2017 State Damage Prevention Program Grants Progress Report
Funding Opportunity Number: DTPH56-17-SN-000001
CFDA Number: 20.720

Award Number: 693 JK3174 1002 $100,000.00   FON: DTPH5617 SN00000`
Effective Date: September 25, 2017 to September, 24 2018
Project Title: Utility Notification Center of Colorado State Damage Prevention (UNCC)
Date Submitted: Jan 02, 2019
Submitted by: J.D. Maniscalco
                    Executive Director, Utility Notification Center of Colorado (Colorado 811)

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Specific Objective(s) of the Agreement

[Cut and paste from Article II, Section 2.03 of your agreement.]
Section 2.03 Specific Objective(s) of the Agreement
Under this grant agreement, UNCC will improve its damage prevention efforts through implementation of the following four objectives and accompanying initiatives:
1) Research locate operator issues leading to locate request overloads in the pipeline industry.
2) Identify industry issues leading to problems, develop potential solutions, assess implementation path and implement solutions.
3) Fund 811 public awareness campaigns at the State and local level.
4) Support the Damage Prevention Action Team Fall Meeting to include stakeholder meeting rooms, handouts, and speaker fees.
5) Upgrade the Learning Management System License.

Workscope

[Cut and paste from Article III. Workscope of your agreement.]
Article III. Workscope
Under the terms of this grant agreement, the Grantee will address the following elements listed in 49 USC §60134 through the actions it has specified in its Application.
o **Element 2 (Comprehensive Stakeholder Support):** Support Damage Prevention Action Team Fall Meeting, to include stakeholder meeting rooms, handouts, and speaker fees.
o **Element 3 (Operator Internal Performance Measurement):** Research locate operator issues leading to locate request overloads in pipeline industry. Identify industry issues leading to problems, develop potential solutions, assess implementation path, and implement solution.
o **Element 4 (Effective Employee Training):** Upgrade Learning Management System License.
o **Element 5 (Public Education):** Fund 811 public awareness campaigns at the State and local level. (Applicable)Note: Each element in the Specific Objectives aligns with a respective element in the Workscope.

Further reference to accomplishments and plans will reference only the Specific Objectives.

Accomplishments for this period (Item 1 under Article IX, <u>Section 9.01 Progress Report</u>:
"A comparison of actual accomplishments to the objectives established for the period.")

[How are you progressing on each of the items/elements provided in the "Specific Objectives" and "Workscope"? Start with an overall description followed by item-by-item or element-by-element detail if possible.]

Progress Overview

The final 2017 SDP grant agreement was signed and approved on February 15, 2018. CO811 received the first half of the grant funding on March 02, 2018. CO811 initiated grant activities after April 01, 2018. Objectives 1, 3, 4 and 5 are complete, while Objective 2 is in the report-writing stage and should be complete by January 31, 2019.

CO811 undertook approved activities in 2018 for the five Objectives:	**$Expense**
Obj-1 (Element 3) – Operator Performance (Internal Locate Performance)	**$ 20,000.00**

CO811 acquired the Member Positive Response data for 2018 and preformed statistical analysis to determine the distribution of response times including the following items: a) clear an incoming ticket, b) perform a locate, and c) receive a 2nd notice. This distribution of data was then assessed against call center operating and legislative requirements.

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STATUS OBJECTIVE 1: <u>Complete</u>
</div>

Obj-2 (Element 3) – Operator Performance (Internal Locate Performance Report) $ 20,000.00

To provide a more timely and meaningful performance report, CO811 delayed this final activity until January 2019 so that the data was timely (2018 data) and so that the member responses were more relevant based upon recent field conditions and ticket activity. The author has met with Member Services and will have several meetings with major facility members in January 2019 to discuss data results and identify and implement potential solutions to the issue of timely operator locate performance.

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STATUS OBJECTIVE 2: <u>Awaiting final report</u>
</div>

Obj-3) Element 5 – Public Education (811 Public Awareness Campaign) $ 25,000.00

CO811 conducted a statewide media campaign from May through September 2018 to promote 811 public awareness throughout Colorado. The media types included TV and Radio spots and digital social media.

