



# Waze & Performance Measures Webinar

Kapsch/NCTCOG

Wednesday, January 24<sup>th</sup>, 2018 9:30 AM



# Agenda

1.	Team Introduction (9:30-9:45)
2.	Objectives of the workshop (9:45-9:50)
3.	IEN Simplified Event Entry Quick Demo Recap (9:50-10:20)
4.	511DFW Website Re-Design (10:20-11:15)
5.	Enhancements – Deployment Schedule (11:15-11:30)
	Lunch Break (11:30-12:45)
6.	Waze Bi-Directional Integration (12:45-2:00)
7.	Performance Measures Enhancements (2:00-3:45)
8.	Closing (3:45-4:00)

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# Team Introduction



- Natalie Bettger
- Eric Quintana
- Marian Thompson
- Ranjith Dhanekula
- Juan Moreno
- Sudhakar Nallamothu
- Ahmad Sadegh
- Joe Zingalli

# Objectives of the Webinar



- Quickly demonstrate the IEN Simplified Event Entry Enhancements
- Present 511DFW Website Re-Design Progress
- Discuss Waze Event Integration and Filtering Criteria
- Overview of Performance Measures
- Performance Measures Enhancements Demonstration
- Encourage the receipt of feedback from participants on all topics



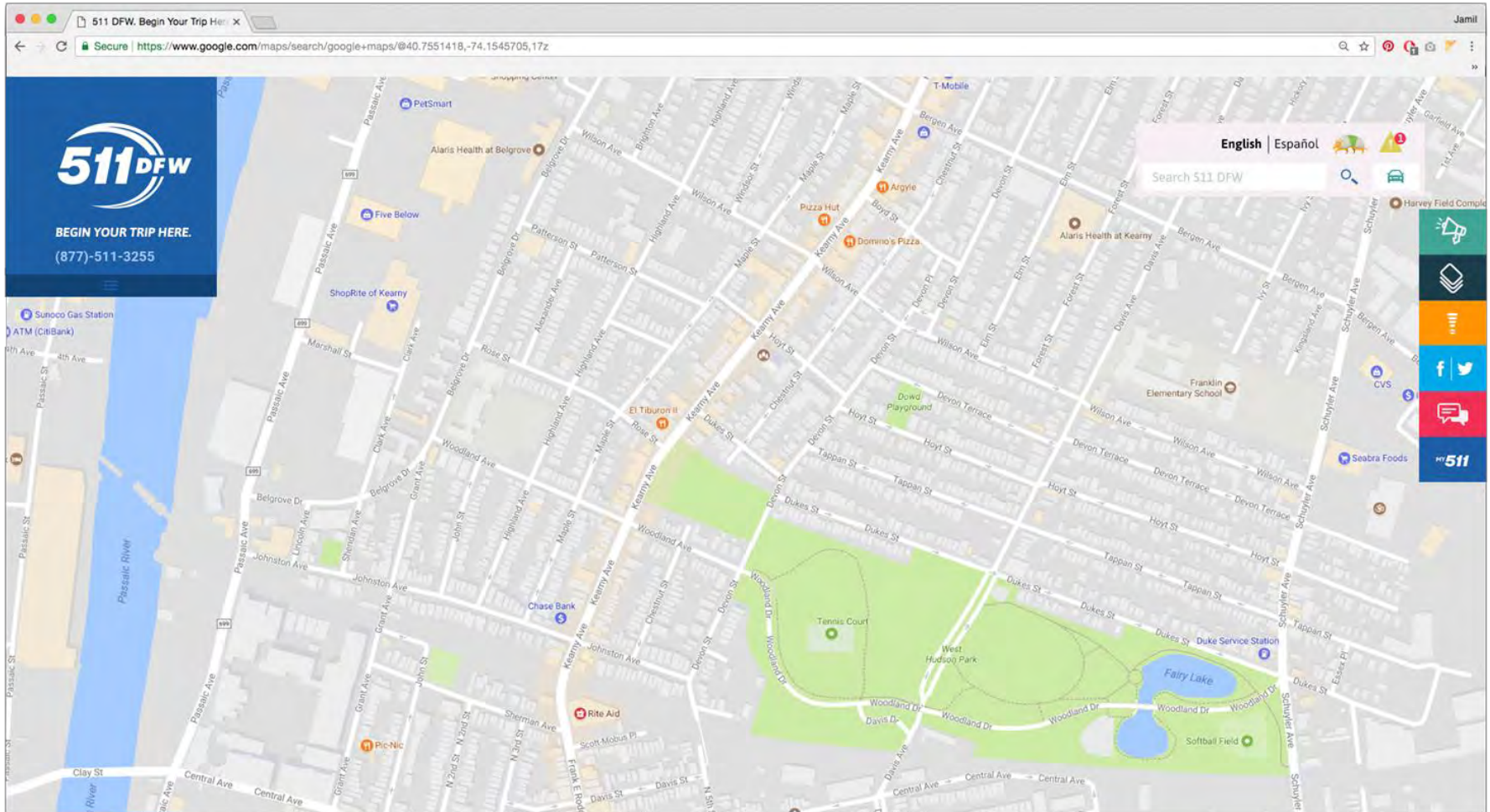


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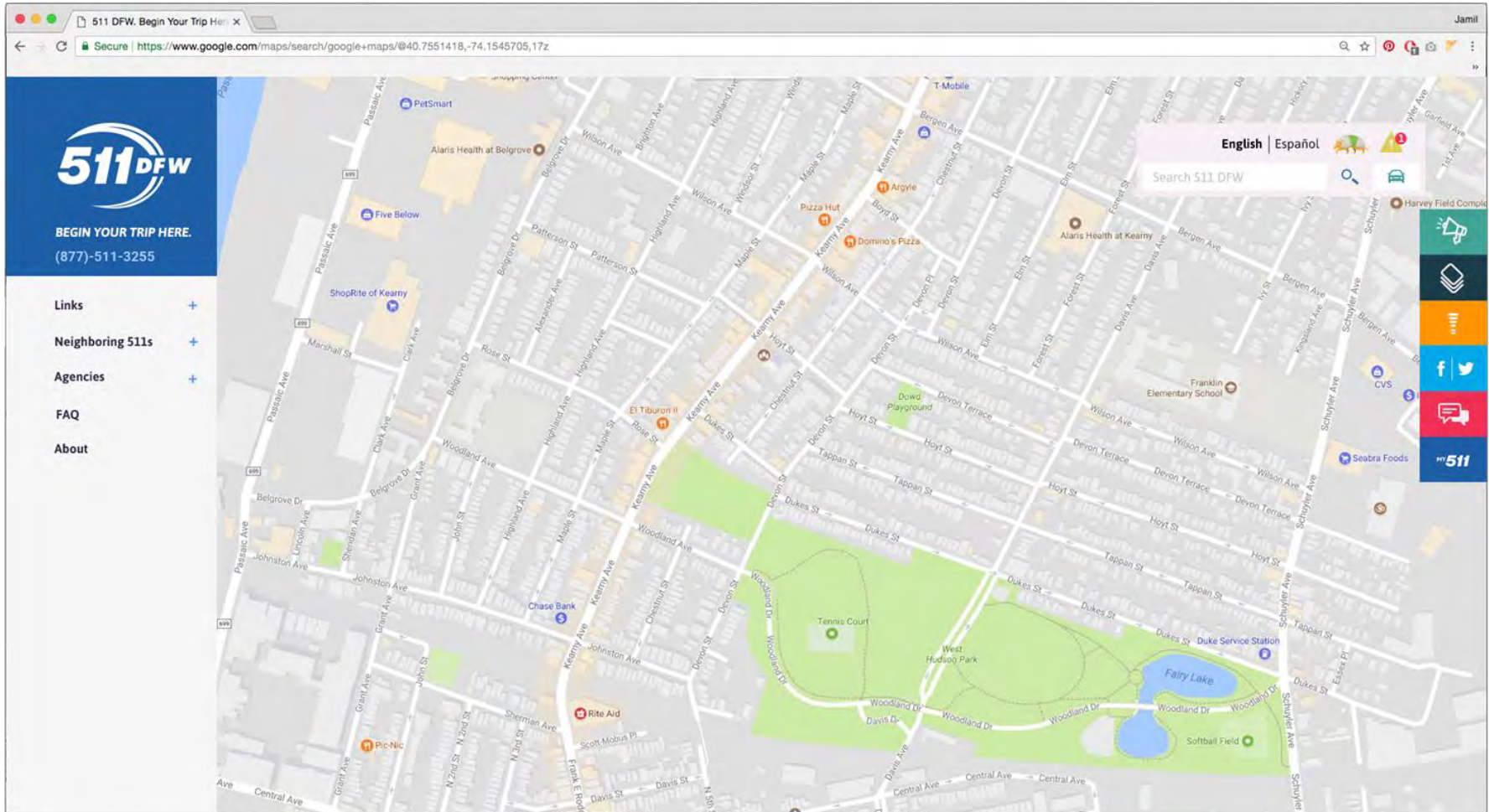


