

ONE CALL INDUSTRY SURVEY



Should the dig laws for all states/provinces be standardized?

Yes	81%
No	18%
N/A	1%

Communications | **E**lectric | **EN**gineer | **EX**cavator | **G**as & Oil | Gov't/**R**egulatory
Locator | **O**ne Call | **P**ublic Works | **W**ater & Sewer | GIS **M**apping

	C	E	N	X	G	R	L	O	P	W	M
Yes	93%	95%	67%	80%	93%	78%	69%	54%	90%	64%	83%
No	7%	5%	33%	20%	7%	22%	31%	38%	10%	32%	17%
N/A	0%	0%	0%	0%	0%	0%	0%	8%	0%	5%	0%

Executive | **U**pper Management | **M**iddle Management | **F**ield Operator

	E	U	M	F
Yes	84%	86%	75%	83%
No	16%	14%	23%	15%
N/A	0%	0%	2%	2%

USA | **I**nternational

	U	I
Yes	80%	92%
No	18%	8%
N/A	1%	0%

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Should the ticket delivery format used to inform a facility owner of an excavator's intent to dig be standardized?

Yes	86%
No	12%
N/A	2%

Communications | Electric | ENgineer | EXcavator | Gas & Oil | Gov't/Regulatory

Locator | One Call | Public Works | Water & Sewer | GIS Mapping

	C	E	N	X	G	R	L	O	P	W	M
Yes	100%	100%	83%	80%	90%	78%	92%	62%	85%	73%	100%
No	0%	0%	17%	20%	10%	11%	8%	31%	15%	23%	0%
N/A	0%	0%	0%	0%	0%	11%	0%	8%	0%	5%	0%

Executive | Upper Management | Middle Management | Field Operator

	E	U	M	F
Yes	89%	81%	80%	94%
No	11%	16%	18%	4%
N/A	0%	3%	2%	2%

USA | International

	U	I
Yes	85%	92%
No	13%	8%
N/A	2%	0%

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Excavating	#1	#2	#3	#4	#5	#6	#7	#8	#9
Legislation	40%	30%	30%	0%	0%	0%	0%	0%	0%
Culture	20%	60%	20%	0%	0%	0%	0%	0%	0%
EDs	30%	10%	30%	10%	0%	10%	10%	0%	0%
Utilities	0%	0%	0%	80%	10%	10%	0%	0%	0%
Contractors	0%	0%	0%	10%	40%	50%	0%	0%	0%
Locators	0%	0%	10%	0%	50%	30%	10%	0%	0%
Other*	10%	0%	10%	0%	0%	0%	0%	0%	0%

Gas & Oil	#1	#2	#3	#4	#5	#6	#7	#8	#9
Legislation	47%	23%	17%	7%	0%	0%	7%	0%	0%
Culture	17%	30%	13%	20%	3%	17%	0%	0%	0%
EDs	27%	20%	23%	13%	3%	13%	0%	0%	0%
Utilities	10%	17%	30%	23%	17%	0%	3%	0%	0%
Contractors	0%	7%	13%	27%	50%	3%	0%	0%	0%
Locators	0%	0%	0%	7%	27%	60%	3%	3%	0%
Other*	0%	3%	3%	3%	0%	0%	3%	0%	0%

Gov't/Reg	#1	#2	#3	#4	#5	#6	#7	#8	#9
Legislation	89%	11%	0%	0%	0%	0%	0%	0%	0%
Culture	11%	44%	11%	33%	0%	0%	0%	0%	0%
EDs	0%	11%	56%	11%	11%	11%	0%	0%	0%
Utilities	0%	22%	22%	33%	11%	11%	0%	0%	0%
Contractors	0%	11%	11%	11%	67%	0%	0%	0%	0%
Locators	0%	0%	0%	11%	11%	78%	0%	0%	0%
Other*	0%	0%	0%	0%	0%	0%	0%	0%	0%

Locating	#1	#2	#3	#4	#5	#6	#7	#8	#9
Legislation	69%	0%	23%	8%	0%	0%	0%	0%	0%
Culture	8%	54%	15%	8%	15%	0%	0%	0%	0%
EDs	8%	15%	38%	23%	8%	0%	8%	0%	0%
Utilities	8%	15%	8%	54%	15%	0%	0%	0%	0%
Contractors	8%	15%	8%	8%	54%	8%	0%	0%	0%
Locators	0%	0%	0%	0%	8%	85%	0%	0%	8%
Other*	0%	0%	8%	0%	0%	0%	0%	0%	0%

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Other	#1	#2	#3	#4	#5	#6	#7	#8	#9
Legislation	40%	60%	0%	0%	0%	0%	0%	0%	0%
Culture	20%	20%	40%	20%	0%	0%	0%	0%	0%
EDs	40%	20%	40%	0%	0%	0%	0%	0%	0%
Utilities	0%	0%	20%	60%	20%	0%	0%	0%	0%
Contractors	0%	0%	0%	0%	80%	20%	0%	0%	0%
Locators	0%	0%	0%	0%	0%	80%	20%	0%	0%
Other*	0%	0%	0%	20%	0%	0%	0%	0%	0%

Executive	#1	#2	#3	#4	#5	#6	#7	#8	#9
Specific state/province legislation	58%	37%	5%	0%	0%	0%	0%	0%	0%
Regional or local culture	16%	42%	21%	5%	11%	5%	0%	0%	0%
Executive Directors want to build their own solutions	16%	11%	42%	11%	0%	5%	11%	5%	0%
Utilities drove requirements	5%	11%	16%	58%	5%	5%	0%	0%	0%
Contractors drove requirements	0%	0%	0%	5%	58%	21%	11%	5%	0%
Locators drove requirements	0%	0%	5%	0%	16%	63%	11%	5%	0%
Other*	5%	0%	11%	21%	11%	0%	5%	5%	5%

