

2015 State Damage Prevention Program Grants Final Report

Funding Opportunity Number: DTPH56-15-SN-000001

CFDA Number: 20.720

Award Number: DTPH56-15-G-PPS03 \$100,000.00
Effective Date: September 30, 2015 to September 29, 2016
Project Title: Utility Notification Center of Colorado State Damage Prevention
Date Submitted: December 29, 2016
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Specific Objective(s) of the Agreement

Article II, 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) Foster support and partnership with stakeholders (supports Element-2)
 - a. Support the Damage Prevention Safety Summit and Conference in the Fall, 2016
- 2) Support Damage Prevention Education Program for industry stakeholders (supports Element-4)
 - a. Implement the infrastructure for the web-based Learning Management System (LMS)
- 3) Support Public Awareness (supports Element-5)
 - a. Support Damage Prevention Awareness Month in April and 811 Day in August
- 4) Support Enforcement (supports Element-7)
 - a. Fund consultants to research issues, perform a comparative state One Call Study, and write report to support implementation of One Call enforcement in Colorado.

Work Scope of the Agreement

Article III, Work Scope of the Agreement

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.

- Element 2 (Comprehensive Stakeholder Support): A process for fostering and ensuring the support and partnership of stakeholders, including excavators, operators, locators, designers, and local government in all phases of the program.
- Element 4 (Effective Employee Training): Participation by operators, excavators, and other stakeholders in the development and implementation of effective employee training programs to ensure that operators, the One Call center, the enforcing agency, and the excavators have partnered to design and implement training for the employees of operators, excavators, and locators.
- Element 5 (Public Education): A process for fostering and ensuring active participation by all stakeholders in public education for damage prevention activities.
- Element 7 (Enforcement): Enforcement of Colorado damage prevention laws and regulations for all aspects of the damage prevention process, including public education, and the use of civil penalties for violations assessable by the appropriate Colorado State authority.

Note: Each element in the Specific Objectives aligns with a respective element in the Work Scope. Further reference to accomplishments will reference only the Specific Objectives.

Accomplishments for Grant period

Article IX, Item 1, Section 9.02 Final Report

A comparison of actual accomplishments to the objectives established for the period.

Activity Overview

Expenditure

The 2015 PHMSA SDP Grant Agreement (Grant) was approved on September 30, 2015, but CO811 did not receive the first half of the 2015 Grant funding until January 21, 2016. CO811 initiated Grant activities in January, 2016 and completed all scheduled activities and payments by September 29, 2016, except for Objective 2, which be addressed in more detail. Groups of invoices (pdf files) are attached to reflect each of the four Objectives.

CO811 undertook approved activities in 2016 for four Objectives:

Objective 1) Element 2 – Stakeholder Support (Communication/Participation) **\$ 5,000.00**

CO811, in conjunction with the stakeholder supported Damage Prevention Action Team (DPAT), sponsored the annual *3-Day Damage Prevention Safety Summit and Conference* attended by stakeholders throughout Colorado. Grant funds offset the cost of meeting rooms and the key speaker.

STATUS: Complete

Objective 2) Element 4 – Effective Employee Training (Stakeholder Training) **\$ 25,000.00**

CO811 undertook development of an on-line situational learning program for stakeholders that will be implemented in 2017. This task was started in September 2016 but is not yet complete.

STATUS: Not Complete

Objective 3) Element 5 – Public Education (811 Public Awareness and Education) **\$ 20,000.00**

CO811 completed a statewide 811 public awareness campaign as well as targeted 811 public awareness efforts in four counties (Denver, Weld, La Plata and Pitkin).

STATUS: Complete

Objective 4) Element 7 – Support Enforcement Efforts **\$ 50,000.00**

CO811 completed the One Call Enforcement Task Force Study in April 2016, reviewed the document from May through July 2016 and released the Final Task Force Report on July 20, 2016. The Report was submitted to the Colo PUC and posted on the CO811 web site.

