

# **CS Connect Evaluation II**

## Intervention II Digital Outreach: "Apply Online"

Prepared for the Office of Child Support Enforcement (OCSE)

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#### Background

#### Purpose

The Digital Marketing grant program, sponsored by the federal Office of Child Support Enforcement (OCSE) within the U.S. Department of Health and Human Services' Administration for Children and Families, is a 24-month demonstration project with the goal of researching how digital marketing may help the child support program more effectively reach and serve families. In September 2018, OCSE awarded funds to 14 child support agencies to test digital marketing approaches and partnerships to reach parents that could benefit from child support services and create or improve two-way digital communication and engagement with parents. The Texas Child Support Division (CSD) was one of the 14 child support agencies selected to participate in the Digital Marketing demonstration.

In this two-year demonstration project, the CSD will build on its recent efforts to engage with parents through its enhanced customer service, website redesign, and mobile-friendly web initiatives with the CS Connect project. With this grant, the CSD will study, design, implement, evaluate, and build upon a digital communication strategy that includes two-way, instant communication coupled with a series of targeted, digital outreach campaigns to increase both customer satisfaction and online applications for service. The CSD expects that this project will build internal capacity so that the program is well equipped to continue these efforts beyond the funding cycle.

#### **CS Connect Objective**

The purpose of the CS Connect grant project is to increase the number of completed online applications for services. In FY 2018, there were 96,247 completed online applications and 38,337 completed paper applications statewide. Further analysis of CSD application data displayed a large disparity in online applications and paper applications between English and Spanish-language speakers across the state. According to CSD internal data, of all new statewide applications for services in FY 2018, only 13% of online applications were from Spanish-language speakers, whereas 87% of online applications were from English-language speakers. This data reflects the amount of completed Spanish-language online applications for services and the amount of completed English-language online applications for services during FY 2018. In addition, counties with a high percentage of new paper applications for service also have a higher percentage of English as a Second Language (ESL) who are primarily Spanish speakers.

Due to the identified trend, the CSD chose to focus on three counties in Texas where a targeted digital outreach campaign could impact an increase in online applications where the completion rate is lower than average. The goal is to push customers towards online applications and increase the number of online applications in these areas when compared to historical data, along with increasing the ratio of online application when compared to paper applications.

County census data revealed that 89.8% of Cameron county's citizens are Hispanic or Latino, and 73.4% of the population speak a language other than English at home.<sup>1</sup> In Hidalgo county, census data shows that 92.4% of the population is Hispanic or Latino, and 84.3% speak a language other than English at home.<sup>2</sup> This data illustrates a great opportunity for the CSD to target outreach efforts in Cameron and Hidalgo Counties where the ESL population is high, and the rate online applications is low – 26% and 40% respectively.

On the other hand, application data from Lubbock County for FY 2018 presented an anomaly. Lubbock County is similar in population size to Cameron County, but the population was recorded as only 23% ESL on the 2010 census. This would lead one to assume that Lubbock County would have a far higher percentage of completed online applications than paper applications due to high percentage of native English-language speakers. Data from FY 2018 reflects almost identical percentages of completed online applications and paper applications<sup>3</sup>. This variance led the CSD to choose Lubbock County as the third county to target for a digital awareness campaign to increase the number of completed online applications where the rate is lower than expected.

<sup>&</sup>lt;sup>1</sup> <u>https://www.census.gov/quickfacts/fact/table/cameroncountytexas/PST045218</u>

<sup>&</sup>lt;sup>2</sup> <u>https://www.census.gov/quickfacts/hidalgocountytexas</u>

<sup>&</sup>lt;sup>3</sup> 3,574 completed online applications, 3,297 completed paper applications

Although the original county selection depended heavily on application trends by the primary native language spoken in the area, the main objective of CS Connect is to increase completed online applications for services among all populations. Based on that overall objective, the digital outreach campaigns in future Interventions will be in both Spanish and English in all three counties to reach as many in the targeted demographic as possible. The targeted demographic in the three counties are Texas parents between 18 and 45 years of age who have at least one child under 18 years of age living with them. These parents must have one of the following marital statuses:

- Married, spouse absent
- Separated
- Divorced
- Never married/Single

Before launching a full digital outreach campaign, the CSD conducted a soft launch of a live chat feature, called CS Live (chat). Intervention I was designed to evaluate the chat tool and receive feedback from those who organically used the chat feature or completed an online application before driving traffic to the apply online webpage with a digital media campaign in Intervention II. Intervention II established the framework for Intervention III which ties CS Live from Intervention I and the digital campaign of Intervention II together by not only highlighting the apply online feature, but also chat.

