CASE STUDY: Zurich

Zurich is the largest city in Switzerland, with a city population of about 430,00 and a metropolitan population over 1.3 million. It has a rich history, dating back to the Roman era, and has been known as a global banking hub since the 1700's. Several major financial and insurance firms call Zurich home, including UBS, Credit Suisse, and Zurich Financial Services. This economic base provides Zurich with a high GDP, allowing them to flourish as a smart city.

What makes it a smart city?

Smartzoning

Zurich partnered with GIS provider ESRI, to use a 3D zoning planning tool known as SmartZoning[1], letting staff view and investigate building development proposals in a true 3D environment. Due to its building density and historic architecture, planners in Zurich need to use extra scrutiny in analyzing new developments. This technology allows city planners to do what would have taken days or even weeks to do by hand, in a number of hours. The models can be used to cut down on noise, air and light pollution, and to plan underground infrastructure.

Combatting Crime

The local police force uses AI to identify burglary trends and predict areas with increased burglary rates[2]. Based on the assumption that criminals will target areas where they have been successful in breaking into already, the AI used maps patterns and highlights areas at increased risk for the next 72 hours. Police will then increase patrols in these neighborhoods. Since being introduced, burglaries in Zurich have decreased from 6,000 in 2013 to 2,200 in 2020.

Public Safety

Zurich is also home to several outdoor festivals and parades. During events such as the Street Parade and Zuri Carnival, crowds can swell into the hundreds of thousands. Large crowds like this can lead to stampedes, crushes, suffocation, and the delay of emergency services. For example, in Seoul, Korea, a Halloween event in October 2022 led to a crowd crush that resulted in over 150 deaths[3]. Public safety and police officials have introduced a *voluntary* mobile app for participants in these events to mark their location, allowing police to better monitor crowd

sizes and locations to detect dangerous situations before they get out of hand [2]. Police can then close streets or divert/disperse crowds if necessary.

References

[1] chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.esri.com/content/dam/esrisites/en-us/media/fliers/zurich-switzerland.pdf

[2] https://govinsider.asia/intelligent-gov/how-ar-and-ai-are-making-zurich-a-smarter-and-safer-city-david-weber-zurich/

[3] https://www.aljazeera.com/news/2022/10/30/what-is-the-difference-between-a-stampede-and-a-crowd-crush