Who's Checking-In to Downtown Tampa?

An Analysis of Foursquare Check-in Data for InVision Tampa

Prepared by the City of Tampa Planning Division

What does Foursquare tell us about the places people visit the InVision Tampa study area?

The location-based social network, which lets people "check in" to places using their mobile phones, provided every check-in on the service for two weeks in April, 2012 to the City of Tampa Planning Division so that trends could be studied and analyzed. The dates of the check-ins coincided with Foursquare Day (April 16) through April 30, 2012. The study area was Tampa's central city area as defined by the InVision Tampa planning study.

The illustration below shows the relative distribution of all check-ins within the InVision Tampa study area (blue line) from April 16-30, 2012. The InVision Tampa area is generally defined as the area bounded by 30th Street, MLK Boulevard, Armenia Avenue, Platt Street and the Garrison and Ybor Channels.

During the 14-day period from April 16-30, 25,026 check-ins were recorded at 2,461 venues within the InVision Tampa area. The University of Tampa, Ybor City, Channelside, Tampa Bay Times Forum and the downtown core all show as dominant centers of activity by Foursquare users.
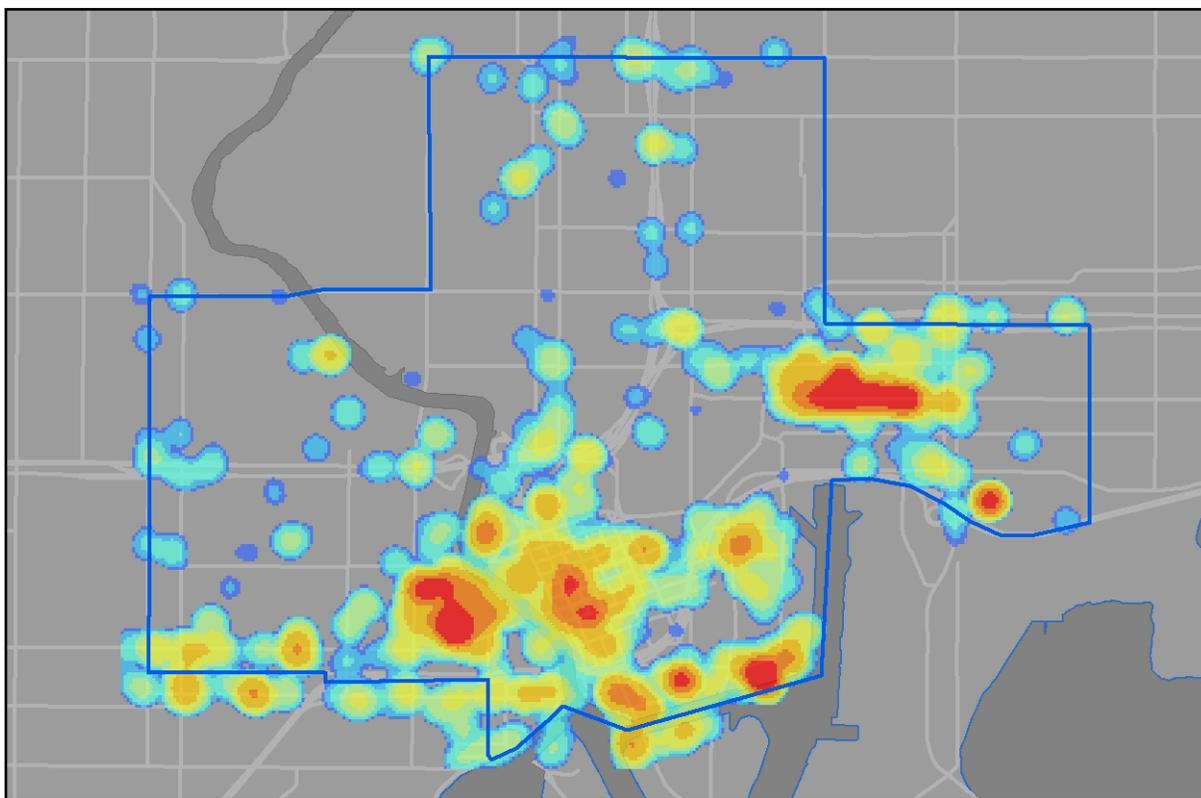
InVision Tampa Area Check-Ins

Categories

Generally, the top categories of check-ins in the InVision Tampa study area are food, night life spots and professional & other places.

