Communicating High Impact Weather across the U.S./Mexico Border using Social Media

Marissa Pazos, Jason Laney, and Tim Brice - NWS El Paso
AMS 2018
A PICTURE IS WORTH A THOUSAND WORDS
(In Any Language)

"@misajg: EH aquí el granizo que cayó en Juarez. Por eso tenía miedo."

3:26 pm: Large Hail heading towards Horizon City. Still seeing rotation, tornado could develop at any time. #ElPaso
Amending a TAF

062
FTUS44 KEIZ 310117 AAA
TAFELP
TAF AND
KELP 310117Z 3101/3124 11000KT PEBM VCTS SCT030CB SCT200 BKN250
TENPO 3101/310 VBR20035KT 6SM -TSRAGS BKN020CB BKN200 OVC250
FM310400 13000KT PEBM VCTS SCT030CB BKN200 OVC250
FM310500 16000KT PEBM SCT090 BKN190 BKN250
FM311200 06000KT PEBM OVC250=

152
FTUS44 KEIZ 310223 AAB
TAFELP
TAF AND
KELP 310222Z 3102/3124 11000KT PEBM VCTS SCT030CB SCT200 BKN250
TENPO 3102/310 VBR20040KT 6SM -TSRAGS BKN020CB BKN200 OVC250
FM310400 13000KT PEBM VCTS SCT030CB BKN200 OVC250
FM310500 16000KT PEBM SCT090 BKN190 BKN250
FM311200 06000KT PEBM OVC250=

BLAK42 @Ambassador_SR May 30
@NWSEIPaso haboob in Juarez atm
Tweeting in Two Languages

NWS El Paso @N... 1 Sep 2016
807am Heavy rain falling on parts of #ElPaso and #Juarez this morning. Flooded roadways likely.

NWS El Paso @N... 1 Sep 2016
807am Lluvas fuertes en partes de #ElPaso y #Juarez esta mañana. Posibles calles inundadas.
El Paso Demographics

- Combined El Paso/Juárez Population 2.7 million
  (El Paso population 680,000)
- 80% Hispanic
- 40% of El Paso residents speak Spanish primarily in the home
- One of the poorest counties in the U.S.
More Border Statistics

- The El Paso – Juárez region is the largest bilingual, binational workforce in the Western Hemisphere
- 7,000 to 10,000 U.S. citizens work in Juárez everyday
  - Ciudad Juárez Maquiladoras (primarily US financed factories)
  - 250 to 350 Maquiladoras in operation annually
  - 2nd most important trade point on the border
- 60,000 cars & 22,000 pedestrians cross the border each day

American lives & property in Mexico? Do we ignore these people or treat the region as one?

Photo credit: (Alexandre Meneghini / AP)
Building Real World Relationships (In Person & with Social Media)

NWS El Paso visit to Ciudad Juárez

Protección Civil visit to NWS El Paso
Innovative Use of Technology

Support of Protección Civil for Pope’s visit to Juárez

- Not practical to send a forecaster across the border
- Used Google Hangouts for real-time video chat
- Face-to-face communication to answer immediate questions
- Ability to screen-share for radar or plume models (if needed)
Social Media

How can we use it to our advantage?
Ability to reach underserved communities...
Constant data mining via social media in search of wx info from both sides of the border.
Frequent mentions of weather conditions across the border are included in our social media posts.

By including Juarez, we many times elicit responses from people across the border.

Responses from Mexico can be a very valuable source of ground truth information.
Building Confidence on the Border

Basic translation:

“Thanks to NWS El Paso for keeping us informed early. The municipality of Juarez doesn’t feel like warning.”
Positive Results (October 5\textsuperscript{th} & 6\textsuperscript{th}, 2015)
Positive Results (October 5th & 6th, 2015)
Communication is the Key!
(No matter what season of the year)
Looking ahead to the future…
Any questions?

You can find me at:
» @JasonLaney2
» jason.laney@noaa.gov