Upper Management	#1	#2	#3	#4	#5	#6	#7	#8	#9
Legislation	68%	16%	5%	5%	5%	0%	0%	0%	0%
Culture	8%	32%	32%	11%	5%	11%	0%	0%	0%
EDs	8%	14%	27%	8%	19%	22%	0%	0%	3%
Utilities	11%	30%	16%	38%	3%	3%	0%	0%	0%
Contractors	3%	5%	11%	32%	43%	3%	0%	3%	0%
Locators	3%	3%	8%	3%	22%	59%	3%	0%	0%
Other*	0%	0%	0%	3%	3%	3%	3%	3%	0%

Middle Management	#1	#2	#3	#4	#5	#6	#7	#8	#9
Legislation	65%	18%	11%	7%	0%	0%	0%	0%	0%
Culture	9%	40%	14%	23%	7%	7%	0%	0%	0%
EDs	11%	14%	35%	12%	9%	18%	2%	0%	0%
Utilities	12%	19%	19%	35%	9%	4%	2%	0%	0%
Contractors	2%	5%	14%	11%	58%	9%	0%	0%	2%
Locators	0%	4%	4%	11%	16%	61%	4%	2%	0%
Other*	2%	0%	4%	2%	2%	2%	2%	0%	0%

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Field Operators	#1	#2	#3	#4	#5	#6	#7	#8	#9
Legislation	60%	13%	8%	10%	2%	2%	4%	0%	0%
Culture	4%	48%	13%	13%	8%	13%	0%	2%	0%
EDs	21%	15%	40%	15%	6%	4%	0%	0%	0%
Utilities	13%	15%	19%	40%	13%	0%	2%	0%	0%
Contractors	2%	6%	15%	15%	56%	6%	0%	0%	0%
Locators	0%	0%	2%	8%	15%	67%	2%	2%	4%
Other*	0%	4%	4%	0%	0%	0%	2%	2%	2%

USA	#1	#2	#3	#4	#5	#6	#7	#8	#9
Specific state/province legislation	62%	19%	9%	6%	2%	1%	1%	0%	0%
Regional or local culture	9%	41%	18%	15%	8%	9%	0%	1%	0%
Executive Directors want to build their own solutions	14%	14%	34%	12%	9%	14%	2%	1%	1%
Utilities drove requirements	11%	19%	19%	41%	7%	2%	1%	0%	0%
Contractors drove requirements	2%	5%	11%	16%	54%	8%	1%	1%	1%
Locators drove requirements	1%	1%	5%	7%	17%	63%	3%	1%	1%
Other*	1%	1%	4%	3%	2%	1%	2%	1%	1%

International	#1	#2	#3	#4	#5	#6	#7	#8	#9
Legislation	77%	8%	0%	15%	0%	0%	0%	0%	0%
Culture	0%	46%	23%	15%	0%	15%	0%	0%	0%
EDs	8%	15%	54%	8%	8%	8%	0%	0%	0%
Utilities	15%	23%	8%	31%	15%	8%	0%	0%	0%
Contractors	0%	0%	15%	15%	54%	8%	8%	0%	0%
Locators	0%	8%	0%	0%	15%	62%	8%	8%	0%
Other*	0%	0%	0%	15%	8%	0%	8%	8%	8%

Question 3, "Other" Responses

- 1/Differences in complexities, densities of utilities in urban environments
- 1/Legacy-Older One Calls began regionally and by large facility owners, for good reason, but as such, they had a myopic look at the solutions needed for all facility owners.
- 2/State regulators seem to always have a "one-up" on other states - competitiveness vs cooperativeness- "We know better than them attitude"
- 2/Those who would be dealing with enforcement.
- 3/Slow regulatory process on the Federal, State and local level
- 3/Failure to recognize effective foreign one call centers as the standard to live up to.
- 3/Strong Branding established by one - call centers
- 3/History of high-profile damages

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- 3/Political affiliations
- 3/Local geography and primary facility types at inception
- 4/Not paying attention to demographic demands/shifts in user preferences.
- 4/It was the first attempt and suited the technology available
- 4/State regulatory and/or enforcement authorities drove the requirements
- 4/Philosophy of government — some states want more gov involvement, some want less
- 4/Vested control, PUC vs. non-PUC control
- 4/No action by board members in each state/maintain status quo
- 5/Too focused on old call-to-actions and branding than Best Practices, data analysis, and reducing damages.
- 5/Federal regulatory and/or enforcement authorities drove the requirements
- 5/Penalty structure/fine structure
- 5/Age of infrastructure
- 6/Elected vs appointed boards
- 6/Speed and scope of economic growth
- 7/hard to get all to agree
- 7/The legislation excuse is often used, but standardization could have still been implemented by using the most restrictive regs and working from there.
- 7/climate/environmental considerations.
- 8/politics
- 8/economic demographics
- 9/egos

Should the information (ticket details, maps, facility records, etc.) provided by the utility company to its in-house locator or a contract locating company be standardized?

Yes	85%
No	13%
N/A	2%

Communications | Electric | ENgineer | EXcavator | Gas & Oil | Gov't/Regulatory

Locator | One Call | Public Works | Water & Sewer | GIS Mapping

	C	E	N	X	G	R	L	O	P	W	M
Yes	67%	79%	83%	80%	83%	67%	62%	77%	65%	45%	83%
No	33%	21%	17%	20%	17%	33%	38%	23%	35%	50%	17%
N/A	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	0%

Executive | Upper Management | Middle Management | Field Operator

	E	U	M	F
Yes	79%	68%	70%	69%
No	21%	32%	30%	29%
N/A	0%	0%	0%	2%

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USA | International

	U	I
Yes	67%	100%
No	32%	0%
N/A	1%	0%

Consider the One Call system you use most frequently. When submitting a ticket request, how easy is it to..