#### Intervention II

Intervention II was the initial attempt to use targeted digital marketing outreach to proactively increase the number of child support customers applying online. The targeted outreach consisted of strategically placing English and Spanish electronic displays developed by the Communications Section within CSD on digital sites which are presented in the three pre-selected counties. Based on audience target data for these designated marketing areas (DMAs), the Harlingen-Weslaco-Brownsville-McAllen DMA (Cameron and Hidalgo counties) had 85,962 individuals and the Lubbock DMA (Lubbock county) had 25,759 as shown in Figure 1. Using this data, the CSD contracted with AMS Pictures to assist with video production, the disbursement of the developed marketing campaigns within these two DMAs, and the collection of data associated with the customers clicking on the displays. AMS Pictures also assisted with developing a list of 624 keywords of custom intents, which included varies word combinations or phrases that could be used to search for child support services. Intervention II was designed to consist of three implementations, including:

- Stationary banner display
- Social media display
- Video

All three were designed, constructed, and presented for the purpose of not only relaying information about applying online, but also providing quick access to the CSD application when clicked.

	By Age		By By Marital Status			Ву	
DMA	Age 18-24	Age 25-54	Age Total	Been Married	Never Been Married	Marital Status Total	
Harlingen-Weslaco-Brownsville- McAllen, TX	11,075	74,886	85,962	44,140	41,822	85,962	
Lubbock, TX	4,620	21,139	25,759	12,155	13,604	25,759	
Grand Total	15,695	96,025	111,720	56,295	55,426	111,720	

Figure 1. Designated Market Area Populations

Intervention II was designed to run for 30 days beginning during the first full week of November 2019, but some logistical concerns effected the display period for of the intervention. This adjustment caused the presentation of the three implementations to run for the following timeframes:

- Stationary banner display ran from November 4, 2019 December 3, 2019
- Social media display ran from November 5, 2019 November 12, 2019
- Video ran from November 6, 2019 December 3, 2019

After the intervention was completed, data was collected pertaining to the number of displays, number of clicks, and the number of applications completed within these designated areas over a two-year period. This data allows for analysis concerning the effectiveness of the digital marketing campaign during the presentation of the digital outreach and longitudinal data when evaluating the historical trends.

#### Goal

The purpose of CS Connect is to increase the number of online applications for child support service using electronic digital marketing. A display banner (Figure 2) and a video (Figure 3) was shown in specific DMAs for the purpose of highlighting the "Apply Online" feature and directing customers to the agency website.

The video is 15 seconds long and shows the ease of applying online. The banner and the video also highlight the availability of the application feature on either a desktop, mobile device, or tablet and is presented in English or Spanish depending on the site where the add is being displayed. The goal of the intervention is to highlight the ease of applying through this process and therefore increase the number of applications within each DMA.





Figure 3. Video Screenshot

#### **Outcome Measures**

Outcome	Method	Data Points
Increased completed online applications for service within presentation areas (Cameron/Hidalgo, and Lubbock County)	Compare the historical trends for the number of applications received from 2018 through 2019 broken down by day.	Internal application data from CSD's Business Management Information (BMI) section
Number of customers clicking on the displays and being directed to the CSD website	Review the ratio of impressions and number of clicks within each DMA	External digital marketing campaign data provided by AMS Pictures
Number of customers utilizing the display to get to "Apply Online" based on English and Spanish languages	Analysis the number of impression clicks based on display method and display language	External digital marketing campaign data provided by AMS Pictures

