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Global Contributors, Local Maps: The Story of OpenStreetMap in a Small Town

Sterling D. Quinn

Department of Geography, Central Washington University, Ellensburg, WA, USA – sterling.quinn@cwu.edu

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Abstract

Digital platform capitalism depends on geographic data to connect users with nearby goods and services, thus playing a role in both representing and shaping commercial landscapes. OpenStreetMap (OSM) represents a vast and low-cost geographic data source for platform capitalism; however, OSM is crowdsourced and exhibits uneven development across space, especially in rural areas. OSM researchers have observed that the map is built by a mix of local and remote volunteers, as well as corporate editors paid to identify and fill data gaps; however, deeper place-based inquiries are needed in order to better understand the process by which OSM contributors grow the map and how fully their contributions are actually representing small towns and villages. I model such a case study by using the OSM history files, contributor profile pages, and the geographies of contributor interest to construct "the story of OpenStreetMap" in the small agricultural town of Othello, Washington, USA. In addition to identifying trends in local and corporate mapping activity, I evaluate the map's completeness by performing a walking survey of Othello's commercial areas and comparing the visible landscape with the town's representation in OSM. At small scales, Othello appears data-rich due to contributors who have traced building footprints and road information; however, a substantial percentage of civic and commercial institutions are still missing from the map, especially small businesses. Platforms that use OSM to connect Othello's residents with commodities or resources may be strengthening the position of national or global chain businesses at the expense of local commerce.

1. Introduction

1.1 Digital capitalism and the representation of place

Digital capitalism relies on spatial databases to connect users with nearby services and commodities (Alvarez Leon, 2024, p. 139). Actors of urban platform capitalism are increasingly turning to OpenStreetMap (OSM) as a low-cost data source, sometimes even paying their own employees to enhance OSM (Michel and Schröder-Bergen, 2022). The set of features in the OSM database thus heavily influences the set of locations that users of these platforms can know about and interact with. In this way, OSM both shapes and becomes part of the places that it represents (Graham and Dittus, 2022, p. 17-18)

Given the power of OSM to both represent and shape places, there is a need for deep place-based studies of OSM evolution, completeness, quality, and utility, with a focus on the social and economic dynamics behind the map's production (Schröder-Bergen et al. 2025). Of particular interest are contributors who add high-value information from local knowledge, as well as remote contributors and corporate mappers who standardize data tags and topology for smoother integration into platforms. OSM needs both types of contribution in order to offer an equitable and comprehensive representation of place within spatially-aware platforms.

1.2 The need for place-based studies of OSM growth

Over the past 15+ years, OSM researchers have produced an expansive body of literature about what (or who) is being mapped, who is doing the mapping, and how the mapping is carried out. Studies of OSM data utility often focus on statistics about the geometric accuracy or completeness of the data when compared with institutionally-produced sources (Haklay, 2010; Graser et al., 2013; Forghani and Delavar, 2014) or the raw number of contributors active at a given time across broad geographies such as the globe, countries, or big cities (Neis and Zipf, 2012; Neis et al., 2013; Tockner et al., 2025). Beneath the numbers lurks the complicated fact that OSM contributors are quite diverse in terms of how much editing they do and what they focus on (Steinmann et al., 2013; Quinn and MacEachren, 2018). This leads to uneven spatial development in the OSM database that persists to very local levels such as neighborhoods (Ballatore and De Sabbata, 2020).

Like all technical systems, OSM is the product of many locally situated actions and decisions (Pickles, 2004, p. 70). Perhaps this is easiest to comprehend in small cities and towns, where the map appears to have been built by a "handful" of people rather than a "crowd" (Quinn, 2017). A "handful" might lend itself to more intensive qualitative study than would be possible with a massive contributor set. There have been few examinations of OSM growth and utility at the scale of a small town or neighborhood as they relate to economic and social dynamics. Given the open nature of OSM data and user profiles, there is ample opportunity for investigation of how local and remote contributors (including corporate mappers) complement and build upon each other's work (Tockner et al., 2025). Such study could be enhanced further through quantitative evaluations of how many businesses and other institutions are being mapped.

