. Participating companies represented sixty percent of ILTA terminal member companies and sixty-three percent of members with operations in the United States and Canada.

[6] Figure 2 shows the total number of companies and facilities that provided data and participated in the ILTA survey.

[7] Andeavor and Marathon Petroleum Company merged in 2019. In the 2020 report, they are treated as separate companies.

FTEs	Company	Facility
Average:	269	21
Median:	178	8
Minimum:	5	1
Maximum:	1,615	300

Table 2: Number of FTE in Survey Companies / Facilities

As shown in *Table 2, above*, the average number of employees per participating company was 269. The minimum number of employees at a participating company was five, while the maximum was 1,615. Generally, the number of FTEs seems to be increasing at both the company and facility level.

For individual facilities[8], the average number of employees was 21, with a median number of eight FTEs. Fifty-nine percent of facilities for which ILTA received individual data reported 10 or fewer employees per facility. The largest single terminal facility reported 300 employees. All corporate offices/headquarters were removed from the facility statistics, here and in the following analyses, to provide a more representative overview. Facility data reported as an aggregate of more than one facility or those that did not report the number of FTEs were also excluded from the facility analysis.

CY 2019 Recordable Incident Rate Data

2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
1.82	1.54	1.44	1.55	2.09	2.17	1.71	2.54	2.27	2.75	2.56	2.46	2.73	3.91	5.19

Table 3: Terminal Company Reported CY Average TRIR

The average total recordable incident rate (TRIR) for the 2019 ILTA sample was 1.82 incidents per 100 workers. This incident rate is the highest since 2015, but not significantly higher than the rates between 2016 and 2018. Forty percent of the terminal companies that participated in the survey reported zero incidents in 2019, a two percent decrease since 2018.

Reporting facilities experienced an average of 1.08 incidents per 100 employees, significantly lower than the average company rate. Eighty-six percent of facilities reported zero incidents in 2019.

[8] For Facility data analysis, only those facilities whose data was reported singly and that indicated at least one full-time employee were included. Data that was submitted for multiple facilities was not included in the facility analyses. Corporate offices and headquarters were also excluded from any facility analyses in this report.

TRIR	Company		Facility	
	Rate	***Cases***	***Rate***	***Cases***
Average:	1.82	2.98	1.08	0.26
Median:	0.45	1	0.00	0.0
Maximum:	12.29	21	28.57	9
Reporting 0.0:	40%		86%	

Table 4: Total Recordable Incidents

Companies reported a range of hours worked from ten thousand to over three million. Total injuries and fatalities ranged from zero to twenty-one. See Figure 3 for company-by company details.

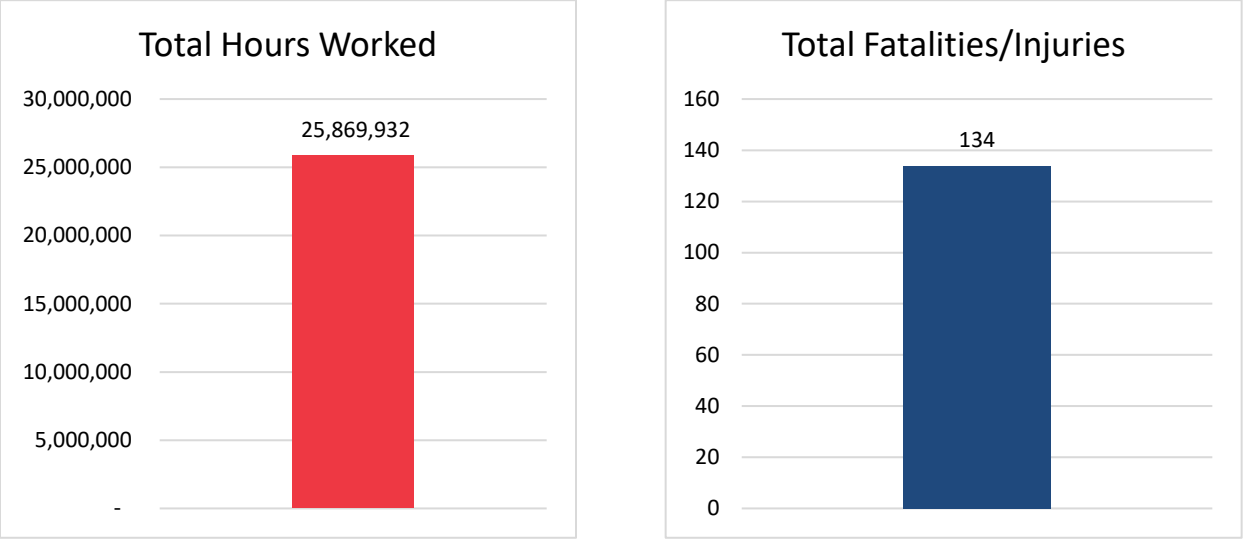


Figure 3: ILTA Total Hours Worked and Injuries/Fatalities

Overall, companies reported slightly fewer serious incidents that involved days away from work, job transfer, or restriction (DART). Participants reported an average of 2.13 DART cases, corresponding to a DART rate of 0.89 incidents per 100 workers. This is slightly higher than the DART rate of 0.78 reported for 2018. Fifty-six percent of participating companies reported zero DART incidents for the year. The highest number of DART injuries reported by a company was 16.

The facility-average number of DART incidents was 0.73. The highest number of DART incidents reported by a single facility was seven. The facility maximum DART rate was 28.57. Eighty-nine percent of individual facilities reported a DART rate of zero.

DART	Company		Facility	
	Rate	***Cases***	***Rate***	***Cases***
Average:	0.89	2.13	0.74	0.19
Median:	0.00	0.0	0.00	0
Maximum:	6.24	16	28.57	7
Reporting 0.0:	56%		89%	

Table 5: Days Away, Restricted & Transfer Incidents

Company Data

Twenty (44 percent) of participating companies reported a workforce of less than 100 employees, while nine (20 percent) reported a workforce greater than or equal to 100 and less than 200; the remaining sixteen companies had workforces greater than or equal to 200 (36 percent) FTEs.