#### **Research Questions:**

- 1. Is a display banner associated with the number of child support customers going to the "Apply Online" webpage?
- 2. Are social media displays associated with attracting possible child support customers to the "Apply Online" webpage?
- 3. Are videos associated with attracting possible child support customers to the "Apply Online" website?
- 4. Is the digital marketing campaign in Lubbock County associated with an increase the number of applications for services in that county?
- 5. Is the digital marketing campaign in Hidalgo and Cameron County associated with an increase the number of applications for service in those counties?
- 6. Is the implementation of the digital marketing campaign associated with a greater impact on one portion of the population than another?

#### Results Digital Report Concerning Intervention II

#### 1. Overall Results

As shown in Figure 4, there were a total of 2,629,005 impressions or displays and 4,373 clicks on the digital marketing campaign during Intervention II, which lasted from November 4, 2019 through December 3, 2019. The campaign intervention cost \$22,223.36 to present and was displayed in the three different formats. The banner display had the most impressions and ran the longest amount of time but received the lowest click through ratio (CTR) at 0.08%, when compared to the video which ran for less time, had fewer impressions, and a CTR of 0.39%. The social media campaign was hampered by logistical changes and only displayed for 8 days, but had a CTR of 0.30%.

Media Type	Impressions	Clicks	Spend	CTR
Display	1,905,993	1,575	\$10,285.71	0.08%
Social	15,915	48	\$435.94	0.30%
Video	707,097	2,750	\$11,501.71	0.39%
Grand Total	2,629,005	4,373	\$22,223.36	0.17%

Figure 4. Media Type Impressions/Clicks

The total number of impressions and clicks is further deconstructed in Figure 5 to show the number of English and Spanish presentations. There were six times more English impressions when compared to Spanish impressions, but the Spanish impressions had a higher CTR at 0.29%.

Language	Impressions	Clicks	Spend	CTR
English	2,258,415	3,296	\$17,776.76	0.15%
Spanish	370,590	1,077	\$4 <i>,</i> 446.60	0.29%
Grand Total	2,629,005	4,373	\$22,223.36	0.17%

Figure 5. Language Impressions/Clicks

#### 2. Breakdown of Results from Designated Market Area

Figure 6 shows the breakdown of the impressions, clicks, and cost between the DMAs. The largest numbers of impressions took place in the Cameron and Hidalgo County area (Harlingen-Weslaco-Brownsville-McAllen DMA) with 1,928,363 impressions and 3,267 clicks, while Lubbock County had only 700,642 impression and 1,106 clicks. The difference in the impressions between the DMAs did not drastically impact the click ratio with the difference only being 0.01%.

DMA	Impressions	Clicks	Spend	CTR
Harlingen-Weslaco- Brownsville-McAllen	1,928,363	3,267	\$16,305.27	0.17%
Lubbock	700,642	1,106	\$5,918.09	0.16%

Figure 6. Designated Market Area Impressions/Clicks

The Spanish impressions in both DMAs and in every display method, except for the video impressions in Lubbock, had a higher click ratio (Figure 7). The total click ratio for the Spanish impressions across the two DMAs was 0.30%, but if the social media method is excluded because of the logistical display issues, the ratio increases to 0.33%. The English impressions follow a similar trend at a lower level with a total click ratio of 0.14%, which increases to 0.21% when the social media method is excluded.