2. Research questions and geographical context

2.1 Finding map stories in the town of Othello

This research offers an example of a deeply place-based and contributor-focused study of OSM by presenting what could be called "the story of OSM in a small town." I reconstruct the history of OSM's development in Othello, Washington, USA (population 9001) using qualitative and quantitative data from the OSM history extracts, changeset comments, user profiles, and a walking survey of the town's main thoroughfares. I focus on the influence of local mappers, casual contributors, corporate mappers, and remote or "armchair" hobbyists, observing the kinds of features they contributed and when. In particular, I ask:

- When did the map begin to be infused with local knowledge that would be difficult to trace or import from remote locations?
- What can we determine about the contributors who added this local knowledge, especially their region of residence and level of involvement in the project?
- What kinds of activity by corporate editors can be detected in this place?
- When we walk the streets of Othello, how much information matches what we see in OSM? What kinds of things are present or missing, and how could this affect people's experiences when using mapping platforms that incorporate OSM data?

This study demonstrates how researchers can benefit from the transparency of the OSM project to learn more about data quality and completeness, especially in rural or low-income regions. The open nature of OSM data and its user profiles facilitates exploration of contributor characteristics, while OSM queries can be used in tandem with ground surveys to reveal what kinds of things are being mapped.

Figure 1. Map of Othello's location in the northwestern part of the continental US.

2.2 Othello's cultural geography

I selected Othello for study because it is largely unremarkable to outsiders; in other words, there is no obvious reason why anyone from outside the area would pay more attention to mapping this town than any other town. Othello is not located on an interstate expressway, and the nearest urban area with over 500,000 people is Seattle, about a three-hour drive to the west (see Figure 1 for a reference map). The interior rural counties of Washington state where Othello is located are generally less wealthy than the urban coastal areas. Approximately 24% of Othello's residents are considered by the US Census Bureau to be living in poverty, compared with about 10% for Washington state as a whole (https://www.census.gov/quickfacts/fact/table/othellocitywashington/PST045224).

Othello was founded in 1910, but the Columbia Basin's arid climate posed challenges for farmers, and the town languished for many years as a dusty rail stop with around 500 people. The 1950s began to bring irrigation water through a series of dams and canals associated with the Columbia Basin Project, allowing a wider variety of crops and attracting more settlers (Figure 2). The town's population quadrupled that decade. Today, Othello's economy is supported principally by farming, trucking, and frozen food processing, especially potato products like french fries (Hanlon, 2022).

As with many other small towns in central Washington, Latino immigrants and their descendants play a major role in Othello's industries and daily life. People from Mexico have a long history of coming to the Inland Northwest of the US for seasonal farmwork. Over time, some of these workers and their families decided to stay, giving rise to new generations whose influence spread into other industries. Meanwhile, new waves of immigrants from Mexico and Central America arrived. Latino growth in the region was especially high in the 1980s and 90s. In recent statistics from the US Census Bureau, over 79% of Othello's residents identify as Hispanic or Latino, compared with 15% for Washington state (https://www.census.gov/quickfacts/). Small local businesses offering products and services targeted toward the Latino community make up a vibrant portion of the town's commerce. They are situated among national and global chain businesses like Walmart, AutoZone, Conoco, and McDonald's.

Othello is the largest town in Adams County (population 21,039), although the county government is seated in the much smaller town of Ritzville. No other towns in Adams County approach Othello's size.

Figure 2. Irrigated farmland in the Columbia Basin, with Othello on the horizon. Photo by author.

3. Methods

3.1 Obtaining and studying the OSM history of Othello

I obtained the OSM edit history in Othello by downloading the US West region full history extract from Geofabrik

(download.geofabrik.de), along with the full changeset history from planet.osm.org. A changeset is a record of all edits committed by a contributor when they save their work. I used the osmconvert utility to help narrow down the changesets to only those whose rectangular envelopes overlapped a polygon boundary of the Othello city limits. I used Python text parsing functions for cleaning, reading, and organizing the data.

I studied all available edit information for OSM nodes and ways from the year 2007 until 31 January 2026. This includes most, but not all, of the OSM work ever done in Othello. Notably, the OSM history files do not include the work of contributors who rejected the project's license change in 2012. Further, I decided to exclude OSM relations (a conceptual mechanism for linking related features into larger entities such as cross-country highways) because these can extend far beyond the city boundary.