The average TRIR for the smallest companies, at 2.67, was significantly higher than the survey average of 1.82. Sixty percent of companies with fewer than 100 employees reported zero reportable incidents in 2019. Large companies (with 200 or more FTEs) reported an average TRIR of 0.92, slightly higher than the average TRIR of 0.83 in 2018. The remaining small company category – those with between 100 and 200 FTEs – reported an average TRIR of 0.95, significantly lower than 2.36 in the prior year. *See Table 6, below.*

	Small Company						***Large Company***		
	FTE < 100 *(20 Companies)*			**100 ≤ FTE < 200** *(9 Companies)*			**FTE ≥ 200** *(16 Companies)*		
	FTE	**TRIR**	**DART**	**FTE**	**TRIR**	**DART**	**FTE**	**TRIR**	**DART**
Average:	33	2.67	0.86	174	1.47	1.29	617	0.95	0.73
Median:	24	1.47	0.00	183	0.45	0.00	467	0.49	0.45
Reporting 0.0 Incident Rate:	*-*	*60%*	*80%*	*-*	*44%*	*56%*	*-*	*13%*	*25%*

Table 6: Incident Rate Data for Large vs. Small Terminal Companies

In *Table 6, above,* we also see that the average TRIR rate is skewed towards very small companies reporting zero TRIR incidents, compared to larger companies. Only 13 percent of large companies reported zero TRIR incidents, compared with 17 percent the previous year. Similarly, the number of smaller companies reporting zero TRIR incidents decreased by eight percentage points. Large companies saw a corresponding increase

in their respective average TRIR rates. The average TRIR rate for companies with between 100 and 200 employees decreased to 1.47, compared with 2.36 the previous year.

Table 7, below, shows the percentile values for TRIR and DART rates based on the safety performance of survey participants. One-half of companies (50th percentile) achieved a TRIR of 0.45 or less and 75 percent of companies fell at or below a TRIR of 2.23.

Percentile	TRIR	DART
90%	5.75	3.42
75%	2.23	0.92
50%	0.45	0.00
25%	0.00	0.00
10%	0.00	0.00

Table 7: Survey Percentiles for OSHA Incident Rate Data

Figures 4, 5, and *6 (page 11)* show the TRIR, DART, and workforce numbers for each of the participating companies by size category. Individual companies can identify their placement on this chart using their Assigned Company Numbers to see how their reported safety performance compares with that of their peers and with the NAICS data for Private Industry, the Warehousing and Storage, and the Transportation and Warehousing sectors.[9]

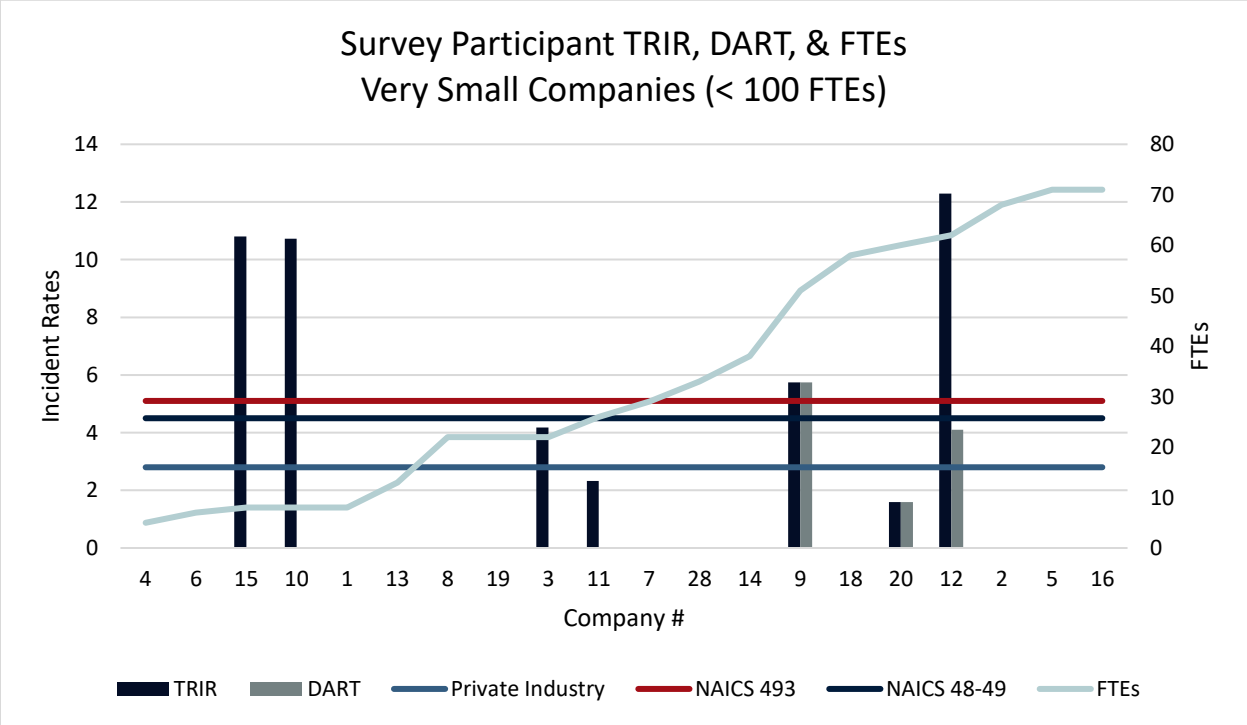


Figure 4: Survey Participant TRIR, DART and FTEs

[9] OSHA Transportation & Warehousing (NAICS 48-49), Warehousing & Storage (NAICS 493) and Private Industry.

