

2014 Tour of Manufacturing

Survey of Tour Hosts and Participants

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Introduction

In fall 2014, the 360° Center of Excellence and its partners coordinated over 85 manufacturing businesses and three two-year colleges across Minnesota to provide tours of their facilities for students and educators, job seekers, other manufacturers, and the general public. This event, called the Dream It. Do It. Minnesota Statewide Tour of Manufacturing, took place from October 23 to 25, 2014. To help understand the implementation and impact of the tours, Wilder Research administered a paper-based survey to tour participants (referred to throughout the report as "participants"), as well as a web-based survey for the manufacturing businesses that hosted the tours (referred to as "hosts"). This report highlights findings from both surveys. For additional data, see the attached tables.

Survey methodology

With the goal of increasing participant response rates, Wilder and 360 staff asked sites to distribute self-administered questionnaires to tour participants, through paper forms rather than a web survey, as was done in previous years. The survey had to be shortened to fit onto one page, so several questions from previous participant surveys were cut. The final survey focused primarily on a set of "perceptions of manufacturing" questions asked across all surveys of 360-related events.

For the host survey, Wilder Research emailed a survey link to 58 businesses with an available email address. Overall, 34 people completed the survey for a response rate of 59 percent.

Staff from each host business distributed copies of the survey to participants and returned completed surveys to Wilder Research in a pre-addressed envelope. A total of 391 people completed the survey, which was an increase from 28 people in 2013 and 117 in 2012.

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Findings

Learning about the Tour of Manufacturing

Participants were more likely to learn about the Tour of Manufacturing through the newspaper (30%), school (25%), and family members or friends (20%) than through the Tour of Manufacturing website (6%), Facebook (1%), or Twitter (0).

Hosts most often heard about the Tour of Manufacturing through a manufacturing association (28%), an email they received from the 360 Center (22%), or via their local Chamber of Commerce (19%). One-quarter (25%) of respondents heard about the Tour of Manufacturing through other means, such as the Minnesota Department of Employment and Economic Development (DEED), local media, or prior participation.

Preparing businesses for their tours

To help businesses prepare for the Tour of Manufacturing, 360 staff sent the hosts a variety of marketing and informational materials intended to increase participation. Of these materials, the hosts most often used their company listing on the Tour of Manufacturing website (47%), followed by customizable flyers about their event (27%), a low-cost option to purchase signage (24%), and letters to schools (21%). Respondents reported that the *most* useful tool was their "company listing on the Tour of Manufacturing website" (32%).

When asked about the primary audience for their tours, 41 percent of hosts said they had only targeted schools; an equal percentage of hosts (41%) targeted both schools and the community at large. Nineteen percent said that the community was their primary audience. Three-quarters of hosts reported that their tour was open to the public, while the remaining quarter said that their tour was only for schools.

Participation in the Tour of Manufacturing

Based on estimates provided by the 34 host respondents, Tour of Manufacturing participation ranged from 0 to 350 people with an average of 78 participants per site. The total estimated number of participants was 2,484. (Figure 1). It should be noted that Tour of Manufacturing hosts could estimate the number of attendees however they chose; therefore the method for estimation across sites is inconsistent. The most common method was a sign-in sheet or registration form.

1. Estimated number of visitors (N=32)

	Ν
Minimum	0
Maximum	350
Average (per respondent site)	78
Total (all respondent sites)	2,484

At the tours, visitors were asked to provide their demographic information; participants tended to be men (58%) and over 46 years old (45%) (Figure 2).

2. Participant respondent demographics (N=371)		
	Ν	%
Gender		
Male	227	58%
Female	144	37%
Age		
Under 18 years old	82	22%
18-25 years old	37	10%
26-45 years old	84	23%
46 and older	168	45%

Satisfaction with the Tour of Manufacturing

Overall, both participants and hosts of the 2014 Tour of Manufacturing reported high levels of satisfaction. Hosts were particularly pleased with the engagement of participants and the opportunity to build awareness of manufacturing careers.

- Nearly all of the participants surveyed (99%) were at least satisfied with their experience at the Tour of Manufacturing, and three-quarters (76%) reported they were "very satisfied."
- Most of the surveyed hosts (89%) reported that their participation in the Tour of Manufacturing was at least somewhat worthwhile and 90% reported that they plan to participate again (61% "certainly" and 29% "maybe").