For each of the changesets in Othello, I examined the geographic extent of the edits and the list of features modified, along with any comments or hashtags left by the contributor and discussion from the user community. I also browsed each contributor's public OSM profile page and user diary (similar to a blog) for any disclosure of hometowns, editing interests, or corporate affiliations.

The OSM platform exposes auto-generated web pages that make this kind of qualitative study quite simple, although it requires a time commitment from the researcher. Each OSM changeset has a publicly visible page with the URL format https://www.openstreetmap.org/changeset/<changesetID> showing all of the features modified, their version numbers, the contributor name, the contributor's changeset comments, and any community discussion about the changeset. These pages facilitate further exploration because they link to the contributor's OSM profile page and pages showing the version history for each edited node and way.

Beyond the OSM-provided pages, I used Pascal Neis' utilities How Did You Contribute to OSM (https://www.hdyc.neis-one.org/) and Your OSM Heat Map (https://yosmhm.neis-one.org/) to understand the contributor's activity levels and most common editing locations. These pages show the time frames that the contributor was active, the types of features they tended to edit, and the areas of the map where they made the most changes.

By giving time and attention to the above resources, one can construct a deeper understanding of the story behind OSM's evolution in any given geography. Such information can be valuable to OSM researchers and the broader community, but simultaneously requires consideration of privacy. Although a contributor's geographic location cannot be known for certain unless they choose to disclose it in their profile pages or changeset comments, the open nature of the OSM project clearly exposes the spatial, temporal, and topical realms of each contributor. In this paper, I use that contributor-specific information to discuss events in the development of Othello's OSM data; however, I have chosen not to mention individual usernames. This is to avoid sharing contributors' information or metadata in a setting they might not expect

3.2 Conducting a walking survey of data completeness

Beyond looking at the history of edits in Othello, I evaluated the current state of the map by using the QuickOSM QGIS plugin to download all OSM data for the town on 31 January 2026. I compared that content with information I gathered from a ground survey of Othello that same day. I walked down both sides of two main commercial thoroughfares (South 1st Avenue and East Main Street), recording all visible named institutions such as businesses, places of worship, government offices, and nonprofit organizations. Overall, the survey covered 6.8 kilometers of sidewalk frontage (Figure 3). Although these streets do not include all the businesses in the town, they provide an abundant sample.

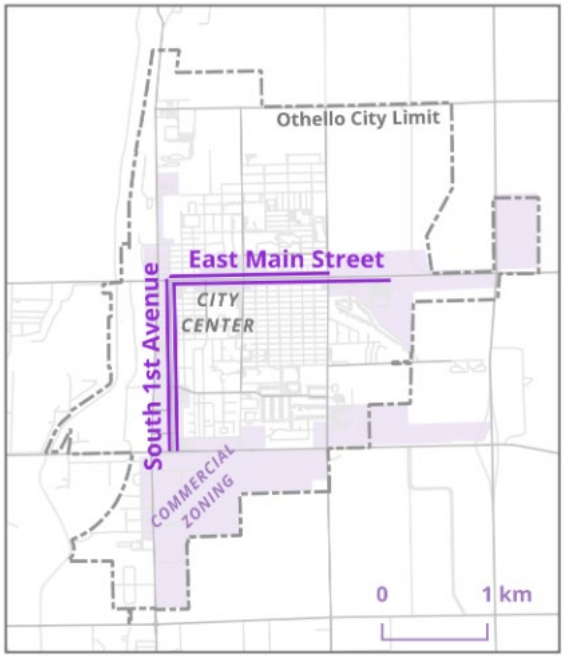

Figure 3. Surveyed sidewalks along South 1st Avenue and East Main Street. These streets are within commercial zones, shown in purple.

4. Results

4.1 General composition of contributors

The OSM history records for Othello show a map built by a diverse set of 122 contributors across 383 changesets. Only a few of these mappers demonstrated enough interest in Othello to contribute there repeatedly. Thirty-six contributors edited the town on more than one day, but only seven of those edited on more than five days. Home countries mentioned in contributor profiles included United States, Canada, United Kingdom, Peru, India, Russia, Germany, and Poland.