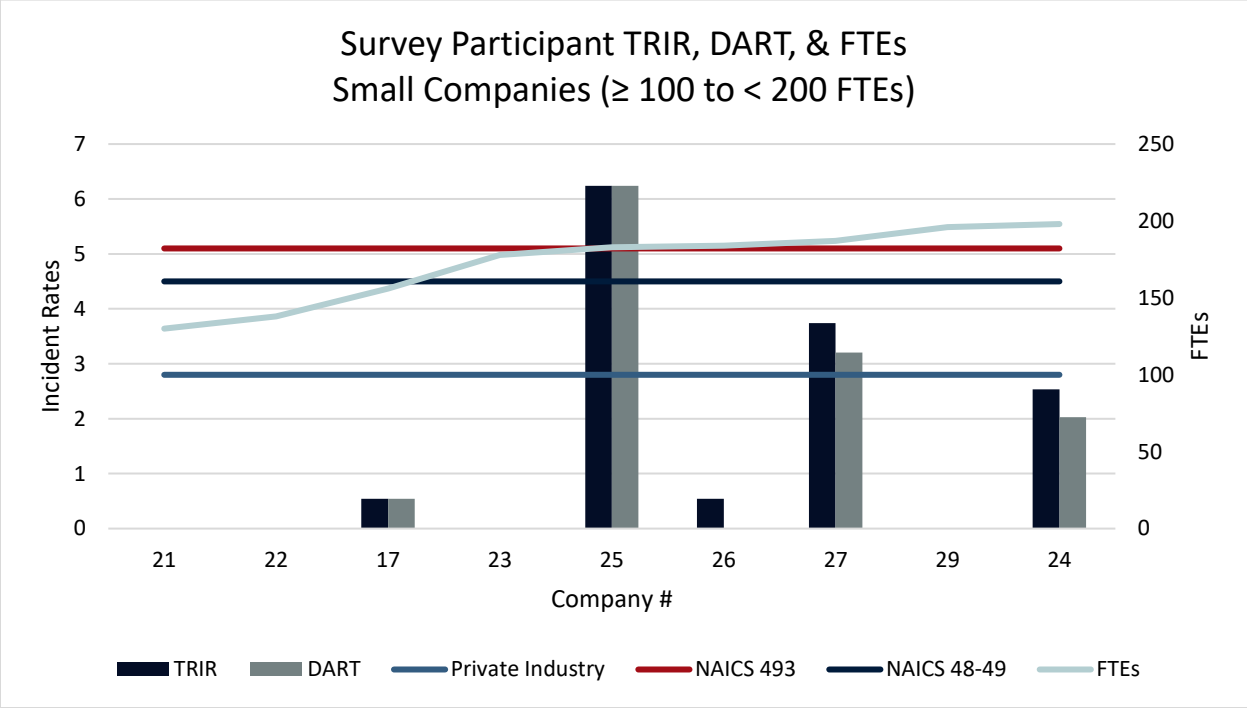


Figure 5: Survey Participant TRIR, DART and FTEs

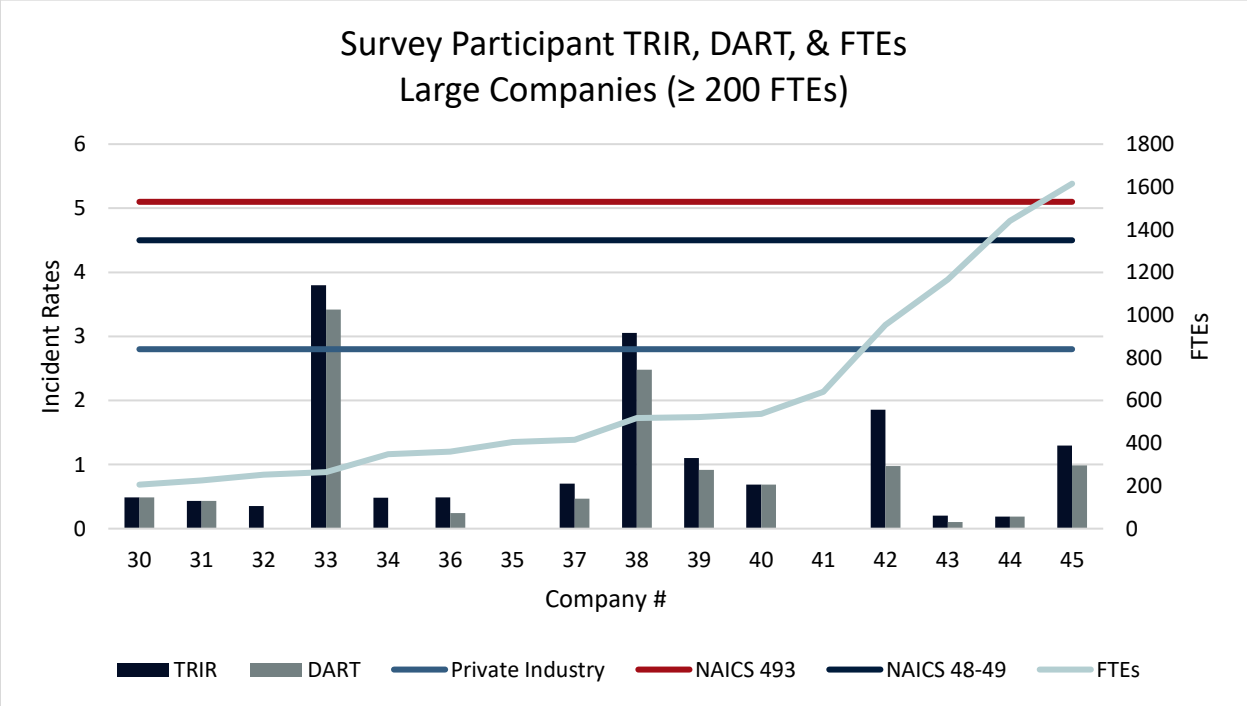


Figure 6: Survey Participant TRIR, DART and FTEs