STATUS: Complete

TOTAL Grant Budgeted and Expended **\$ 100,000.00**

Accomplishments for Grant period

Grant Activity Detail	Budget	Expenditure	Remaining
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Objective 1) Element 2 – Stakeholder Support (Communication/Participation)

<i>Ameristar Resort – Audio Visual</i>	\$ 1,273.70	\$ 1,273.70	\$ 0.00
<i>Ameristar Resort – Meeting Rooms</i>	\$ 1,500.00	\$ 1,500.00	\$ 0.00
<i>Safety Awareness Solutions – Keynote Speaker</i>	\$ 2,226.30	\$ 2,226.30	\$ 0.00
Total	\$ 5,000.00	\$ 5,000.00	\$ 0.00

The 3-day *Damage Prevention Safety Summit and Conference* was enthusiastically attended by well over 100 stakeholders representing facility owners, excavators, locators, industry groups, regulatory agencies (PHMSA, Colo PUC) and industry vendors. The event is financially supported by stakeholder registration fees, vendor booth fees, and the PHMSA Grant. The CO811 Annual Meeting was held in conjunction with the Summit on the first day. Presentations ranged from field safety topics and regulatory updates to a detailed review of the 2015 One Call Damage Report and 2015 County DP Report Cards.

Objective 2) Element 4 – Effective Employee Training (Stakeholder Training) \$ 25,000.00

<i>Trivantis Corporation – 1 year LMS Hosting Fee (250 user)</i>	\$ 6,000.00	\$ 6,000.00	\$ 0.00
<i>Foresight Advantage – Content Development</i>	\$ 19,000.00	\$ 19,000.00	\$ 0.00
Total	\$ 25,000.00	\$ 25,000.00	\$ 0.00

To support development of the online Damage Prevention Stakeholder Education program, CO811 renewed the web-based Learning Management System (LMS) content delivery platform. The delivery platform hosts the content learning modules for delivery via the internet and provides for module scheduling, attendee registration, student tracking and reporting, surveys, and certificate generation for the students. The learning modules can be accessed by stakeholders through individual open enrollment. The delivery platform is licensed by CO811 and it must be renewed each year. If the education program is successfully accepted by users, CO811 may expand the licensing in the future.

CO811 is in the process of developing updated stakeholder learning programs for web based delivery. The Objective was not completed by 2016 year-end due to a later than scheduled startup, but should be complete by March 2017. The learning program includes a series of short-length modules and covers the operational and legal guidelines of One Call practices in Colorado. The modules utilize an interactive visual format with scenario based testing to provide realistic application of the One Call procedures to exercise the stakeholder's knowledge and comprehension of CO811 operational guidelines and the Colorado One Call Law.

Objective 3) Element 5 – Public Education (811 Public Awareness and Education) \$ 20,000.00

<i>Colorado Broadcasters Association – Media campaign</i>	\$ 7,500.00	\$ 7,500.00	\$ 0.00
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The statewide 811 public awareness 6-month campaign included 38 TV and 197 radio advertising spots through a media consolidator which provided nearly \$1.81 Million in media coverage for a discounted,

non-profit rate of just \$90,000. The Grant provided \$7,500 funding while CO811 provided the remaining 91.7% of funding.

<i>Before The Movie, Inc</i> – Local DP Awareness ads	\$ 412.00	\$ 412.00	\$ 0.00
<i>Town of Gypsum</i> – Local auto show event sponsorship	\$ 1,000.00	\$ 1,000.00	\$ 0.00
<i>Wells Fargo for BKB Services</i> – Local CO811 walk event	\$ 6,000.00	\$ 6,000.00	\$ 0.00
<i>4Corners Public Awareness</i> – Purchase “Hard Hat Harry”	\$ 3,588.00	\$ 3,588.00	\$ 0.00
<u><i>Lamar Companies</i> – Local Transit (Bus) advertising</u>	<u>\$ 1,500.00</u>	<u>\$ 1,500.00</u>	<u>\$ 0.00</u>
Total	\$ 20,000.00	\$ 20,000.00	\$ 0.00

CO811 organized 22 trade shows around the state, a grade school educational series (*Hard Hat Harry*), an 811 public walk and golf event, a public safety 811 banner campaign (204 locations), events for April Dig Safely Month, 811 Day in August, and promoted 811 public awareness in a number of magazines.

The Grant supported local 811 awareness events sponsored by four Damage Prevention Councils (DPC) in four counties (Pitkin-2, Denver-1, La Plata-1, and Weld-1, respectively). The events were organized by industry stakeholders from the local DPC.