Category of Venue	#
Food	4,224
Nightlife Spots	4,080
Professional & Other Places	4,030
Colleges & Universities	3,851
Travel Spots	2,347
Arts & Entertainment	2,315
Great Outdoors	1,583
Total	**24,793**

Venue Types

The top venue types are bars & nightclubs, college dorms and academic buildings, offices, hotels and homes, The top 10 venue types are shown below.

Type	#
Bars	1,751
College Dorms	764
Offices	763
Nightclubs	757
Hotels	720
Apartment/Condo Properties	559
College Academic Buildings	504
General Travel	493
Furniture or Home Stores	466
Hockey Stadiums	459
Total	7,236
(29.2% of all check ins)	

Venues

The top individual spots are places like Ikea, Tampa Bay Times Forum, Carnival Cruise Lines, Ybor City, Straz Center, University of Tampa and the Tampa Convention Center reflecting downtown's key activity generators.

| Venue	#
Ikea	464
Tampa Bay Times Forum	442
Carnival Paradise	344
Ybor City	325
The Castle	298
Straz Center	289
Straz Hall	286
Plant Hall	252
Tampa Convention Center	250
John H Sykes College of Bus.	230
Total	3,180
(12.8% of all check ins)	

A Day in InVision Tampa on Foursquare

These illustrations depict the Foursquare check-ins at different times on April 26, 2012. Looking at these check-ins, it is easy to note the changing levels of activity at the University of Tampa, the morning check-ins at work in downtown, the return to places like Skypoint and Channelside in the afternoon, the tourist activity at Channelside and the awaking of Ybor City after 6 pm.
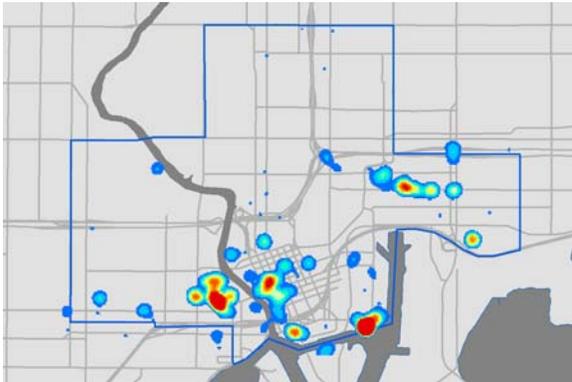
The check-in data also shows a linear pattern of activity, stretching across the Hillsborough River, from Hyde Park through Channelside to Ybor City.
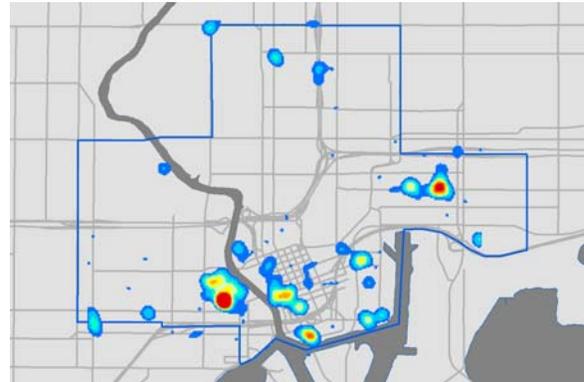
7 AM – 9 AM
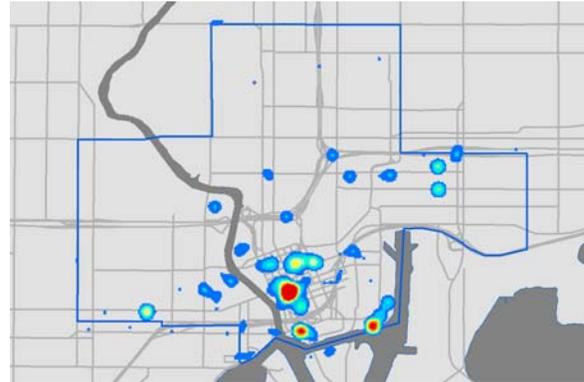
Employees checking in to office locations, parking garages and morning coffee places. Visitor activity in the form of convention attendees and cruise passengers.
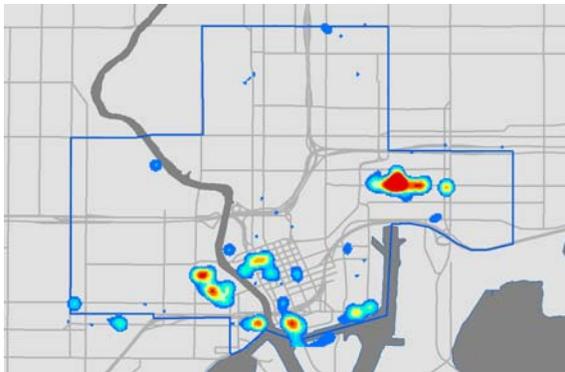
11 AM – 1 PM

