nature cities

Supplementary information

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A universal framework for inclusive 15-minute cities

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1 Global distributions of accessibility times

The distributions of the foot accessibility scores that we propose, for worldwide cities, can be found in Figure 1. The cities cover all of the world and are the same that can be found in our platform [1]. The Proximity Time (PT) is the average time of accessibility to services on foot in the city, while the F15 measure describes the percentage of the city population living in a 15 minute city. PT and F15 scores are highly different in cities around the world.

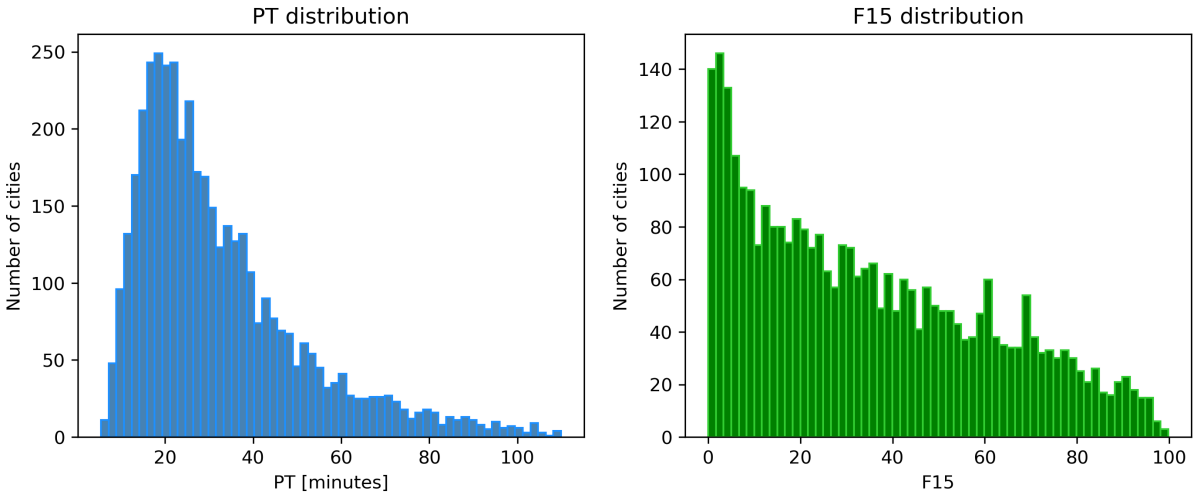


Figure 1: **The distribution of accessibility scores.** The left plot describes the distribution of the average Proximity Time (on foot) of the cities, while the right plot is the distribution of the F15 (relative to the foot accessibility measure).

2 The proximity time scores and rankings

We present here a closer look at the accessibility scores for the set of cities we considered in the main text. In Figure 2, we present both the city average and the percentage of people within 15-minute accessibility on foot and by bike. The left plot ranks the cities according to their proximity time by foot. It is also interesting to compare the foot and bike accessibility, which are close or far depending somehow on how bikable the city is: for instance, Rotterdam and Amsterdam have very good bike accessibility compared to the walking one, whereas cities like Hanoi and Mumbai or Bogotá show the opposite trend. The right plot shows the percentage of people living in 15-minute areas again by bike and on foot, and the same considerations are valid. In both cases, it is remarkable to see that most cities would be close to the 15-minute city if they were free from car traffic and therefore more suitable for bikes: our analysis does explore how easy it is to bike or walk in cities (see SI 4).