Attitudes towards manufacturing

The 2014 participant survey focused on the "perceptions of manufacturing" questions developed in 2013, which ask participants to rate their interest in science, technology, engineering and math (STEM) and manufacturing careers, as well as their awareness and perceptions of those careers. Respondents were asked to recall their opinions of these factors before they attended the Tour of Manufacturing, as well as comment on their opinions after attending the event. In all areas, participant attitudes of STEM and manufacturing were higher after the Tour of Manufacturing. Eight in ten (79%) participants left the event with positive perceptions of manufacturing careers (meaning they thought they were good), and 74 percent left the event with either "a lot" (39%) or "some" (35%) interest in manufacturing careers.

Participants' perceptions of manufacturing careers also saw the greatest increase of any other pre-post survey question. Whereas 199 people said they thought manufacturing careers were "good" before the Tour of Manufacturing, 297 felt this away after attending the event (Figure 3). Overall, 31 percent of respondents increased their perceptions of manufacturing careers (this means movement from any lower category into a higher one), while another 55 percent maintained their already-high perceptions of manufacturing careers (Figure 4).

Perceptions of manufacturing careers	Before Tour (N=374)	After Tour (N=377)	Change
I thought/think they were/are good	199	297	+98 people
I thought/think they were/are just OK	115	57	-58 people
I didn't/don't think they were/are good	8	3	-5 people
I didn't/don't think about them	32	7	-25 people
I'm not sure	20	13	-7 people

3. Perceptions of manufacturing careers (pre- and post-Tour of Manufacturing)

4.	Change in perceptions towards	of manufacturing careers (N=347)	

Positive perceptions of manufacturing careers	N	%
Increased	107	31%
Maintained high positive perceptions	192	55%
Maintained moderate or low perceptions	42	12%
Decreased	6	2%

Note: "Maintained high positive perceptions" means that the participant's interest level was "good" both before and after the Tour of Manufacturing. "Maintained moderate or low perceptions" means that participant interest level was either "okay", "not good" or "didn't think about it" both before and after the Tour of Manufacturing.

In general, respondents' awareness of (30% increase) and interest in (24% increase) manufacturing careers saw greater increases than interest in STEM (18% increase).

Changes in perception also differed by demographic group.

- Participants between ages 26 and 45 saw the largest increase in interest (33%) as well as awareness (35%) of manufacturing careers as a result of the Tour of Manufacturing.
- When asked how participants feel about manufacturing careers, those ages 18 to 25 reported the largest increase in positive perceptions (47%).
- Participants ages 46 and older experienced the largest increase in STEM interest (22%).
- In all questions gauging participants' perceptions of manufacturing before and after the Tour of Manufacturing, women showed larger increases in interest and positive perceptions than men.
- For both men and women, the greatest categorical increase was positive perceptions towards manufacturing careers (28% and 36%, respectively).

Participants were asked to select words they felt best described manufacturing careers from a list of five positive and five negative adjectives that might be used to describe those careers (Figure 5). All five positive adjectives were selected more often than any of the negative adjectives. The most common selections were "creative" (57%), "advanced" (49%), and "exciting" (37%).

Words that best describe manufacturing careers	Ν	%
Creative	210	57%
Advanced	183	49%
Exciting	136	37%
Modern	128	34%
Fun	118	32%
Noisy	111	30%
Hard	97	26%
Dangerous	47	13%
Dirty	46	12%
Dark	7	2%

5. Descriptions of manufacturing careers (N=372)

Note: Percentages equal more than 100% because respondents were able to give multiple responses.

Experiences of the Tour of Manufacturing hosts

Tour of Manufacturing hosts were generally pleased with the level of engagement shown by participants and greatly valued the opportunity to build awareness of and interest in manufacturing careers. Manufacturers found the event to be valuable in several ways.

- The *most valuable* aspects (offered by respondents in an open-ended question) were increased awareness (48%) and informing participants about manufacturing careers or the industry of manufacturing (48%).
- When asked about five specific items related to the value of the Tour of Manufacturing, a majority of respondents reported that building awareness of or interest in manufacturing as a career option (60%) was a "very valuable" component of the event. Three in ten (30%) reported that marketing or building awareness of their business to the general public was "very valuable," and 23 percent reported that identifying potential employees was a "very valuable" component of the Tour of Manufacturing.

- When asked about three items related to the success of the Tour of Manufacturing, over half (57%) said that "the engagement of Tour of Manufacturing participants" was "very successful" this year, 43 percent reported that they were "very successful" in the type of people they got to attend their tour, and 43 percent reported they were "very successful" in the number of participants.
- The *most successful* aspects of the Tour of Manufacturing, according to hosts, were the number of people who attended (26%), as well as the general interest expressed in the event from those who attended (26%). Twenty-two percent said that the most successful aspect was educating or informing the public.

There were also some challenges reported by the Tour of Manufacturing hosts.