All	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	N/A
Understand what to do	38%	45%	15%	2%	38%
Ease of use	39%	43%	17%	1%	39%
Speed of use	36%	40%	18%	6%	36%
Receive status updates	36%	38%	18%	9%	36%
Obtain system information	22%	26%	24%	29%	22%

Communications	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	N/A
Understand what to do	36%	50%	7%	7%	36%
Ease of use	36%	36%	29%	0%	36%
Speed of use	36%	36%	21%	7%	36%
Receive status updates	33%	33%	25%	8%	33%
Obtain system information	15%	38%	23%	23%	15%

Electric	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	N/A
Understand what to do	25%	58%	17%	0%	25%
Ease of use	17%	58%	25%	0%	17%
Speed of use	17%	58%	25%	0%	17%
Receive status updates	20%	10%	50%	20%	20%
Obtain system information	18%	45%	18%	18%	18%

Engineering	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	N/A
Understand what to do	33%	67%	0%	0%	33%
Ease of use	33%	67%	0%	0%	33%
Speed of use	17%	50%	17%	17%	17%
Receive status updates	17%	33%	17%	33%	17%

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Obtain system information	17%	17%	33%	33%	17%
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Excavating	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	N/A
Understand what to do	40%	40%	20%	0%	40%
Ease of use	40%	40%	20%	0%	40%
Speed of use	40%	30%	20%	10%	40%
Receive status updates	30%	40%	20%	10%	30%
Obtain system information	30%	40%	30%	0%	30%

Gas & Oil	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	N/A
Understand what to do	22%	52%	22%	4%	22%
Ease of use	27%	55%	14%	5%	27%
Speed of use	22%	48%	22%	9%	22%
Receive status updates	17%	58%	25%	0%	17%
Obtain system information	12%	60%	28%	0%	12%

Gov't/Regulatory	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	N/A
Understand what to do	50%	33%	0%	17%	50%
Ease of use	71%	29%	0%	0%	71%
Speed of use	50%	38%	13%	0%	50%
Receive status updates	29%	57%	14%	0%	29%
Obtain system information	38%	63%	0%	0%	38%

Locating	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	N/A
Understand what to do	33%	22%	44%	0%	33%
Ease of use	33%	22%	44%	0%	33%
Speed of use	33%	22%	22%	22%	33%
Receive status updates	44%	22%	22%	11%	44%
Obtain system information	22%	33%	33%	11%	22%

One Call	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	N/A
Understand what to do	50%	30%	20%	0%	50%
Ease of use	50%	30%	20%	0%	50%
Speed of use	60%	30%	0%	10%	60%

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Receive status updates	50%	20%	10%	20%	50%
Obtain system information	56%	11%	11%	22%	56%

Public Works	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	N/A
Understand what to do	44%	39%	17%	0%	44%
Ease of use	50%	35%	15%	0%	50%
Speed of use	50%	30%	20%	0%	50%
Receive status updates	50%	39%	11%	0%	50%
Obtain system information	32%	37%	26%	5%	32%

Water & Sewer	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	N/A
Understand what to do	57%	38%	5%	0%	57%
Ease of use	50%	40%	10%	0%	50%
Speed of use	45%	40%	15%	0%	45%
Receive status updates	57%	43%	0%	0%	57%
Obtain system information	33%	62%	5%	0%	33%

GIS Mapping	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	N/A
Understand what to do	0%	60%	40%	0%	0%
Ease of use	0%	60%	40%	0%	0%
Speed of use	0%	40%	60%	0%	0%
Receive status updates	0%	40%	40%	20%	0%
Obtain system information	0%	40%	40%	20%	0%

Other	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	N/A
Understand what to do	0%	67%	33%	0%	0%
Ease of use	0%	67%	33%	0%	0%
Speed of use	0%	100%	0%	0%	0%
Receive status updates	0%	33%	33%	33%	0%
Obtain system information	0%	0%	67%	33%	0%

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Executive	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	N/A
Understand what to do	38%	44%	19%	0%	38%
Ease of use	38%	44%	19%	0%	38%
Speed of use	38%	44%	13%	6%	38%
Receive status updates	31%	31%	13%	25%	31%
Obtain system information	19%	25%	31%	25%	19%

Upper Management	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	N/A
Understand what to do	45%	42%	10%	3%	45%
Ease of use	34%	53%	13%	0%	34%
Speed of use	34%	53%	9%	3%	34%
Receive status updates	28%	44%	19%	9%	28%
Obtain system information	28%	41%	16%	16%	28%

Middle Management	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	N/A
Understand what to do	30%	48%	17%	4%	30%
Ease of use	41%	41%	16%	2%	41%
Speed of use	35%	41%	20%	4%	35%
Receive status updates	33%	38%	24%	4%	33%
Obtain system information	30%	41%	24%	4%	30%

Field Operations	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	N/A
Understand what to do	39%	45%	16%	0%	39%
Ease of use	40%	38%	23%	0%	40%
Speed of use	40%	25%	25%	10%	40%
Receive status updates	46%	37%	11%	6%	46%
Obtain system information	21%	55%	18%	5%	21%

USA	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	N/A
Understand what to do	38%	45%	15%	2%	38%
Ease of use	40%	42%	17%	1%	40%

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Speed of use	38%	38%	18%	6%	38%
Receive status updates	36%	39%	16%	9%	36%
Obtain system information	26%	43%	20%	11%	26%

International	Very Easy	Somewhat Easy	Somewhat Difficult	Very Difficult	N/A
Understand what to do	30%	40%	20%	10%	30%
Ease of use	20%	60%	20%	0%	20%
Speed of use	20%	60%	20%	0%	20%
Receive status updates	22%	33%	44%	0%	22%
Obtain system information	20%	50%	30%	0%	20%

Which of the options below do you consider important on a ticket request? (Indicate all)

Start Date | End Date | Job Type | Contact Name/Phone | Working on Behalf of | Working in the Road
Working on Private Property | Depth | Intersecting Streets | Street Address | Dig Site Geometry |
Electronic White Line Info | Other

All	S	E	J	C	B	R	P	D	I	A	G	W	O*
Required	96%	57%	87%	99%	46%	72%	58%	51%	76%	95%	61%	54%	93%
Important but optional	3%	30%	13%	1%	45%	26%	35%	33%	20%	5%	32%	36%	8%
Not important and optional	1%	13%	0%	0%	9%	2%	7%	16%	4%	0%	7%	10%	0%