Objective 4) Element 7 – Support Enforcement Efforts **\$ 50,000.00**

<i>Quality Engineering, LLC</i> – One Call Enforcement Study	\$ 25,048.00	\$ 25,048.00	\$ 0.00
<i>Quality Engineering, LLC</i> – One Call Enforcement Study	\$ 6,600.00	\$ 6,600.00	\$ 0.00
<i>Quality Engineering, LLC</i> – One Call Enforcement Study	\$ 12,524.00	\$ 12,524.00	\$ 0.00
<i>4M Business Solutions, Ltd</i> – One Call Enforcement Study	\$ 2,860.00	\$ 2,860.00	\$ 0.00
<u><i>4M Business Solutions, Ltd</i> – One Call Enforcement Study</u>	<u>\$ 2,968.00</u>	<u>\$ 2,968.00</u>	<u>\$ 0.00</u>
Total	\$ 50,000.00	\$ 50,000.00	\$ 0.00

With financial assistance from the Grant, CO811 funded an independent Study to research issues, perform a comparative state One Call analysis, and write a Study Report to support implementation of One Call Enforcement in Colorado. The study investigated the effectiveness of other state One Call systems in reducing the impact of facility damages and improving public safety through active One Call enforcement efforts. The study was started in June 2015 and extended through July 2016. *4M Business Solutions, Ltd* coordinated and facilitated the study which was conducted by consultants from *Quality Engineering, LLC*. CO811 spent \$129,435 for preliminary work on the study from June 2015 through February 2016. The Grant funded an additional \$50,000 to complete the study from January through July 2016. A copy of the final Study Report has been included for PHMSA’s review.

Quantifiable Metrics / Measures of Effectiveness

Article IX, Item 2, Section 9.02 Final Report

Where the output of the project can be quantified, a computation of the cost per unit of output.

CO811 has established three quantifiable metrics that are used to evaluate the progress the damage prevention industry in Colorado is making toward:

- a) Building stakeholder collaboration around Colorado,
- b) Improving 811 public awareness and stakeholder compliance with the mandated notification requirement,
- c) Reducing facility damages in relation to transmissions to facility owners, and
- d) Delivery cost for stakeholder training through Grant.

The three metrics are discussed in the following pages and it is shown that CO811 and the Colorado damage prevention industry are making a positive impact and improving the quantifiable metrics. With this improvement, CO811 continues to support the following efforts with the financial support of PHMSA:

- Support collaborative stakeholder efforts through the Damage Prevention Action Team (DPAT) and the Damage Prevention Councils (DPCs),
- Support 811 public awareness through statewide and local media campaigns,
- Collect and report on facility damages and other related Call Center data, and
- Support damage prevention training for stakeholders through the Damage Prevention Stakeholder Education program.

Quantifiable Metric-1) Building Stakeholder Collaboration

Stakeholder collaboration around Colorado is facilitated through the new CO811 Damage Prevention Liaisons (DPLs), the DPCs, and the DPAT. The three original DPCs were established in Colorado prior to 2005. Since then, CO811 has aggressively supported the expansion of the DPCs and the number has grown from the three DPCs to 17 DPCs in 2014, as the last column in the table below shows. No additional DPCs were added in 2013 or 2014. As the center column in the table below shows, the counties covered by the 811-public awareness and damage prevention efforts of the DPCs have grown from 8 to 44, representing 68.75% of the 64 total counties in Colorado. Additionally, the share of the population, the incoming tickets, and the facility damages covered by these 44 counties now ranges from 91.6% to 95.9% (see the last row in table).

In 2015, CO811 developed and undertook a new outreach program by staffing a Damage Prevention Liaison Department with a manager and four DPLs. Each DPL was trained and assigned a territory to support industry stakeholders and the DPCs. The DPLs provide on-site stakeholder training, encourage compliance with the Colorado One Call Law and the damage reporting requirement, and support local public 811 public awareness campaigns and community events. Additionally, the DPLs encourage Tier II facility owners to enroll as Tier I members and facilitate problem resolution.

Starting in 2016, the DPCs were reorganized to reflect active stakeholder support for each of the four territories. As of 2016, there are ten active DPCs in Colorado, along with nine Joint Utility Committees that function more as utility project coordination meetings than damage prevention councils. The statistics in the table on the next page are currently being updated to reflect the new structure and county coverage. In 2016, the CO811 DPLs delivered 83 Damage Prevention stakeholder classes and Oil

& Gas Industry presentations, held 8 grade school presentations, conducted 37 Web Ticket Entry classes, and organized 22 trade shows events.