- The biggest challenges reported by respondents were providing staff time to lead the tours (29% reported very or somewhat challenging), the interruption of manufacturing processes (22%), and interrupting front or back office business functions (not related to manufacturing) (11%).
- In an open-ended question, several hosts also talked about the logistical challenges of hosting a tour.

When asked about planning for 2015, 68 percent of hosts surveyed said they would prefer to have the Tour of Manufacturing during Minnesota Manufacturers' Week, rather than on National Manufacturing Day (32%). Note: After some discussion, 360 staff decided to align Minnesota Manufacturers' Week with the National Manufacturing Day.

Conclusion

Overall, the findings from the Tour of Manufacturing surveys are positive. Participants had a high level of satisfaction with the tours, indicating that they increased their awareness of and interest in manufacturing careers as well as their positive perceptions of those careers. The increase in responses allowed Wilder Research to run analyses on questions by gender and age. We found that younger people had a greater increase in positive perceptions about manufacturing careers than older age groups; however, older participants showed larger increases in interest in STEM and awareness of manufacturing on all questions.

Hosts were also generally pleased with the event and appreciated the public awareness and participant engagement. Few challenges were reported; therefore 360 staff and host businesses should continue the good work that they are doing informing schools and the public about manufacturing careers.

Data tables

Participant survey

P1. How participants heard about the Tour (N=391)

	Ν	%
Newspaper	119	30%
School (e.g., fellow student or teacher)	99	25%
Family member or friend	78	20%
Work (e.g., employer or another employee)	48	12%
Tour of Manufacturing website	22	6%
Chamber of Commerce	21	5%
Signs or other marketing in town	9	2%
Manufacturer	7	2%
Radio	3	1%
Facebook	3	1%
Twitter	0	0%
Other (please specify)	36	8%
Other	19	5%
Central Minnesota Manufacturers Association	8	2%
An email/electronic newsletter	2	1%
Knew about it from last year	2	1%
Missing	3	1%
Social Media (other than Twitter and Facebook)	1	<1%
Internet search	1	<1%

Note: Percentages may equal more than 100% as respondents were able to give multiple responses.

P2. Overall satisfaction with the Tour (N=391)

296	76%
90	23%
2	1%
3	1%
	2

P3. Change in interest in STEM (N=372)

	Ν	%
Increased	66	18%
Maintained high interest	142	38%
Maintained moderate or low interest	147	40%
Decreased	17	5%

Note: "Maintained high interest" means that the participant's interest level was "A lot" both before and after the Tour of Manufacturing. "Maintained moderate or low interest" means the participant's interest level was either "some", "very little" or "not at all" both before and after the Tour of Manufacturing.

P4. Change in interest in manufacturing careers (N=355)

	Ν	%
Increased	85	24%
Maintained high interest	88	25%
Maintained moderate or low interest	171	48%
Decreased	11	3%

Note: "Maintained high interest" means that the participant's interest level was "A lot" both before and after the Tour of Manufacturing. "Maintained moderate or low interest" means the participant's interest level was either "some", "very little" or "not at all" both before and after the Tour of Manufacturing.

P5. Change in awareness of careers in manufacturing (N=359)

	Ν	%
Increased	106	30%
Maintained high awareness	114	32%
Maintained moderate or low awareness	127	35%
Decreased	12	3%

Note: "Maintained high awareness" means that the participant's awareness level was "A lot" both before and after the Tour of Manufacturing. "Maintained moderate or low awareness" means the participant's awareness level was either "some", "very little" or "not at all" both before and after the Tour of Manufacturing.

P6. Change in perceptions of manufacturing careers (N=347)

Ν	%
107	31%
192	55%
42	12%
6	2%
	107 192 42

Note: "Maintained high positive perception" means that the participant's perception level was "good" both before and after the Tour of Manufacturing. "Maintained moderate or low perception" means the participant perception level was either "okay", "not good" or "didn't think about it" both before and after the Tour of Manufacturing.