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STATUS OBJECTIVE 3: <u>Complete</u>
</div>

Obj-4 (Element 2) – Stakeholder Support (Communication/Participation) $ 5,000.00

CO811, in conjunction with the stakeholder supported Damage Prevention Action Team (DPAT), sponsored the annual *Damage Prevention Safety Summit and Conference* attended by over 300 stakeholders throughout Colorado. Grant funds helped offset the cost of an outdoor mock pipeline strike demonstration. The conference was held September 18-19, 2018 in Denver, CO.

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STATUS OBJECTIVE 4: <u>Complete</u>
</div>

Obj-5) Element 4 – Effective Employee Training (Learning Management System-LMS) $ 30,000.00

CO811 engaged the developer to upgrade the LMS platform and renew the 2018 license for the 4IQ Learning Management System. The internet-based platform delivers stakeholder learning modules for basic 811 requirements and tracks stakeholder progress through this educational system.   **STATUS OBJECTIVE 5: <u>Complete</u>**

Total Approved Budget	**$ 100,000.00**
Total Funds Expended by CO811	**$ 100,000.00**
Total Funds Underspent and Returned to PHMSA	**$ 0.00**

Further details follow in the next section.

Grant Activity Detail	Awarded Budget	CO811 Expended	Funds Remaining

Obj-1 (Element 3) – Operator Performance (Internal Locate Performance)

Foresight Advantage – Positive Response Data Collection and Analysis	$ 20,000.00		
Total	$ 20,000.00	$ 20,000.00	$ 0.00

The call center member's Positive Response (PR) data was collected through the Ticket Management System and analyzed for 2018. The data demonstrates that most incoming tickets for members using the PR System are either Cleared with a Positive Response or are in fact Located with a Positive Response. Note that not all members utilize the Positive Response platform provided by the call center as they have their own in-house system. Further details will be provided in the final operator performance report in early 2019.

Obj-2 (Element 3) – Operator Performance (Internal Locate Performance Report)

Foresight Advantage – Operator Interviews, Report writing	$ 20,000.00		
Total	$ 20,000.00	$ 20,000.00	$ 0.00

Several representative operators for natural gas and pipeline facility (private distribution, private liquid pipeline, municipal distribution) are scheduled to be interviewed in early 2019 to discuss the data analysis results and identify issues and potential changes in procedures. The final report should be available in early 2019.

Obj-3) Element 5 – Public Education (811 Public Awareness Campaign)

Colorado Broadcasters Association – Statewide Media campaign	$ 10,000.00		
Colorado Broadcasters Association – Statewide Media campaign	$ 15,000.00		
Total	$ 25,000.00	$ 25,000.00	$ 0.00

The statewide 811 public awareness 5-month campaign included over 11,000 TV and 45,000 radio advertising spots and digital social media spots through a media consolidator which provided nearly $2.5 Million in media coverage for a discounted, non-profit rate of just $102,000. The Grant provided $25,000 funding for this public education and awareness, while CO811 provided the remaining 75% of the funding.

Obj-4 (Element 2) – Stakeholder Support (Communication/Participation)

Enertech – Mock Line Strike Demonstration - Partial	$ 5,000.00		
Total	$ 5,000.00	$ 5,000.00	$ 0.00

The 2-day *Damage Prevention Safety Summit and Conference* was enthusiastically attended by stakeholders representing facility owners, excavators, locators, first responders, industry groups, regulatory agencies (Colo PUC) and industry vendors. The event is financially supported by stakeholder registration fees, vendor booth fees, and the PHMSA Grant. Twenty industry firms provided paid sponsorship for the event, which included a preliminary day of free pipeline safety education, a session on how to manage tickets, and an informative legislative change overview. The CO811 Annual Meeting was held in conjunction with the Summit on the first day.

Obj-5) Element 4 – Effective Employee Training (Learning Management System-LMS)

4IQ – upgrade system and renew 2018 license	$ 15,000.00		
4IQ – upgrade system and renew 2018 license	$ 15,000.00		
Total	$ 30,000.00	$ 30,000.00	$ 0.00

CO811 utilized the grant funds to renew the LMS license for Colorado and upgrade the platform. The internet-based learning system is available to all call center employees and

stakeholder in Colorado and includes information on the new legislative changes.