# IEN Simplified Event Entry Quick Demo Recap

# 511DFW Website Re-Design

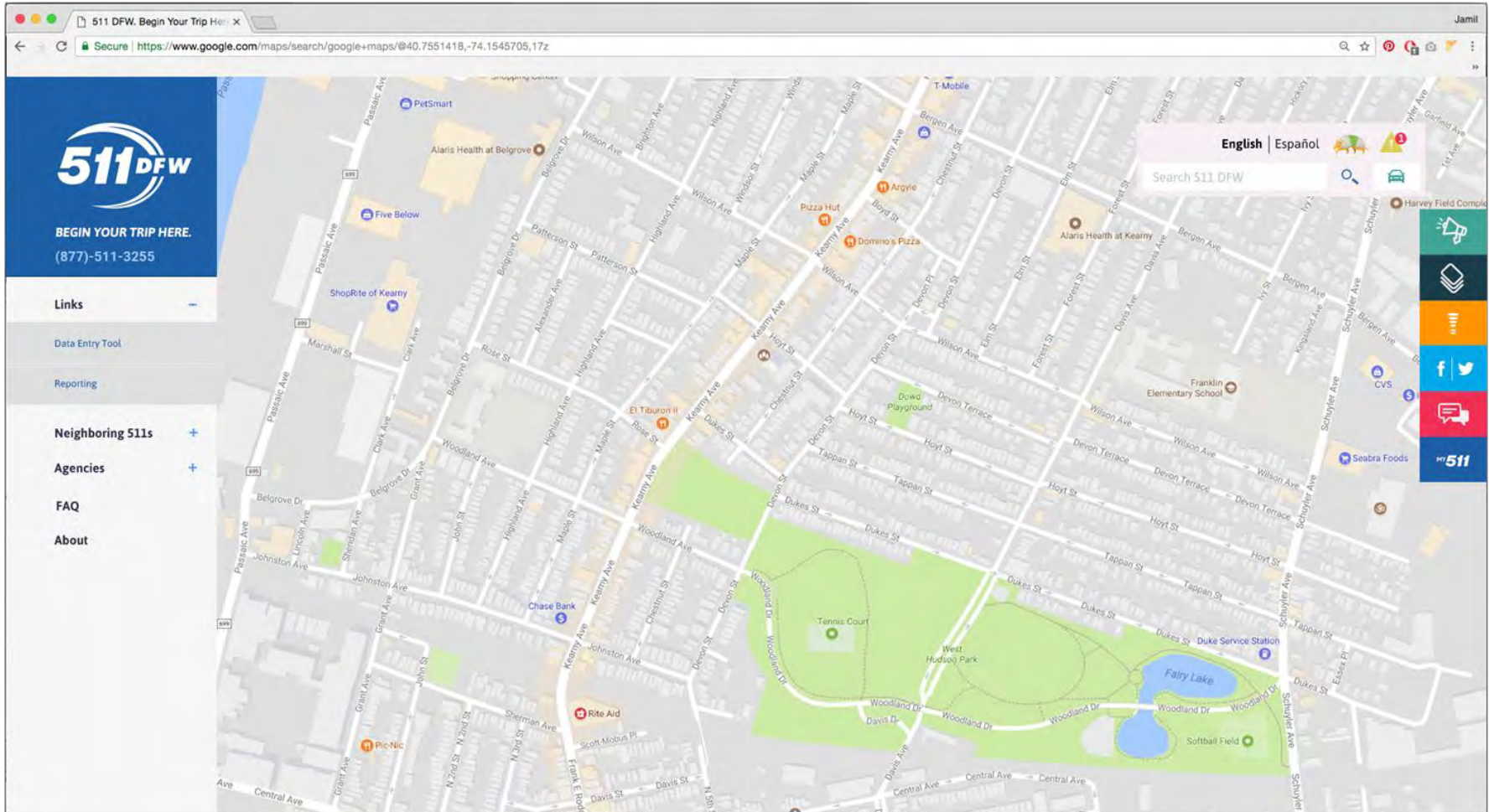


# 511DFW Website Re-Design



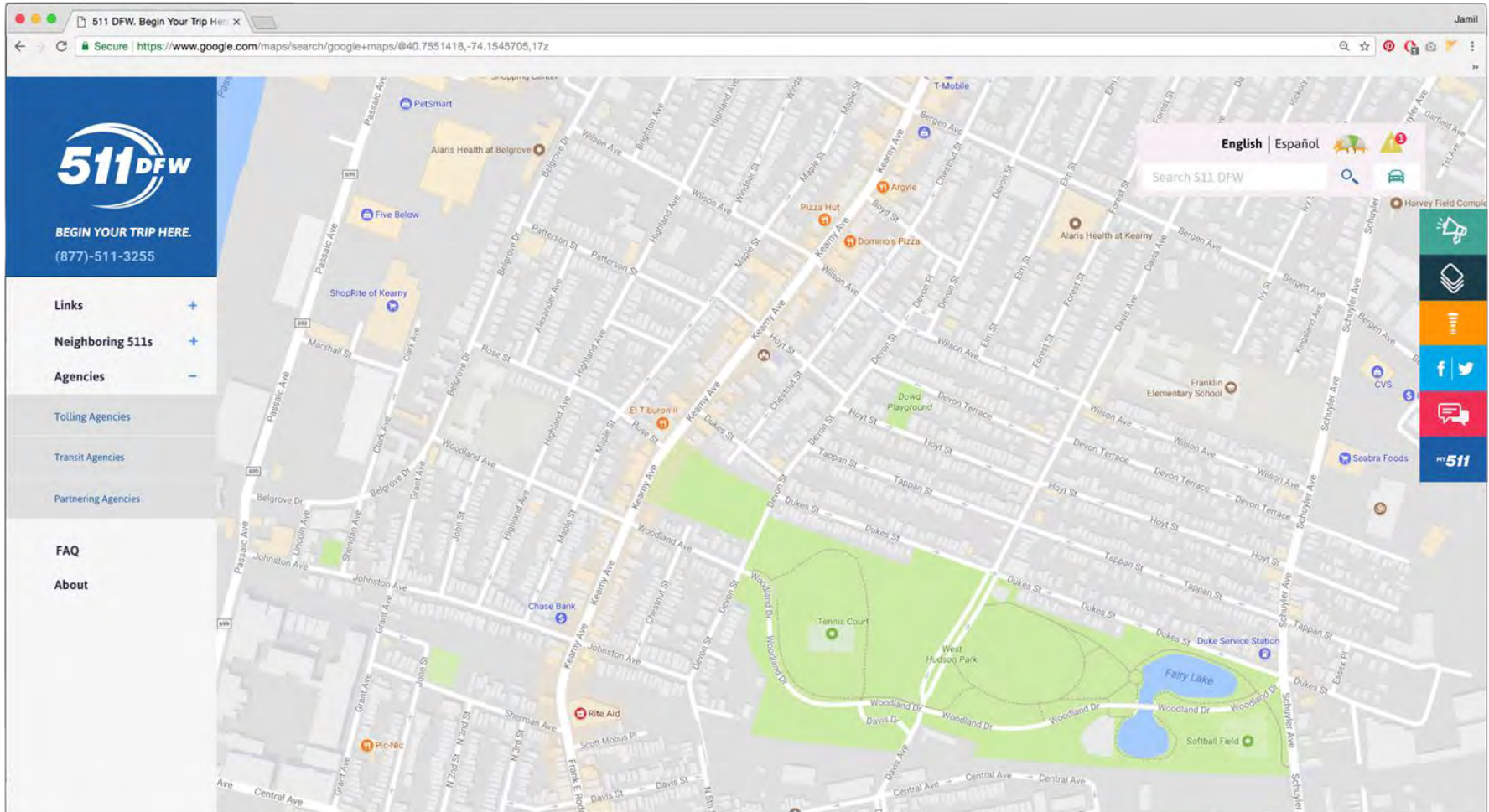


# 511DFW Website Re-Design





# 511DFW Website Re-Design



# 511DFW Website Re-Design



The screenshot displays the 511DFW website interface. On the left, there is a navigation sidebar with the 511DFW logo and the text "BEGIN YOUR TRIP HERE. (877)-511-3255". Below this are links for "Links", "Neighboring 511s", "Agencies", "FAQ", and "About". The main content area features a "Frequently Asked Questions:" section with three expandable categories: "General", "Cameras", and "Driving Times".

**Frequently Asked Questions:**

- General**
  - What is My511DFW?
    - Is the My511DFW service free?

My511DFW is the same as using 511DFW. It is free to sign up and use on the Web. It is free on your landline phone, and on your cell phone, although depending on your agreement, charges may be incurred when using plan minutes.
    - I need help with a specific My511DFW feature. Who do I contact?
    - How do I make a suggestion for the My511DFW system?
    - What is the geographic coverage area for My511DFW?
    - Are there other My511DFW features planned?
- Cameras**
  - How many cameras can I select to be available on my personalized My511DFW home page?
  - Can I name my cameras anything I want?
  - Can I get video streams instead of camera images?
  - Why can't I see the traffic camera video on the "Manage Cameras" page in my browser?
- Driving Times**
  - How often is the driving time information updated?
  - How are driving times calculated for each trip?

On the right side of the screenshot, a map is visible, showing a street grid with labels such as "Wilson Ave", "Devon Terrace", "Hoyt St", "Tappan St", "Dukes St", "Schuyler Ave", "Bergen Ave", "Kingsland Ave", "Franklin Elementary School", "CVS", "Seabra Foods", "Duke Service Station", "Fairy Lake", "Woodland Dr", "Softball Field", and "Harvey Field Complex". The map includes a search bar for "Search 511 DFW" and language options for "English" and "Español". A vertical sidebar on the right contains icons for a megaphone, a camera, a list, social media links for Facebook and Twitter, a chat bubble, and the "my 511" logo.



# 511DFW Website Re-Design



**511DFW**  
BEGIN YOUR TRIP HERE.  
(877)-511-3255

## About 511DFW

### Overview

#### MYS11DFW on the Phone

On the phone, MYS11DFW allows you to bypass menu prompts to go directly to current information for your preferred trips. During registration, you can save up to three phone numbers that 511DFW will recognize. When calling 511DFW, the phone system recognizes MYS11DFW users via caller ID and immediately asks for the name of a saved trip set-up during MY 511 registration (e.g. "Home to work"). MYS11DFW will respond with current traffic and/or transit information for your trip.

If your phone number has caller ID blocked, you must say, "MY 511" at the Main Menu. The system will respond by asking you to enter your 10-digit phone number. Upon recognition, MYS11DFW will ask for one of your trip names and provide the current traffic and/or transit information.

To use MYS11DFW on the phone, you must create an account. [Click here to register.](#)

#### MYS11DFW on the Web

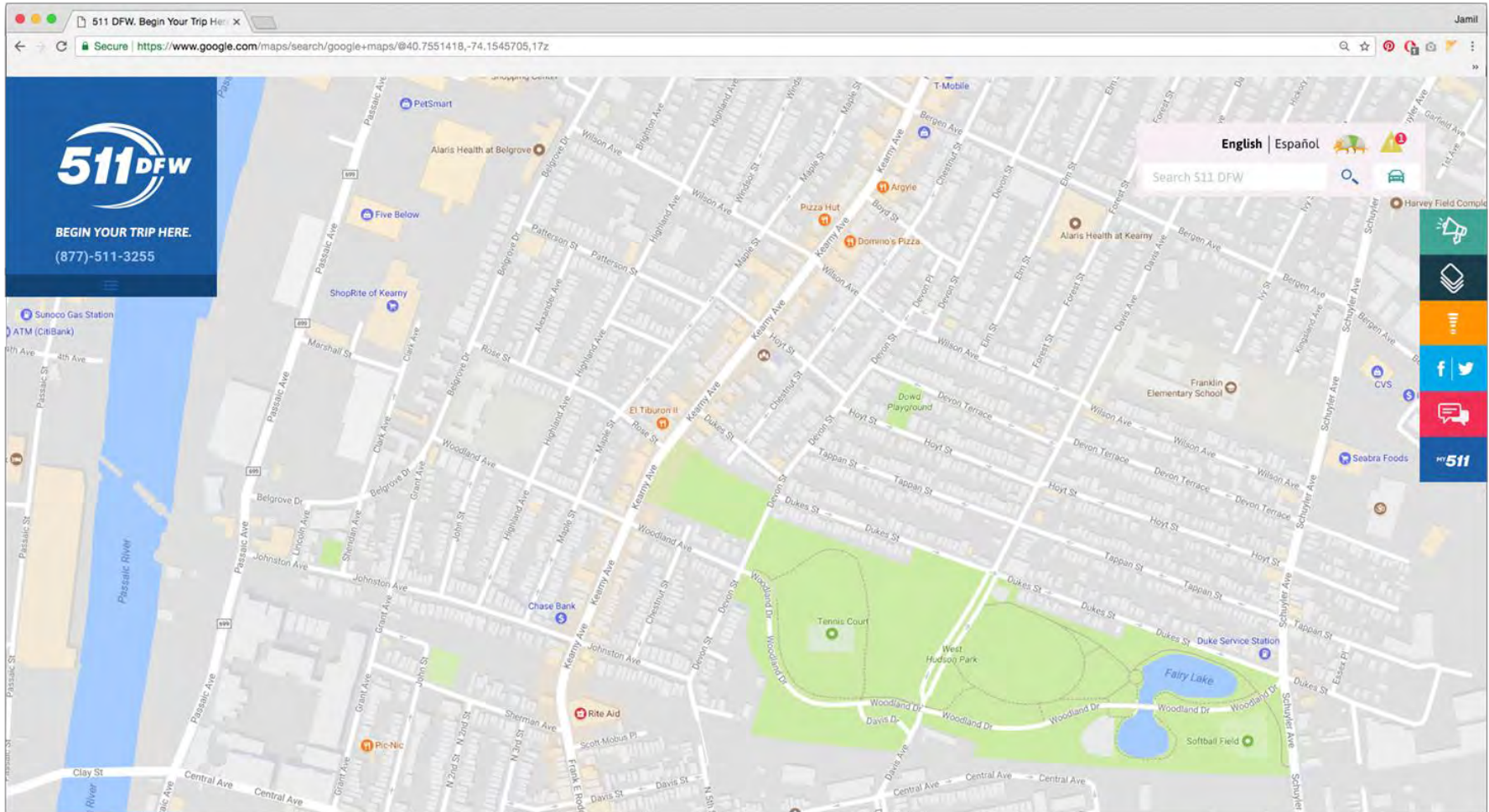
##### Traffic Features

##### Transit Features

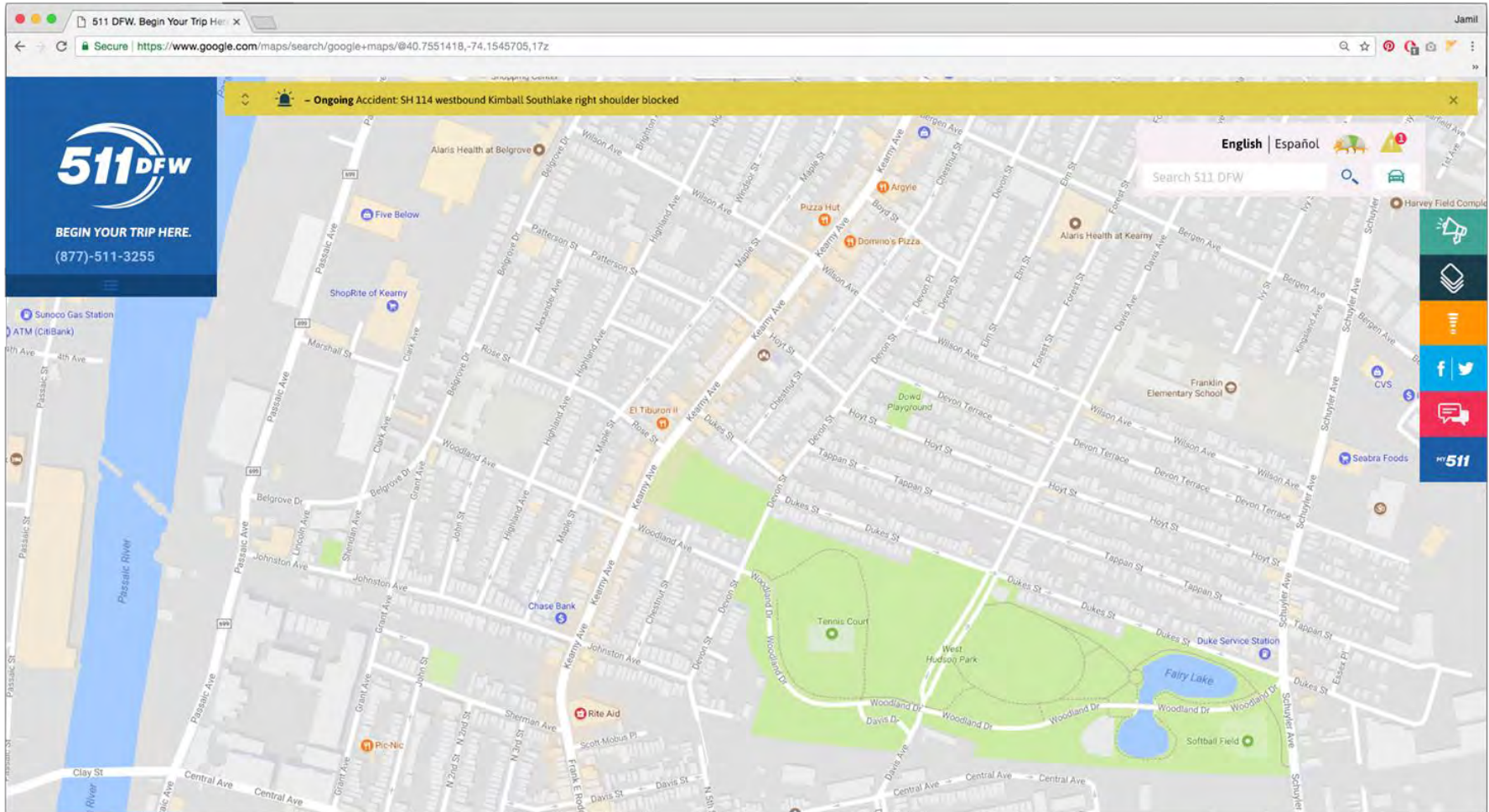
Are there other My511DFW features planned?



