

Overview On March 11, 2020, after more than 118,000 cases in 114 countries and 4,291 deaths, the World Health Organization declared the coronavirus disease 2019 (COVID-19) a global pandemic. The COVID-19 response has been the largest response to any disease outbreak in the Centers for Disease Control and Prevention's (CDC) history. The agency works to slow the spread of COVID-19 and to protect people's lives and health. Their role in educating the American public is well understood. But as the pandemic unfolded, the CDC's Division of Global Migration and Quarantine needed to explore and test new innovative ways to communicate COVID-19 guidance to as many international travelers as possible. Together with Deloitte, Chickasaw Nation Industries and Coegi, CDC piloted geofenced messages to reach and teach as many travelers as possible about COVID-19, sharing lessons learned along the way that will inform future U.S. public health responses.

Planning/Content

The project started with primary and secondary research to charter the international traveler journey once they arrived at a U.S. air or land ports of entry (POE) such as Chicago O'Hare International Airport and the San Ysidro U.S./Mexico Border Crossing. Research included literature reviews, analysis of historical flight and land travel data, focus groups, and surveys with target travelers and partners. We found that travelers prefer to receive personalized COVID-19 guidance iteratively throughout their journey with messaging that is tailored to their habits and preferences. We then concluded that a paid media outreach solution, via social media and programmatic advertising, was the best way to leverage geofencing technology to meet CDC's goal. To measure effectiveness, we set two measurable objectives:

- Reach 15% of travelers entering the U.S. at 10 POEs, within 0-5 days, with COVID-19 guidance
- Teach international travelers about precautions they should take in the U.S., through engaging content and creative, and achieving a click-through rate (CTR) of .4%

Based on research and these objectives, we defined the audience as international travelers (age 18+) returning to or entering the U.S. We segmented audiences into seven traveler personas based on demographic information, communication preferences, and patterns in their journey. For example, one persona featured Emily, a non-U.S. student who often crossed the U.S. border to attend school. To reach individuals like Emily, we set a paid media budget of \$400,000-\$200,000 for social media and \$200,000 for programmatic advertising using geofencing technologies. We also developed ads that stood out to our audience, using diverse imagery and language that resonated with travelers based on where they were going. Prior to launch, we worked with partners (e.g., U.S. Customs and Border Protection) to share media talking points, fact sheets, and question and answer documents.

Creativity/Quality

After two years of COVID-19 messaging, we decided the art direction for this outreach needed to be different, aspirational, and health equity focused. We wanted audiences to see themselves in the creative. We used bright colors to evoke certain emotions and put forward authentic and transparent messages. The branding was designed using lively, engaging colors that were whimsical and inspired feelings of excitement and hopeful anticipation, paired with modern, lively fonts. Maximalist iconography was also created to offer a playful combination when used with imagery. And content was culturally competent to represent the diversity of travelers entering the U.S. We designed 70+ ads that were engaging and motivational for travelers. Of the total ad set, 48 were in English and 37 in Spanish. Ad formats included still images, interactive graphics interchange formats (GIF), polls, and video commercials.

Technical Excellence

We began geofenced social media advertising on July 20, 2022 and programmatic advertising on November 17, 2022. Both of these concluded on February 28, 2023. Combined, CDC's messages reached 10,724,457 unique travelers, generated 31,629,295 impressions, and had an average CTR of .29%. While both solutions proved geofencing technologies can reach large groups of individuals, results showed programmatic messaging fared better in achieving CDC's overarching goal:

- On social media, we reached 2,323,084 individuals at three POEs, generated 13,157,450 impressions, and by optimizing mid-project, we raised CTR from .14% to .19%
- With programmatic, we reached 8,401,373 individuals, generated 18,471,845 impressions, and garnered a CTR of .49%
- Combined, both pilots met our mark of reaching at least 15% of travelers entering the U.S.

Throughout this project, we updated ad content to reflect evolving COVID-19 guidance and seasonal imagery. We pivoted to increase ads on apps and sites most frequently used by travelers entering the U.S, which resulted in improved reach and CTR. In addition, qualitative results from conducting social listening showed that that ads didn't generate any negative sentiment or publicity which has direct links to building (or rebuilding) brand trust.

This type of outreach is a significant step forward in accelerating CDC's public health communication mission. Specifically, to deliver information proactively and quickly to specific audiences at the right time and place, and in the right cultural context. CDC is leveraging private industry technology to build brand awareness and credibility with international travelers. And, with COVID-19 likely here to stay, this project enables CDC to refine, elevate, and collaborate with other agencies to communicate about future public health threats to mitigate disease transmission among travelers.