The amount of contributor activity in Othello has varied greatly from year to year. It has generally grown since the beginning of the OSM project, but remains light enough that the map sometimes goes for a month or more without any attention. Because contributors save their work (and thereby create changesets) at different frequencies, I use "mapper days" to measure OSM activity, defined as the sum of days that each mapper was active in the project during a given time. For example, if Mapper A was active 3 days and Mapper B was active 5 days and Mapper C was active 1 day, the number of mapper days would be 9, even if some of those mappers were active on the same calendar day. The years with the highest number of mapper days in Othello were 2025 (30 mapper days), 2023 (29 mapper days), and 2019 (23 mapper days) (Figure 4).

4.1.1 Contributors with regional ties

Out of the 122 contributors to the map of Othello, 43 (35%) have at least regional ties to the northwestern US, defined narrowly here as the states of Washington and Oregon. I considered a contributor to have "regional ties" if they listed a place in the Northwest as their home area in their public OSM profile or diary pages, or if their OSM heat map showed substantial activity in the Northwest when visually compared with other parts of the country or globe. Although only 35% of Othello contributors had Northwest ties, these contributors accounted for 52% of the mapper days. This indicates that contributors with regional ties dedicated more attention to the map of Othello than other contributors. The share of contributions by Northwest mappers has varied from year to year, but has always been a presence, as shown in Figure 4.

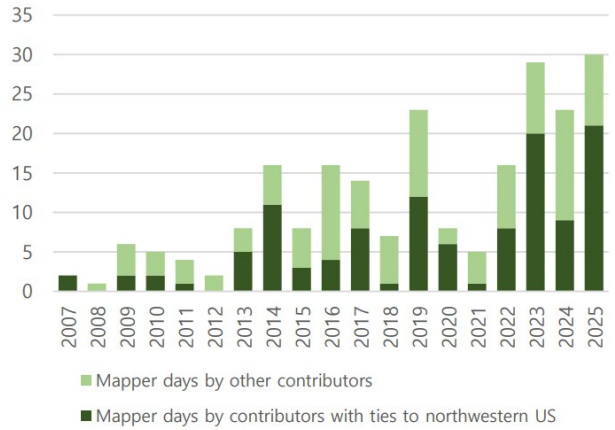

Figure 4. Mapper days per year by contributors with ties to northwestern US versus other contributors

4.1.2 Corporate mapping activity

Corporate mapping has played a role in Othello's development in OSM, although a rather minor one. Table 1 gives an overview of the corporate influences detected in the OSM history and contributor profiles, and the activities carried out by each company. Edits by Mapbox/DevelopmentSeed, Meta, Microsoft, and Telenav focused on improving the positioning and topological integrity of the road network. Driveways and parking lots were of common interest, which could boost OSM's utility for route finding and navigation tasks when cars leave the main street grid. Additionally, two digital marketing firms, Brandify and Zartico, appeared to be engaged in brand promotion by adding locations and metadata tags to a few businesses in Othello.

Corporate mappers did not appear in Othello until 2015. The share of corporate mapper days was highest in 2016 and 2018, with about half the mapper days of those years being logged by corporate contributors. Corporate mapping has continued since that time, but in recent years it has constituted a smaller share of the overall mapping. Figure 5 shows the number of mapper days per year of corporate contributors to the Othello map (at least those who disclosed their affiliations), compared with mapper days logged by non-corporate contributors.

Company	Type of services	Year range of edits in Othello	Number of mappers in Othello	Types of edits in Othello
Brandify	Digital marketing	2018 - 2019	1	Business metadata
Mapbox / Dev.Seed	Mapping and analysis	2015 - 2025	12	Road topology and alignment, business locations
Meta	Tech and social media	2022	1	Road intersections
Microsoft	Tech and computing	2019	2	Driveways and back roads
Telenav	Navigation	2022	3	Parking lot details
Zartico	Digital marketing	2023	2	Business locations and metadata

Table 1. Corporations mapping in Othello, and their activities.