Interested in science, technology, engineering, or math	Before Tour (N=361)	After Tour (N=374)	Change
A lot	154 (43%)	187 (50%)	+33 people
Some	160 (44%)	145 (39%)	-15 people
Very little	50 (14%)	27 (7%)	-23 people
Not at all	15 (4%)	15 (4%)	0 people

P7. Interest in STEM (pre- and post-Tour)

P8. Interest in manufacturing careers (pre- and post-Tour)

Interested in manufacturing careers	Before Tour (N=361)	After Tour (N=357)	Change
A lot	95 (26%)	139 (39%)	+44 people
Some	140 (39%)	126 (35%)	-14 people
Very little	81 (22%)	50 (14%)	-31 people
Not at all	45 (12%)	42 (12%)	-3 people

P9. Awareness of careers in manufacturing (pre- and post-Tour)

Aware of careers in manufacturing	Before Tour (N=366)	After Tour (N=361)	Change
A lot	121 (33%)	186 (52%)	+65 people
Some	154 (42%)	135 (37%)	-19 people
Very little	73 (20%)	24 (7%)	-49 people
Not at all	18 (5%)	16 (4%)	-2 people

P10. Perceptions of manufacturing careers (pre- and post-Tour)

Perceptions of manufacturing careers	Before Tour (N=374)	After Tour (N=377)	Change
I thought/think they were/are good	199 (53%)	297 (79%)	+98 people
I thought/think they were/are just OK	115 (31%)	57 (15%)	-58 people
I didn't/don't think they were/are good	8 (2%)	3 (1%)	-5 people
I didn't/don't think about them	32 (9%)	7 (2%)	-25 people

I'm not sure	20 (5%)	13 (3%)	-7 people

P11. Adjectives for manufacturing careers, open-ended (N=267) Ν % 48 18% Hard-working/motivated/dedicated 48 Interesting/fun/exciting 18% Smart/educated 37 14% Technological/good at math/science/programming/designing/ 21 8% Precision/detailed 21 8% 7% Creative/inventive/problem solver 18 Talented/skilled 16 6% Highly paid/good job/career 14 5% Challenging/difficult/dangerous/intense 9 3% Doing boring/dull/tedious/repetitive work 8 3% 8 3% Machines/metal Essential/important/needed/critical 5 2% Hands-on/builder/welder/constructing things 3 1% 2 1% Someone I know (e.g., dad, mom, uncle, aunt) 2 Dirty/smelly 1% 2 1% Nothing Tired 1 <1% 44 17% Other

Note: Percentages may equal more than 100% as respondents were able to give multiple responses; Open-ended responses to the questions were coded into the above categories.

P12. Descriptions of manufacturing careers (N=372)

	Ν	%
Creative	210	57%
Advanced	183	49%
Exciting	136	37%
Modern	128	34%
Fun	118	32%
Noisy	111	30%
Hard	97	26%
Dangerous	47	13%

Dirty	46	12%
Dark	7	2%

Note: Percentages may equal more than 100% as respondents were able to give multiple responses.

P13. Gender (N=371)

	N	%
Male	227	58%
Female	144	37%

P14. Age (N=371)

	N	%
Under 18	82	22%
18-25 years old	37	10%
26-45 years old	84	23%
46 and older	168	45%

Cross-tabs by age

Due to the higher number of survey responses, Wilder Research was able to run analyses on questions by age and gender. These crosstabs are reported below.

P15. Change in interest in STEM, by age

		Under 18 (N=77)	18-25 (N=37)	26-45 (N=84)	46 and older (N=155)
Increased (N=60)	%	12%	11%	16%	22%
	Ν	9	4	13	34
Maintained high interest (N=136)	%	33%	30%	41%	43%
	Ν	25	11	34	66
Maintained	%	52%	54%	41%	31%
moderate or low interest (N=142)	N	40	20	34	48
Decreased (N=15)	%	4%	5%	4%	5%
	Ν	3	2	3	7

Note: "Maintained high interest" means that the participant's interest level was "A lot" both before and after the Tour of Manufacturing. "Maintained moderate or low interest" means the participant's interest level was either "some", "very little" or "not at all" both before and after the Tour of Manufacturing

		Under 18 (N=80)	18-25 (N=36)	26-45 (N=80)	46 and older (N=141)
Increased (N=81)	%	21%	22%	33%	21%
	Ν	17	8	26	30
Maintained high interest (N=81)	%	20%	11%	28%	28%
	Ν	16	4	22	39
Maintained moderate or low interest (N=78)	%	58%	61%	36%	48%
	Ν	46	22	29	67
Decreased (N=11)	%	1%	6%	4%	4%
	Ν	1	2	3	5

P16. Change in interest in manufacturing careers, by age

Note: "Maintained high interest" means that the participant's interest level was "A lot" both before and after the Tour of Manufacturing. "Maintained moderate or low interest" means the participant's interest level was either "some", "very little" or "not at all" both before and after the Tour of Manufacturing.