Excess Grant Funding

CO811 utilized all SDP Grant funds in 2018.

Attachments

The 2017 Colorado State Damage Report and the County DP Report Cards.

NOTE: The Final Financial Report SF-425, the Funding Category Report, and a copy of each invoice were emailed as a separate attachment to the AA and AOR on October 31, 2018.

Quantifiable Metrics/Measures of Effectiveness (Item 2 under Article IX, <u>Section 9.01 Project Report</u>: "Where the output of the project can be quantified, a computation of the cost per unit of output.")

[This is difficult to explain across the board, but we're trying to get a gauge for how effective this grant work is in improving your program. If your grant is more data oriented, you likely had some sort of metrics in mind to improve upon. If so, what were those metrics and how is the data looking now compared to when the program started? If you're doing something along the lines of enforcement that involves incident review, how many cases have you been able to review/close and/or fines collected compared to before the grant work? If you pitched something more along the lines of public awareness, to how many stakeholders have you been able to reach? Even if you don't have the metrics fully defined, put whatever you can here.]

The CO811 analysis utilizes CGA DIRT damage data and CO811 Ticketing data. Our quantifiable metrics consist of reporting the State's progress with:

1) The change in the number of DIRT submitted facility damage
   (for All facility types, Natural Gas Distribution, and Liquid Pipeline)
2) The change in the ratio of DIRT facility damages per 1,000 incoming requests
   (for All facility types)
3) The change in the number of counties receiving a grade ranging from B- to A+ on the Damage Prevention County Report Card (Composite damage prevention score for all facility types)

For 2017 Colorado had the following metrics:

Year	DIRT All-Facility damages	Natural Gas Distribution Facility damages	Liquid Pipeline Facility damages	DIRT Damages / 1,000 Requests Ratio All-Facility NatGasD	# of B- to A+ Grade On County Report Card (of 64 counties)
2015	4,773	1,273	14	6.5 1.74	24
2016	2,442	1,174	23	3.1 1.47	30
%Change	-48.8%	-7.8%	+64.3%	-52.3% -15.2%	25.0%
2017	2,508	1,230	15	3.0 1.45	32
%Change	2.7%	4.8%	-34.8%	-3.5% -1.4%	6.7%

There were also 848,351 Incoming Requests from excavators in 2017 and 796,695 in 2016, a 6.5% increase. The 2017 facility damages were submitted to DIRT by 57 facility owners (CO811 Members) with facility damages in 51 of the 64 counties in Colorado. 41.8% of the facility damages occurred while excavators (either contractors or facility owner staff) were performing some type of <u>Utility Work</u>. A locate was requested by the excavator for 49.9% of the facility damages where the Root Cause of the damage was reported.

It is evident that the while the number of damages for All-Facility damages and Natural Gas Distribution Facility damages increased, or worsened, from 2016 to 2017, the damage ratios decreased slightly. Liquid Pipeline Facility damages have decreased from 2016 to 2017, though the number of damages is low (15) in 2017 compared to either the total number of facility damages (2,508) or the number of locate requests (848,351).

The number of counties in 2017 with a Damage Prevention Composite Grade ranging from B- to A+ increased 6.7% to 32 (or half the counties) of 64 counties (from 30 in 2016). The number of counties in 2017 with a Damage Prevention Composite Grade ranging from C- to C+ decreased 6.5% to 29 (from 31 in 2016). In 2017, only three counties earned a Composite Grade lower than a C-, down from a high of 13 in 2010.

The charts on this and the next two pages show the historical trend of these numbers and metrics from 2001-2017.