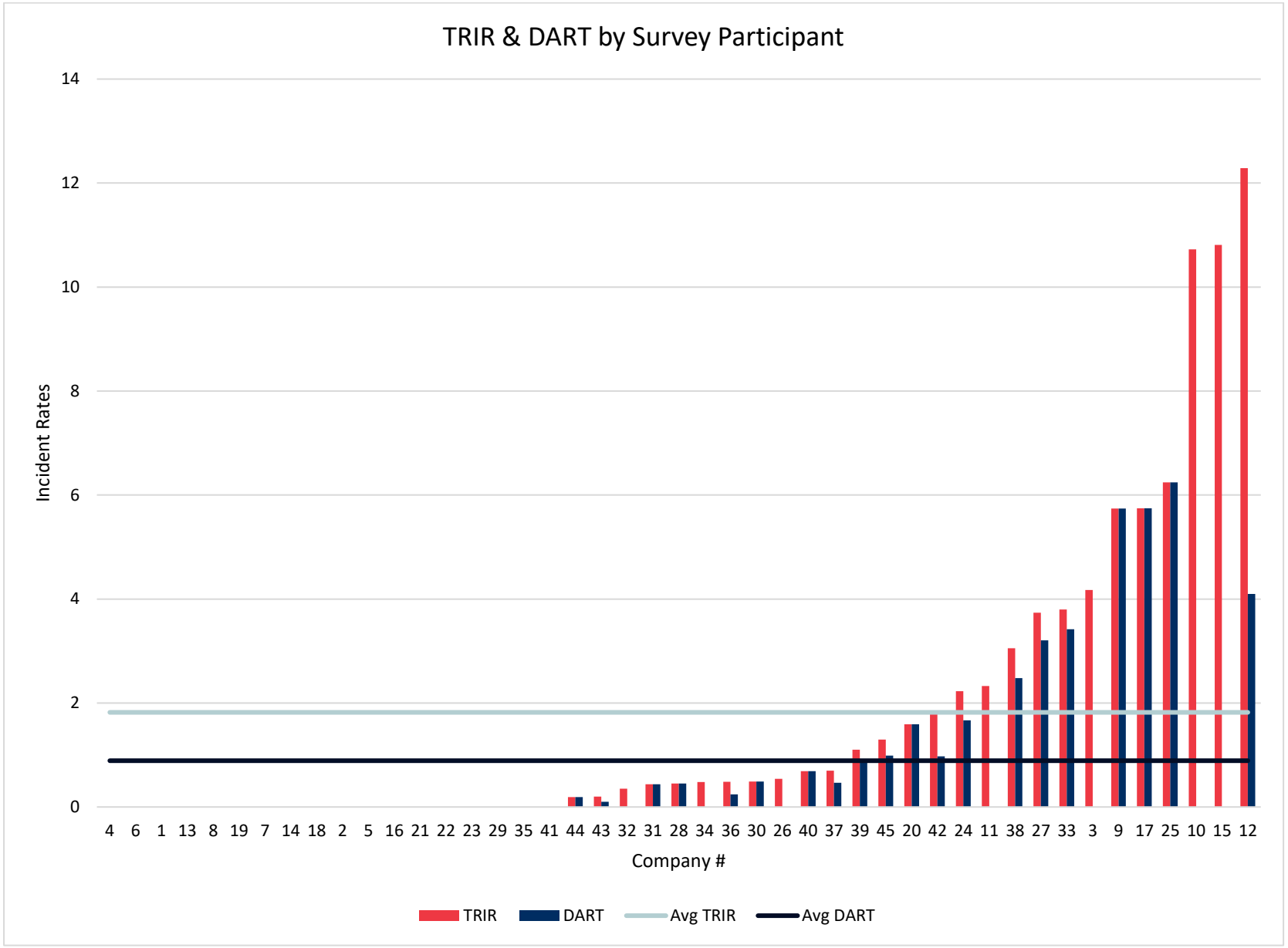


Figure 7: Survey Participant TRIR, DART and FTEs

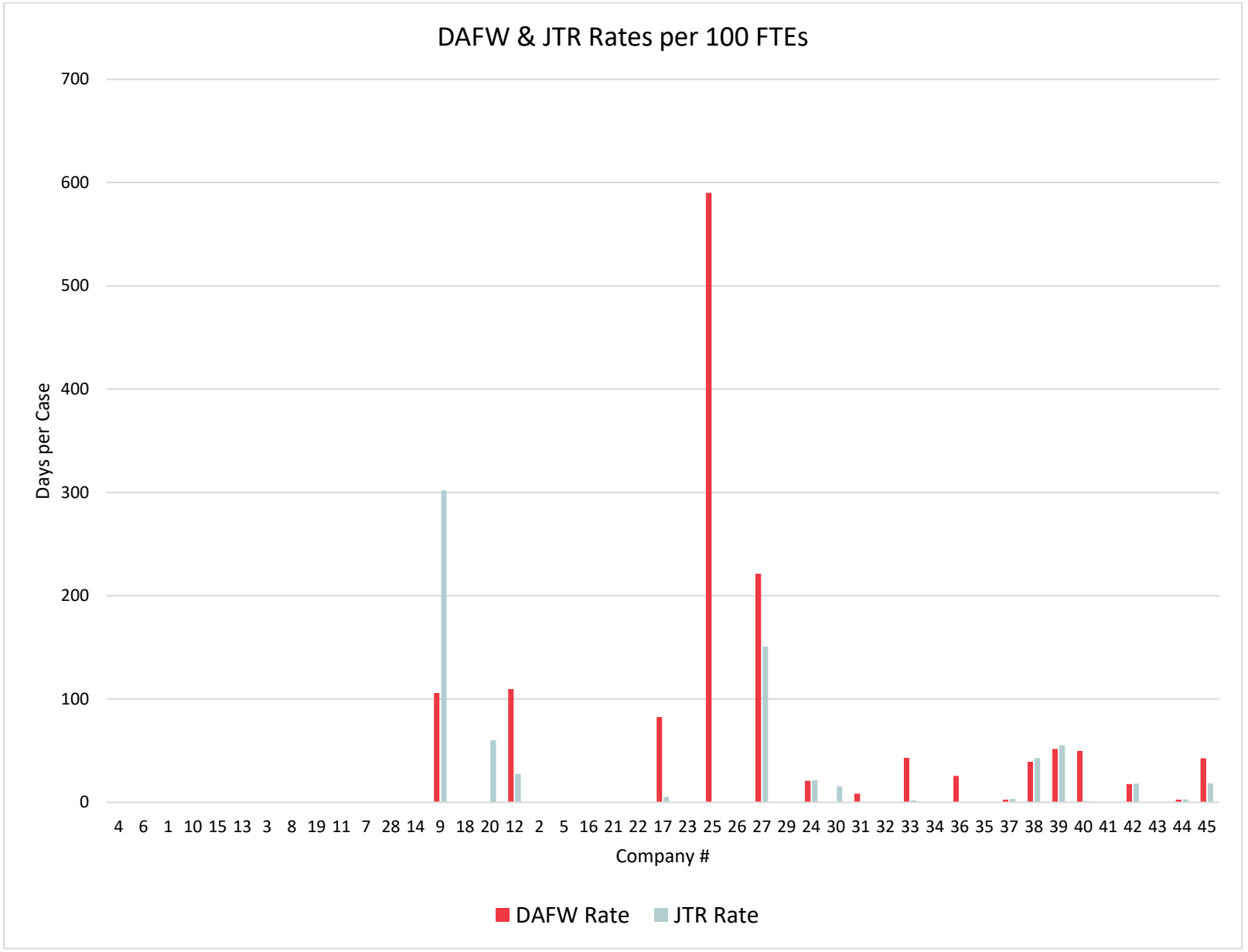


Figure 8: Survey Participant Days Away from Work & Days of Job Transfer/Restriction Rates