Communication	S	E	J	C	B	R	P	D	I	A	G	W	O*
Required	93%	67%	71%	100	71%	80%	79%	27%	86%	100	73%	73%	93%
Important but optional	7%	20%	29%	0%	29%	20%	21%	40%	7%	0%	20%	7%	7%
Not important and optional	0%	13%	0%	0%	0%	0%	0%	33%	7%	0%	7%	20%	0%

Electric	S	E	J	C	B	R	P	D	I	A	G	W	O*
Required	95%	63%	76%	100	67%	58%	44%	58%	83%	94%	58%	47%	0%
Important but optional	5%	37%	24%	0%	28%	42%	56%	32%	11%	6%	42%	53%	0%
Not important and optional	0%	0%	0%	0%	6%	0%	0%	11%	6%	0%	0%	0%	0%

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Engineering	S	E	J	C	B	R	P	D	I	A	G	W	O*
Required	100	50%	33%	100	33%	50%	50%	33%	83%	83%	50%	67%	0%
Important but optional	0%	50%	67%	0%	67%	50%	33%	67%	17%	17%	33%	17%	0%
Not important and optional	0%	0%	0%	0%	0%	0%	17%	0%	0%	0%	17%	17%	0%

Excavation	S	E	J	C	B	R	P	D	I	A	G	W	O*
Required	100	40%	90%	100	22%	80%	70%	60%	80%	100	40%	50%	0%
Important but optional	0%	20%	10%	0%	44%	20%	30%	40%	20%	0%	60%	30%	0%
Not important and optional	0%	40%	0%	0%	33%	0%	0%	0%	0%	0%	0%	20%	0%

Gas & Oil	S	E	J	C	B	R	P	D	I	A	G	W	O*
Required	100	62%	90%	100	75%	62%	58%	52%	65%	97%	64%	53%	0%
Important but optional	0%	31%	10%	0%	25%	27%	31%	34%	35%	3%	29%	43%	0%
Not important and optional	0%	7%	0%	0%	0%	12%	12%	14%	0%	0%	7%	3%	0%

Gov't/Reg	S	E	J	C	B	R	P	D	I	A	G	W	O*
Required	100	78%	89%	89%	56%	75%	67%	50%	67%	100	56%	78%	0%
Important but optional	0%	22%	11%	11%	44%	25%	11%	50%	33%	0%	44%	22%	0%
Not important and optional	0%	0%	0%	0%	0%	0%	22%	0%	0%	0%	0%	0%	0%

Locating	S	E	J	C	B	R	P	D	I	A	G	W	O*
Required	92%	54%	85%	100	54%	85%	54%	25%	83%	91%	42%	62%	0%
Important but optional	0%	23%	15%	0%	23%	15%	23%	25%	17%	9%	42%	15%	0%
Not important and optional	8%	23%	0%	0%	23%	0%	23%	50%	0%	0%	17%	23%	0%

ONE CALL INDUSTRY SURVEY



One Call	S	E	J	C	B	R	P	D	I	A	G	W	O*
Required	100	54%	92%	100	69%	85%	77%	31%	58%	77%	77%	58%	0%
Important but optional	0%	15%	8%	0%	23%	15%	23%	38%	25%	23%	23%	42%	0%
Not important and optional	0%	31%	0%	0%	8%	0%	0%	31%	17%	0%	0%	0%	0%

Public Works	S	E	J	C	B	R	P	D	I	A	G	W	O*
Required	95%	50%	95%	100	50%	94%	68%	79%	72%	100	53%	40%	0%
Important but optional	5%	30%	5%	0%	44%	6%	32%	21%	22%	0%	37%	55%	0%
Not important and optional	0%	20%	0%	0%	6%	0%	0%	0%	6%	0%	11%	5%	0%

Water/Sewer	S	E	J	C	B	R	P	D	I	A	G	W	O*
Required	100	45%	95%	100	52%	60%	44%	62%	81%	95%	43%	40%	0%
Important but optional	0%	45%	5%	0%	38%	40%	50%	29%	19%	5%	43%	45%	0%
Not important and optional	0%	10%	0%	0%	10%	0%	6%	10%	0%	0%	14%	15%	0%

GIS Mapping	S	E	J	C	B	R	P	D	I	A	G	W	O*
Required	83%	67%	67%	100	40%	50%	60%	60%	50%	100	67%	50%	0%
Important but optional	17%	0%	33%	0%	20%	50%	20%	40%	33%	0%	33%	33%	0%
Not important and optional	0%	33%	0%	0%	40%	0%	20%	0%	17%	0%	0%	17%	0%

Other	S	E	J	C	B	R	P	D	I	A	G	W	O*
Required	100	60%	100	100	100	80%	60%	80%	100	100	80%	80%	0%
Important but optional	0%	20%	0%	0%	0%	20%	40%	0%	0%	0%	20%	20%	0%
Not important and optional	0%	20%	0%	0%	0%	0%	0%	20%	0%	0%	0%	0%	0%

Executive	S	E	J	C	B	R	P	D	I	A	G	W	O*
Required	95%	53%	84%	100	53%	74%	58%	37%	63%	79%	68%	53%	0%
Important but optional	0%	26%	16%	0%	42%	26%	37%	26%	21%	21%	26%	37%	0%
Not important and optional	5%	21%	0%	0%	5%	0%	5%	37%	16%	0%	5%	11%	0%

ONE CALL INDUSTRY SURVEY



Upper Mgmt	S	E	J	C	B	R	P	D	I	A	G	W	O*
Required	95%	50%	88%	100	63%	79%	65%	63%	71%	97%	68%	49%	0%
Important but optional	5%	36%	12%	0%	31%	21%	35%	26%	26%	3%	22%	49%	0%
Not important and optional	0%	14%	0%	0%	6%	0%	0%	11%	3%	0%	11%	3%	0%

Middle Mgmt	S	E	J	C	B	R	P	D	I	A	G	W	O*
Required	100	63%	85%	98%	65%	74%	55%	58%	78%	98%	52%	50%	0%
Important but optional	0%	27%	15%	2%	24%	23%	34%	31%	22%	2%	43%	39%	0%
Not important and optional	0%	11%	0%	0%	12%	4%	11%	11%	0%	0%	6%	11%	0%