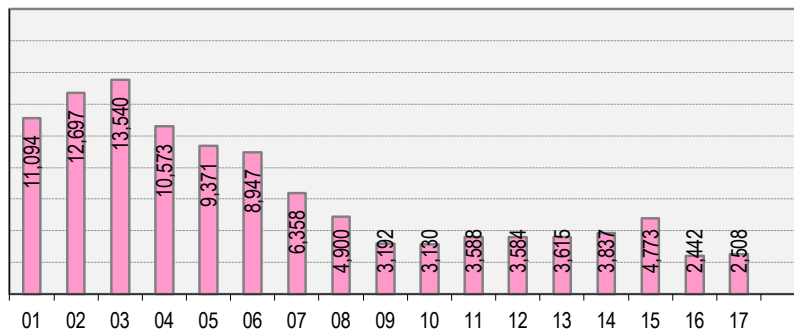**Colorado Damage Prevention 2001-2017**

Chart 1   # Incoming Notification Requests
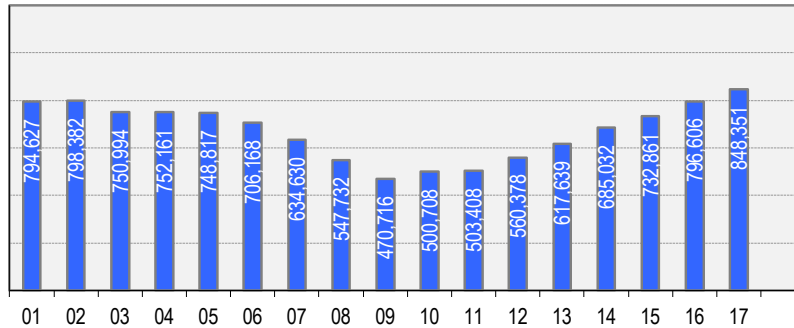
The number of Incoming Requests from excavators trended down from 2002 through 2009 during the economic slowdown. As the economic recovery progressed, the number of Incoming Requests grew stedily through 2017.
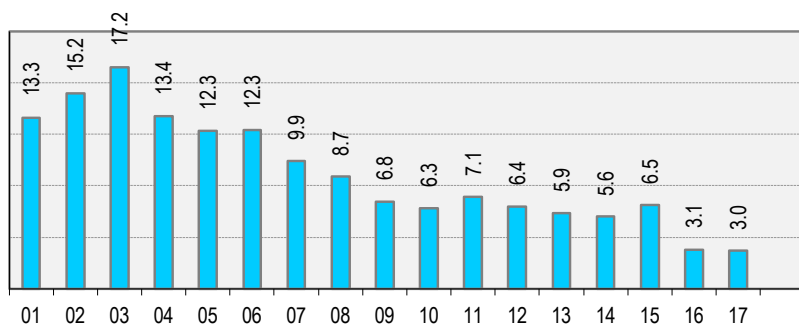
Colorado Damage Prevention 2001-2017

Chart 3   # Facility Damages

The number of Facility Damages trended down from 2003 through 2010, then slightly increased through 2015. 2016 and 2017 experienced the lowest number of damages since 2003.