		Under 18 (N=78)	18-25 (N=35)	26-45 (N=80)	46 and older (N=147)
Increased (N=99)	%	21%	23%	35%	32%
	Ν	16	8	28	47
Maintained high	%	26%	20%	39%	33%
awareness (N=107)	Ν	20	7	31	49
Maintained	%	53%	51%	25%	29%
moderate or low awareness (N=122)	Ν	41	18	20	43
Decreased (N=12)	%	1%	6%	1%	5%
	Ν	1	2	1	8

P17. Change in awareness of careers in manufacturing, by age

Note: "Maintained high awareness" means that the participant's awareness level was "A lot" both before and after the Tour of Manufacturing. "Maintained moderate or low awareness" means the participant's awareness level was either "some", "very little" or "not at all" both before and after the Tour of Manufacturing.

		Under 18 (N=74)	18-25 (N=30)	26-45 (N=78)	46 and older (N=159)
Increased (N=105)	%	30%	47%	26%	31%
	Ν	22	14	20	49
Maintained high perception- (N=190)	%	42%	33%	69%	60%
	N 31	10	54	95	
Maintained	%	26%	17%	5%	8%
moderate or low perception- (N=40)	N	19	5	4	12
Decreased (N=6)	%	3%	3%	0%	2%
	Ν	2	1	0	3

P18. Change in perceptions of manufacturing careers, by age

Note: "Maintained high perception" means that the participant's perception level was "good" both before and after the Tour of Manufacturing. "Maintained moderate or low perception" means the participant perception level was either "okay", "not good" or "didn't think about it" both before and after the Tour of Manufacturing.

Cross-tabs by gender

P19. Change in interest in STEM, by gender

		Male (N=216)	Female (N=137)
Increased (N=61)	%	10%	29%
	Ν	21	40
Maintained high interest (N=135)	%	48%	23%
	Ν	104	31
Maintained moderate or low	%	38%	45%
interest (N=142)	Ν	81	61
Decreased (N=15)	%	5%	4%
	Ν	10	5

Note: "Maintained high interest" means that the participant's interest level was "A lot" both before and after the Tour of Manufacturing. "Maintained moderate or low interest" means the participant's interest level was either "some", "very little" or "not at all" both before and after the Tour of Manufacturing.

P20. Change in interest in manufacturing careers, by gender

		Male (N=206)	Female (N=132)
Increased (N=80)	%	18%	32%

	Ν	38	42
	%	31%	14%
Maintained high interest (N=82)	Ν	63	19
Maintained moderate or low	%	47%	52%
Maintained moderate or low interest (N=165)	N	97	68
Decreased (N=11)	%	4%	2%
	N	8	3

Note: "Maintained high interest" means that the participant's interest level was "A lot" both before and after the Tour of Manufacturing. "Maintained moderate or low interest" means the participant's interest level was either "some", "very little" or "not at all" both before and after the Tour of Manufacturing.

		Male (N=207)	Female (N=134)
Increased (N=98)	%	22%	39%
	Ν	46	52
Maintained high awareness	%	38%	22%
(N=108)	N	79	29
Maintained moderate or low awareness (N=123)	%	37%	34%
	Ν	77	46
Decreased (N=12)	%	2%	5%
	Ν	5	7

P21. Change in awareness of careers in manufacturing, by gender

Note: "Maintained high awareness" means that the participant's awareness level was "A lot" both before and after the Tour of Manufacturing. "Maintained moderate or low interest" means the participant's awareness level was either "some", "very little" or "not at all" both before and after the Tour of Manufacturing.

P22. Change in perceptions of manufacturing careers, by gender

		Male (N=210)	Female (N=131)
Increased (N=105)	%	28%	36%
	Ν	58	47
Maintained high perception	%	58%	52%
(N=190)	N	122	68
Maintained moderate or low	%	13%	10%
perception (N=40)	Ν	27	13
Decreased (N=6)	%	1%	2%
	Ν	3	3

Note: "Maintained high perception" means that the participant's perception level was "good" both before and after the Tour of Manufacturing. "Maintained moderate or low perception" means the participant's perception level was either "okay", "not good" or "didn't think about it" both before and after the Tour of Manufacturing.

Host survey closed-ended question responses

H1. Days of Tour of Manufacturing participation (N=34)

	Ν	%
Friday, October 3	0	0%
Tuesday, October 21	1	3%
Wednesday, October 22	2	6%
Thursday, October 23	19	56%
Friday, October 24	12	35%
Saturday, October 25	6	18%

Note: Percentages may equal more than 100% as respondents were able to give multiple responses. "Other" category included Monday, October 20th.

H2. How hosts heard about the Tour of Manufacturing (N=32)

	N	%
Manufacturing association	9	28%
Received an email about the Tour	7	22%
Local chamber of commerce	6	19%
Tourofmanufacturingmn.com	1	3%
State Chamber of Commerce	1	3%
Other (please specify)	8	25%

Note: "Other" common responses included: the Minnesota Department of Employment and Economic Development, John Klein, a local paper, grant, and having participated before.