Field Ops	S	E	J	C	B	R	P	D	I	A	G	W	O*
Required	94%	57%	88%	100	63%	64%	59%	41%	83%	98%	63%	65%	0%
Important but optional	6%	30%	13%	0%	35%	34%	33%	41%	13%	2%	33%	23%	0%
Not important and optional	0%	13%	0%	0%	2%	2%	9%	17%	4%	0%	4%	13%	0%

USA	S	E	J	C	B	R	P	D	I	A	G	W	O*
Required	97%	58%	85%	99%	61%	71%	58%	52%	77%	97%	60%	54%	0%
Important but optional	3%	29%	15%	1%	33%	27%	34%	30%	20%	3%	33%	36%	0%
Not important and optional	1%	13%	0%	0%	7%	2%	8%	18%	4%	0%	7%	10%	0%

International	S	E	J	C	B	R	P	D	I	A	G	W	O*
Required	92%	46%	100	100	77%	85%	62%	46%	69%	77%	69%	62%	0%
Important but optional	8%	38%	0%	0%	15%	15%	38%	54%	23%	23%	31%	38%	0%
Not important and optional	0%	15%	0%	0%	8%	0%	0%	0%	8%	0%	0%	0%	0%

ONE CALL INDUSTRY SURVEY



Question 6, Other Responses

Required:

After Hours Contact

Ask for the name of an additional person, along with the caller, who has the authority to change the instructions on a ticket such as a site forman or crew leader.

Boring

Cell Phone Number of Person Onsite for Emergency

Locates

Contact information for person actually performing work including phone and email, not someone setting in an office that doesn't understand the scope of work or the exact location

Contractor Details

Date/time when excavator may actually begin work so it takes out the interpretation and is clear of excavator and facility/utility owner.

duration

Email

e-mail

email address

equipment type

Everything on the current ticket

exact scope

Field contact

Field Contact (Mandatory)

Give authority to utility locators in the field to create a ticket in cases where the original ticket was incorrect or there never was a ticket called in for an excavation. Example: locator drives through neighborhood on the way to a ticket when they notice a homeowner installing a mailbox with no paint or flags visible. They investigate and discover that there is no ticket for this excavation. The current process is to ask the homeowner to call in a ticket today and wait the appropriate time for

locates before installing the mailbox. This is frustrating to the homeowner and the locator because 1. this interrupts the homeowners plans and 2. the locator has to return to this same location on another day to do what they could do right now.

How to report a miss mark

If the dig site is at a government or commercial property, include the name of the building or business along with or in some cases instead of, the address.

is a meeting required

lat/long

Latitude/Longitude of Excavation

Location on the property where the work is going to take place

Locator Details

Name of locator

On site contact number

reliable contact number

Repeat tickets for same job, charge caller for abuse of system

Response Date

Response due date

Site access comments (e.g. gate code)

Size Limits 1,500-2,500 Feet

specific as to contractor doing excavation

true dig date

type equipment being used to excavate

Type of equipment being used for excavation (pneumatic, mechanical, boring, etc.)

Who to contact for discrepancy

Important but optional:

2nd Contact

Private Utilities in scope y/n

property ownername

What makes a One Call Center easy to work with?

Apps for mobile devices	15%
Call Center Staff	15%
Easy to remember nationwide phone number	23%
Facilities communication between excavator and operator	14%
Other*	1%
There is a set process	17%

ONE CALL INDUSTRY SURVEY



Web portals	16%
-------------	-----

Communications | Electric | ENgineer | EXcavator | Gas & Oil | Gov't/Regulatory
Locator | One Call | Public Works | Water & Sewer | GIS Mapping

	C	E	N	X	G	R	L	O	P	W	M
Apps	16%	19%	24%	11%	12%	17%	25%	16%	8%	4%	25%
Call Center Staff	3%	15%	6%	21%	16%	11%	14%	16%	18%	25%	25%
Nationwide phone #	29%	17%	18%	18%	27%	22%	29%	18%	31%	25%	19%
Communication	11%	15%	12%	18%	17%	11%	11%	16%	16%	17%	6%
Other*	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
There is a set process	18%	21%	24%	18%	13%	17%	11%	11%	20%	17%	13%
Web portals	24%	13%	18%	14%	16%	22%	11%	24%	8%	13%	13%

Executive | Upper Management | Middle Management | Field Operator

	E	U	M	F
Apps	21%	19%	24%	26%
Call Center Staff	23%	17%	19%	9%
Nationwide phone #	17%	16%	14%	13%
Communication	17%	20%	14%	17%
Other*	10%	14%	14%	15%
There is a set process	12%	12%	14%	19%
Web portals	0%	0%	0%	0%

USA | International

	U	I
Apps	23%	22%
Call Center Staff	17%	11%
Nationwide phone #	14%	22%
Communication	17%	17%
Other*	14%	11%
There is a set process	15%	17%
Web portals	0%	0%

Question 7, "Other" Responses

All members of the Call Center staff has prior excavation or utility experience. Also, all new hires should spend a day in the field with one of the larger commercial excavation crews and do a ride along with a contract utility locator to help see the other side of one call.

ClickBeforeYouDig.com

Response time to questions

Understanding of specific state requirements.

ONE CALL INDUSTRY SURVEY



What makes a One Call Center difficult to work with?