The DPAT was established in 2008 in response to Element-1 of the 9 Damage Prevention Elements supported by the PHMSA SDP Grants. The stakeholder supported group has met at least once a year since 2008 and has been an effective forum for discussing and collaboratively designing 811 public awareness and damage prevention activities and sharing the progress made on these efforts by the DPCs. The leadership demonstrated by industry stakeholders in this group has contributed immensely to the success of improving public awareness and reducing facility damages in Colorado since 2008.

CO811's goal is to reach 100% of the population covered by a DPC. This goal of 100% then becomes the metric against progress is measured toward developing *Stakeholder Collaboration* in Colorado.

Each year since 2005 Colorado has progressed toward the goal of 100% coverage. Note that the effort to add the final 31% of the counties has a diminishing return on effort as only 4% more of the population will be added. Note that the 91.6% share of facility damages occurring in these 44 counties is less than the 94.6% share of incoming tickets in these same counties. This means that these 44 counties with a DPC have a lower relative share of damages for the share of tickets requested by their excavators. This also means that the remaining 31% of the counties without a DPC have a higher relative share of damages for the tickets requested by their excavators, demonstrating that having a DPC is a positive factor in reducing facility damages.

DPC	County Coverage	Ticket Share	Damage Share	Population	DPCs Added
TOTAL (Counties added pre 2005)	8	64.9%	56.1%	67.2%	3
TOTAL (Counties added 2005-2009)	15	20.4%	26.0%	19.7%	9
TOTAL (Counties added in 2010)	9	1.8%	2.9%	1.2%	2
TOTAL (Counties added in 2011)	6	6.8%	6.1%	6.8%	2
TOTAL (Counties added in 2012)	6	0.7%	0.5%	0.9%	1
TOTAL (Counties represented of 64)	44 (68.75%)	94.6%	91.6%	95.9%	17

Quantifiable Metric-2) Improving 811 Public Awareness and Stakeholder Compliance

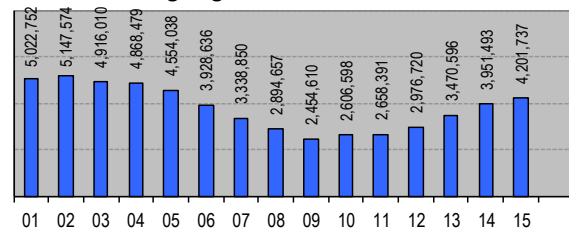
Public awareness of the 811 System and compliance with the mandate for excavators to request locate notifications is an important responsibility for CO811 defined in the Colorado One Call Law. While 811 public awareness can be measured by the number of locates requested by excavators, quantifying and measuring the level of effective awareness is a much harder task. As the economy grows and construction and excavation activity increases, the number of locate requests are expected to increase. Conversely, when the economy slows and construction and excavation activity decreases, the number of locate requests are expected to decrease. So how do we know when awareness is improving during a slowing economy?

A standard method of determining a relationship between an activity that can be measured and the factors that drive it is to define and perform a linear regression between the data variables. Some of the factors that drive locate notifications (ie: use outgoing transmissions to facility owners) include the level of the population in a geographic area, construction activity in the area, and net migration into the area. These factors can be used to define and perform a regression utilizing the relevant input data over a defined time interval. To perform the regression analysis, the data for Colorado over a 21-year period (1995-2015) was collected, proprietary data manipulation was applied to the factors, and the results of the model were analyzed to ensure a viable model was constructed.

The charts below show some of the raw data and the final analysis. Chart-17 depicts the outgoing transmissions to facility owners from 2001 through 2015. Note the decrease through 2009 and the increase through 2015. This decrease in outgoing transmissions was a result of the slowing economy and housing industry after 2002 and the financial crises in 2008. The economy and housing industry slowly recovered after 2009. Chart-5 depicts the slowly growing population in Colorado. As population increases, transmissions should increase if the economy and construction activity is also expanding.