H3. Primary audience for your tour (N=32)

	N	%
Schools	13	41%
Community	6	19%
Both schools and community	13	41%

H4. Was your tour open to the public or was it closed (N=32)

	Ν	%
Open to the public	24	75%
Closed tour for schools	8	25%

H5. Estimated number of visitors (N=32)

	N
Minimum	0
Maximum	350
Average (per respondent site)	78
Total (all respondent sites)	2,484

Note: Five sites reported fewer than 10 visitors, including one that had no visitors.

H6. Preferred time to host a tour in 2015 (N=25)

	N	%
Minnesota Manufacturers' Week	17	68%
National Manufacturing Day	8	32%

H7. Value of individual Tour of Manufacturing components

		Very valuable	Somewhat valuable	A little valuable	Not at all valuable	N/A
Building awareness of or interest in manufacturing as a career option (N=30)	%	60%	23%	7%	7%	3%
	Ν	18	7	2	2	1
Marketing or building awareness of your business to the general public (N=30)	%	30%	33%	23%	7%	7%
	N	9	10	7	2	2
Identifying potential employees or workers (N=30)	%	23%	20%	27%	17%	13%
	N	7	6	8	5	4
Employees interacting with people outside the organization (N=30)	%	17%	47%	20%	13%	3%
	N	5	14	6	4	1
Identifying potential customers (N=30)	%	3%	10%	30%	33%	23%
(N	1	3	9	10	7

		Very successful	Somewhat successful	A little successful	Not at all successful
The engagement of the tour participants (N=30)	%	57%	33%	3%	7%
	Ν	17	10	1	2
The people who attended the tour were who you wanted (N=30)	%	43%	27%	20%	10%
,	Ν	13	8	6	3
The number of tour participants (N=30)	%	43%	27%	17%	13%
· ·	Ν	13	8	5	4

H8. Success of individual Tour of Manufacturing components

H9. Challenges of individual Tour of Manufacturing components

		Very challenging	Somewhat challenging	A little challenging	Not at all challenging	Not applicable
Providing staff time to lead the	%	4%	25%	46%	25%	0%
tours (N=28)	Ν	1	7	13	7	0
Interrupting manufacturing processes (e.g., line shut down)	%	4%	18%	21%	54%	4%
(N=28)	Ν	1	5	6	15	1
Working with the coordinating organizations (e.g., assns., chambers, 360 [°] Center, etc.) (N=28)	%	4%	4%	18%	68%	7%
	Ν	1	1	5	19	2
Assuring participant safety	%	4%	4%	18%	75%	0%
(N=28)	Ν	1	1	5	21	0
Interrupting front or back office business functions (not related to manufacturing) (N=28)	%	0%	11%	32%	54%	4%
	Ν	0	3	9	15	1
Coordinating the tour participants (e.g., parking) (N=28)	%	0%	4%	7%	82%	7%
	Ν	0	1	2	23	2

H10. Tour of Manufacturing participation worthwhile (N=28)

	N	%
Yes, very	14	50%
Yes, somewhat	11	39%
No	2	7%
Not sure	1	4%

H11. Likelihood of participating in Tour of Manufacturing again (N=28)

	N	%
Yes, certainly	17	61%
Yes, maybe	8	29%
Not sure	3	11%

H12. Participated in Tour of Manufacturing last year (N=28)

	N	%
Yes	10	36%
No	18	64%

H13. Materials used in preparation for your tour (N=34)

	Ν	%
Company listing on Tour of Manufacturing website	16	47%
Customizable flyers about your local event	9	27%
Low-cost option to purchase signage	8	24%
Letter to schools	7	21%
Press release template	6	18%
Customizable posts for social media	6	18%
Dream it. Do it. MN Giveaways	3	9%
Customizable radio ad	2	6%
Public service announcements	2	6%
Other	7	21%

Notes: Percentages may equal more than 100% as respondents were able to give multiple responses "Other" category included Greater Mankato Growth promotional fliers.

H14. Most useful materials used in preparation for your tour (N=19)

N	%
6	32%
4	21%
2	11%
2	11%
2	11%
3	16%
	6 4 2 2 2 2

H16. Region (N=28)

	Ν	%
Metro area	13	46%
Central	6	21%
Northwest	5	18%
West Central	2	7%
South Central	1	4%
Northeast	1	4%

Host survey open-ended question responses

Q5. Method used to count the number of participants (N=31)

VERBATIM RESPONSES

Formal Participant counting strategy (N=17)

Sign-in sheet in reception.