Adds a layer of communication between excavator and operator	6%
Buffer zones are not accurate enough and trigger a response when the dig area is, in fact, not very close to an underground asset	13%
Call Center Staff	6%
Different laws in different regions, tolerance zones, notifications, etc.	19%
Different notification requirements for adjacent states	8%
Do not provide more accurate location data on underground assets	13%
Other*	4%
The need for better damage reporting	11%
Use of written dig area descriptions instead of showing accurately on visual maps	20%

Communications | Electric | ENgineer | EXcavator | Gas & Oil | Gov't/Regulatory
Locator | One Call | Public Works | Water & Sewer | GIS Mapping

	C	E	N	X	G	R	L	O	P	W	M
Adds Communication	10%	11%	0%	11%	3%	7%	12%	6%	3%	5%	13%
Buffer Zone not acc	23%	9%	21%	16%	8%	14%	12%	9%	14%	21%	13%
Call Center Staff	10%	4%	0%	11%	6%	0%	15%	0%	6%	8%	0%
Different Laws	6%	31%	21%	11%	25%	29%	19%	25%	14%	11%	13%
Diff Requirements	6%	4%	7%	5%	14%	7%	12%	13%	9%	5%	13%
No Accurate Data	10%	16%	7%	21%	13%	7%	12%	6%	14%	13%	19%
Other*	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Need better Dmg Rpt	23%	9%	7%	5%	10%	14%	8%	16%	11%	16%	6%
Written descriptions	13%	16%	36%	21%	21%	21%	12%	25%	29%	21%	25%

Executive | Upper Management | Middle Management | Field Operator

	E	U	M	F
Adds Communication	8%	3%	5%	8%
Buffer Zone not acc	16%	16%	12%	12%
Call Center Staff	24%	20%	27%	12%
Different Laws	12%	16%	15%	12%
Diff Requirements	16%	20%	20%	22%
No Accurate Data	10%	11%	10%	13%
Other*	8%	8%	6%	12%
Need better Dmg Rpt	4%	7%	5%	7%
Written descriptions	0%	0%	0%	0%

ONE CALL INDUSTRY SURVEY



USA | International

	U	I
Adds Communication	6%	7%
Buffer Zone not acc	13%	19%
Call Center Staff	20%	30%
Different Laws	15%	4%
Diff Requirements	20%	22%
No Accurate Data	12%	4%
Other*	8%	11%
Need better Dmg Rpt	6%	4%
Written descriptions	0%	0%

Question 8, "Other" Responses

Accurate description, Not changing what they are told by contractor

Contractor lacking informational details

it can only go to one e-mail address

Locates are spread to thin

No easy to use online portal or mobile app

Outdated Website Design & Forms

Poor response time to questions

State one call boards trying to maintain status quo, not seeking proactive solutions

the different one calls have different questions for their tickets, not all one calls have an updated land base so they do not know the road exist in area., not all will take gps coordinates for the ticket,

Tools to help excavators manage their tickets

Unreadable Maps

Wait times when calling in.

Was not designed with Digital/Online in mind, needs a transformation

ONE CALL INDUSTRY SURVEY



How long should a dig ticket be valid?*

3 - 7 Days	8%
8 - 14 Days	45%
15 - 28 Days	16%
30 Days	24%
+30 Days	4%
Other	4%

Communications | Electric | ENgineer | EXcavator | Gas & Oil | Gov't/Regulatory

Locator | One Call | Public Works | Water & Sewer | GIS Mapping

	C	E	N	X	G	R	L	O	P	W	M
3 - 7 Days	15%	11%	0%	0%	6%	14%	0%	0%	6%	5%	33%
8 - 14 Days	54%	16%	60%	20%	26%	43%	33%	15%	61%	60%	0%
15 - 28 Days	15%	32%	20%	40%	15%	14%	25%	8%	17%	20%	17%
30 Days	15%	32%	20%	40%	15%	14%	42%	38%	17%	10%	50%
+30 Days	0%	5%	0%	0%	32%	14%	0%	8%	0%	5%	0%
Other	0%	5%	0%	0%	6%	0%	0%	31%	0%	0%	0%

Executive | Upper Management | Middle Management | Field Operator

	E	U	M	F
3 - 7 Days	0%	3%	8%	18%
8 - 14 Days	41%	56%	27%	38%
15 - 28 Days	0%	22%	25%	18%
30 Days	47%	17%	29%	20%
+30 Days	6%	3%	6%	2%
Other	6%	0%	6%	4%

USA | International

	U	I
3 - 7 Days	7%	11%
8 - 14 Days	39%	22%
15 - 28 Days	20%	11%
30 Days	24%	56%
+30 Days	4%	0%
Other	5%	0%

ONE CALL INDUSTRY SURVEY



Question 9, Clarifying responses

3 - 7 Days	8 - 14 Days	30 Days
3 days (3) 5 days (3) 5 working days (1) 7 days (8)	10 Business Days (3) 10 Days (10) 10 days, becoming null and void if the job isn't started within that window (1)	1 month (8) 30 business days (1) 30 Days (26) 30 days as long as marks are visible (1) 30 days in continued work (1) 30 days would be good (1) 30 days. When one thinks of common reference points, 1 day, or 1 week or 1 month is a common reference. Our tickets are valid 28 days. Just make is 30 days or what might be more commonly referred to as 1 month during casual conversation.(1)
15 - 28 Days	10 Working Days (3)	+30 Days
15 Days (2) 20 days (5) 20 days as long as marks are visible (1) 20 working days is good (1) 21 days (7) 21 days. In the winter with the snow no more than 4 days as all of the markings disappear under the snow (1) 21 working days (1) 2-3 weeks (1) 2-3 weeks (need to prevent excavators from requesting marks then not doing the work in a timely fashion) (1) 3 weeks (2) 3 weeks (21) days staking marks can go away, people forget about a project (1) 28 days (5)	12 business days from lawful start (1) 14 Business Days (1) 14 Calendar Days (2) 14 Days (16) 14 days with visible marks (1) 14 Working Days (5) 2 Weeks (14) 2 Weeks unless faded (1) 2 WEEKS. Water based marking paint does not have a manufacturers guarantee of how long their paint will last due to so many uncontrollable variables. A locator will do their best to place paint where it will have the best retention but even in ideal cases, paint will start to exponentially degrade after two weeks. Degraded paint marks increases the likelihood of a utility strike which could easily be mitigated by expiring two week old tickets and requiring a new ticket to be called in. (1) 2 weeks. Should be seasonal. In winter, shorter than summer due to removal of marks. At max, two weeks, as too much damage to marks occurs due to weather or lawn mowing (1)	30-60 days as long as markings are clearly visible (1) 60 days (2) 90 Days (2) 90 days, as long as marks are maintained (1)
		Other
		Depends upon the project (1) Duration of Project (Max. 1 year) (1) Indefinitely - with caveats that markings are maintained and excavation work is continuous (equipment doesn't leave the site) (1) unlimited if the scope hasn't changed and the marks are visible and the equipment hasn't moved off site for more than 2 business days (1) Until the marks are no longer visible (1) until the marks are no longer visible - Missouri is the model state for this, in my opinion (1)