Colorado Damage Prevention 2001-2015

Chart 17 # Outgoing Transmissions



Colorado Damage Prevention 2001-2015

Chart 5 # Population

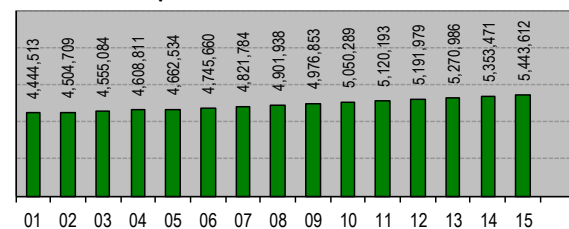
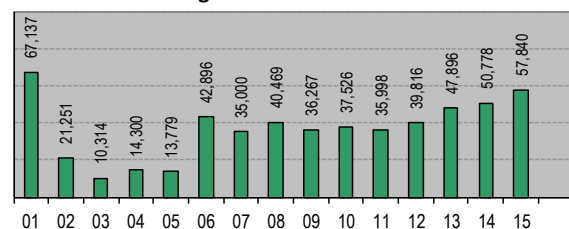


Chart-7 depicts the variation in the annual net migration in Colorado. As net migration increases, likely due to local job growth, construction activity should eventually expand. Chart-11 depicts the variation in the annual building permits in Colorado. An increase in construction activity should cause the transmission level to increase also.

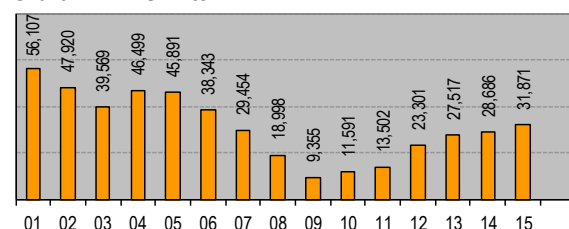
Colorado Damage Prevention 2001-2015

Chart 7 # Net Migration

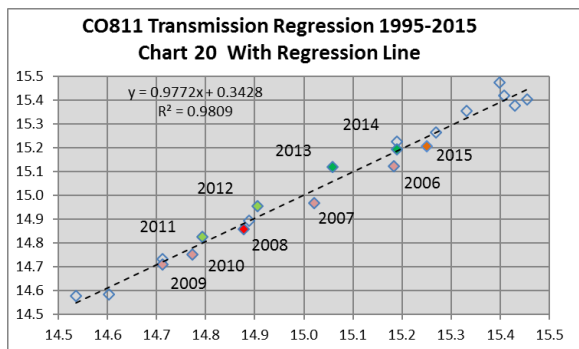


Colorado Damage Prevention 2001-2015

Chart 11 # Permits



When a linear regression is performed using data from the 21 years, a scatter plot (Chart 20 below) shows the predicted level of transmissions versus the actual number of transmissions with a plot of the regression line through the data. The regression line will form an ascending line up to the right at a 45-degree angle. Data points, representing each year of the data, falling above the regression line show an improvement in transmissions for the level of population, building permits, and net migration for that



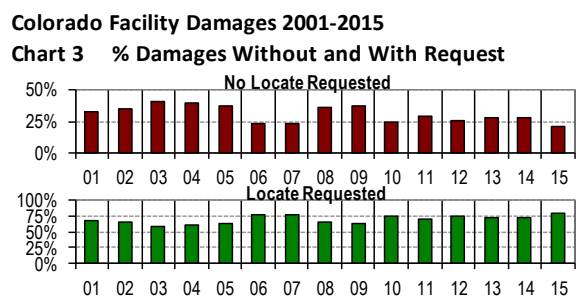
year. Data points falling below the regression line show a worsening in transmissions for the level of population, building permits, and net migration for that year. The years from 2006 through 2015 are labeled on the chart. Note that the years 2006-2010 and 2015 are below the regression line plotted through the data, showing that the transmissions, (the public awareness level), were below expectation. Conversely, the years 2011-2014 are above the

regression line, showing that the transmissions, (the public awareness level), were above expectation for the levels of population, building permits, and net migration experienced in those years. As the data points move up and away from the regression line, the transmissions are even higher than expected, meaning the public awareness level was better as related to all other years.

CO811 began receiving funding for the PHMSA Grant in 2008 (the bright red data point below the regression line). The conclusion drawn from the regression analysis is that public awareness, as measured by the level of outgoing transmissions in relation to the regression line, improved more than expected from 2011 through 2014. It can be reasoned that this Grant funding for public awareness and stakeholder education efforts, and the resulting activities conducted around Colorado, had a positive impact on public awareness and education. While the impact was not large enough from 2008 through 2010 to move the data points above the regression line, the impact improved sufficiently from 2011 through 2014 to move the data points above the regression line. It appears that transmissions (the public awareness level) were not as good as expected in 2015.