University of Tampa students/class, lunchtime in downtown, Channelside and Ybor City, office arrivals and tourist activity in Channelside (mostly cruise passengers).

4 PM – 6 PM

University of Tampa students/class, convention center attendees, restaurants in Ybor City and people returning to hotels near Convention Center and the core.

8 PM – 10 PM

Nightlife spots and restaurants in Ybor City come to life. Downtown restaurants, college dorm and cafeteria check-ins at University of Tampa, attendees at the Convention Center and the Florida Aquarium.

11 PM – 1 AM
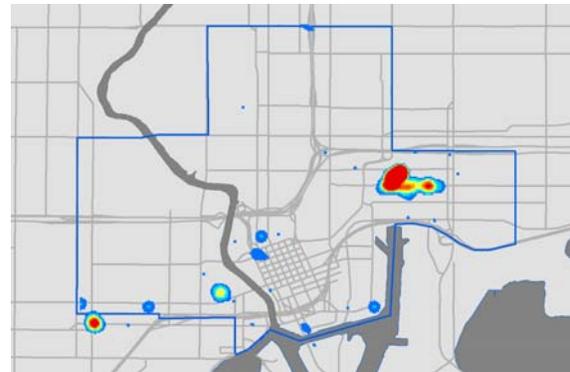
Ybor City restaurants and bars, people returning to Skypoint, Convention/Tourist activity at Convention Center and University of Tampa dorm check-ins. Activity on South Howard emerges.

About the Foursquare Data

Age and sex of the user is not available from Foursquare, so it's unclear from the Foursquare check-ins themselves how old users are, or what their other demographic characteristics might be. But in articles, Foursquare users are described as younger, tech-savvy and socially active individuals.

Foursquare data contains some anomalies that must to be considered when viewing and interpreting the results.

o   There are errors in the data. For example, there are two entries for Amtrak – one using the correct spelling and one using "Amtrack". In another instance, "hooters" and "hooters on the patio" are used to refer to the same venue.

o   Of the 2,461 venues, 2,267 have unique names. Venues include specific addresses, general locations (like I-275) and events or experiences (like "gasparilla", "flutag" or "FMEA Convention".

o   Foursquare allows users to define places, so obscure locations can be found having a meaning only known to the user, such as "grandpa's new car" or "yeeeeeeep". There are four different locations named "hell".

o   Within major locations like University of Tampa, there are numerous sub-locations, like the "UT softball field", "UT mail room", "UT boathouse" etc. There are check-ins for both the main category and each of the sub-categories.

o   Foursquare check-ins are representative of users' experiences and places they have noted as meaningful to them. People check in for a variety of reasons. Some of the reasons cited in articles range from checking in at big events, share experiences, announce to other people where they are (traveling), trying to be trendy and just having time to kill by playing on the phone.

Because of these anomalies in the data, location-based social networking databases can provide many insights into the patterns of their users; however, without additional data cleaning and validation, the data bases are limited in their statistical reliability. As social networking sites evolve, the quality of the data may improve, thus providing planners with another valuable interpretation too.