ONE CALL INDUSTRY SURVEY



What is the appropriate wait time for a ticket?*

24 Hours or less	10%
2 - 3 Days	78%
4 - 7 Days	7%
+8 Days	1%
Other	3%

Communications | Electric | ENgineer | EXcavator | Gas & Oil | Gov't/Regulatory
Locator | One Call | Public Works | Water & Sewer | GIS Mapping

	C	E	N	X	G	R	L	O	P	W	M
24 Hours or less	7%	16%	0%	0%	18%	0%	0%	23%	0%	10%	17%
2 - 3 Days	93%	68%	75%	100	82%	100	82%	62%	78%	85%	67%
4 - 7 Days	0%	16%	0%	0%	0%	0%	9%	8%	22%	0%	17%
+8 Days	0%	0%	0%	0%	0%	0%	0%	8%	0%	5%	0%
Other	0%	0%	25%	0%	0%	0%	9%	0%	0%	0%	0%

Executive | Upper Management | Middle Management | Field Operator

	E	U	M	F
24 Hours or less	11%	8%	2%	17%
2 - 3 Days	67%	83%	85%	70%
4 - 7 Days	22%	0%	13%	9%
+8 Days	0%	6%	0%	0%
Other	0%	3%	0%	4%

USA | International

	U	I
24 Hours or less	9%	60%
2 - 3 Days	81%	30%
4 - 7 Days	7%	10%
+8 Days	1%	0%
Other	2%	0%

ONE CALL INDUSTRY SURVEY



24 Hours or less	2 - 3 Days	
<p>1 day (3) 1 day max (1) 1 Hour (1) 1 hr past start time (1) 2 hours (1) 2 min (1) 24 Hours (1) 4 Hours (1) 5 minutes (3) 60 minutes (1) Should be 15-30 minutes, but due to lack of proper mapping 72 business hours (1)</p>	<p>2 business days (5) 2 business days - call on Monday, excavate on Thursday (1) 2 business days plus call in day (1) 2 days (16) 2 full business days NOT including the day of the call (1) 2 Full working days (2) 2 working days (2) 2-3 days (5) 3 Business Days (10) 3 business days regular, two hours emergency (1)</p>	<p>48 working hours (2) 48-72 hours (1) 72 hours (13) 72 hours (not including weekends or holidays) (1) 72 hours from midnight of the call in date. (1) 72 hours with times only being within normal working hours (1) about 48 hours although has been much quicker but some authorities are still a bit slower (1) 3 business days or as agreed to and documented by all affected parties. (1)</p>
4 - 7 Days	3 days (22)	
<p>4 days (1) 4 working days (1) 5 days (6) 7 days (3)</p>	<p>3 days unless an emergency (1) 3 days, 5 if large project (1) 3 working days (3) 36 Hours (2) 48 Hours (21) 48 hours from when the ticket was delivered to utilities (1) 48 hours not including the day called in (1)</p>	<p>3 days is okay, emergency should be better coordinated and faster. (1) It should be raised from the current 48 hours to 72 hours, as a minimum. Project locates should be longer than 72 hours. (1)</p>
+8 Days	48 hours, not including weekends and legal holidays (1)	Other
<p>10 days (1) 30 days (1) 2 to 3 weeks (1)</p>		<p>Depends on scope of work. (1) i feel the wait time should be looked at that is different with the different one calls. the time should be looked at in the high growing areas. (1) it should depend on size and scope of the proposed excavation. one city block or 600feet (1)</p>

ONE CALL INDUSTRY SURVEY



What is the right tolerance zone for locating assets?

12 - 17 inches	3%
18 - 24 inches	64%
25 - 60 inches	18%
+60 inches	8%
Other	7%

Communications | Electric | ENgineer | EXcavator | Gas & Oil | Gov't/Regulatory

Locator | One Call | Public Works | Water & Sewer | GIS Mapping

	C	E	N	X	G	R	L	O	P	W	M
12 - 17 inches	0%	7%	0%	0%	8%	0%	0%	0%	8%	0%	17%
18 - 24 inches	66%	60%	80%	67%	72%	80%	58%	82%	46%	29%	33%
25 - 60 inches	18%	20%	20%	22%	12%	0%	33%	9%	46%	50%	0%
+60 inches	9%	13%	0%	0%	4%	20%	0%	9%	0%	21%	33%
Other	7%	0%	0%	11%	4%	0%	8%	0%	0%	0%	17%

Executive | Upper Management | Middle Management | Field Operator

	E	U	M	F
12 - 17 inches	0%	0%	4%	8%
18 - 24 inches	59%	57%	64%	57%
25 - 60 inches	18%	33%	15%	24%
+60 inches	12%	7%	11%	8%
Other	12%	3%	6%	3%

USA | International

	U	I
12 - 17 inches	4%	0%
18 - 24 inches	60%	38%
25 - 60 inches	22%	13%
+60 inches	6%	38%
Other	7%	13%