DMA _Media Type Language	Impressions	Clicks	Spend	CTR
Harlingen-Weslaco- Brownsville-McAllen	1,928,363	3,267	\$16,305.27	0.17%
Display	1,405,630	1,154	\$7,574.21	0.08%
English	1,169,524	893	\$6,311.10	0.08%
Spanish	236,106	261	\$1,263.11	0.11%
Social	14,812	46	\$406.86	0.31%
English	1	0	\$0.00	0.00%
Spanish	14,811	46	\$406.86	0.31%
Video	507,921	2,067	\$8,324.20	0.41%
English	416,564	1,365	\$6,154.93	0.33%
Spanish	91,357	702	\$2,169.26	0.77%
Lubbock	700,642	1,106	\$5,918.09	0.16%
Display	500,363	421	\$2,711.50	0.08%
English	488,620	408	\$2,648.99	0.08%
Spanish	11,743	13	\$62.50	0.11%
Social	1,103	2	\$29.08	0.18%
English	2	0	\$0.02	0.00%
Spanish	1,101	2	\$29.06	0.18%
Video	199,176	683	\$3,177.51	0.34%
English	183,704	630	\$2,661.71	0.34%
Spanish	15,472	53	\$515.80	0.34%
Grand Total	2,629,005	4,373	\$22,223.36	0.17%

Figure 7. Designated Market Area Method/Language

#### **Application Data During Intervention II**

#### 1. Hidalgo and Cameron County Application Data

Figure 8 highlights the number of applications received between October 4, 2019 and January 3, 2020 for Cameron County and Hidalgo County. According to the data, Intervention II appears to be associated with a brief upward trend in the number of applications within this DMA. While there is a positive correlation, there is no causation, because there is no relevant data which highlights an impression click leading to an application, but Figure 8 does show an uptick in the polynomial trendline beginning around November 4, 2019 and continuing through December 3, 2019. The significance of the polynomial and linear trendline becomes more obvious when comparing the application data of 2019 with the 2018 application data for this DMA (Figure 9). While a downward overall linear trendline persists within both figures, the difference in degree is significant.

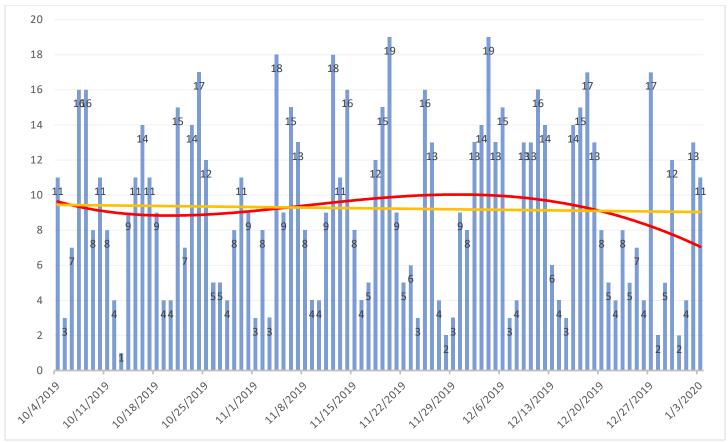


Figure 8. Cameron/Hidalgo County Application Data 11/04/19 - 01/04/20

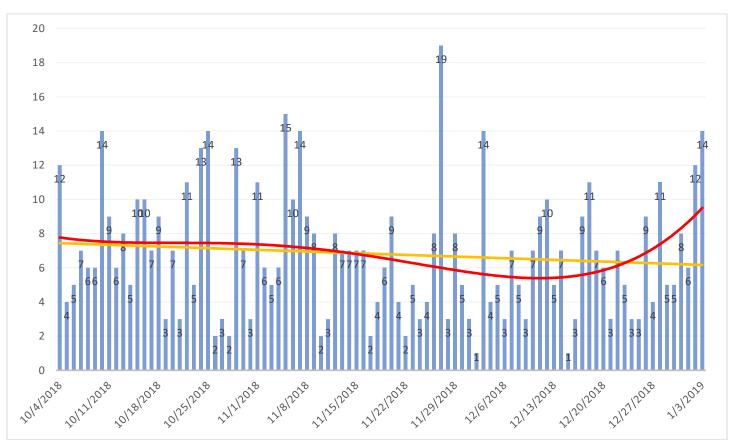


Figure 9. Cameron/Hidalgo County Application Data 11/04/18 - 01/04/19

#### 2. Lubbock County Application Data

Figure 10 shows the number of applications received between October 4, 2019 and January 3, 2020 for Lubbock County. Comparing the application data in Lubbock County for 2019 with the historical Lubbock County 2018 application data (Figure 11) shows a continuation of a downward trend for this cross-sectional review, but at a lesser degree with a more stable linear and polynomial trendline. While this may not be able to be directly correlated to the intervention, the timing of the stabilization and the intervention is significant.