# 511DFW Website Re-Design

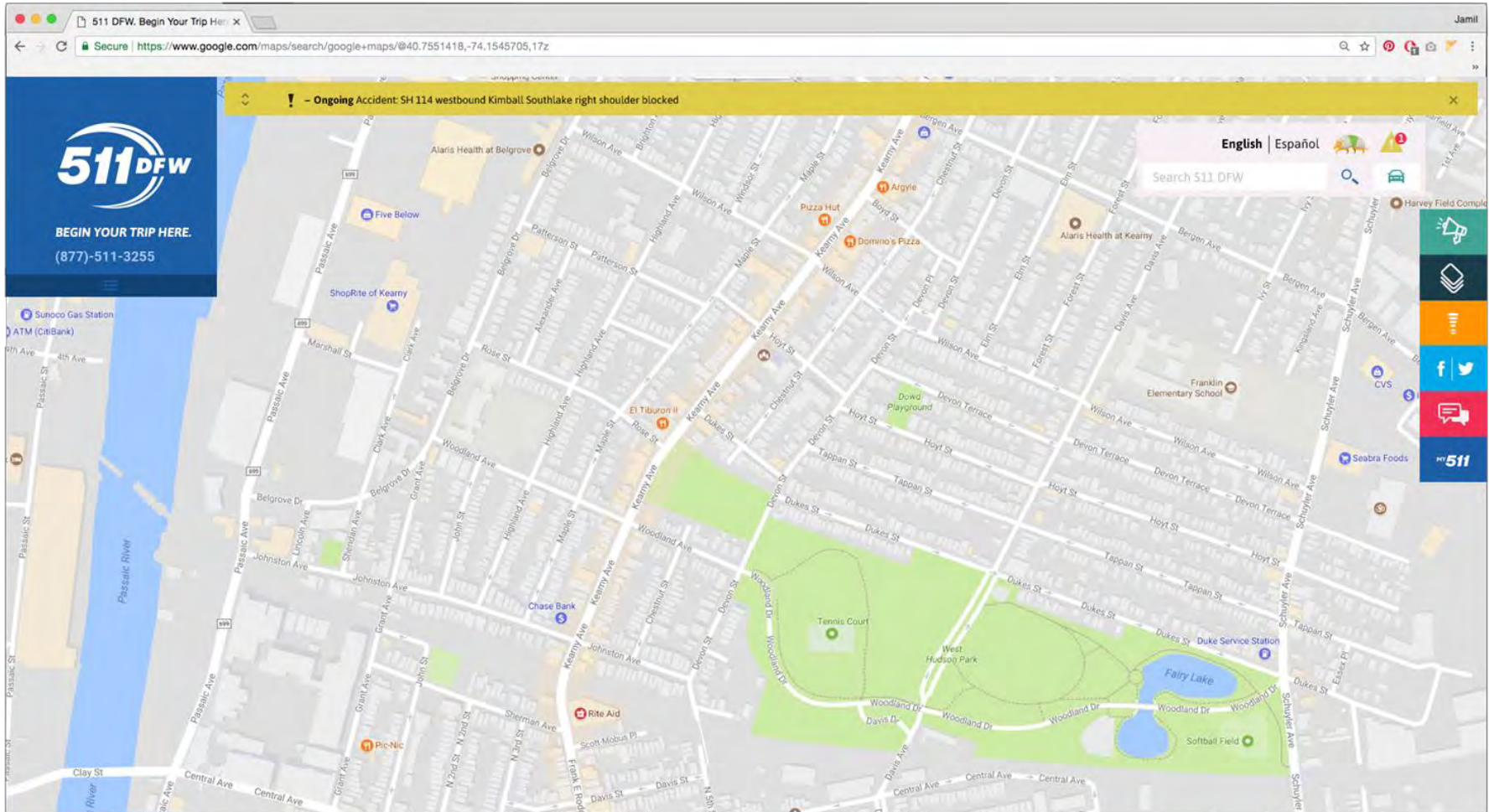


# 511DFW Website Re-Design



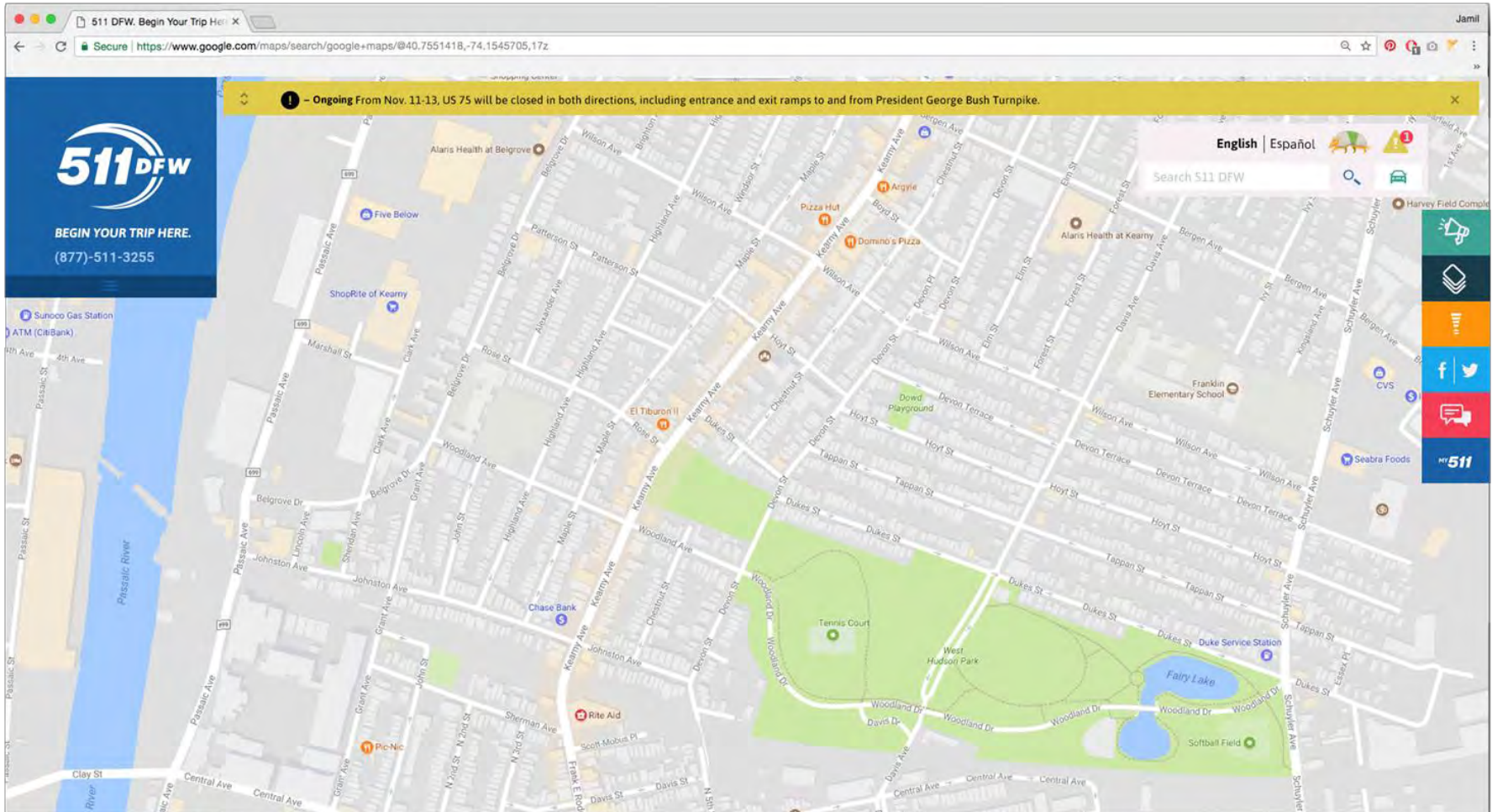


# 511DFW Website Re-Design





# 511DFW Website Re-Design



# 511DFW Website Re-Design



511DFW  
BEGIN YOUR TRIP HERE.  
(877)-511-3255

Ongoing From Nov. 11-13, US 75 will be closed in both directions, including entrance and exit ramps to and from President George Bush Turnpike.

The closure is required for the partial demolition of the Plano Parkway bridge. US 75 traffic will be directed to the frontage roads. For a full list of detour routes, along with a detailed map, click the "ALERT" link at the top of 511dfw.org.

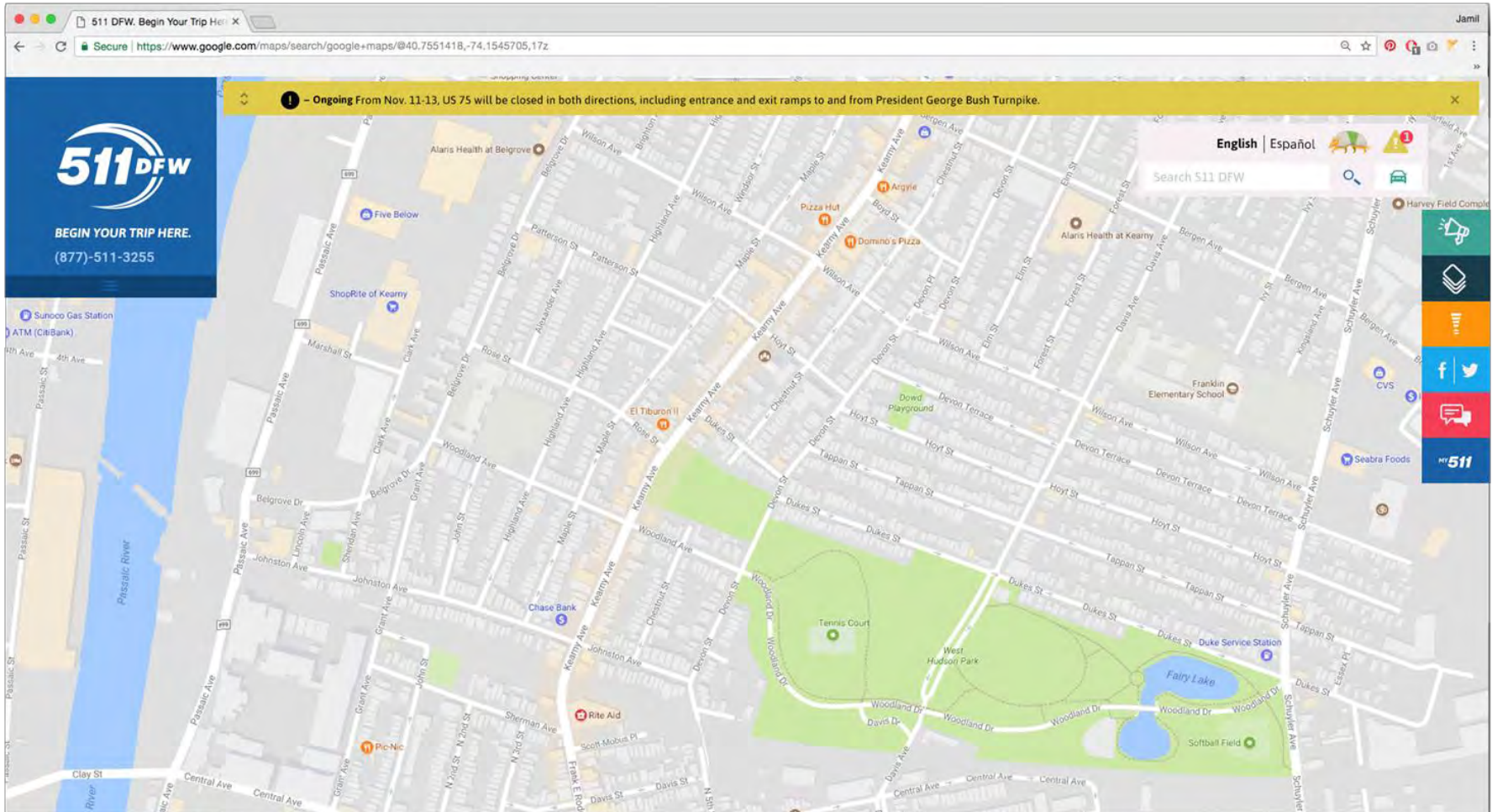
English | Español

Search 511 DFW

511DFW



# 511DFW Website Re-Design





# 511DFW Website Re-Design



# 511DFW Website Re-Design



511DFW  
BEGIN YOUR TRIP HERE.  
(877)-511-3255

English | Español

Search 511 DFW

SIGN IN

E-mail Address

Password

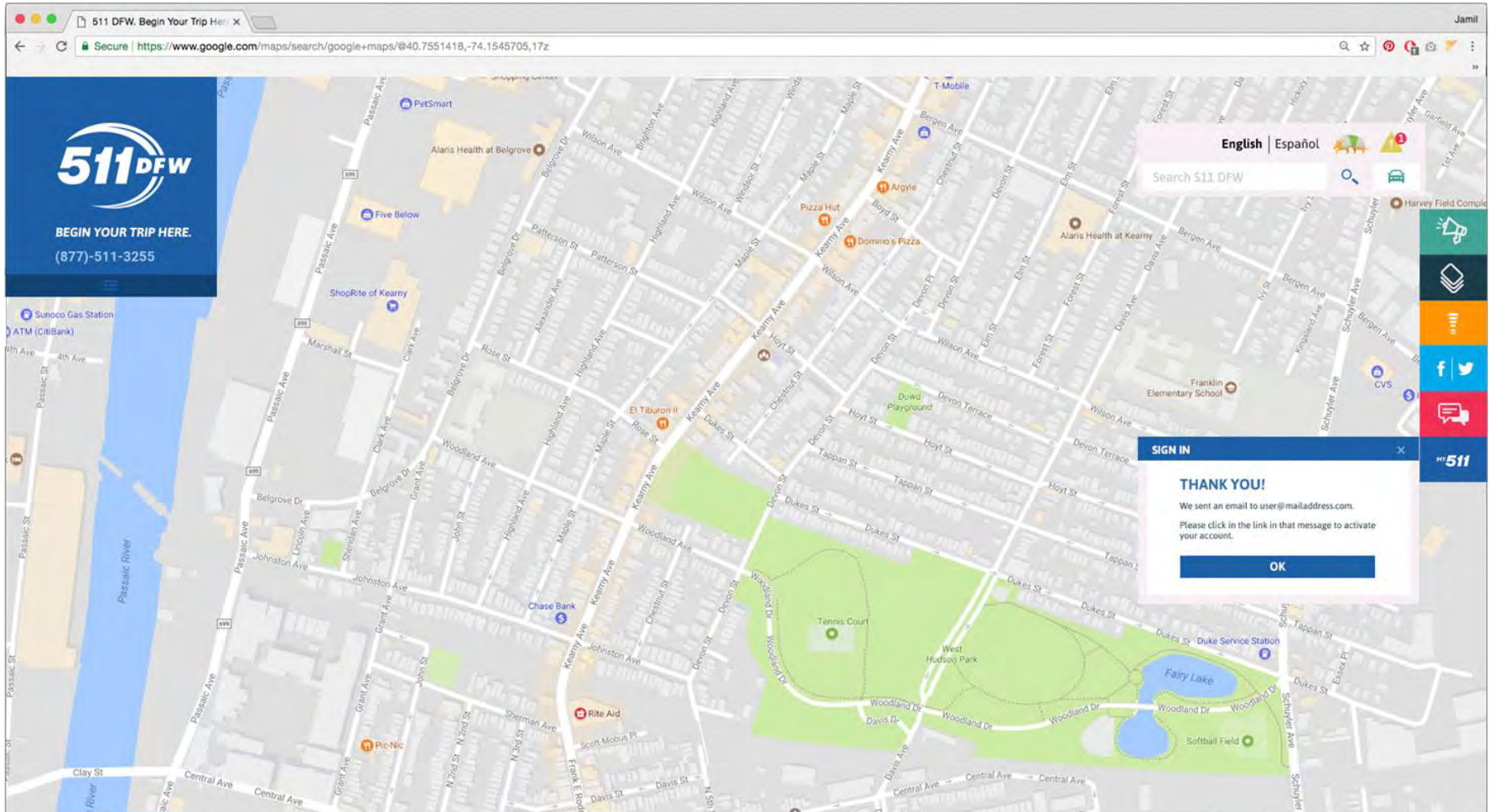
Phone AT&T

CREATE AN ACCOUNT

By signing up to create an account I accept 511DFW Terms and Conditions & Privacy Policy



# 511DFW Website Re-Design



# 511DFW Website Re-Design



The screenshot displays the 511DFW website interface. On the left, a blue sidebar contains the 511DFW logo and the text "BEGIN YOUR TRIP HERE. (877)-511-3255". The main area features a Google Maps view of a neighborhood with various points of interest like PetSmart, Five Below, and ShopRite. A search bar at the top right allows users to search for 511DFW services in English or Spanish. A vertical navigation bar on the right includes icons for home, search, and social media. A traffic alert panel in the bottom right corner provides information about road conditions, such as "Via I-30 2 incidents" and "30 MIN" travel time.