[1] `whatif.sonycsl.it/15mincity`

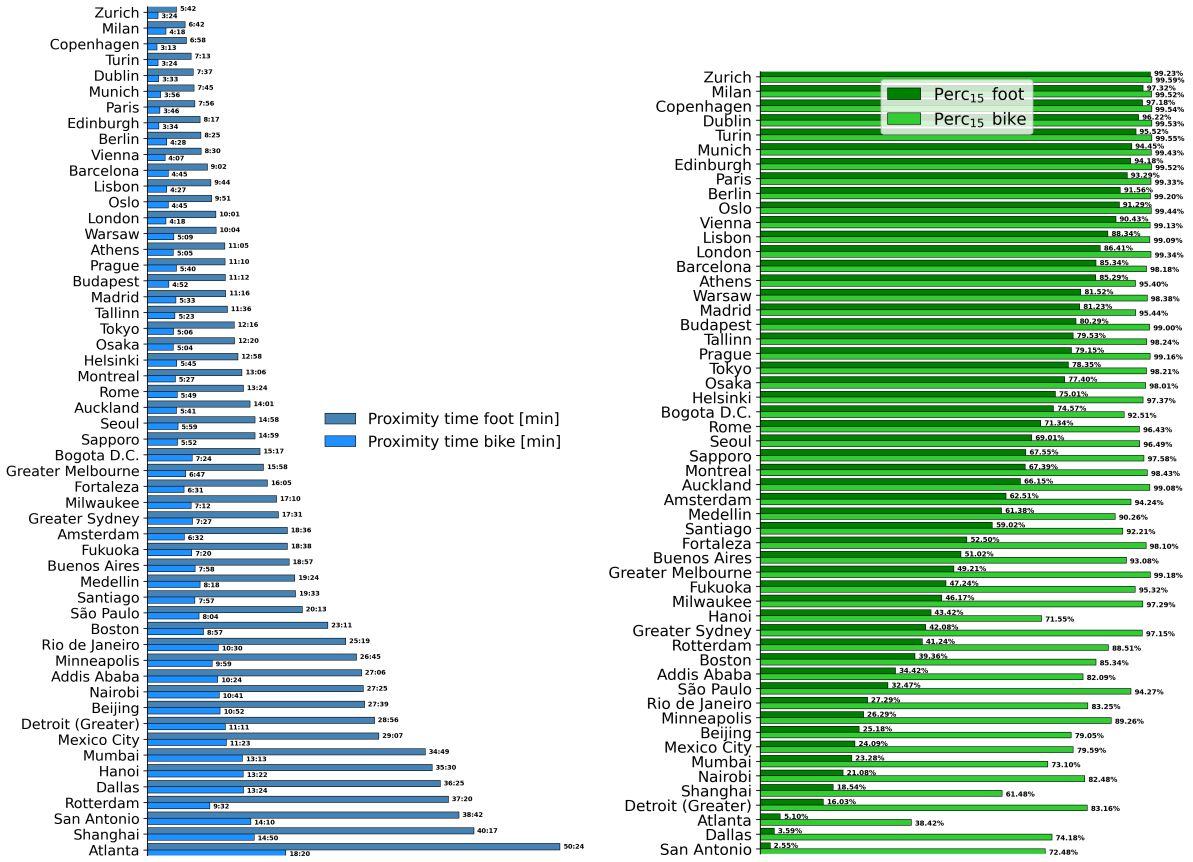


Figure 2: **The rankings of accessibility.** The left plot describes the rankings of the average Proximity Time of the cities, both by bike and on foot, while the right one describes the percentages of people in a 15-minute city.

3 The effect of the reallocation of services on accessibility

The reallocation of services generates an improvement in the accessibility times. In Figure 3, we take a closer look at the set of cities analysed in the main text and their average (foot) accessibility scores. As almost all cities average scores improve, the cumulative distributions of the "optimal" cities shift to the left (in the case of the PT) and to the right (for F15), meaning that optimised cities have lower accessibility times and a higher share of people with an accessibility time of less than 15 minutes.

4 Sources of bias from the data

A few remarks are due about the potential limitations of our study.

- The first critical point is related to the use of OpenStreetMap data. OSM data might not be complete for some cities, and their level of completeness is city-dependent, a long-known issue in