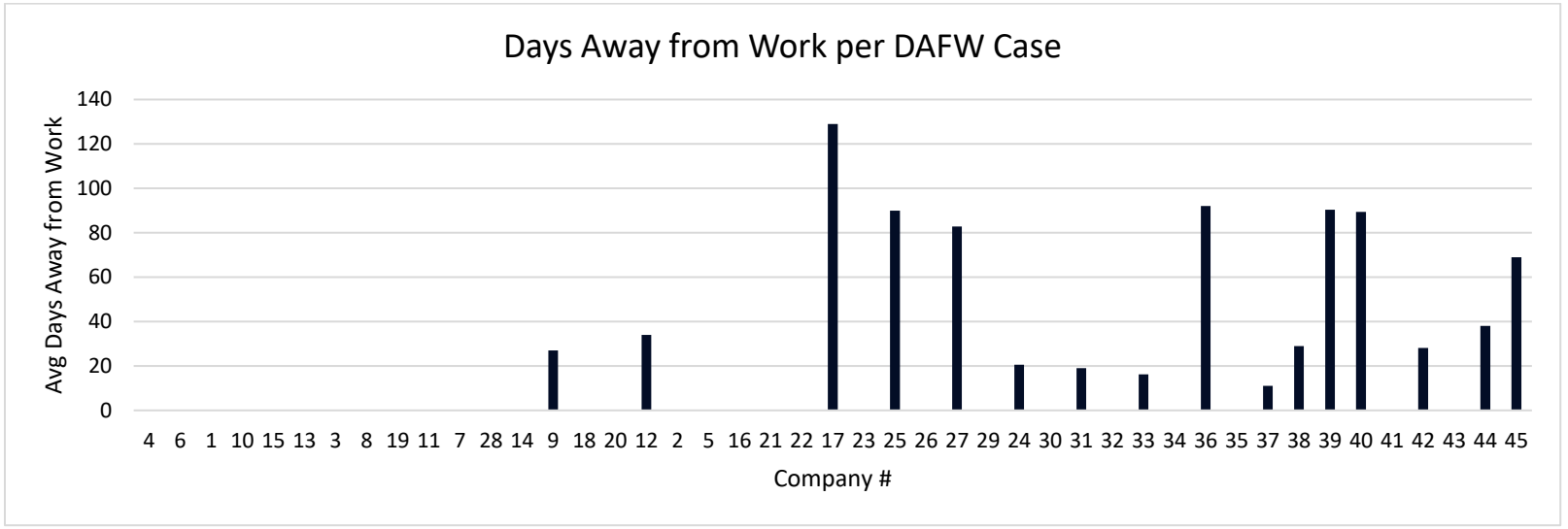


Figure 9: Survey Participant Average Days Away from Work per Case

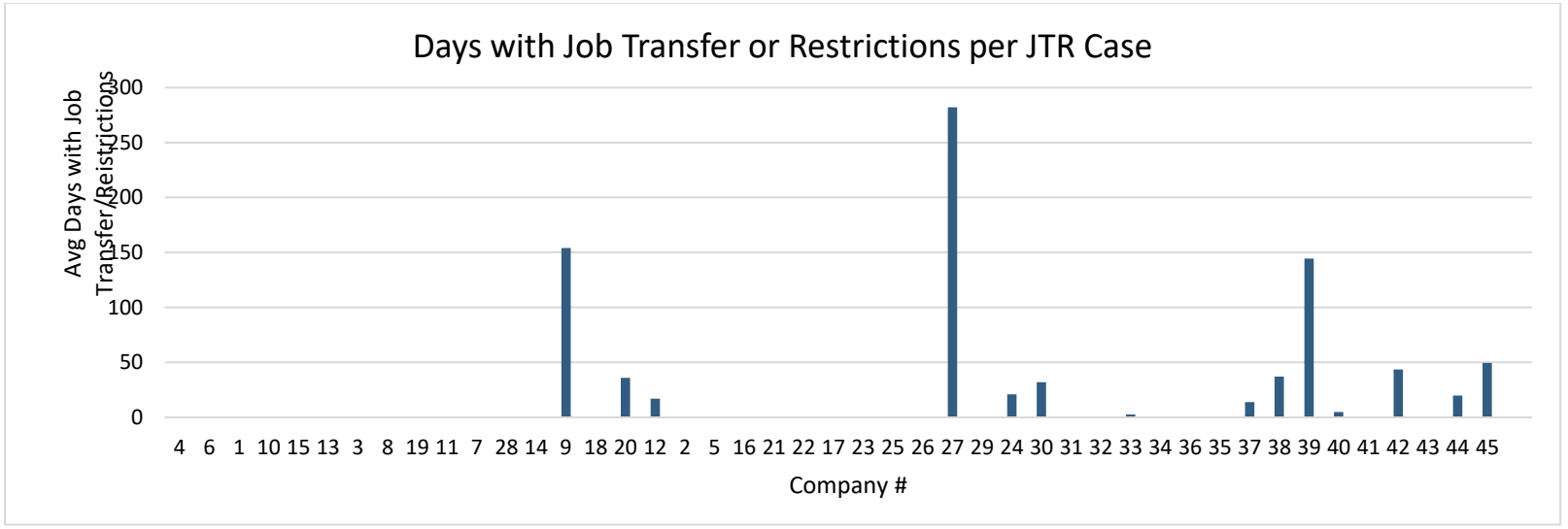


Figure 10: Survey Participant Average Days of Job Transfer/Restriction per Case

Contractor Incident Data

Thirty-one companies provided both contractor incidents and contractor hours or approximate percentage of contractor labor[10]. Incomplete contractor information, including data from companies that provided partial data, were excluded from this analysis. The survey defines contractors as workers not reported on the company 300A log. The term excludes on-site contract labor whose work was directly overseen by company personnel.