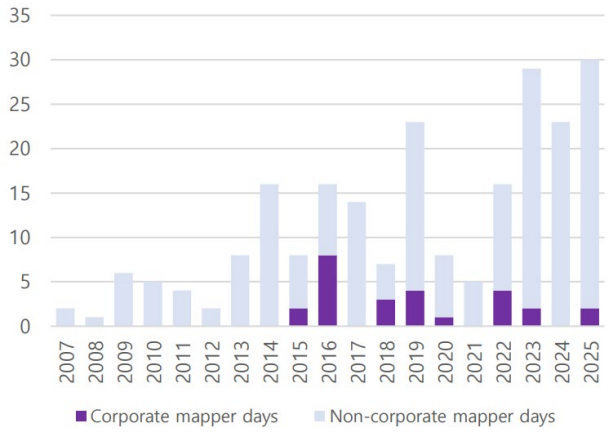

Figure 5. Number of mapper days per year by corporate and non-corporate contributors.

4.2 Story of OSM in Othello

Although the above charts provide a good start to understanding OSM's development in Othello, they fail to convey some of the rich qualitative information available in changeset histories, particularly in the contributor comments. Taking a deeper look into these sources can help us understand the unique story of how OSM took shape in any given place. In the interest of demonstrating this technique, I now offer a narrative describing how OSM's construction in Othello played out by different actors over time, from 2007 to the end of January 2026. To get a better feel for how this story affected digital representation of

place, I also discuss the results of the ground survey that compared features from OSM with things actually observed when walking around Othello.

4.2.1 A trickle of imports and remote cleanup (2007-2013)

On December 5, 2007, a contributor uploaded a batch of the US Geological Survey's Geographic Names Information System (GNIS) place data, bringing Othello into the OSM database for the first time. During the earliest years of OSM, the map of Othello consisted mostly of public data imports, such as the US Census Bureau's TIGER street data.

The early 2010s saw occasional modification and correction of the imported data. Every few months, someone would come and adjust a highway location, or the name of a school. Some of the TIGER and GNIS data was woefully out of date, allowing for easy edits. Data redactions surrounding the OSM license change in 2012 provoked two later changesets cleaning up roadways, but those are the only changesets recorded in the history file for that year.

This dearth of edits continued until September 2013. In at least three separate instances near the end of that year, Othello was visited by mappers with ties to Washington state. They updated road and rail networks and mapped aspects of the power grid, all while adding park facilities, civic buildings, schools, and churches. Meanwhile, remote mappers made fixes and standardizations to tag structures. Some of them came from Maproulette, a gamified tool for OSM contributors to find and fix potential inconsistencies or missing data.

4.2.2 Increased attention from local and corporate editors (2014-2021)

As some mappers turned their attention to Othello and returned for multiple edit sessions, the town's map began to include more places that contribute to local community life and culture. The year 2014 was the first time Othello saw a substantially larger number of mapper days than mappers, indicating more sustained attention on the part of some contributors. Most of this activity can be credited to a self-described retired geologist with high activity levels in Washington state who returned for various edit sessions that year. That contributor's edits focused on trails and hydrological features.

In 2015, Othello saw its first known visits from corporate editors working on behalf of technology companies whose business models relied on OSM quality. The first wave of these paid mappers was from Mapbox, a company providing embeddable web maps based on OSM data. In keeping with OSM community standards, their editors identified their employer on their user profile pages. Mapbox also maintains a page listing the usernames of its former team members, which is helpful for OSM history research. Often working remotely from outside the US, the Mapbox employees updated details about road network topology that would be useful for routing algorithms, such as junctions, crossings, and bridges. Their edits in Othello, however, were minor compared to other contributors' work. During roughly this same time window, a mapper from Washington state added turn restrictions and traffic signals to Othello, providing highly valuable information to these global companies that might have been difficult for them to get from satellite imagery alone.

Edits throughout the late 2010s continued on an occasional basis, with mappers from afar stopping in to tinker with road alignments or trace whatever they could see on the satellite imagery of the OSM editor programs. Occasionally, however, a more local contributor would visit the project to add information that someone could only get from an in-person visit. In April 2017, for example, a contributor very active around eastern Washington made a substantial upload of businesses, buildings, roads, and land use tags.

The year 2019 saw the highest number of unique mapper days to that point, mostly with people adjusting and adding details to roads, parks, and institutions. These contributors came from near and far. For example, someone from the Tri-Cities area of Washington added tags to Othello's public library, marking it as part of a regional library system. A Portland, Oregon-based contributor interested in pedestrian access added tags to Kiwanis Park related to accessibility.