CO811's goal is to have the level of outgoing transmissions higher than the regression line for each year going forward. This goal of having transmissions above the regression line then becomes the metric against which progress is measured toward improving 811 Public Awareness in Colorado. The goal was met for 2011, 2012, 2013 and 2014, but not for 2015. Likely, Population, Net Migration, and Building Permits increased at a faster rate compared to transmissions.

CO811 monitors a 2nd metric for the damage data (facility owner provided CGA DIRT) – the share of facility damages WITHOUT a locate request by the excavator. As Chart-3 below shows, this share has decreased from a high of 40.9% in 2003 to a low of 20.5% in 2015. CO811's goal is to maintain this



metric below 20% through 811 public awareness and education efforts. NOTE: Since this metric is only collected for facility damaged each year, it is not representative of the larger transmission population. In 2015 there were 4,773 facility damages reported by facility owners for 4.2 million transmissions, or about 1.1 damage per 1,000 transmissions (0.11%).

Quantifiable Metric-3) Delivery Cost of Stakeholder Training through Grant

The Colorado One Call Law mandates that CO811 provide a safety class for stakeholders after they damage a facility. The Law does not require that all stakeholders receive damage prevention training though. The responsibility to receive proper training lies directly with the excavators, locators and facility owners. Regardless, CO811 is actively involved with stakeholder training aimed at increasing the understanding of the legal requirements defined under the One Call Law for all stakeholders. In addition, CO811 provides education to stakeholders on Damage Prevention Best Practices in an effort to help reduce facility damages. As such, CO811 develops and delivers stakeholder training courses that have a positive impact on damage prevention. These classes include the “101-One Call Law and Call Center Procedures Class” and the “201-CGA Best Practices and Reasonable Care Case Class”.

In 2016, 2,174 Colorado stakeholders attended the 83 Stakeholder Damage Prevention classes delivered by the four CO811 DPLs at a delivery cost of \$29,200 (burdened wage only, excludes minimal travel costs, assumes 10% of time spent on education activity). This equates to a **per student cost of \$13.43** (compare \$48 in 2014 and \$32 in 2015), and a **per class cost of \$352** (compare \$1,523 in 2014 and \$1,136 in 2015). Considering the benefit received in increased transmissions and low facility damages from 2009-2016, these costs appear reasonable. The Grant did not fund the delivery of any of these stakeholder classes in the 2015 Grant funding year.

The stakeholders have been receiving various forms of informal and formal education since the initial PHMSA Grant funding in 2008. The table below summarizes the PHMSA Grant funding each year since 2008 and includes a total for each year and for each funded activity. The Stakeholder Education cost on the 5th row includes the sum from the Stakeholder Education Sub Total section of the upper table.

PHMSA Grant Funding Activity	2008	2009	2010	2011	2012	2013	2014	2015	TOTAL
State Media Awareness	0	20,000	20,000	17,983	18,080	21,295	20,000	7,500	124,858
Local Media Awareness	22,926	20,000	18,014	14,958	19,975	24,631	5,230	12,500	138,235
DPAT Conference	1,849	2,000	2,986	2,003	1,200	1,000	1,500	5,000	17,538
Stakeholder Education	24,811	16,779	16,584	34,914	36,941	35,240	27,500	0	192,769
Administration	16,670	15,000	15,000	10,000					56,670
Supplies				3,027	4,454	2,834			10,315
DP Portal	30,000	24,000	24,000	17,000	7,500	15,000			117,500
OnLine LMS Platform							10,770	6,000	16,770
LMS Development							15,000	19,000	34,000
Industry Studies								50,000	50,000
TOTAL Grant Funding by year	96,256	97,779	96,584	99,885	88,150	100,000	80,000	100,000	758,654
Stakeholder Education Sub Total									
Education Travel	4,811	1,779	1,584	3,914	4,458	9,740			26,286
Stakeholder Education	20,000	15,000	15,000						50,000
101, 201 Class Development				11,000	7,650	8,000			26,650
101, 201 Class Delivery				20,000	21,505	17,500	25,000		84,005
Other Education					3,328		2,500		5,828
SUBTOTAL EDUCATION	24,811	16,779	16,584	34,914	36,941	35,240	27,500	0	192,769
ONE CALL Data	2008	2009	2010	2011	2012	2013	2014	2015	TOTAL
Transmissions	2,894,657	2,454,610	2,606,598	2,658,391	2,976,720	3,469,023	3,951,493	4,201,737	25,213,229
Transmission Increase	(444,193)	(440,047)	151,988	51,793	318,329	492,303	482,470	250,244	862,887
Facility Damages	4,900	3,192	3,130	3,588	3,584	3,615	3,837	4,773	30,619
Annual Damage Increase	(1,485)	(1,708)	(62)	458	(4)	31	222	936	(1,612)
Damages / 1,000 Transmissions	1.69	1.30	1.20	1.35	1.20	1.04	0.97	1.14	1.21
Cumulative Damage Increase (+)	-1,485.00	-3,193.00	-3,255.00	-2,797.00	-2,801.00	-2,770.00	-2,548.00	-1,612.00	