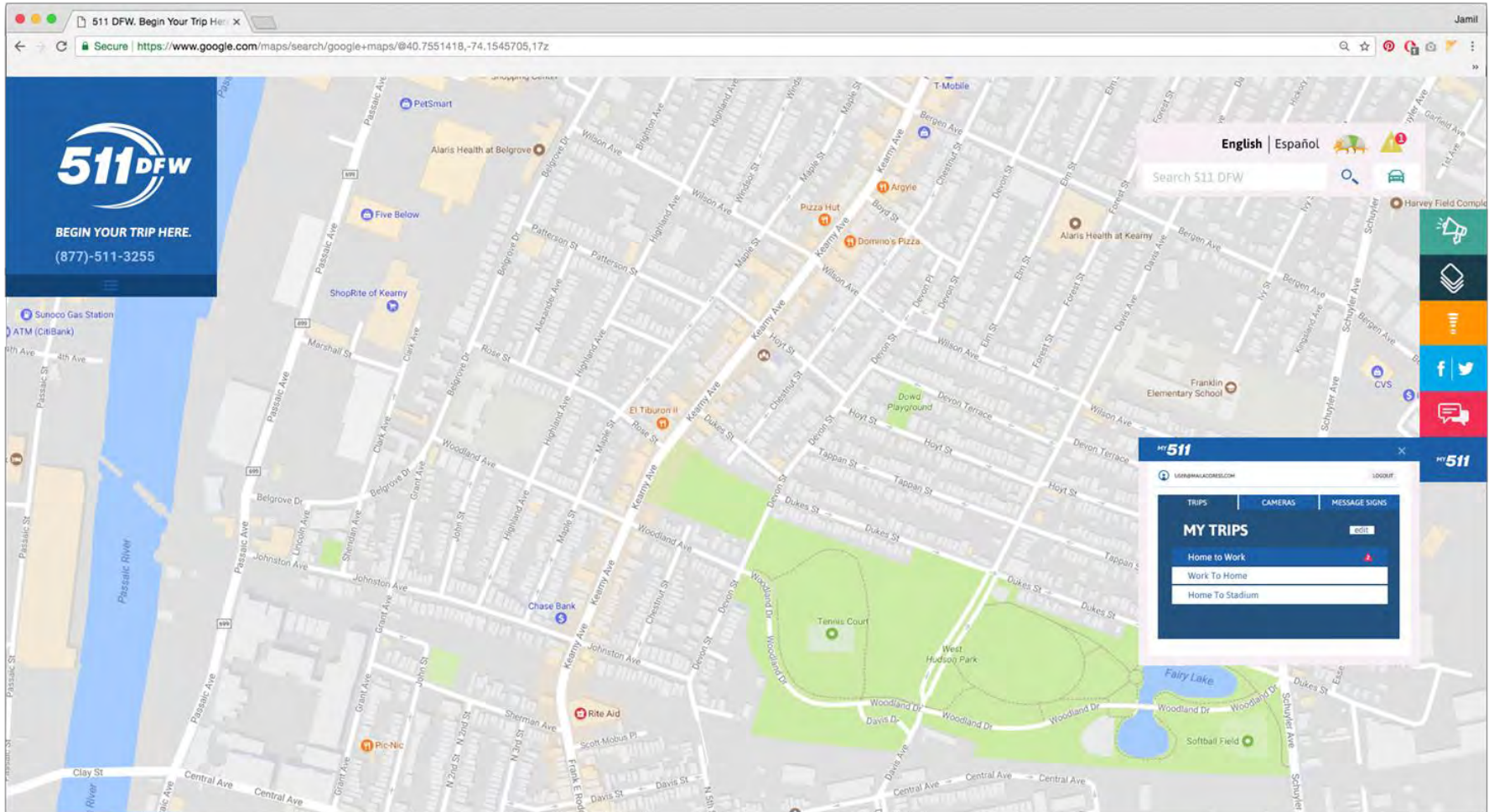
# 511DFW Website Re-Design



The screenshot displays the 511DFW website interface. On the left, a blue sidebar contains the 511DFW logo and the text "BEGIN YOUR TRIP HERE. (877)-511-3255". The main content area features a Google Maps view of a neighborhood with a blue route highlighted. A search bar at the top right allows users to search for "511 DFW" in English or Spanish. A vertical sidebar on the right contains navigation icons for home, search, and social media. A "HOME TO WORK" summary box in the bottom right corner provides trip details:

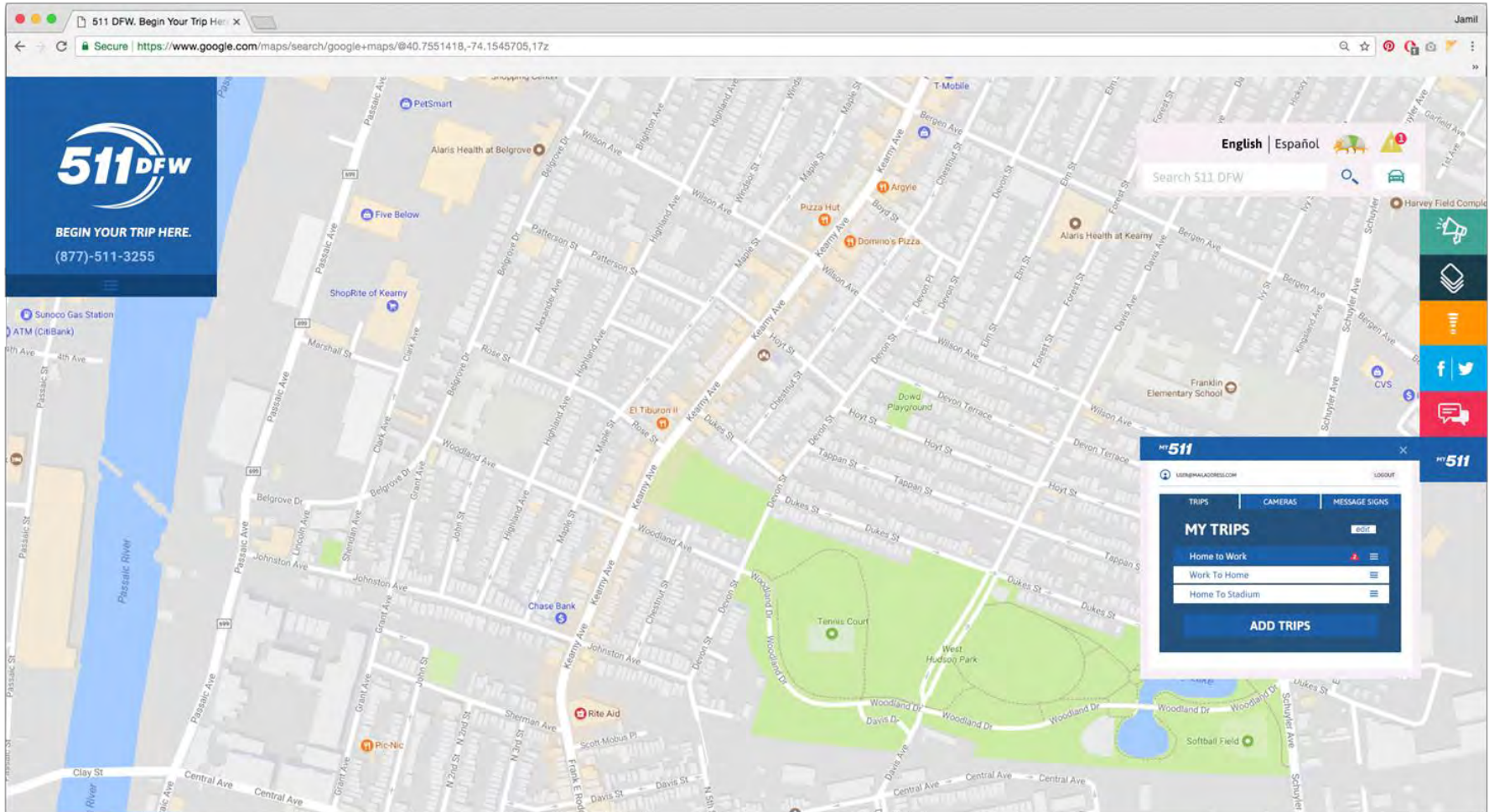
Mode	Incidents	Time
Via I-30	2 Incidents	30 MIN
RED		30 MIN
CLIP		30 MIN

# 511DFW Website Re-Design

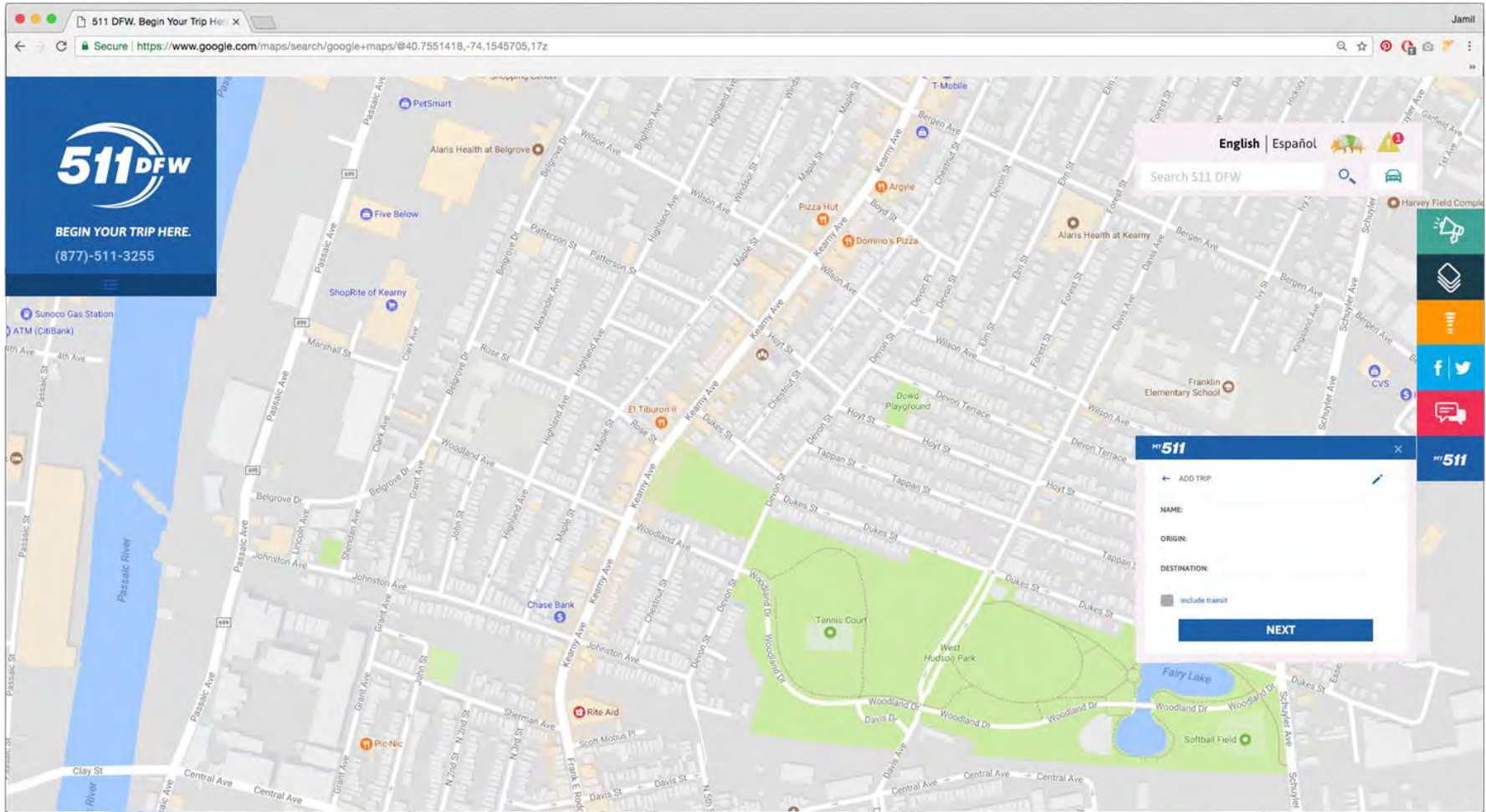




# 511DFW Website Re-Design



# 511DFW Website Re-Design





# 511DFW Website Re-Design



**511DFW**  
BEGIN YOUR TRIP HERE.  
(877)-511-3255

English | Español

Search 511 DFW

**MY 511**

← ADD TRIP

CONTENT AND 511 PLAY ORDER		
Enable	Play Order	
<input checked="" type="checkbox"/>	1	Driving Times
<input checked="" type="checkbox"/>	2	Traffic Conditions
<input checked="" type="checkbox"/>	3	Transit Conditions

**NEXT**

# 511DFW Website Re-Design



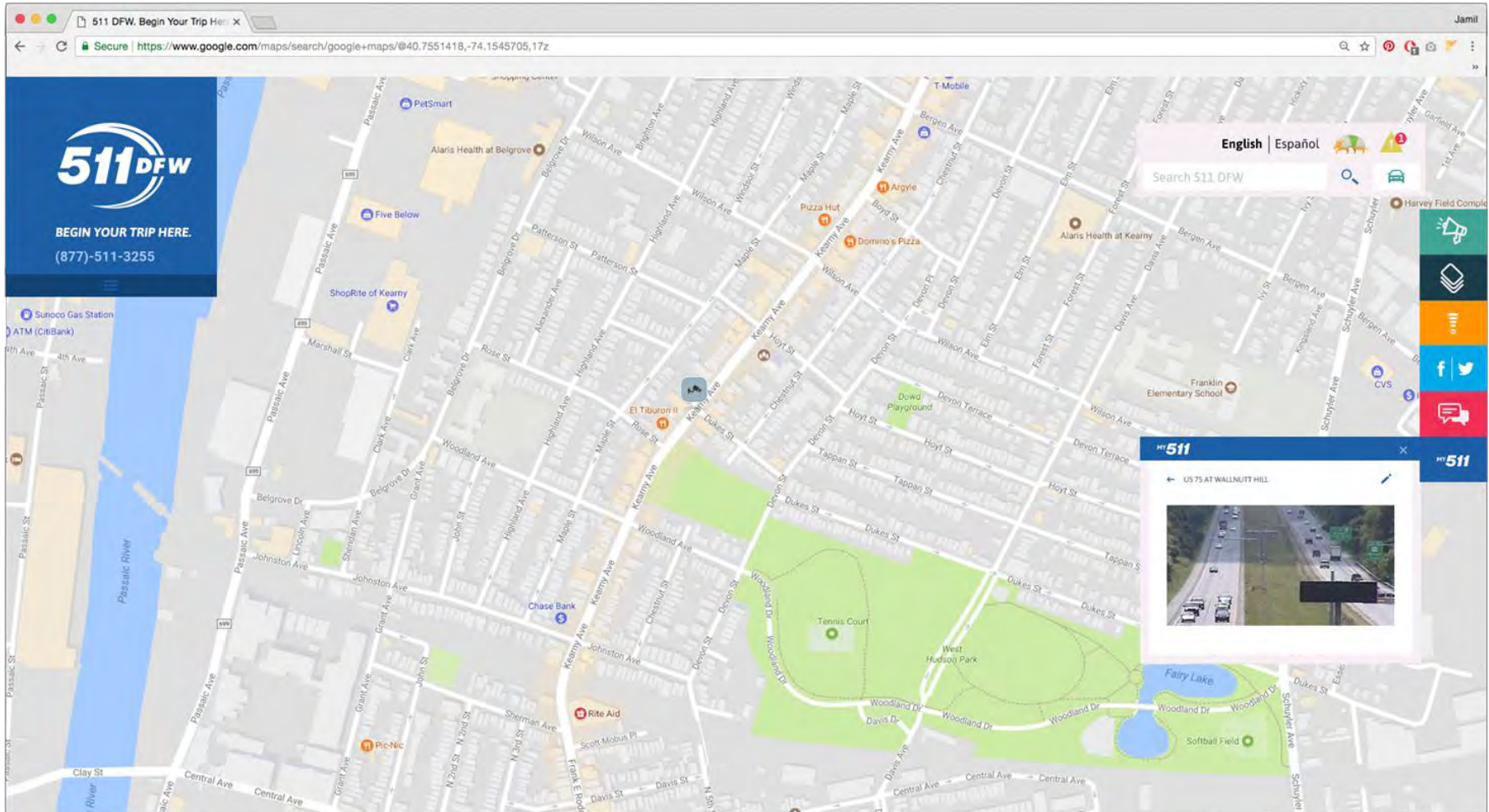
511DFW  
BEGIN YOUR TRIP HERE.  
(877)-511-3255