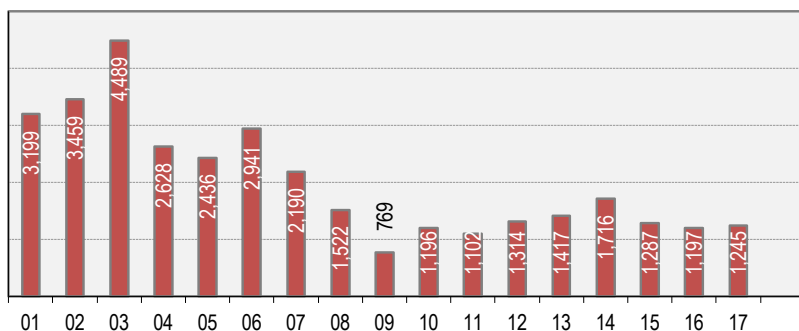**Colorado Damage Prevention 2001-2017**

Chart 15   Damages per 1,000 Incoming Requests

The Metric "Facility Damages per 1000 Incoming Requests" has trended down since 2003 and reached its lowest levels in 2016 and 2017.
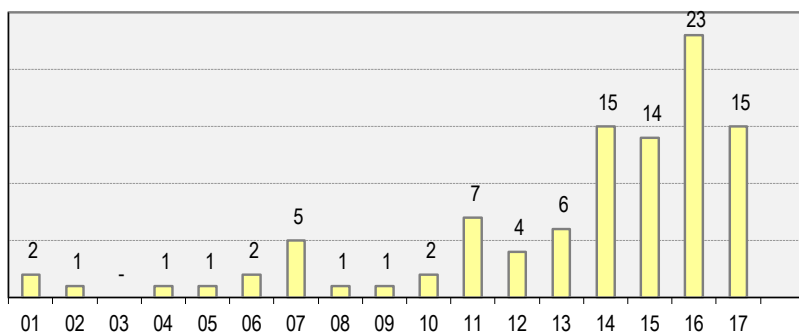
Colorado Damage Prevention 2001-2017
Chart 19   Nat Gas Distibution+Liquid Pipeline Damages

The number of Natural Gas and Liquid Pipeline Facility Damages trended down from 2003 through 2009, then slowly increased through 2014. The number of damages has leveled off around 1200-1300 from 2015 through 2017.

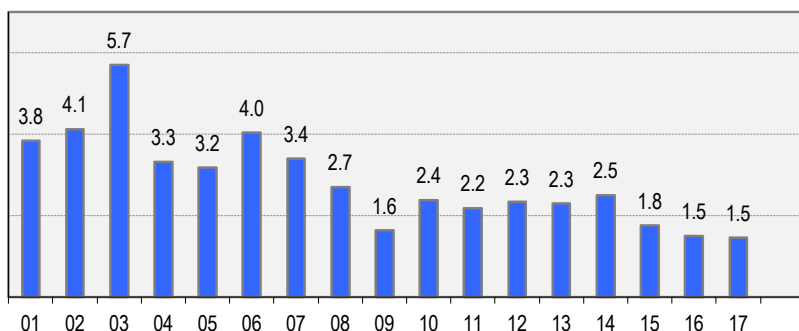**Colorado Damage Prevention 2001-2017**
Chart 20   Liquid Pipeline Damages

The number of Liquid Pipeline Facility Damages trended up from 2011 through 2016, then decreased in 2017. While the level of damages is low compared to All Facilities, this recent trend should concern the industry.

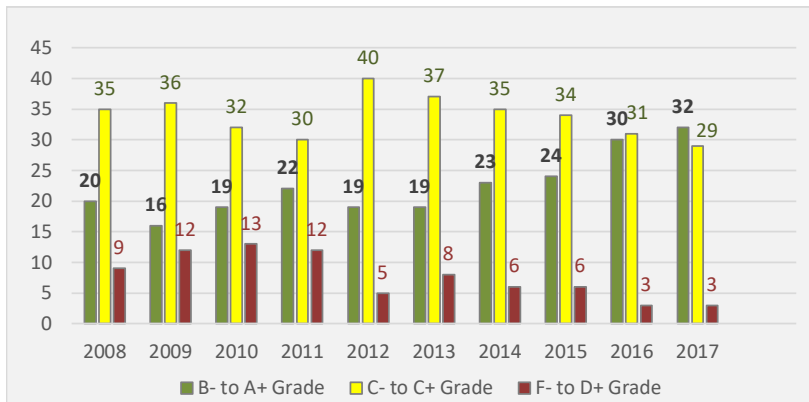**Colorado Damage Prevention 2001-2017**
Chart 21   Nat Gas+Liq Pipeline Damages/1000 Requests

The Metric "Natural Gas + Liquid Pipeline Facility Damages per 1000 Incoming Requests" has trended down since 2003 and reached its lowest levels in 2016 and 2017.

Colorado Damage Prevention 2008-2017
County Report Card Composite Grade - #Counties in Grade Range

This charts depicts the historical County Report Card grades for the 64 counties in Colorado since 2008. Note the steady increase in the number of counties earning a "B- to A+" grade and the steady decrease in the number of counties earning an "F- to D+" grade on their "Composite DP Score". As a group, the counties have made significant improvement in the Damage Prevention grades.

For more information on the County DP grading process, see the Appendix in the 2017 State Damage Report, attached with this email.

Issues, Problems or Challenges (Item 3 under Article IX, <u>Section 9.01 Project Report</u>: "The reasons for slippage if established objectives were not met.")