The lower table above summarizes One Call Data (transmissions and facility damages) since 2008. Divide the total cost of the Stakeholder Education Program from 2008 to 2014 (2015 not included since education was not funded by Grant) by the total decrease in facility damages over the seven years: the result is a **cost of \$75.65 per decreased facility damage** (compare \$59.66 in 2013 for 2008 to 2013) (result = \$192,769 cumulative cost / -2,548 reduced cumulative damages). Now assume that the

stakeholder education program had some impact upon the decrease in damages. This cost is very reasonable. Based upon damage data submitted into CGA DIRT in previous years, the average cost of facility damage was about \$500. If these 2,548 fewer damages would have cost \$1,274,000 (2,548 damages* \$500 ave cost), then the \$192,769 spent on the Stakeholder Education Program **represents a \$1.08 million savings for the damage prevention industry over seven years through the reduction in the number of damages**. Note that there are other factors and costs attributable to the decrease in facility damages.

In a similar manner, divide the total cost of the Public Awareness Programs (top two rows) over the eight years (2008 to 2015) by the increase in transmissions over the eight years: the result is a **cost of \$0.30 per increased transmission** (\$263,093 cost/ 862,887 increased transmissions). While this cost may seem reasonable, the metric is not very reliable since the economic slowdown drove down transmissions by 884,240 in 2008 and 2009. A more sophisticated analysis is needed to reveal the relative increase in transmissions in 2008 and 2009 due to the public awareness program that should have offset an even higher decrease in the transmissions had the public awareness program not been in place.

Quantifiable Metric-4) Reducing Facility Damages in Relation to Transmissions

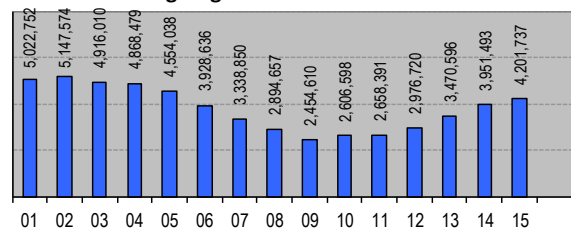
The Colorado One Call Law does not define reducing facility damages as a responsibility of CO811. That responsibility lies directly with the excavator, locator and facility owner. The call center serves primarily as a communications mechanism between excavators and facility owners.

The lower table on the previous page shows that transmissions decreased in 2008 and 2009, then increased into 2015. The table also shows facility damages decreased from 2008 through 2010, then modestly rose into 2015. If transmissions were increasing, the expectation would be for the facility damages to increase also. From 2008 through 2014, the more revealing damage metric, facility damages per 1,000 transmissions (2nd to last row), **decreased from 1.69 in 2008 to 0.97 in 2014**. In other words, while transmissions were increasing, facility damages were decreasing or holding steady. **CO811's goal is to maintain the level of facility damages per 1,000 transmissions at or below 1.0**. This goal of 1 facility damage per 1,000 transmissions then becomes the metric against which progress is measured toward **reducing Facility Damages in Relation to Transmissions** in Colorado. Each year since 2003 CO811 has made progress toward this goal. The goal was reached in 2014, but regressed slightly in 2015 (1.14 damage/1,000 transmissions).