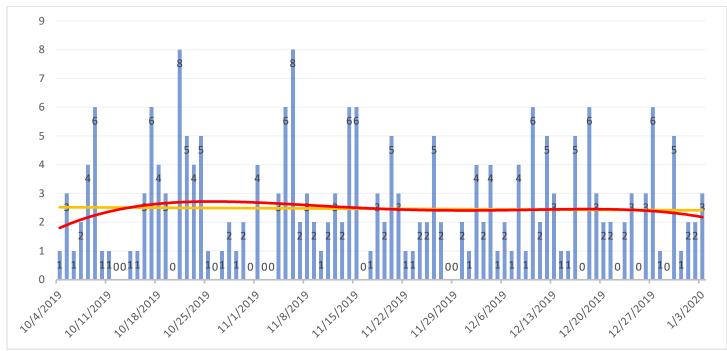


Figure 10. Lubbock County Application Data 11/04/19 - 01/04/20

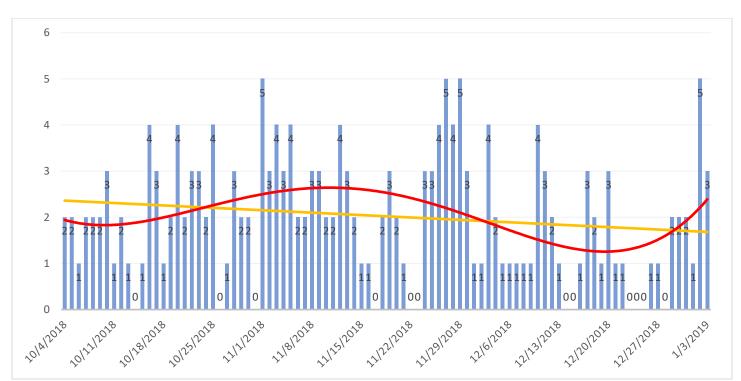


Figure 11. Lubbock County Application Data 11/04/18 - 01/04/19

#### **Impression Clicks to Completed Applications**

A positive correlation between impression clicks and the number of completed applications could not be established. Based on the AMS data and the CSD's internal application data, there were only 2 applications which were completed after an external customer clicked on an impression. While this data cannot show if the external customer completed an application during a later session on the website, because the direct electronic "handoff" is not able to be tracked, it does highlight a lack of an immediate intended result.

#### Limitations

Intervention II was limited in its affectability because of logistical issues with the social media providers. The click ratio and effectiveness of connecting with the customer appears to have been effective when launched, but the display was removed after 8 days because of concerns over the link between CSD and a politically elected official. The social media providers reasoned that posting the display would violate their political messaging terms and guidelines. Prior to the removal, the social media display was receiving a click ratio of 0.30%, which statistically placed this method between display (0.08%) and video (0.39%).

#### Analysis

Intervention II provided insightful feedback that will be instrumental in the application of Intervention III and shows areas where digital marketing may be very beneficial. While the expectations as set forth by the grant managers were not fully achieved during this intervention, the intentional and unintentional results highlighted a couple of factors which could be utilized in creating a more successful digital marketing campaign, including population density and population demographics. AMS Pictures had notified the CSD that while they seek to isolate the location of the impressions, there were impressions which fell within other DMAs. When reviewing the data of these unintended impressions a pattern emerged of a higher response rate in urban areas when compared to more rural areas. To expand on these results and see if this pattern is an anomaly, a more urban and less homogenous DMA is being introduced in Intervention III.

Intervention II also showed that there may be an underserved portion of the Spanish speaking population that could greatly benefit from the services of CSD. The number of clicked Spanish displays exceeded the English-speaking displays in every category and across both DMAs, except for video in Lubbock County where English and Spanish tied at 0.34%.