English | Español  
Search 511 DFW

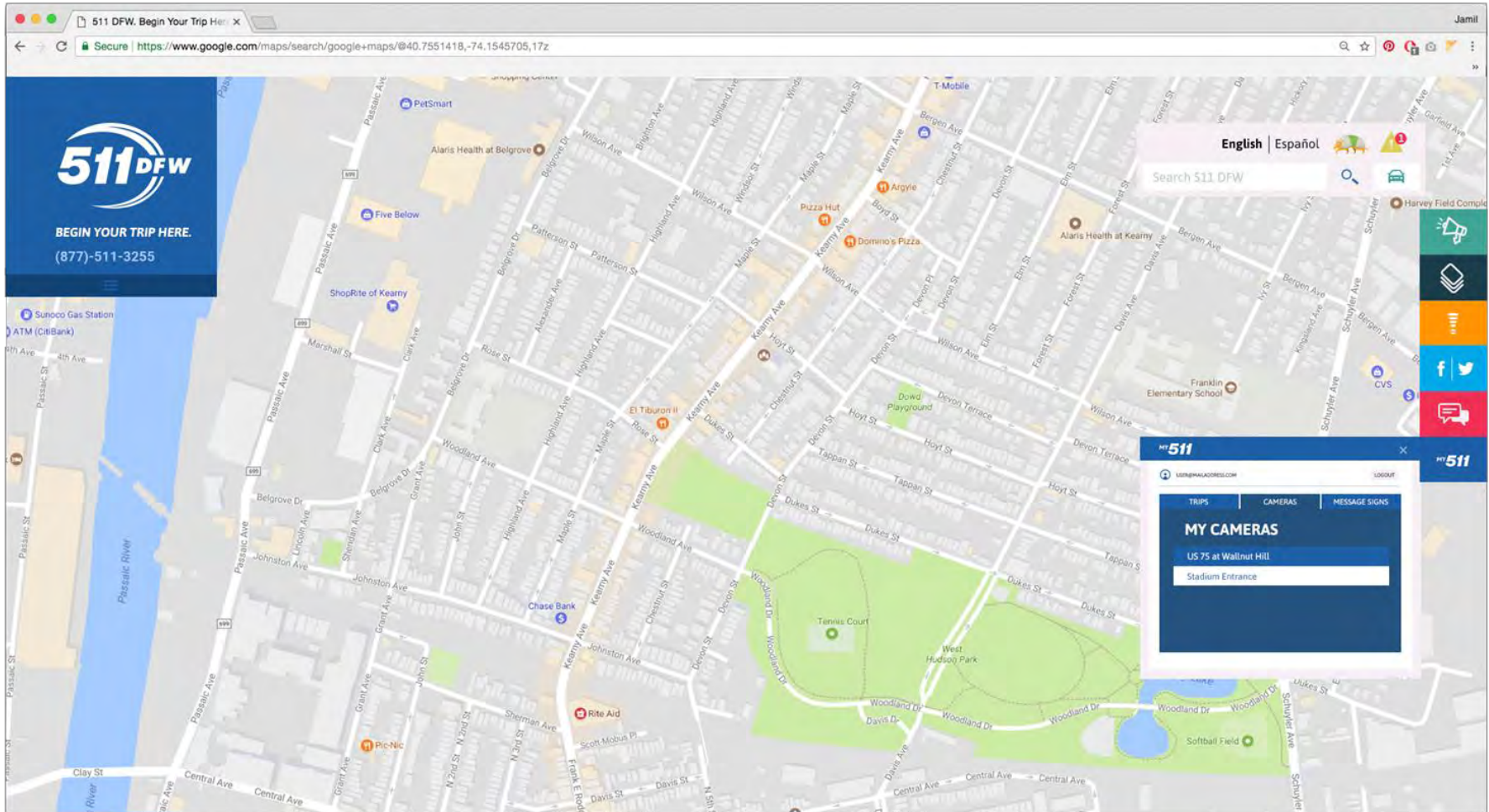
MY CAMERAS  
US 75 at Walnut Hill  
Stadium Entrance



# 511DFW Website Re-Design

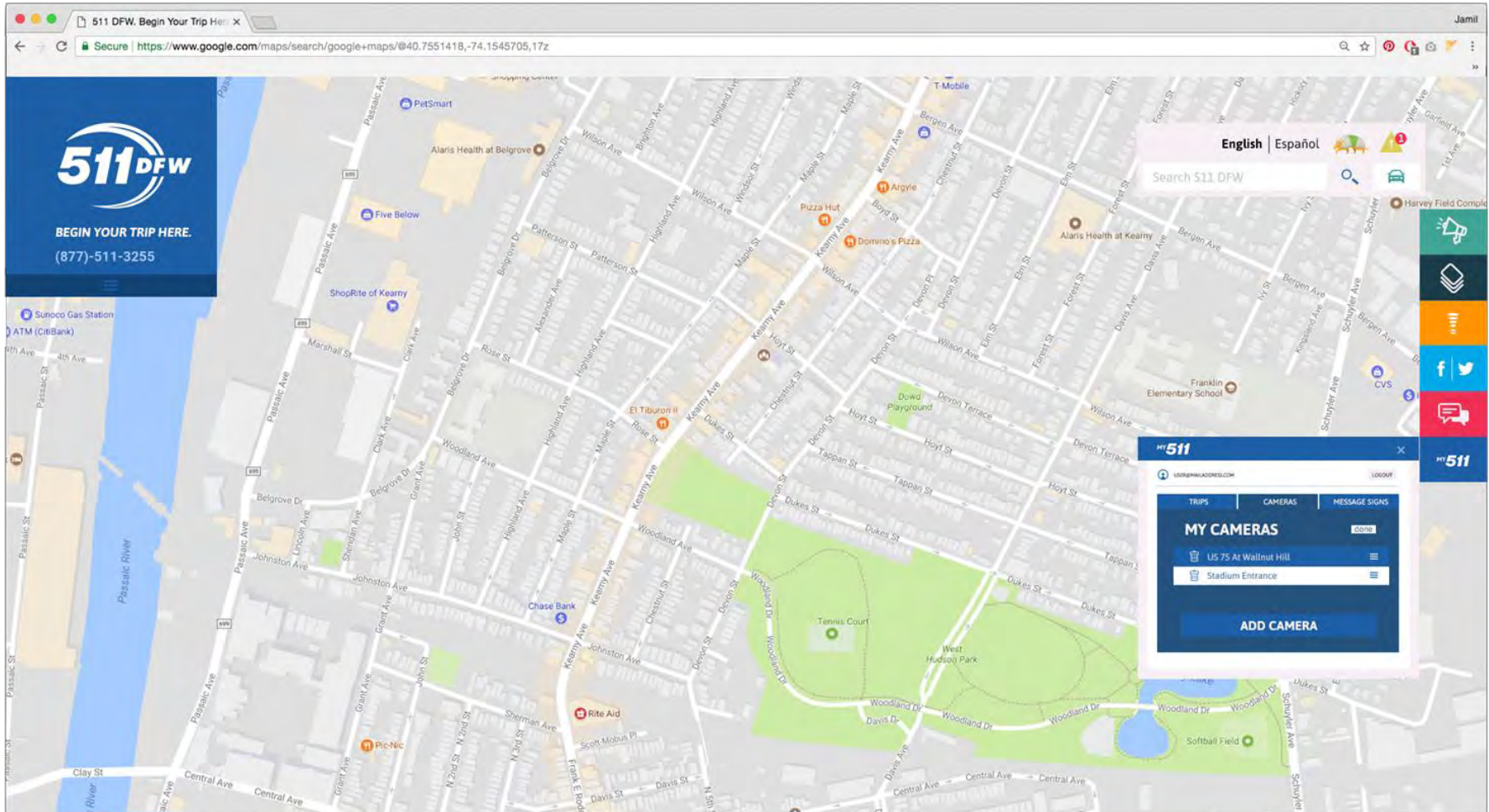


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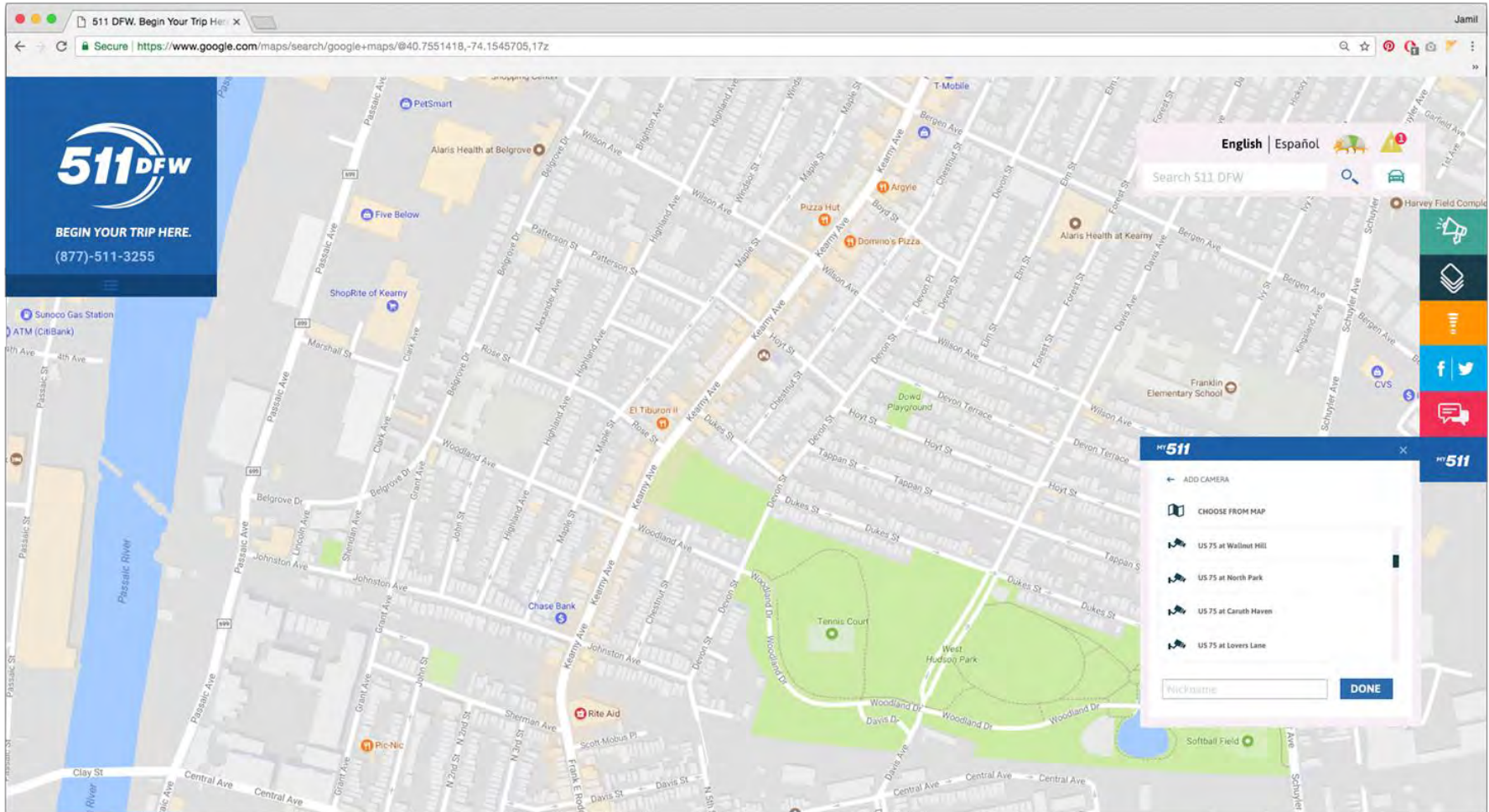