[If the project is progressing on schedule, simply state that there are no issues, problems or challenge to report. If there have been delays for any reason, explain what they are and how that may impact the grant work. For instance, with some States, even after an agreement is in place, it has to be sent back to the Governor's office for approval, which takes more time than originally anticipated. Even if work begins right away after the agreement is in place, other delays can be caused by personnel changes or simply having a better understanding of the effort required once the work is underway.]

The drafting of the "Objective 2) Performance Report" is in progress and should be completed by early 2019. To prepare a useful data analysis with timely ticket data and write a meaningful and relevant report, the completion of the written report was delayed until after the data was collected in 2018 and reviewed with call center members in early 2019. A final report will be provided to the call center in early 2019.

Final Financial Status Report

[Per the instructions in Article IX, Section 9.03 of your agreement (included below), the financial status report should go to the Agreement Administrator (AA). For this section of the progress report, simply state "The Final Financial Report has been sent as a separate attachment to the AA.". However, if there are any issues with the Financial Status Report or additional explanation is needed, please provide that information here. If there are any delays for whatever reasons, these should be communicated to the AA and AOTR in advance.

From Article IX, Section 9.03 of your agreement: "During the performance of the grant, the Grantee must submit a Final Financial Status Report, Standard Form 425 (SF-425), to report the status of funds. In addition to SF-425, the Grantee should provide the break down of costs for each object class category (Personnel, Fringe Benefits, Travel, Equipment, Supplies, Contractual, Other, and Indirect Charges). This report must be submitted to the AA in electronic form via e-mail no later than [refer to your agreement for date."]

The Final Financial Report SF-425, Funding Category Report, and a copy of each invoice were emailed as a separate attachment to the AA and AOR on October 31, 2018.

The table on the next page identifies the funds awarded and funds expended from September 25, 2017 through September 24, 2018 for each Object Class Category under the 2017 PHMSA SDP Grant agreement.

2017 PHMSA SDP GRANT – Object Class Category Summary – For CO811

Grant Awarded   Sept 25, 2017, Amended Feb 15, 2018
Grant Period   Sept 25, 2017 to Sept 24, 2018
$Funds Awarded $100,000
50% Funds Received   Mar 02, 2018 $50,000
50% Funds Received   Aug 02, 2018 $50,000

REPORTS:
Progress   Through Mar 01, Due April 1, 2018
Final   Through Sept 24, 2018, Due within 90 Days

Object Class	$ Requested	$ Awarded September 25, 2017	$ Expended to Sep 24, 2018	Description	Supports
a. Personnel	0	0	0		
b. Fringe Benefits	0	0	0		
c. Travel	0	0	0		
d. Equipment	0	0	0		
e. Supplies	0	0	0		
f. Contractual	40,000	40,000	40,000.00	Research locate operator issues leading to locate request overloads in pipeline industry. Identify industry issues leading to problems, develop potential solutions, assess implementation path, implement solution.	Element-3
	30,000	30,000	30,000.00	Upgrade Learning Management System License	Element-4
g. Construction	0	0	0		
h. Other	25,000	25,000	25,000.00	Fund 811 public awareness campaigns at the State and local level	Element-5
	5,000	5,000	5,000.00	Support Damage Prevention Action Team Fall Meeting, to include stakeholder meeting rooms, handouts, speaker fees	Element-2
TOTAL:	**$100,000**	**$100,000**	**$100,000.00**		

Requests of the AOTR and/or PHMSA

[In most cases, any questions or actions requested of the AOTR and PHMSA (such as grant modifications in anyway) should have been addressed in advance of filing the report. If this is the case, simply state "No actions requested at this time" or explain any actions that are currently in process. However, if something has come up recently, or if you haven't been able to discuss with the AOTR yet, please describe here.]

No Actions Requested at this Time

The drafting of the Objective 2) Operator Performance Report is in progress and should be completed by early 2019. To prepare a useful data analysis with timely ticket data and write a meaningful and relevant report, the completion of the written report was delayed until after the data was collected in 2018 and reviewed with call center members in early 2019. A final report will be provided to the call center in early 2019.