Meanwhile, Microsoft Open Maps team members were making MapRoulette edits to driveways and streets in Othello, while a national digital marketing consulting firm attempted to update tags on the Walmart store through a mass edit of Walmarts across the country. In fact, throughout OSM's history in Othello, large commercial chains such as McDonald's, Taco Bell, O'Reilly Auto Parts, 76 Gas Stations, and Dollar Tree have been part of broad changesets enriching and standardizing tags on hundreds of stores of the same company in one swoop. The edits include information such as the companies' web addresses and the stores' opening hours. Sometimes these updates come from branding consultants, but more often they are made by active volunteer mappers throughout the world who have incorporated this kind of edit into their repertoire of ways to contribute. Their work furthers the integration of OSM into platform capitalism, but often leaves local businesses behind when it comes to metadata richness.

Map updates in Othello slowed throughout 2020 and 2021 for reasons that are difficult to tell from the data alone. This was contrary to the global OSM project, which saw a jump in edits in 2020 and reached its highest level ever in 2021 before declining (Tockner et al., 2025).

4.2.3 Increased local mapping activity, with remote attention to standardization (2022-present)

Contributor activity in Othello rebounded and reached its highest rates ever in 2023 and 2025. During this period, several mappers added information that could likely only be known through local visits or residency. In 2023, a mapper who had modest overall levels of activity in OSM worked on Othello during 11 different days, adding houses, land use polygons, driveways, addresses, and parking lots. According to their OSM heat map, this mapper's main areas of focus in the project have been Othello and two other small locations on the other side of the country. Another mapper who appeared in the Othello area incorporated an abbreviation of the name Adams County in their username, and indeed has focused most of their OSM edits on infrastructure and facilities managed by the county. It is possible that this mapper maintains or works with databases of county government assets, but the user profile does not reveal this.

4.2.4 Current happenings: student mapping and citizen privacy activism

In late 2025, someone created an OSM account and added 10 local businesses in Othello. The changeset metadata contains a hashtag commonly used by students and faculty at Central

Washington University (CWU), about 115 km from Othello. Although I do not know this contributor or the circumstances surrounding their edits, I am aware that CWU's GIS students are often given school assignments where they get some experience updating OSM in a place familiar to them (Quinn, 2025). The edits made by this particular contributor included Latino-oriented small businesses, which are rare in Othello's map even though these kinds of businesses abound in the town and the majority of Othello's population identifies as Hispanic or Latino. Such additions to local data are therefore highly valuable and represent a possible benefit of student mapping, although retaining such mappers can be a challenge once the incentive to earn a grade has gone away.

Also of interest to many of Othello's residents are surveillance cameras using automatic license plate reader (ALPR) technologies that have been deployed throughout the region (Figure 6). Municipal governments around the US have installed such cameras with the stated goals of finding crime suspects, stolen vehicles, and missing persons; however, President Donald Trump's efforts to increase deportations of undocumented people have drawn attention to the fact that local police in Washington state and elsewhere are regularly sharing ALPR data with US Immigration and Customs Enforcement (University of Washington Center for Human Rights, 2025). Privacy advocates from the group DeFlock have responded by encouraging people to sign up for an OSM account and map the ALPRs for all to see (https://deflock.org/report/id). In Othello, two different accounts added ALPRs in late December 2025 and early January 2026, at the same time nationwide protests were occurring against high-profile immigration enforcement operations in major cities. These contributors only made a handful of changes in OSM, mostly near Othello.

4.3 Results of the walking survey, and determining what's still missing

Out of 154 institutions identified in the walking survey of Othello, 29 (18.8%) were correctly tagged in OSM as something beyond just a building. Two of those, a hotel and a gas station, had changed owners and were marked with the wrong name, although the function of the business was the same. An additional two items in OpenStreetMap had closed down or changed in function.

OSM data found in Othello included the city government headquarters (city hall), the public library, and a handful of gas stations, banks, restaurants, and other businesses. At the same time, OSM was missing major public and private institutions of value to the population, such as the local food bank, the city police department, the school district headquarters, the county public services office, and various churches, clinics, markets, and offices.