# 511DFW Website Re-Design



# 511DFW Website Re-Design





# 511DFW Website Re-Design



**511DFW**  
BEGIN YOUR TRIP HERE.  
(877)-511-3255

English | Español

Search 511 DFW

**MY MESSAGE SIGNS**

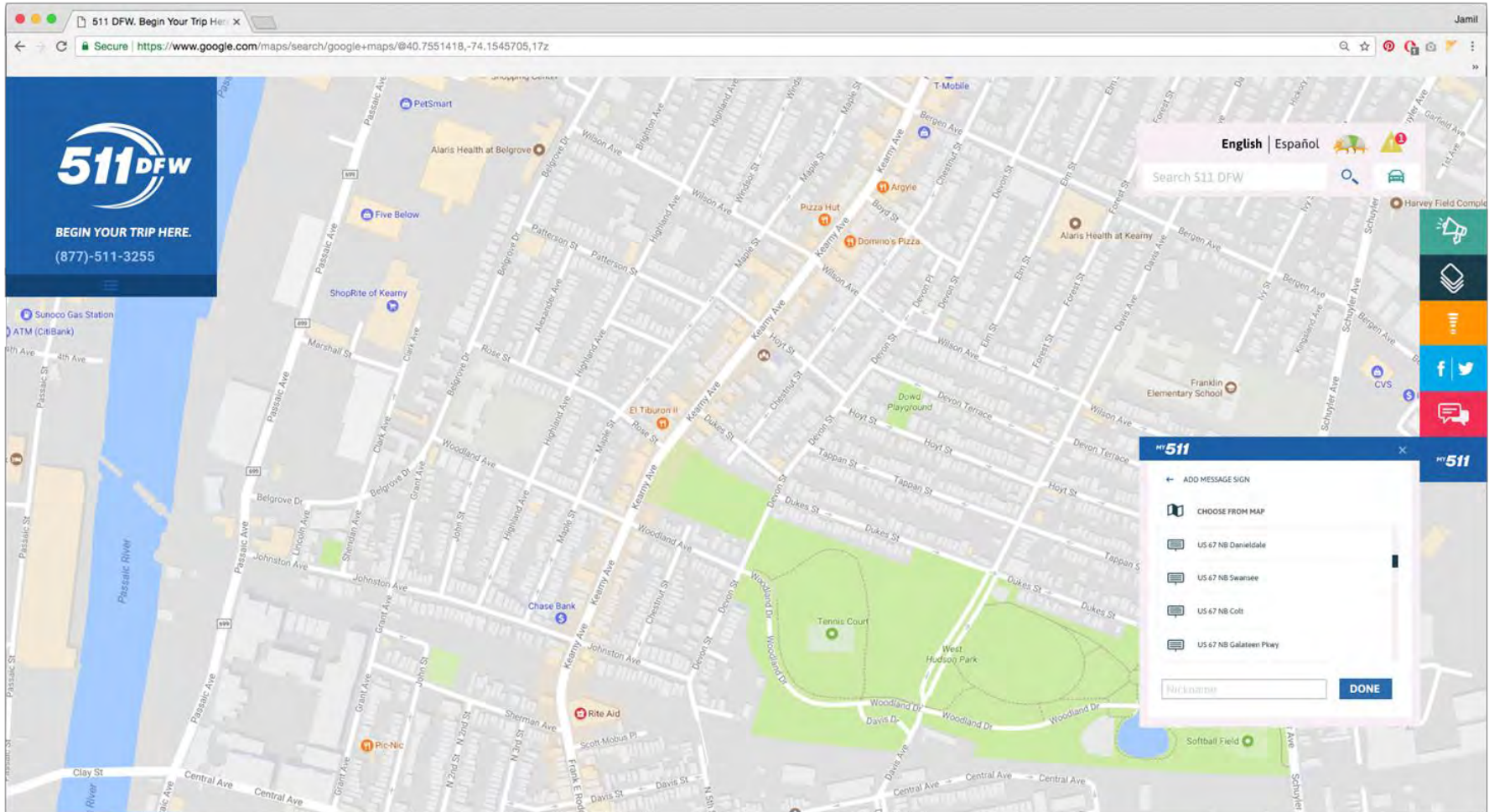
TRIPS	CAMERAS	MESSAGE SIGNS
<b>MY MESSAGE SIGNS</b>		
I-20 WB Cedar Ridge		
PGBT (SH161) 6 MILES 6 MINUTES Last Update: 10/03/2017 10:45:56 AM		
I-20 EB Cedar Ridge		
SH360 9 MILES 8 MINUTES Last Update: 10/03/2017 10:45:26 AM		
US75 NB		
SH360 9 MILES 8 MINUTES Last Update: 10/03/2017 10:22:26 AM		

# 511DFW Website Re-Design





# 511DFW Website Re-Design



# 511DFW Website Re-Design



511DFW  
BEGIN YOUR TRIP HERE.  
(877)-511-3255

Search 511 DFW

Contact Us

Field Required\*

\*E-mail

\*Subject

\*Comments

\*Type code in image

Submit Reset



# 511DFW Website Re-Design



The screenshot displays the 511DFW website interface. On the left, a blue sidebar contains the 511DFW logo and the text "BEGIN YOUR TRIP HERE. (877)-511-3255". The main area features a Google Maps view of a city street grid. A search bar at the top right allows users to search for "511 DFW" and includes language options for English and Español. Below the search bar is a "Social Network Feeds" section with a list of tweets from @511dfw, each detailing traffic incidents and their status (e.g., "CLEARED", "accident", "blocked"). On the right side of the map, there is a vertical navigation bar with icons for various services: a megaphone, a map, a list, and a 511 logo.

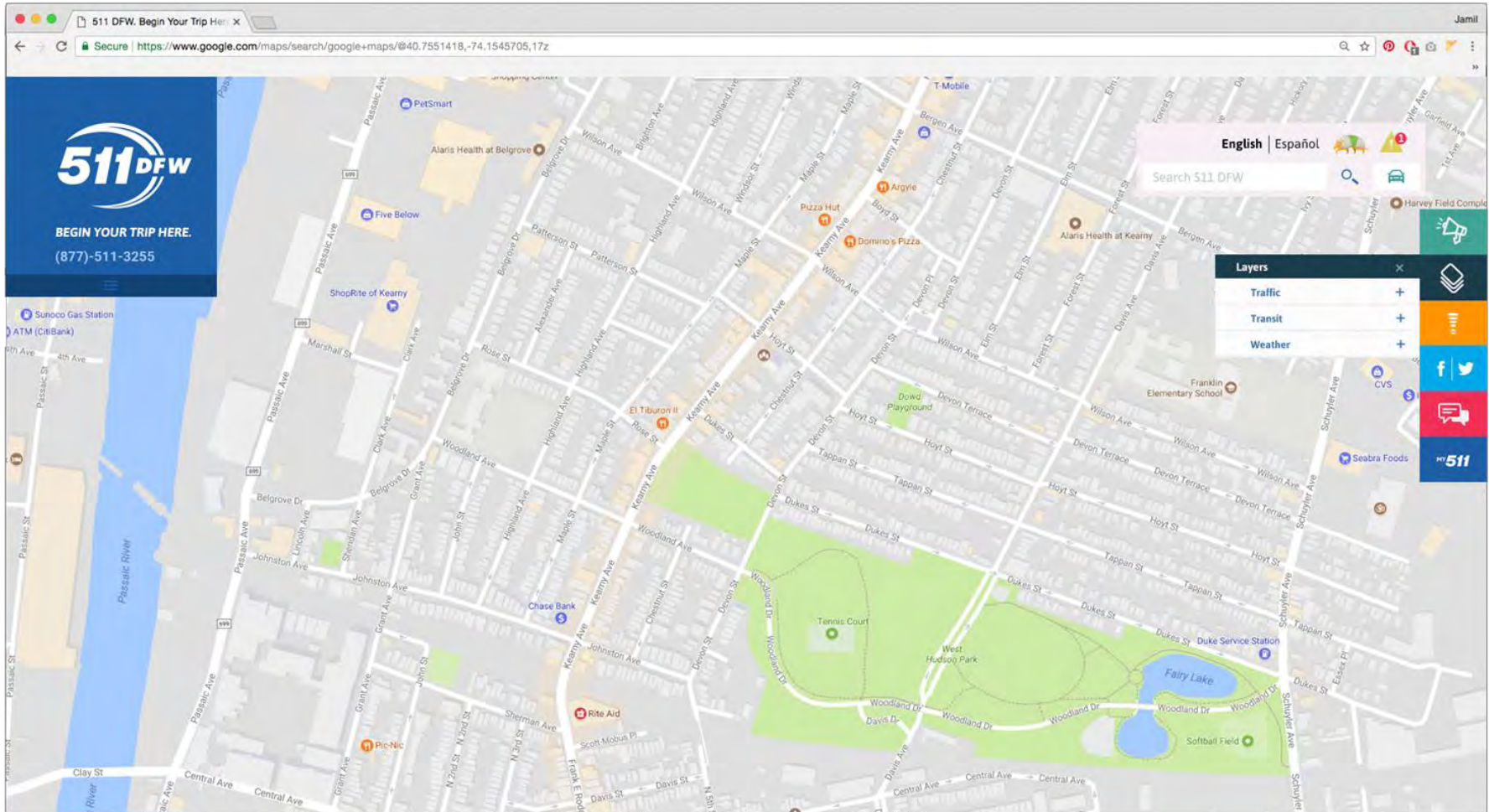
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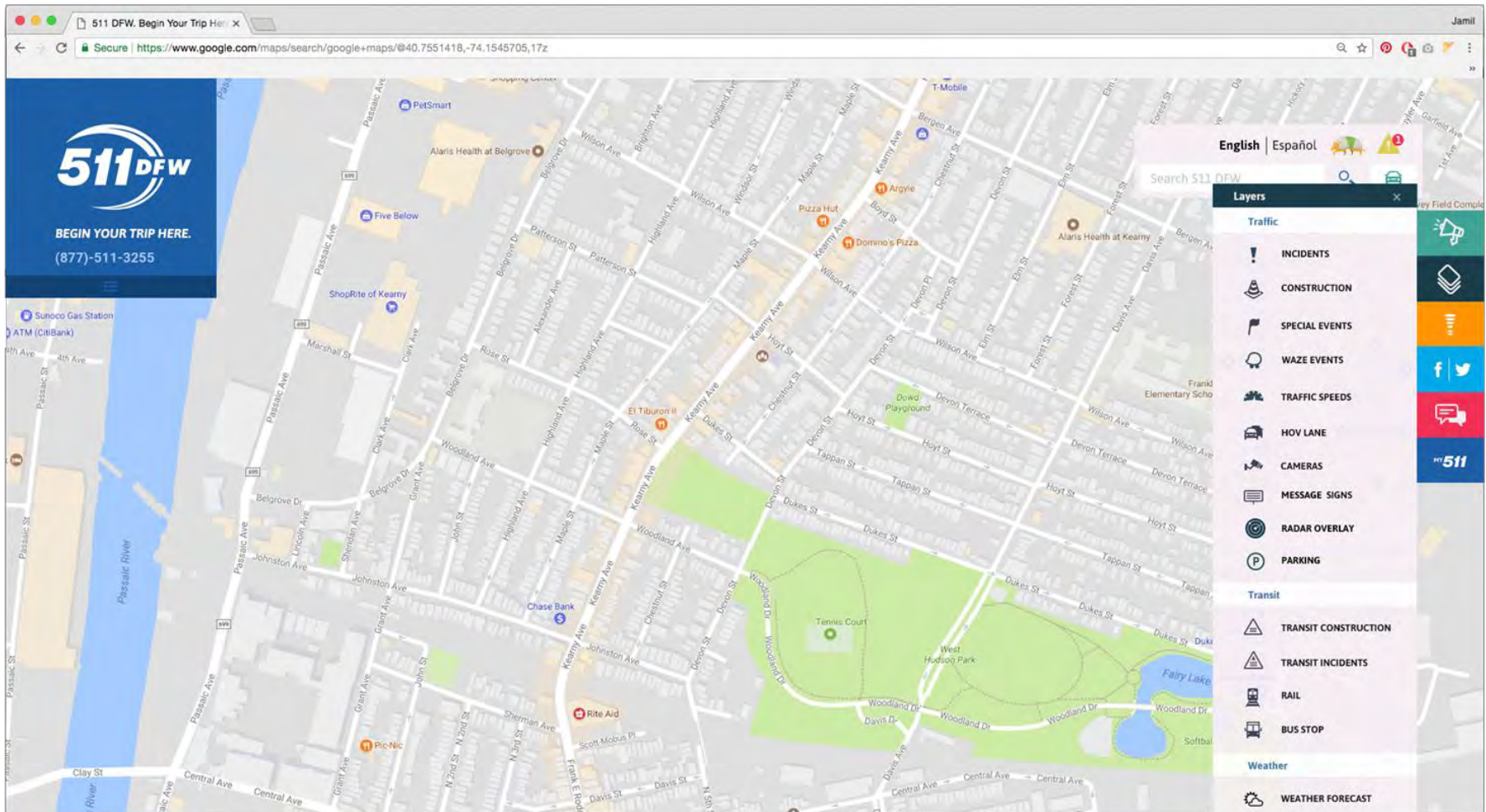
The screenshot displays the 511DFW website interface. On the left, a blue sidebar contains the 511DFW logo and the text "BEGIN YOUR TRIP HERE. (877)-511-3255". The main area features a Google Maps view of a residential neighborhood with various street names and landmarks. A search bar at the top right allows users to search for 511DFW services in English or Spanish. Below the search bar, an "Events" section lists traffic incidents: "SH-114 Westbound Accident. Kimball Southlake right shoulder blocked. 8/25/17 6:49:55 pm" and "IH-20 Eastbound TransVISION various lanes closed from 10:00 am until 1:00 pm. 8/25/17 8:25:15 pm". A vertical sidebar on the right includes social media icons for Facebook, Twitter, and a chat icon, along with a "511" button.