Eleven companies reported contractor incidents. Respondents reported a combined total of 28 incidents and an average contractor incident rate of 2.54, excluding companies that did not report contractor incidents.

Average Contractor Incidents Reported	
Average Contractor Incident Rate per Company:	1.60
Average Contractor Incidents per Company	2.54

Table 8: Contractor Incidents Data

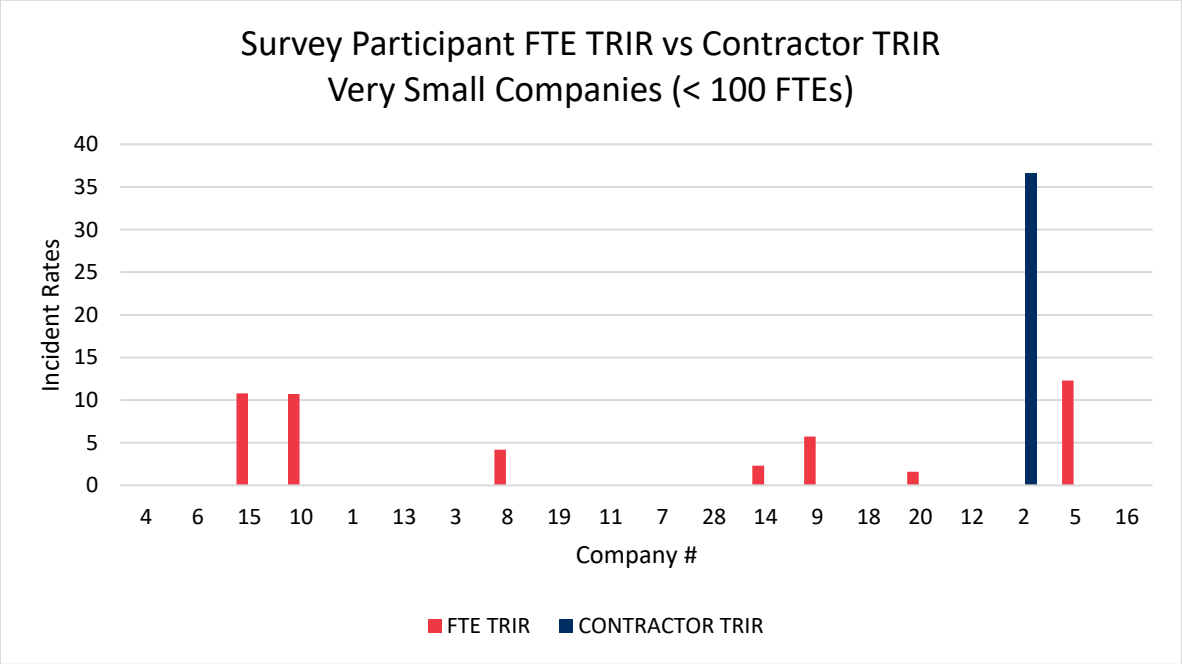


Figure 11: Contractor Incident Rates

[10] Table 8 and Figure 11 include only the 30 companies that included contractor hours in the ILTA survey data, regardless of the number of contractor incidents reported.