Half (13 out of 26) of the national chain businesses in the Othello survey were represented in OSM, whereas other kinds of institutions such as small businesses, nonprofit organizations, and government offices had only 12.5% representation in OSM (16 out of 128). The only city block in OSM where all institutions were completely mapped was a commercial plaza consisting entirely of national or global chains: Walmart, Taco Bell, AutoZone, and O'Reilly Auto Parts (Figure 7). In contrast, some entire blocks consisting mostly of small businesses were missing from Othello's map (Figure 8).

Institutions in Othello with Spanish-language words or names in the title, or those selling products aimed at the Hispanic/Latino population, had 13.3% representation in OSM (4 out of 30). That number is consistent with Quinn and Condon's (2022) OSM surveys in larger cities of the US Inland Northwest, and is similar to Othello's overall percentage of OSM representation for local businesses and institutions given above.

Street-level imagery holds some potential for remote contributors to more fully map Othello's institutions. OSM's browser-based editor allows contributors to toggle on various sources of street level images that tech companies have donated for the project. In Othello, Bing StreetSide imagery is available from 2015 and 2020, while there is extensive Mapillary coverage from 2023. Remote contributors could look at this imagery to add information only visible from street-facing signage, such as business names, speed limits, and so forth; however, from the OSM changeset metadata I examined, it does not appear that this imagery is a common source used by Othello's mappers.

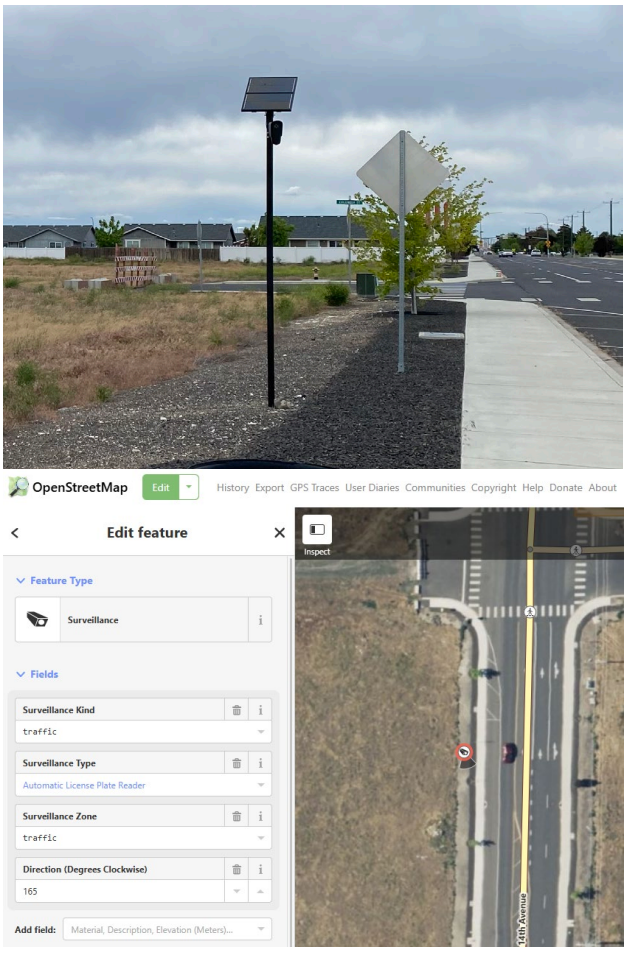

Figure 6. Automatic license plate reader cameras like this one are positioned on major roads entering Othello. Privacy activists have used OSM as a platform for collecting the location of these cameras nationwide. Photo by author. Screen capture from OpenStreetMap.org.