ONE CALL INDUSTRY SURVEY



12 - 17 inches	18-24 inches	25 - 60 inches
<p>12" (3) 12" on either side of the locate marking (2)</p>	<p>18" on both sides of the asset, plus the asset size (1) 18" on either side of the buried utility (1) 18" outside each edge if the diameter of the asset is provided, or 18' from mark-out if the diameter is not provided. (1) 18 to 24 inches outside locating marks (1) 18-24" (3) 2' each side is good (1) 2 feet (14) 2 feet Plus or minus (1) 2' on either side of the outside diameter of the utility (1) 2' plus 1/2 the width of the facility (1) 24 inches (18) 24 inches on each side of the facility (1) 24" from outside diameter of pipeline size in both horizontal directions and vertically from ground level to top of underground asset being located, all the state variations are confusing to excavators (1) 24" or a variable tolerance for those assets that are difficult to locate, PVC water main with no tracer wire for example (1) 24" to each side of the known facility (1) 24" to each side plus the width of the facility. (1) 2ft both sides (1) 2ft. Either side of mark (1) current 2' on either side of buried, marked utility is fair. (1)</p>	<p>+/- 4 feet (1) +/- three feet (1) 3 feet (13) 3 ft either side of utility (2) 30 inches (1) 36" plus half the diameter of the utility (1) 3ft either side of the physical construction of the utility (1) 4 feet (5) 4 feet 18 inches (1) 5 feet either side of utility (1) 5' on either side of a white line (1)</p>
<p>Other</p> <p>Depends (1) Immediate location affected NOT general area (1) Markings (1) Michigan does not have a tolerance zone (1) n/a (1) None (1) not familiar with tolerance zones (1) should verify the marks for gas and electric lines regardless of distance from dig location (1) unknown, some states is 18" and some 24". i do think it should be standardized (1) ? (2)</p>		
<p>18-24 inches</p> <p>.5 meters The smaller the better. I would suggest 0.5 meters (1) 18 inches (39) 18 inches either side of exterior of utility (1) 18 inches, plus half of the diameter (1) 18" both sides of object being located (1) 18" either side of a line (1) 18" either side of asset (2) 18" either side of the mark (1) 18" either side of the outside wall of the facility (1) 18" For marking accuracy, accurate to 18" of the outside of the asset (not the center of the pipe, in other words) (1)</p>		<p>+60 inches</p> <p>10 feet (4) 100 feet (2) 12 feet (1) 200' (1) 25 feet (1) 2m (1) 30 m (1) 6' (1) within 25 feet (1)</p>

ONE CALL INDUSTRY SURVEY



Which stakeholder groups (if any) should be exempt from receiving notifications?

None	95%
Other	5%

Communications | Electric | ENgineer | EXcavator | Gas & Oil | Gov't/Regulatory

Locator | One Call | Public Works | Water & Sewer | GIS Mapping

	C	E	N	X	G	R	L	O	P	W	M
None	100%	93%	100%	100%	88%	86%	100%	92%	92%	100%	100%
Other	0%	7%	0%	0%	12%	14%	0%	8%	8%	0%	0%

Executive | Upper Management | Middle Management | Field Operator

	E	U	M	F
None	88%	100%	88%	97%
Other	12%	0%	12%	3%

USA | International

	U	I
None	95%	88%
Other	5%	13%

Question 12, Other responses

None

None - If a pipe is hit and explodes, no one will want to hear, "Exempt" (1)

none, more communication the better (1)

NONE. State of California should be a member and pay just as all other facility owners (1)

None. Certain stakeholder groups could be granted special notification rules (e.g. farmers, mining on one's own property). (1)

None. If you have underground facilities, you should be notified. (1)

None. Military, Reservations, mom & pop. All need to be notified. (1)

Those that don't want to protect their underground facilities and ensure the safety of those digging around them...

I'm just kidding... no underground facility operator should be exempt. (1)

Other

Property owner (1)

Storm water/Drainage (1)

The underground facility owner is the only stakeholder who should receive notifications. Records of the ticket should go to the originator of the ticket. (1)

Design (1)

eapuoc (1)

Emergency services (1)

Miss Digs has the maps of every companies buried product with in a graphed area quit wasting everyones time running to locates outside those areas (1)

ONE CALL INDUSTRY SURVEY



Which stakeholder groups (if any) should be exempt from providing notifications?

None	96%
Other	4%

Communications | Electric | ENgineer | EXcavator | Gas & Oil | Gov't/Regulatory
Locator | One Call | Public Works | Water & Sewer | GIS Mapping

	C	E	N	X	G	R	L	O	P	W	M
None	92%	100%	100%	100%	93%	86%	100%	92%	100%	100%	100%
Other	8%	0%	0%	0%	7%	14%	0%	8%	0%	0%	0%

Executive | Upper Management | Middle Management | Field Operator

	E	U	M	F
None	94%	97%	90%	100%
Other	6%	3%	10%	0%

USA | International

	U	I
None	96%	100%
Other	4%	0%

Question 13, Other responses

None

None - If a pipe is hit and explodes, no one will want to hear, "Exempt" (1)

None - with electronic capabilities there is no excuse (1)

none everyone should provide information (1)

none, typically infrastructure provides public service and all (public or private) need protection. (1)

None. Farmers, military, private property owners, everyone should be required to give notice. The one call has to be seen as the higher authority to make the decision of if it is clear to dig or not. (1)

It's always best to be safe and submit a locate request... so I say no one should be exempt. (1)

Other

anyone outside the 1 mile graph (1)

County road grading (1)

Duplicate? If not, no additional stakeholder groups should be exempt in my opinion. (1)

Emergency services (1)

Home owners while digging themselves on their property. (1)

ONE CALL INDUSTRY SURVEY



Job Function

Executive (Owner, CEO, COO, CFO, President)	11.7%
Upper Management (Director, Manager)	22.8%
Middle Management (Supervisor, Foreman)	35.2%
Field Operations (Technician, Locator, Operator)	30.2%

Industry

Communications	9.3%
Electrical	11.1%
Engineering	3.7%
Excavating	3.7%
Gas & Oil	17.3%
GIS Mapping	2.5%
Government / Regulatory	5.6%
Locating	6.8%
One Call	7.4%
Public Works	12.3%
Water & Sewer	12.3%
Other*	8.0%
Communications	9.3%

Industry, Other

Damage Prevention Training in all areas
Digital Services
Drilling
Education
Excavation, gas and oil, location, mapping, and others
Heavy Road construction
Power line construction
Public Awareness
Sales
training of locating, and print reading of utilities
Trenchless Technology
Utility Safety & Training
Water, Locating and excavating and especially GIS Mapping

Our thanks to PelicanCorp for helping to underwrite the cost of this research. Individual responses are not shared with the underwriter or sold in any way. Infrastructure Resources employees assisting with research will have access to responses as needed.