The charts below show some of the One Call data for transmissions and facility damages from 2001 through 2015, as well as the damage metric referenced above. Chart-17 depicts the outgoing transmissions to facility owners from 2001 through 2015. Note the decrease through 2009 and the increase through 2015. This decrease in outgoing transmissions was a result of the slowing economy and

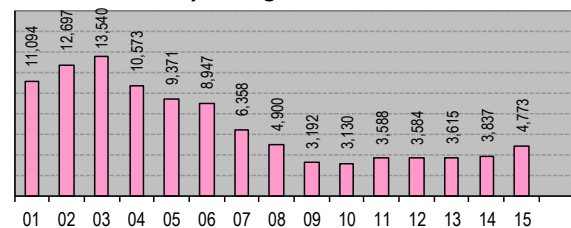
Colorado Damage Prevention 2001-2015

Chart 17 # Outgoing Transmissions



Colorado Damage Prevention 2001-2015

Chart 3 # Facility Damages



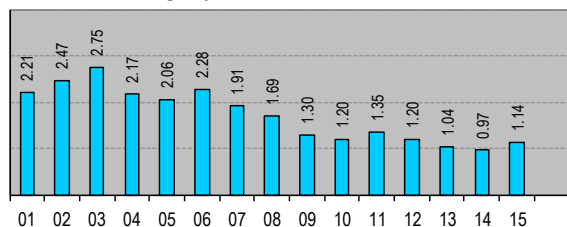
housing industry after 2002 and the financial crisis in 2008. The economy and housing industry slowly recovered after 2009.

Chart-3 above depicts the steady decrease in facility damages as the economy was slowing after 2003 and into 2010. After 2010 though, as the economy was improving and transmissions were quickly increasing, facility damages only had a moderate increase into 2015. A significant contribution to this increase in facility damages is new excavation and facility location companies entering the state, reforming, or expanding after the economic slowdown. This points to the need for CO811 to find ways to identify these companies and provide them with appropriate stakeholder training.

Chart-13 below depicts the steady decrease in the damage metric, facility damages per 1,000 transmissions. This metrics has decreased from a high of 2.75 in 2003 to its lowest level of 0.97 in 2014. The data validates our progress toward the stated goal. While facility damages are naturally expected to increase as transmissions increase, the rate of increase for facility damages has been much smaller overall than the rate of increase for transmissions since 2010. This points to the exceptional job that industry stakeholders in Colorado have done since 2003 to reduce facility damages and improve public safety.

Colorado Damage Prevention 2001-2015

Chart 13 Damages per 1,000 Transmissions



Issues, Problems or Challenges

Article IX, Item 3, Section 9.02 Final Report:

The reasons for slippage if established objectives were not met.

Due to the late start on the LMS content development, the task was started but not completed by September 30, 2016. The work is ongoing and should be completed by March 31, 2017.

There were no other issues to report.

Final Financial Status Report

Article IX, Section 9.04 Final Report

Submit the financial status report to the Agreement Administrator (AA) and Agreement Officer's Representative (AOR). Include supporting documents such as invoices.

Grantee must submit a Final Federal Financial Report, Standard Form 425 (SF-425).

Provide the breakdown of costs for each Object Class Category.

The Final Financial Report and SF 425 have been sent as a separate attachment to the AA and AOR.

The following table defines the funding approved and fund expended from January 1, 2016 through March 31, 2016 (Mid Term period) and then to September 30, 2016 (Final period) for each Object Class in the Grant agreement. The Table is also attached as a PDF.

PHMSH 2015 SDP Grant Categories - Colorado 811, Utility Notification Center of Colorado, Reported December 28, 20

Object Class Categories:	Funded Amount	Expended to March 31, 2016	Expended to September 29, 2016	Funds Remaining to Spend	Description	Supports
a. Personnel	\$0					
b. Fringe Benefits	\$0					
c. Travel	\$0					
d. Equipment	\$0					
e. Supplies	\$0					
f. Contractual						
Foresight Advantage, Quality Engineering	\$50,000	-\$25,048	-\$24,952	\$0	Research issues related to OneCall enforcement and write a report that supports implementation of a State Enforcement Authority	Element-7
Foresight Advantage	\$25,000	\$0	-\$25,000	\$0	Design and develop the backend infrastructure modules for the Learning Management System	Element-4
g. Construction	\$0					
h. Other	\$20,000	\$0	-\$20,000	\$0	Purchase 811 public awareness media at Local and State level	Element-5
	\$5,000	\$0	-\$5,000	\$0	Support Damage Prevention Action Team Fall Meeting, stakeholder meeting rooms, handouts, speaker fees (September 2016)	Element-2
i. Total Direct Charges (sum of a-h)	\$100,000	-\$25,048	-\$74,952	\$0		
j. Indirect Charges	\$0	\$0	\$0			
k. TOTALS (sum of i and j)	\$100,000	-\$25,048	-\$74,952	\$0		

Requests of the AOR and/or PHMSA

No actions were requested.