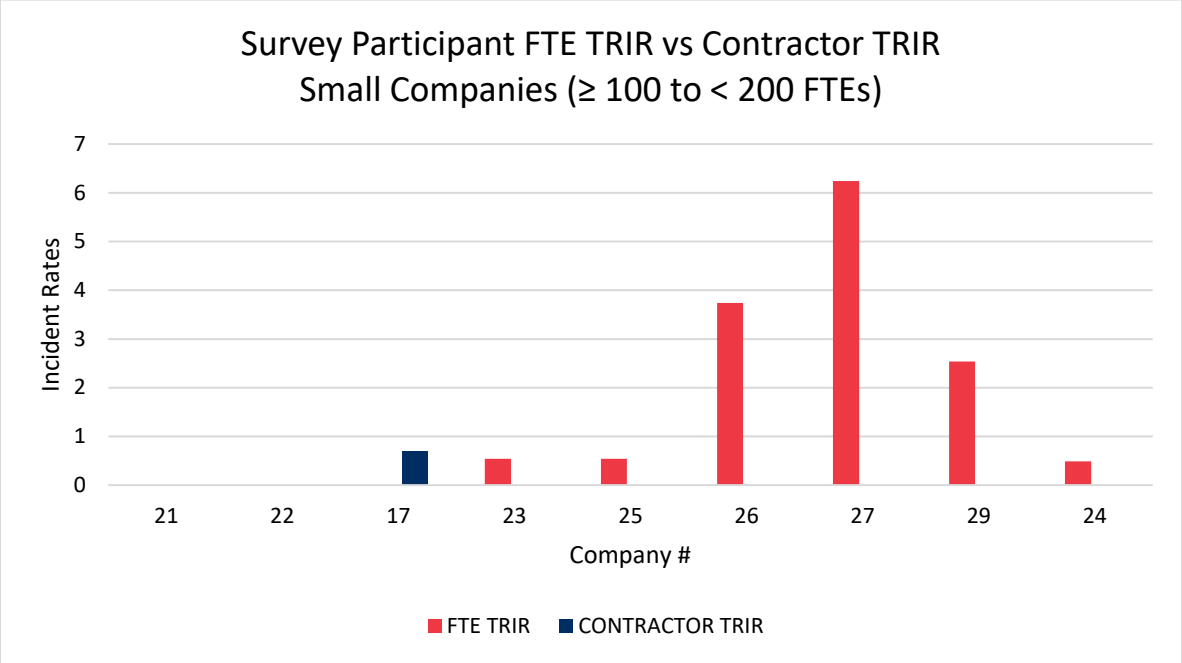


Figure 12: Contractor Incident Rates

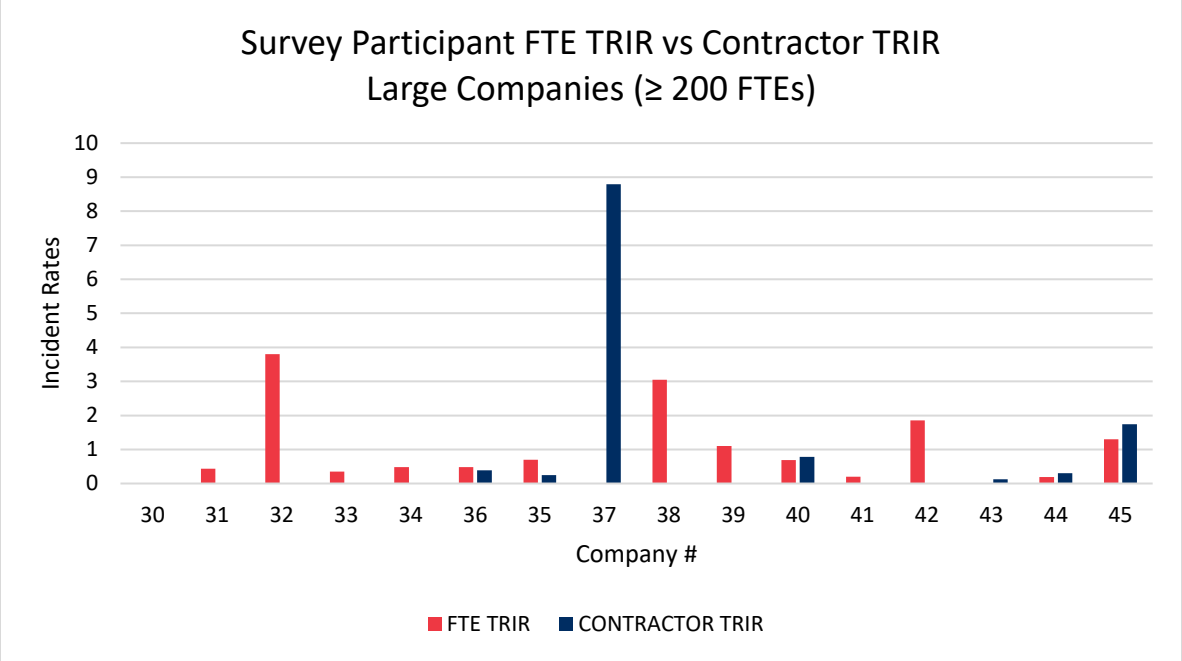


Figure 13: Contractor Incident Rates

Throughput Data

Ninety-one percent of survey respondents (41 companies) submitted complete throughput data for all facilities. Based on this data, productivity was calculated as a function of throughput in millions of gallons per FTE employee (MMgals/FTE). The average amount of product moved per employee was 104.37 million gallons, and the median amount was 24 million gallons per employee. The aggregate value, the sum of all reported annual throughput divided by the sum of corresponding employees, in 2019 was 52.61 MMgals/FTE, compared with 42.5 MMgals/FTE in 2018.

Companies that only submitted partial throughput data were excluded from the *company* throughput statistics, and all facilities with a corresponding throughput value were included in facility-level statistics. For each level of analysis (company, facility), all available data that would result in the most accurate, representative value was included.

Throughput Data	Company	Facility
# Reporting Throughput Data:	41	319
Average (MMgals/FTE):	104.37	45.82
Median:	24.00	19.41
Aggregate:	52.61	62.88
Minimum:	0.56	0.10
Maximum:	2,789.87	2,789.87