# 511DFW Website Re-Design

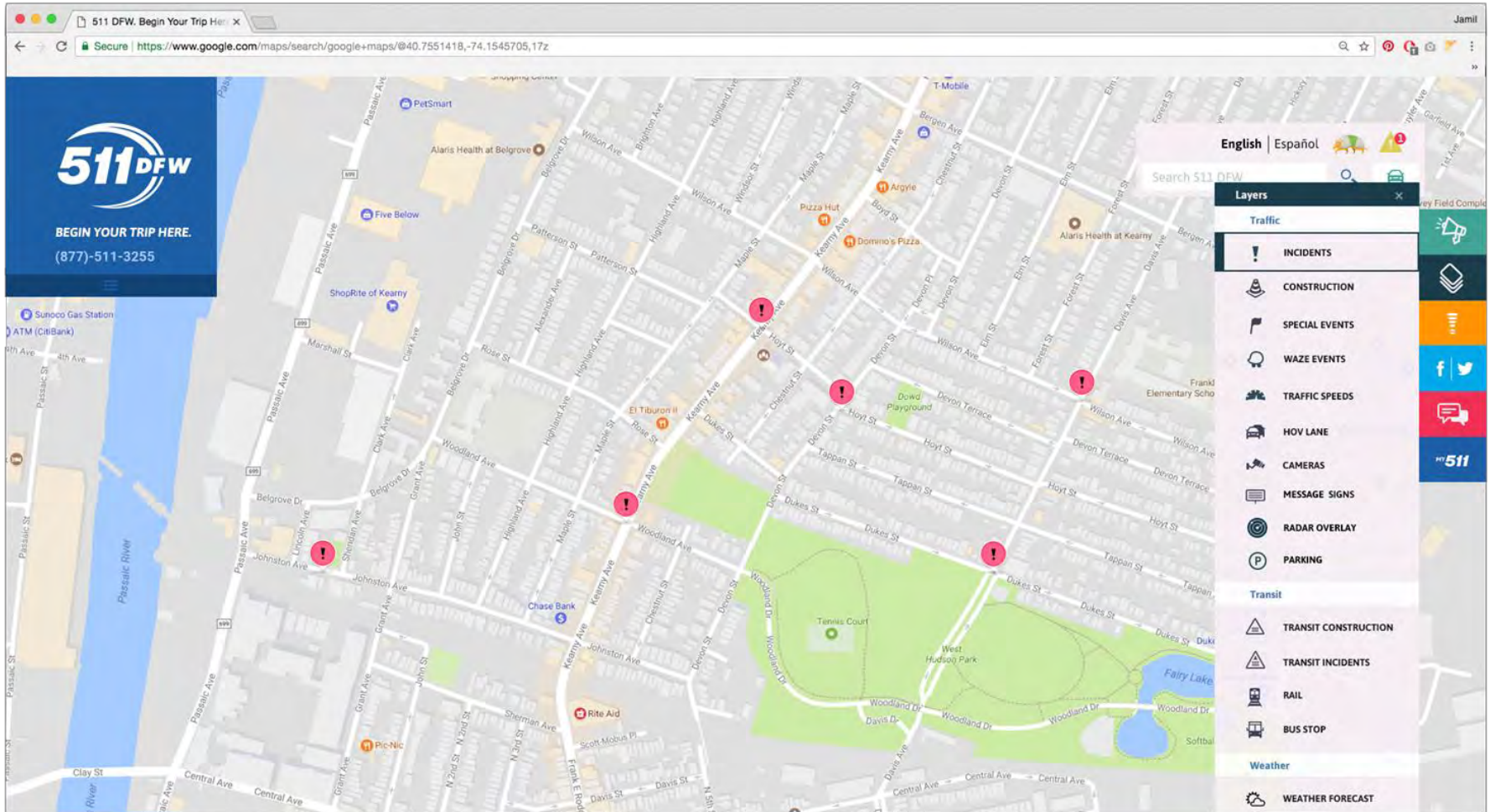


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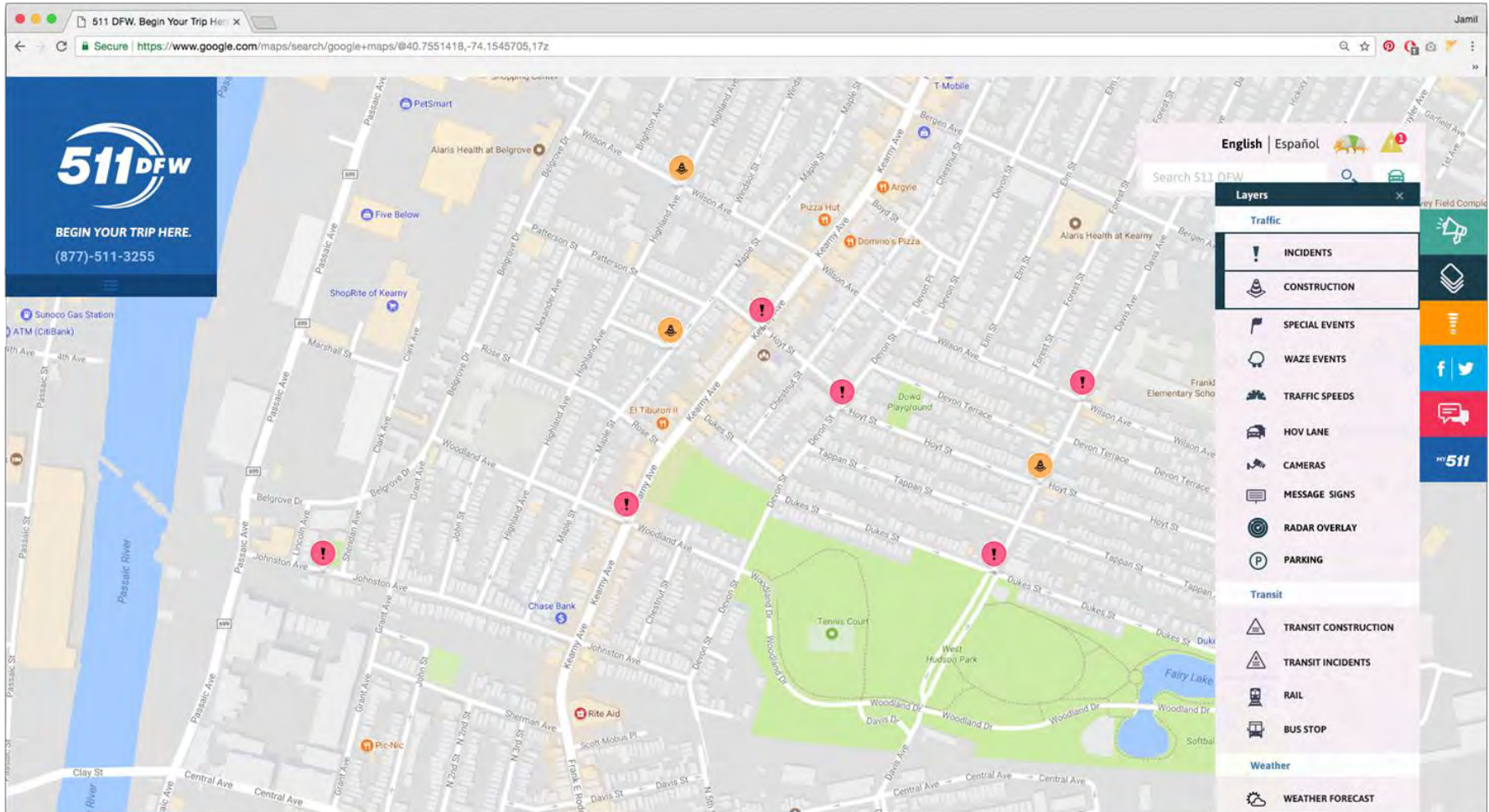




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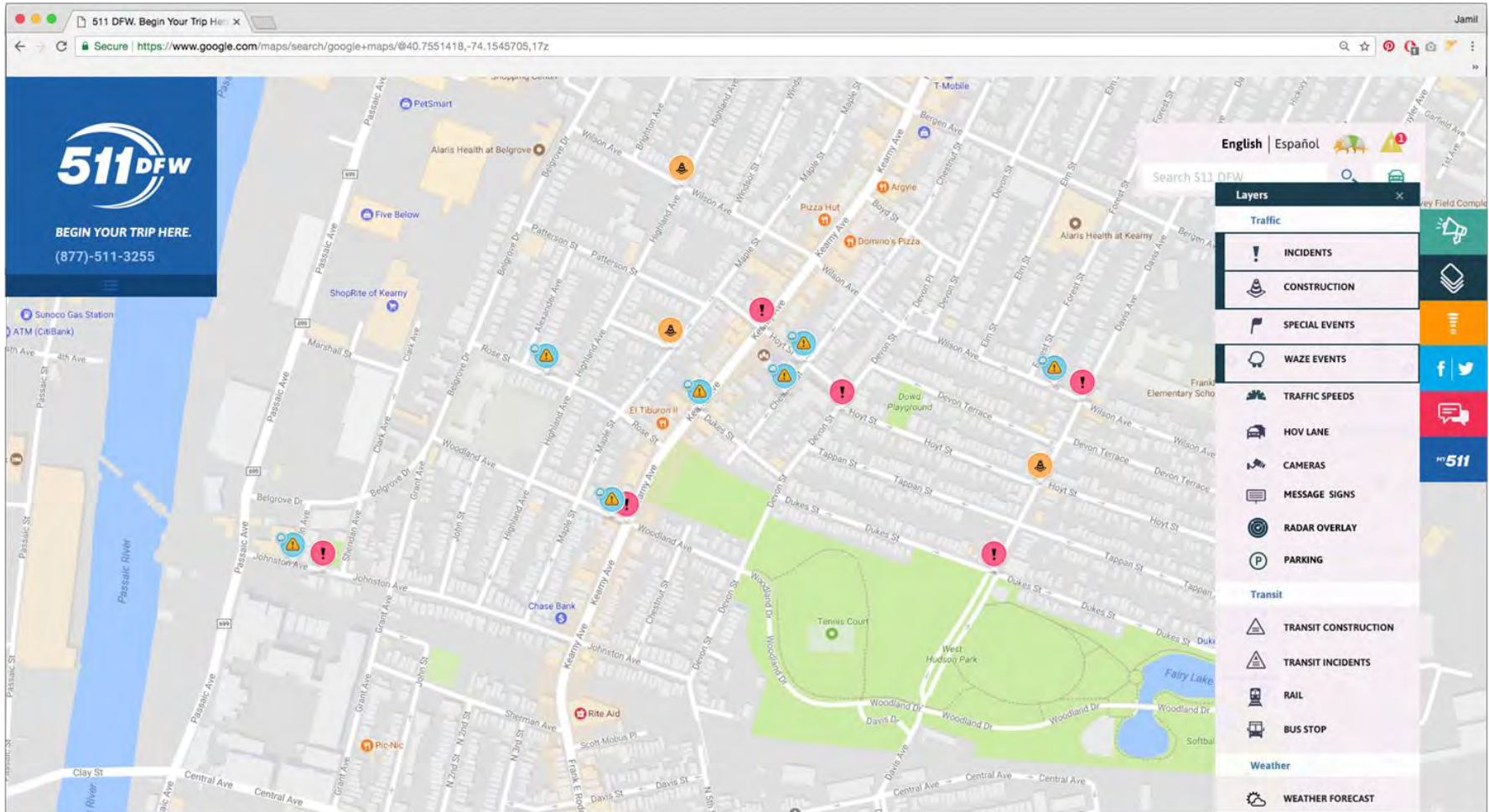


# 511DFW Website Re-Design





# 511DFW Website Re-Design



# 511DFW Website Re-Design



**511DFW**  
BEGIN YOUR TRIP HERE.  
(877)-511-3255

Reported By: TxDOT Dallas  
Accident on IH 635 Westbound at Preston Rd.  
Last Update: 10/27/2017 12:44 PM

English | Español

Search 511DFW

**Layers**

- Traffic
- INCIDENTS
- CONSTRUCTION
- SPECIAL EVENTS
- WAZE EVENTS
- TRAFFIC SPEEDS
- HOV LANE
- CAMERAS
- MESSAGE SIGNS
- RADAR OVERLAY
- PARKING
- Transit
- TRANSIT CONSTRUCTION
- TRANSIT INCIDENTS
- RAIL
- BUS STOP
- Weather
- WEATHER FORECAST