Visitors signed-in.

Counted at welcome desk.

We had all seven participants sign in on a sheet; the front desk receptionist monitored this.

We had a guest book that we asked people to sign as they entered our facility. We also had a 40th Anniversary open house celebration concurrently for team members and their families.

Surveys and we took reservations for the tour with attendees.

Check in when they came through the door

Had them sign the guest book

Had a sign-up sheet for the community and counted the schools

We registered each person for a personalized, laser engraved key chain medallion as they entered the door. This gave us the names and number of people who toured.

Sign-in sheet

Guest book sign-in

Sign-in sheet

Sign-in sheet

Provided list of attendees up front

RSVP's

Label count of walk-in's

By the division of students for the tour

We had actual numbers from the schools

Informal Method of Counting Participants (N=8)

Small group, easy to count

Public visitors a close estimate

Count

We counted them

Hard count on high school attendees

Informal count - there was a guide on duty at the door during the entire tour

Head count

Kept a tally as they arrived

Note: Six sites reported no method for counting participants, including one that had no visitors

Q6. Most valuable aspect of the Tour of Manufacturing (N=27)

Inform participants about manufacturing careers or the industry of manufacturing (N=13)

We thought it would be to encourage students in high school or in Tech school to get interested in micro machining

We feel it is helpful to bring awareness of the Manufacturing Industry

To introduce and inform students about the career possibilities in manufacturing and what type of continued education would be needed for those careers

The high school students, it gave us exposure to them and them to careers in manufacturing

Exposure to career opportunities in manufacturing

Having an opportunity to speak directly to the youth that will be soon entering the work force

Getting the students and community interested in manufacturing careers

Making our company and what we do accessible to young people whom are looking at career options

Creating an awareness about manufacturing education and career tracks in central Minnesota

General recruitment

Industry exposure

Allowing others to see what we do and opening their eyes to opportunities in their back yards

Exposure to future employees

Increased awareness about the manufacturing company (N=13)

Showing the community that the company started and stayed here in Bemidji

Having employees' family and friends tour. They promoted the event heavily to members of their circle and in turn then the community. We had a huge cross-section of age groups; which was also good

Letting the general public know what we do

We were able to showcase our facilities to both local schools and community members

Exposure to schools

General branding, awareness

Letting the community know we manufacture

Making awareness to those who wanted to learn more about the business

Just to let the community know we are here

Being able to showcase our facility, manufacturing line, engineering department, etc.

Community Outreach

Connections with local schools

Showing people all of our products

Did not have value from the Tour of Manufacturing (N=1)

Was none this year, very poor attendance.

Q7. Most successful aspect of the Tour of Manufacturing (N=23)

VERBATIM RESPONSES

The amount of people that attended (N=6)

We had about 100 high school employees attend which helps us for future employees

21 attendees

The amount of people that toured

The turn out from the prior year. We promoted

In 2013, we had 1 visitor tour our facility. This year we had 175 visitors

Actually had a few people stop by!

General interest expressed from those whom attended (N=6)

The students were engaged and seemed to enjoy the tour and presentation

The most successful aspect for us was the enthusiasm that a few of the student(s) exhibited. This meant to us that some real "seeds" were being planted that may someday result in future employees

Employee Engagement

The school tour from Pine River-Backus High School. We received communication from the instructors afterwards that indicated the students were very impressed and really "turned on to manufacturing" after the tour

The general interest by those who participated

Exposure to schools

Educating/informing the public (N=5)

Talking to participants about manufacturing careers that they are exploring

Educating the public

Showing off our business and helping visitors understand what we do

Having 350 [360] come through our doors and show them a new perspective of manufacturing

Proving information to people on what is available at our plant.

General positive feedback (N=6)

Seeing the opportunities available in manufacturing

Attendees saw a different side of manufacturing

We enjoyed opening our doors; we were extremely disappointed in the turn out, however

Many students attended with their families

Community familiar with us.

The question and answer sessions from the students

Q8. Biggest challenge or barrier (N=23)

VERBATIM RESPONSES

General logistical challenges (N=13)

I wanted to make sure we had products running during the tour

Keeping the groups small enough to be able to communicate with them

Size of the audience

Our biggest challenge was getting all the hosts to have the same time frame available

Overall distance traveled to see the operation. May use golf carts to transport guests next time

Limited access to the facility for young children when the plant is in operation

Time & Business levels, we are very busy

Space for us is limited so we took people back two at a time

location - hard to find

Tight scheduling between the two afternoon tours

Keeping my management staff on task. (our own problem) :)

The guided tours lasted about an hour. This can be too long for some people, so with coaching we had our volunteer tour guides (employees) ask their group if they could spare up to an hour for the tour. If the visitors didn't have that much time, then the guide would move them through quicker. But with the technology we have, there is so much to see that it really does take an hour to do justice to the tour.