Table 9: Company vs. Facility Throughput Data

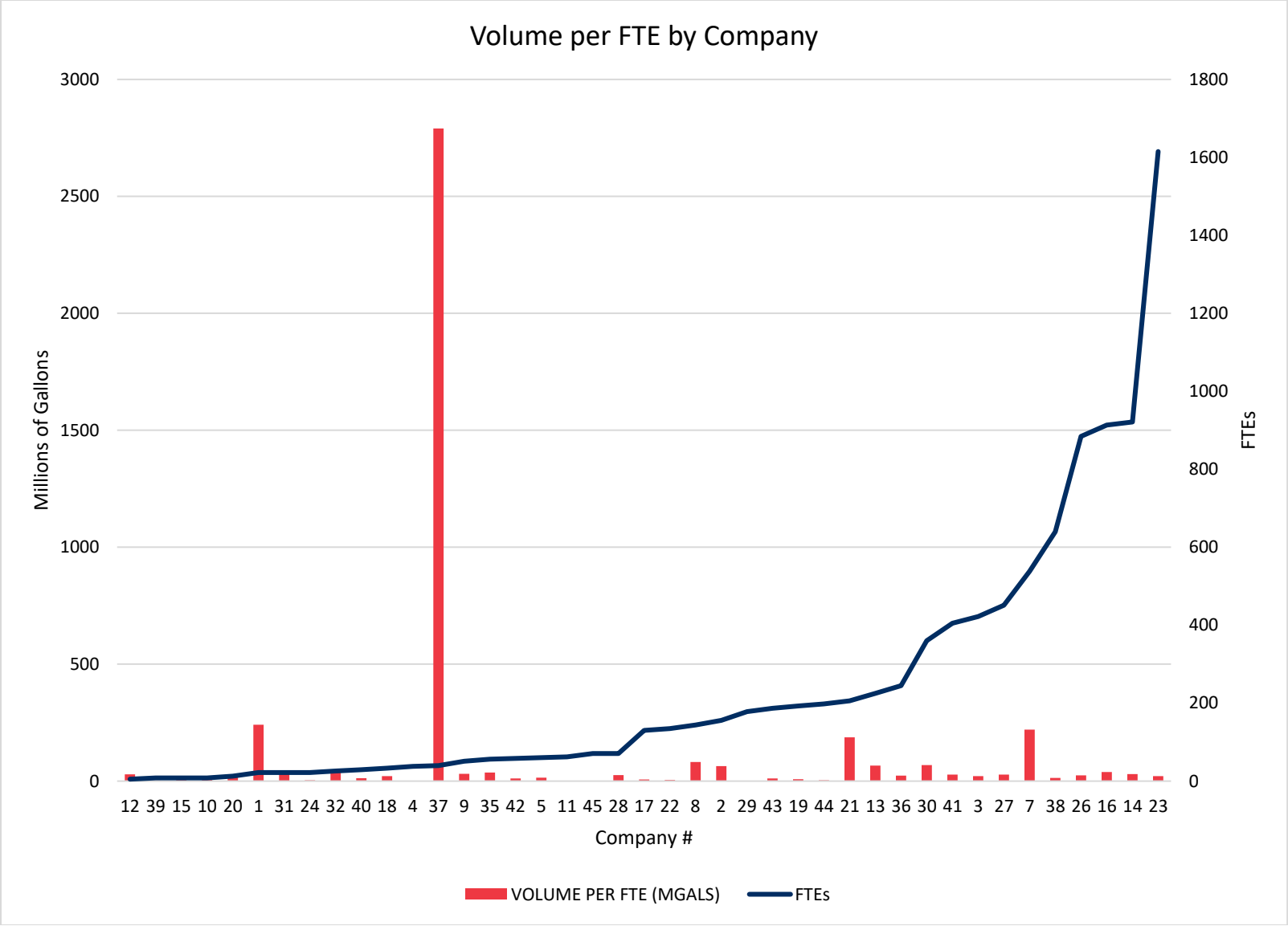


Figure 14: Throughput in Millions of Gallons

Survey Methodology

Assigned Company Numbers

Each company that participated in the survey was assigned a unique number that corresponds with that company's placement on the graphs.

Standard Analysis

Company

Aggregated data for all reporting companies was analyzed for different calculated values, including average, median, minimum, maximum, etc.

Facility

Only data from individual facilities was analyzed for the facility-specific calculations. Regional and aggregated terminal data as well as corporate/regional offices were excluded from these calculations.

Contractor Analysis

Contractor data was analyzed on a company level. Only data from companies that completed all the survey fields for this section was used for the contractor safety data analysis. Companies that submitted incomplete data were eliminated from this analysis category.

Throughput Analysis

Company

Listwise deletion was used to eliminate incomplete data from the analysis. Aggregated throughput values were used only from companies that provided throughput data for all reported facilities. Data from companies that submitted only partial throughput data was eliminated from this specific analysis category.

Facility

All facilities that included a throughput value were included in this analysis category. Even if a company provided throughput data for a limited number of facilities, facilities containing a throughput value were included in these calculations, whereas facilities missing a throughput value were eliminated from analysis.

IV. 2020 ILTA Safety Award Recipients

All survey participants were eligible for consideration in ILTA's 14th Annual Safety Recognition Program, which acknowledged terminal companies that demonstrated exemplary performance in protecting their employees from injury and illness while promoting employee safety and health.

Platinum Safety Award

The Platinum Safety Award is given to one operator in each of the small and large company categories each year[11]. The company must achieve a TRIR of 0.50 and demonstrate an exemplary safety culture as assessed through an executive-level application. In addition, the company must have in place a contractor safety management program if it uses contractor labor.

2020 Winners:

CITGO Petroleum Corporation
MIPC, LLC

Safety Milestone Award (Five Consecutive Years)

The Safety Milestone Award (five consecutive years) is given to companies that achieved and maintained safety excellence for five or ten consecutive years.

2020 Winners:

CITGO Petroleum Corporation
MIPC, LLC

Safety Excellence Award

The Safety Excellence Award is given to companies that achieved a TRIR of 0.75 or less.

2020 Winners:

Chemserve Terminal of Wilmington, LLC
Contanda Terminals LLC
Energy Transfer
Ergon Terminaling, Inc.
Flint Hills Resources
Intercontinental Terminals Company LLC
LBC Houston-Seabrook
Marathon Petroleum Company, LP
Martin Operating Partnership
Moda Midstream LLC
Motiva Enterprises LLC
Murphy Oil USA Inc
NuStar Energy LP
Oiltanking North America
Petro-Diamond Terminal Company
Phillips 66 Company
Plains All American
Saudi Aramco (Eastern Region Distribution Department)
U.S. Venture, Inc.
South Florida Materials Corp./Vecenergy
Vopak Americas
Zenith Energy

[11] Small companies are those with fewer than 200 FTEs and less than a total of 400,000 hours worked each year. Large companies are those with 200 or more FTEs and 400,000 or more hours per year.