# 511DFW Website Re-Design



**511DFW**  
BEGIN YOUR TRIP HERE.  
(877)-511-3255

**Traffic Speeds**

- 50 mph
- 30 - 49 mph
- < 30 mph
- No information

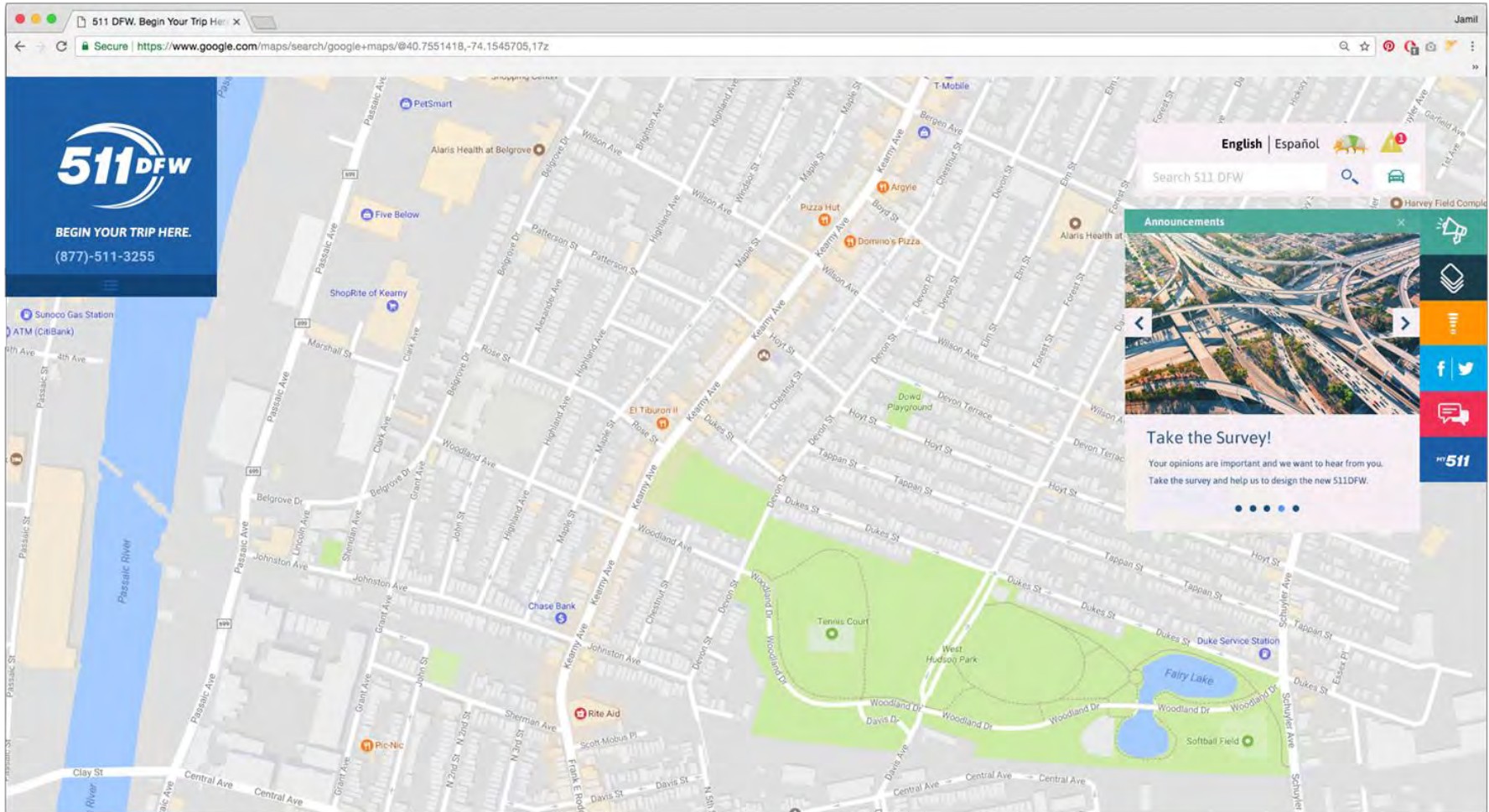
**Arterial Speeds**

- > 24 mph
- 14 - 24 mph
- < 14 mph

**Layers**

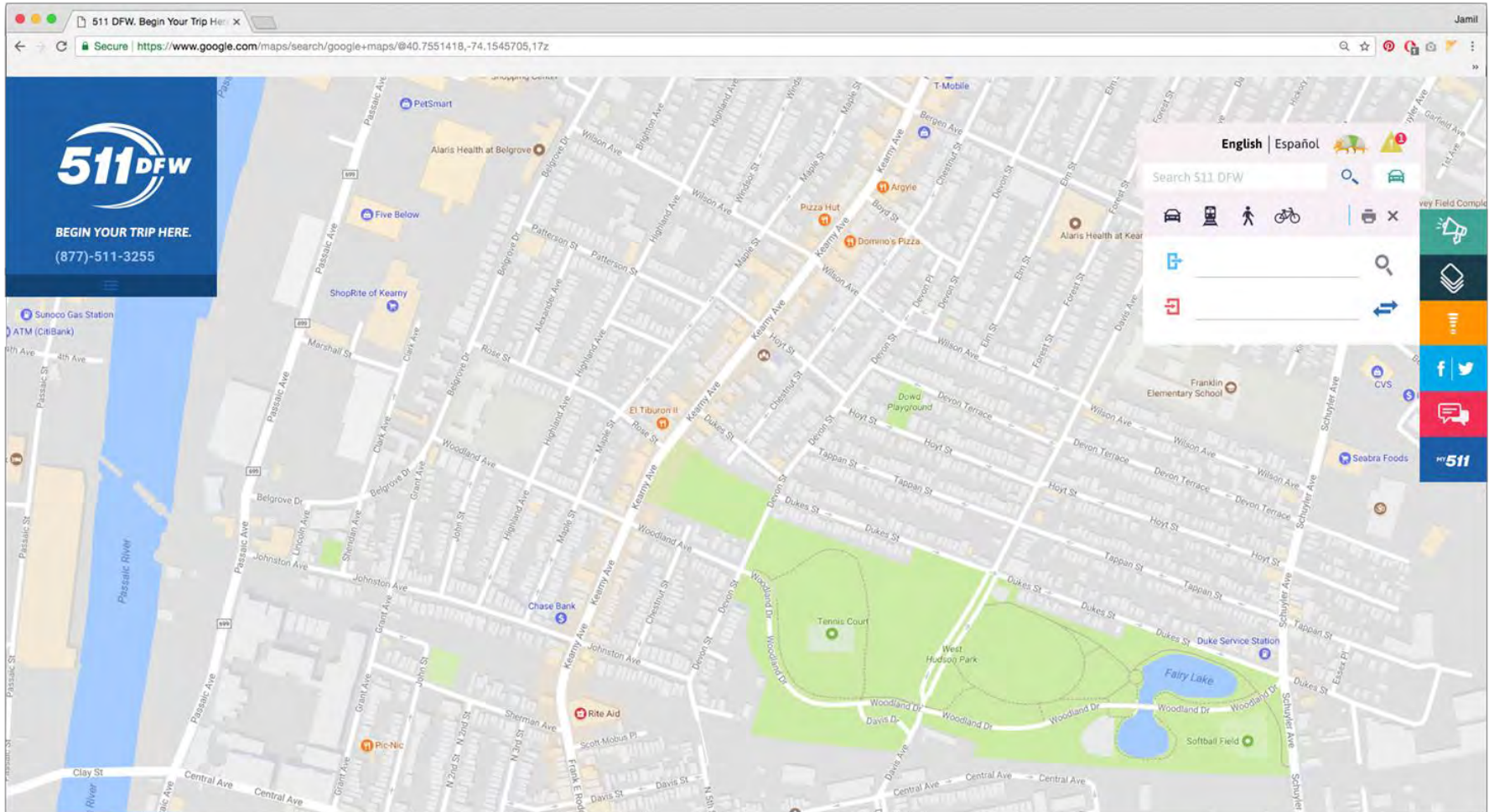
- Traffic
  - INCIDENTS
  - CONSTRUCTION
  - SPECIAL EVENTS
  - WAZE EVENTS
  - TRAFFIC SPEEDS
  - HOV LANE
  - CAMERAS
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  - TRANSIT CONSTRUCTION
  - TRANSIT INCIDENTS
  - RAIL
  - BUS STOP
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# 511DFW Website Re-Design





# 511DFW Website Re-Design



# 511DFW Website Re-Design



**Layers**

- Traffic
  - INCIDENTS
  - CONSTRUCTION
  - SPECIAL EVENTS
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  - HOV LANE
  - CAMERAS
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  - PARKING
- Transit
  - TRANSIT CONSTRUCTION
  - TRANSIT INCIDENTS
  - RAIL
  - BUS STOP
- Weather
  - WEATHER FORECAST

**Contact Us**

Field Required\*

\*E-mail

\*Subject

\*Comments

\*Type code in image

**Sign In**

E-mail Address

Password

remember me

Don't have an account? [SIGN UP](#)

**Social Network Feeds**

- 511DFW\_AllRegions @511dfw - 1m  
CLEARED - accident:US 75 southbound Campbell Rd Richardson various Lns blocked
- 511DFW\_AllRegions @511dfw - 42m  
CLEARED - accident:IH 635 northbound Galloway Ave Mesquite various Lns blocked
- 511DFW\_AllRegions @511dfw - 53m  
CLEARED - accident:Loop 12 southbound SH114 Irving various Lns blocked
- 511DFW\_AllRegions @511dfw - 1h  
accident:Loop 12 southbound SH114 Irving various Lns blocked

**Announcements**

**Take the Survey!**

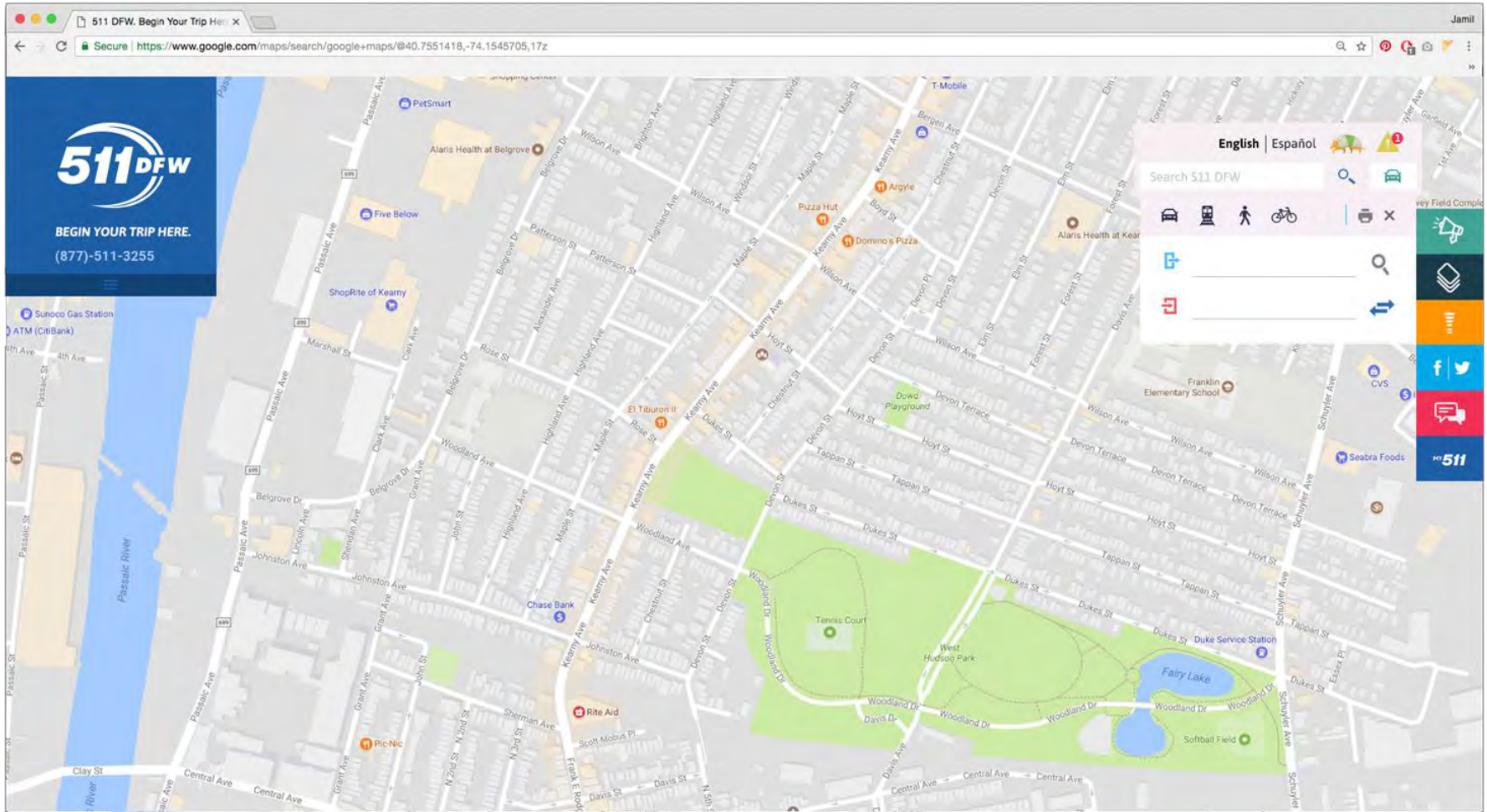
Your opinions are important and we want to hear from you. Take the survey and help us to design the new 511DFW.

•••••

Event	Location	Date/Time
SH-114 Westbound Accident. Kimball Southlake right shoulder blocked.	Kimball Southlake	8/25/17 6:49:55 pm
IH-20 Eastbound TransVISION various lanes closed from 10:00 am until 1:00 pm.	TransVISION	8/25/17 8:25:15 pm



# 511DFW Website Re-Design



# 511DFW Enhancements

## Deployment Schedule



- IEN Simplified Entry upgrade in production week of Dec 15<sup>th</sup>, 2017
- Waze Data Interface to provide Event data to Waze week of January 5<sup>th</sup>, 2018
- Integrate Waze data into 511DFW in production in June 2018
- Performance Measures updated in production in June 2018
- 511DFW Re-Designed Bilingual Website in production in July 2018
- Bilingual 511DFW IVR in production in July 2018





# Lunch Break

(1 Hour and 15 Minutes)

# Waze Integration



- Bi-Directional Data Integration:
  - Waze > 511DFW (Waze Subscriber)
  - 511DFW > Waze (Waze Publisher)
- Waze provides 3 types of events (all currently integrated into the 511DFW system):
  - Alerts
  - Jams
  - Irregularities





# Waze Integration

## Proposed Filtering Criteria - Purpose

### Purpose Behind Filtering Certain Waze Events

- Waze can provide:
  - Events on road types that are not useful for public consumption
  - Events that have low confidence and/or low reliability
  - Events with certain subtypes that do not affect traffic
  - Duplicated event data that should be filtered
- Filters can be customized by modifying a translation file without changing any code



# Waze Integration

## Proposed Filtering Criteria (I)

- Road Types
  - Alerts and jams associated with certain road types are consumed (Ex. Streets, Freeways, Ramps, etc.)
  - Alerts and jams associated with certain road types are filtered out (Ex. Trails, Ferry Crossing, Stairway, Railroads, etc.)
- Confidence and Reliability
  - Waze alerts and jams with confidence and/or reliability value less than 5 are filtered out
- Types and Subtypes
  - Waze alerts and jams with certain combination of alert types and subtypes are consumed (Ex. Major accident, heavy traffic jam, etc.)
  - Waze alerts and jams with certain combination of alert types and subtypes are filtered out (Ex. Jam light traffic, hazard on shoulder, etc.)





# Waze Integration

## Proposed Filtering Criteria (II)

- Blocking Alerts
  - Jams related to road closures are filtered out to reduce duplicated events
  - Alerts are already created for road closures
- Duplicate Alerts
  - Waze feed can contain duplicate alerts with identical published date, type, subtype, street and city



# Waze Integration

## Presenting Waze Data to the Public (I)

- Public Website and Mobile Application Map Integration:
  - Provide Waze event data as a separate map layer
  - Separate Waze event data into Alerts, Jams, and Irregularities sub-layers
- IEN Integration:
  - Provide Waze event data as a separate map layer
  - Separate Waze event data into Alerts, Jams, and Irregularities sub-layers
  - Waze events read only and cannot be managed by IEN Operators





# Waze Integration

## Presenting Waze Data to the Public (II)

- IVR Integration:
  - Waze event data to be provided to phone system ONLY if event data can be mapped to a 511DFW location
    - Events need proper facility, direction, and intersection translation to 511DFW network
    - Without proper mapping translation, Waze events cannot be made available on the phone



# Waze Integration Demonstration

(Utilizing prototype showcase website)

<http://ppweb.511dfw.org:8081>

# Web Services Demonstration

(Accessing Your Data)

[http://4.31.137.92/DFW511/PublicWebServices/DFW511\\_WebServices.aspx](http://4.31.137.92/DFW511/PublicWebServices/DFW511_WebServices.aspx)





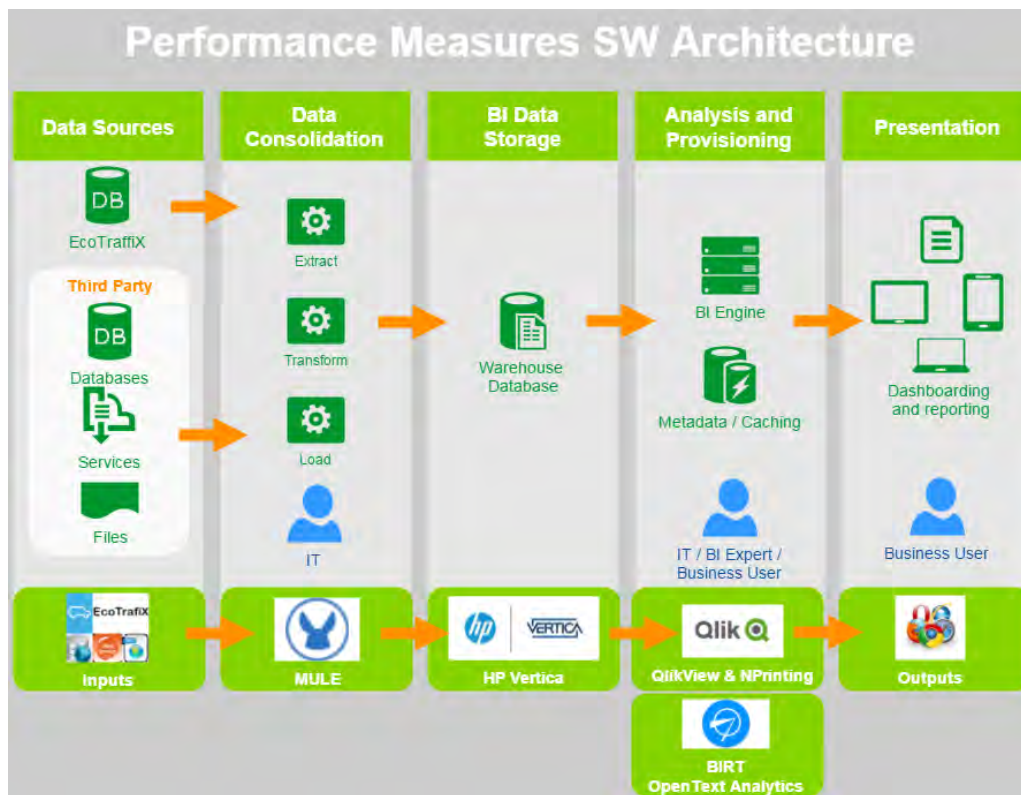
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# Performance Measures Enhancements

# Performance Measures

## Architecture







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# Performance Measures Demonstration



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# Comments and Questions





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# Closing

# Contact Information



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## **Natalie Bettger**

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**Thank you!**  
**NCTCOG/Kapsch**