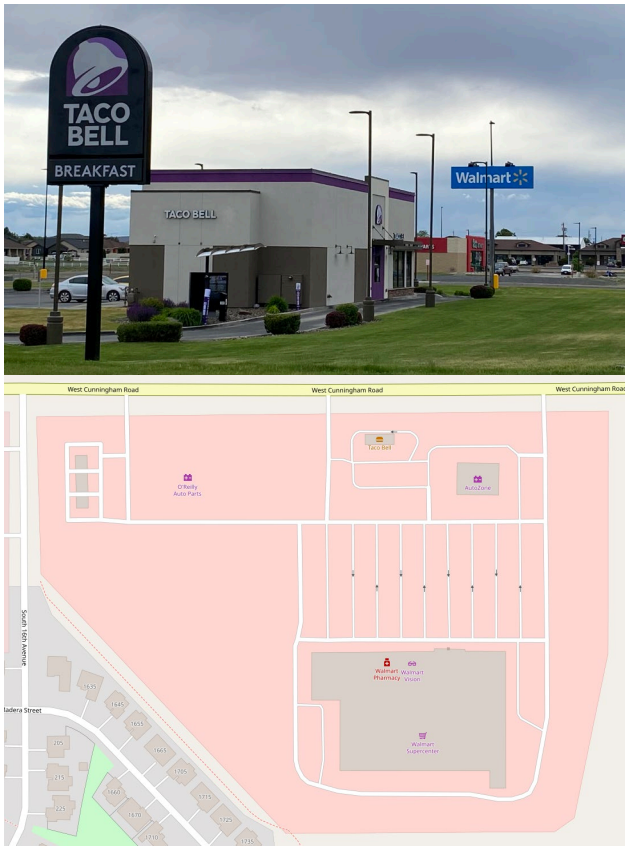

Figure 7. Commercial plaza of national and global chain businesses, the only block in the walking survey that was completely mapped in OSM. Photo by author. Screen capture from OpenStreetMap.org.

Figure 8. Most of Othello's small local businesses, like these, remain as simple building footprints in OSM. Photo by author. Screen capture from OpenStreetMap.org.

5. Conclusions

OSM in Othello has been built by (1) a mix of remote contributors working from satellite imagery and other public databases, and (2) a set of dedicated local contributors who have physical access to the town. Perhaps "regional" contributors is a more accurate moniker than "local" contributors. People with ties to Washington and Oregon have taken the most active roles in the mapping, but only a few of these contributors seem likely to live in Othello or visit there regularly.

Othello has a largely complete and accurate street network in OSM, and extensive coverage of building footprints, land use, parks, and schools that make the map look detailed at a glance; however, many of the institutions that contribute to day-to-day livelihoods in the town are absent from OSM and its representation of place. In general, the map of Othello seems to have reached a point where most things identifiable through satellite imagery have been traced. Meanwhile, the vast majority of small businesses and institutions that are only identifiable through street-facing signage remain unlabeled, unnamed, or out of date.

Although I have focused on a single town, this is ultimately not a paper about Othello. It is my suspicion that many of the patterns found here would hold true in other small towns throughout the western US and beyond, and I encourage the research and writing of further OSM stories to confirm or refute this. Certainly each place would have its own variations. It would be instructive to study OSM development in a small town where a very active OSM contributor is known to be living. It would also be useful to interview such rural contributors to learn about their motivations, their priorities, and how they got involved in the project.

Several quantitative approaches to OSM data analysis could complement the qualitative techniques performed in this study. For example, an interesting way to study the attention gap between national/global chain businesses and local businesses would be to calculate and compare the average or median version number for those two types of OSM features. Features with more versions have undergone more edits and received more contributor attention. Also, the visual patterns studied in the OSM heat maps could be further explored by calculating the percentage of each contributor's total edits to the OSM project that fall within a particular area of interest, whether that be the Othello city boundary or the Northwest in general. A contributor who made 20% of their edits in Washington state might be considered to have a stronger personal connection to the region than someone who made only 2% of their edits there, although this is not guaranteed.

Global platforms that rely on OSM data will offer a distorted representation of small towns like Othello unless OSM is supplemented with other datasets or locally-contributed information. Commercial data products such as Google Maps are typically more complete than OSM in this region of the US, but are still missing many businesses (Quinn and Condon, 2022). Users of digital commerce apps should recognize that they are seeing only a portion of the available set of goods and services in any particular location. In rural areas and small towns such as Othello, the gap may be wider than expected. Would-be consumers of goods and services in these areas should be willing to diversify their digital search and discovery methods to include multiple platforms, social media networks, word-of-mouth recommendations, and perhaps a dose of old-fashioned exploration and spontaneity.

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