The exposure of the Texas Child Support Division appears to be increasing through the use of digital marketing based on impression clicks and there appears to be a stabilization in the number of applications being completed when compared to the historical data. There are multiple factors which could be impacting this process and we are optimistic that Intervention III, which will incorporate "Apply Online", CS Live (chat), an AI Chat Bot, and the inclusion of a more urban demographic alongside the original two DMAs will amplify and highlight these possible correlations.

#### **Lessons Learned**

There were many lessons learned during Intervention II, which have caused the CSD to adjust the implementation of Intervention III and evaluate possible areas of need, including:

#### **Spanish Speaking Customers**

The Spanish speaking audience has been the most receptive to the digital marketing campaign based on the click ratio during Intervention II. While we are not seeing an overwhelming increase in application numbers, this demographic population appears to need further analysis concerning a possible lack of communication from the CSD. This assumption appears to also be supported by the number of Spanish speakers utilizing the Chat feature which was launched for Intervention I.

#### Social Media

The connection between a politically elected official and the CSD created some logistical issues during the deployment of Intervention II. The Communication Division is seeking a way to possibly have the ad boosted internally (i.e., pushed out through our current social media connections) in order to create a pathway around this issue in order to further understand the impact associated with social media and digital marketing as it relates to child support.

#### **Designated Market Areas**

While the two areas for Intervention II were selected based on location and demographic components, some of the additional data shows that an urban area may provide a better customer response rate. While the vast majority of the impressions fell within the DMAs, 0.49% (12,842) were displayed in other markets around Texas with some of the more urban, such as Dallas/Fort Worth, El Paso, and Houston, receiving higher click-through rates (Figure 12). This was due to the deployment of unintentional displays created by our third part vendor and could not be avoided.

DMA	Impressions	Clicks	Spend	CTR
Abilene-Sweetwater	98	0	\$1.24	0.00%
Amarillo	233	0	\$2.44	0.00%
Austin	709	0	\$8.88	0.00%
<b>Beaumont-Port Arthur</b>	94	0	\$1.02	0.00%
Corpus Christi	420	0	\$5.06	0.00%
Dallas-Ft. Worth	2,998	8	\$37.06	0.27%
El Paso (Las Cruces)	1,266	3	\$15.86	0.24%
Houston	3,492	13	\$43.26	0.37%
Laredo	558	0	\$5.94	0.00%
Non-DMA Region	4	0	\$0.06	0.00%
Odessa-Midland	361	0	\$4.06	0.00%
San Angelo	85	0	\$0.96	0.00%
San Antonio	1,842	3	\$21.76	0.16%
Sherman-Ada	23	0	\$0.30	0.00%
Shreveport	48	0	\$0.40	0.00%
Tyler-Longview (Lfkn&Ncgd)	173	1	\$2.22	0.58%
Victoria	48	0	\$0.64	0.00%
Waco-Temple-Bryan	345	0	\$3.94	0.00%
Wichita Falls & Lawton	45	0	\$0.48	0.00%

Figure 12. Designated Market Area Outside Target Area Impressions/Clicks

#### **Next Steps**

As the CSD prepares for the launch of Intervention III on April 1, 2020, lessons learned for both Intervention I and II are being implemented. Intervention III will follow a similar path as Intervention II, including the deployment in the same DMAs, but additional aspects will be added, including:

- The chat tool implemented during Intervention I as part of CS Live will be highlighted in the banner display and video, so customers are aware that there is support for them during the application process.
- The digital launch will include Travis County, which has a larger, more urban, and more demographically diverse population. The selection of Travis County originates from the response rate of the Spanish speaking population and the click ratio in more urban areas during Intervention II. This data has created a desire to see if this trend will continue or if the data points are outliers.

- During Intervention I, chat was introduced to the CSD application process and has received promising feedback, so on April 1, 2020, a Chat AI Bot will be introduced. The AI Bot has been designed to answer questions, provide guidance, learn, and be available at all times. During business hours, our Chat Staff will still be available to answer questions, initiate chats, handle complicated or sensitive inquires, and step in when the AI Chat Bot needs assistance.