None, just needed more attendance

Other general challenges (N=10)

No schools called to participate

Knowing what they would like to hear

We had no barriers, and not really a challenge either; staff was lined up to give tours

The portion of the high school students who viewed it as time away from class and were disruptive to the students who were genuinely interested

We did not see enough middle school and/or junior high aged children with their families (other than our employees' children, grandchildren, etc.) We need to get this age group introduced to the possibilities in manufacturing! I sent press releases and personalized e-mails to a dozen area schools too

Getting the right people through the door. We had staffing agencies and a technology software company attend, which had no interest besides gaining business from [manufacturer]

Just getting prepared up front

Beautiful weather and a Friday afternoon.

Joining with industry partners in a coordinated effort to promote educational tours that correlated to industry partner tour days/times. Our marketing campaign could also be improved next year

There were some local schools that were not interested in touring due to budget constraints

Q12B. Why the Tour of Manufacturing was not worthwhile (N=2)

VERBATIM RESPONSES

General reasons the Tour of Manufacturing was not worthwhile

No visitors

Again there didn't seem to be the interest this year as there was in the past two years

Q13B. Why host would not participate in the Tour of Manufacturing again (N=2)

VERBATIM RESPONSES

General reasons the Tour of Manufacturing was not worthwhile

Lack of participants. For this being the 4th annual we expected a better turn out. Although we signed up later and personally invited 13 area schools, not many were aware of the program. We thought leveraging a 4th annual would have proved more fruitful. We even had radio coverage! Lots of planning and work, but little to show. It was a worthwhile experience that we planned this and know we have the capability to host such an event with short notice

We invited local companies early on to participate with us making for more of a draw to the community. They would have to step up with a commitment for future events

Q16. Promotional materials used in preparation for the Tour of Manufacturing (N=7)

VERBATIM RESPONSES

General materials used

Created invite letters to schools

Custom advertisement in regional "shopper" paper

Colleges, Organizations, blogs

Chamber provided the promotions

Our Manufacturing Alliance also prepared a special color insert for the Sunday paper that promoted Manufacturing and the tours. This was very worthwhile

Rosedale LED sign

Links to the MN Tour of Manufacturing website

Q17. Most useful promotional materials in preparation for the Tour of Manufacturing (N=2)

VERBATIM RESPONSES

General materials

Greater Mankato Growth Promotional Fliers

Only received the surveys

Q18. Other types of support that would have been helpful (N=13)

VERBATIM RESPONSES

General support responses (N=7)

Could we have a prominent guest(s) (Governor, Senator, Representative, etc.) schedule a tour with one/some of the host companies to call attention to this event. It might help with the media message to MN residents.

The statewide site & social media templates were also beneficial! Possibly even an opportunity as an off-site career day. Advanced planning perhaps. I sent e-mails with information to a dozen schools but only heard back from two

More help advertising or directing people to come attend certain businesses

Continue the advertising

More mass media marketing on behalf of all participants in the MN manufacturing tours

Aitkin may be too far from the core of the Tour Area to be successful

More promotional and advertising support from the sponsoring organizations

Local promotion of Tour of Manufacturing (N=6)

Better promotion of the event and the participants to the local community (media, city government, chamber of commerce, etc.)

Promoting this program more in the area- make announcements to schools and encourage they set the week on the calendar

We would like to see more support working directly with schools to get more middle/junior high school students to participate in tours.

Maybe a map that is published locally so people know all the businesses involved

Money for local radio Ads and Newspaper Ads

Targeted emails based on location

Q19. Additional comments (N=7)

VERBATIM RESPONSES

General suggestions (N=5)

It would be nice to have some feedback from the students

Have the local tech colleges have they students tour the open facilities/companies more upfront promoting of the week; high and middle schools involvement, perhaps work with the schools and arrange multi-stop tours as area businesses

Getting more companies to see the value of and participate in it would help show it is a vibrant industry with very good career opportunities

It would be great to have more local "clusters" of manufacturers participate in the event together. That way, if someone from an hour away wants to tour a facility, they would have at least two or three manufacturers to tour in one area -- gives them extra incentive to travel

We prefer to participate every other year. Next year we will focus on grade school tour groups and not hold the Community Wide open house

General comments (N=2)

I am glad we participated, we look forward to next year

We look forward to participating next year