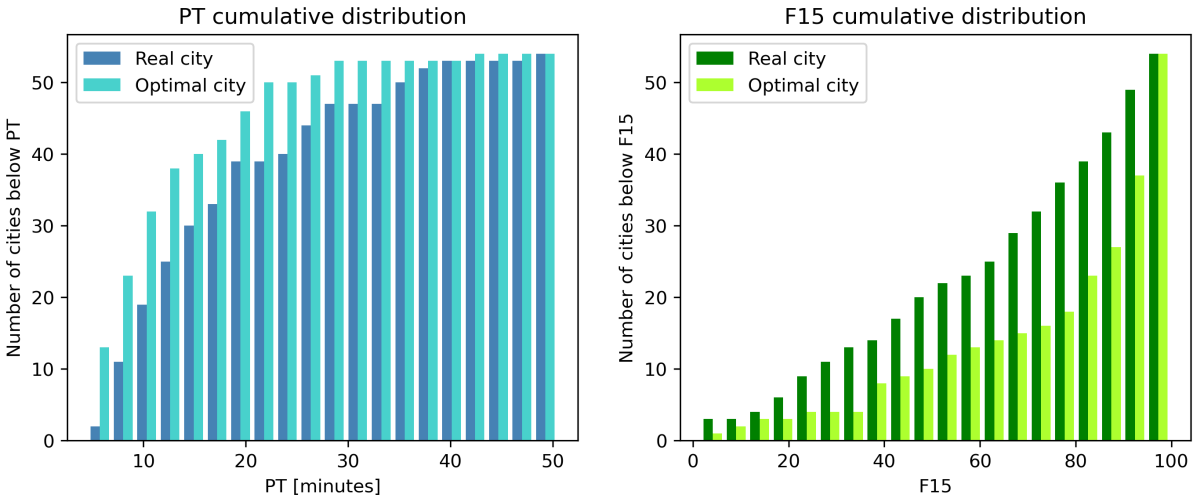


Figure 3: **The distribution of accessibility scores before and after the reallocation for the set of cities analysed.** The average PT cumulative distribution (left plot) moves to the left: before the reallocation of services 52% of the cities had an average PT of less than 15 minutes, compared to 72% after the reallocation. Similarly, the F15 cumulative distribution (right plot) shifts to the right: 50% of optimised cities have more than 90% of their population in a 15 minute accessibility area, compared with 20% before the reallocation.

OSM data analysis, as highlighted by some recent work [1]. Moreover, its open-source categorisation can lead to errors such as repeated entries or wrong categories. It's worth remarking that some parts of our analysis, specifically the simulations of the optimal relocation of POIs, do not depend on POIs data.

- The walking infrastructure present in OSM can also lead to biases in times of accessibility to services. Cities might be walkable in principle but less in reality: some areas might be dangerous because of traffic or lack of safety, or the street could be damaged or uphill, therefore not encouraging walkability. In recent work, Rhoads et al. [2] show that sidewalks can also shape walking trips. This also applies to the biking infrastructure, even more so because it is generally rarer to create a safe, reliable biking network.

- Another possible source of bias is the definition of urban areas. Here, we considered OECD-defined core urban areas, which rely also on the municipalities' borders[3]. When cities are not in the OECD data set, we use borders of core urban areas from GHS instead, but there might be similar biases. However, in most cases, we weigh our accessibility measures by population, meaning that if many empty areas are included in the city shapefile, they will not change the results.

- The population data is taken from WorldPop and is crucial for this work. However, it is often considered reliable, and we used data adjusted to match UN population estimates.

- The last two points are due to our analysis and can be refined, although it is not trivial to find an unbiased procedure.

– First, the categories we chose are arbitrary, and the treatment of all categories in this work is the same, meaning that different services, such as eating and learning (overarching categories including restaurants and schools, respectively), are treated equally despite their specificities.

– Lastly, the arbitrary choice of the number of POIs in proximity for the accessibility measure, which is again equal for all services, might lead to some debatable results. The same analysis considering the closest 20 POIs or 2 POIs might change some measures.

Future research should address these limitations by considering the differential usage of POIs and improving the data quality to reflect city structures better.

5 The POIs relocation algorithm

Here, we present the algorithm with the detailed steps of our methodology 1. The rationale behind the algorithm is to equalise the number of services per capita across the city. The algorithm is iterative, placing one POI in each iteration and starting from an empty city. It is also category-independent, meaning that the relocation is the same for any kind of service. The random part of the algorithm, yielding slightly different results in different runs, is when the POI is placed in a neighbour hexagon of the "highest demand" cell (step 10 of Algorithm 1). This choice prevents the algorithm from always choosing a "local maximum" demand cell: if the population needing a service has a local maximum in a certain cell, since we reduce the need for a service homogeneously across the neighbouring hexagons if we always placed the POIs in the highest demand hexagon the local maximum demand cell would not change.

We also provide a pictorial representation of the steps of the algorithm in Figure 4.

Algorithm 1 POI Reallocation Algorithm

1: Create a grid for the area of the city;
2: Calculate the total population of each grid cell;
3: Find the 15-minute *neighbourhood* of each cell by finding the cells that can be reached in 15 minutes;
4: Compute the *reachable population* of each cell by summing up the populations of the neighbourhood;
5: **for** each category **do**:
6: Compute CAP_c as the capacity of a POI of the category, defined as the population of the city divided by the number of POIs of the category;
7: Initialise the number of optimally allocated POIs to zero;
8: **for** each POI in the category **do**
9: Identify the cell with the highest reachable population;
10: Randomly allocate the POI to a cell within the neighbourhood, with a probability proportional to the resident population;
11: Remove the population from the cells in the neighbourhood that can reach the POI, summing up to CAP_c and proportionally to the population resident in the cells;
12: **end for**
13: **end for**

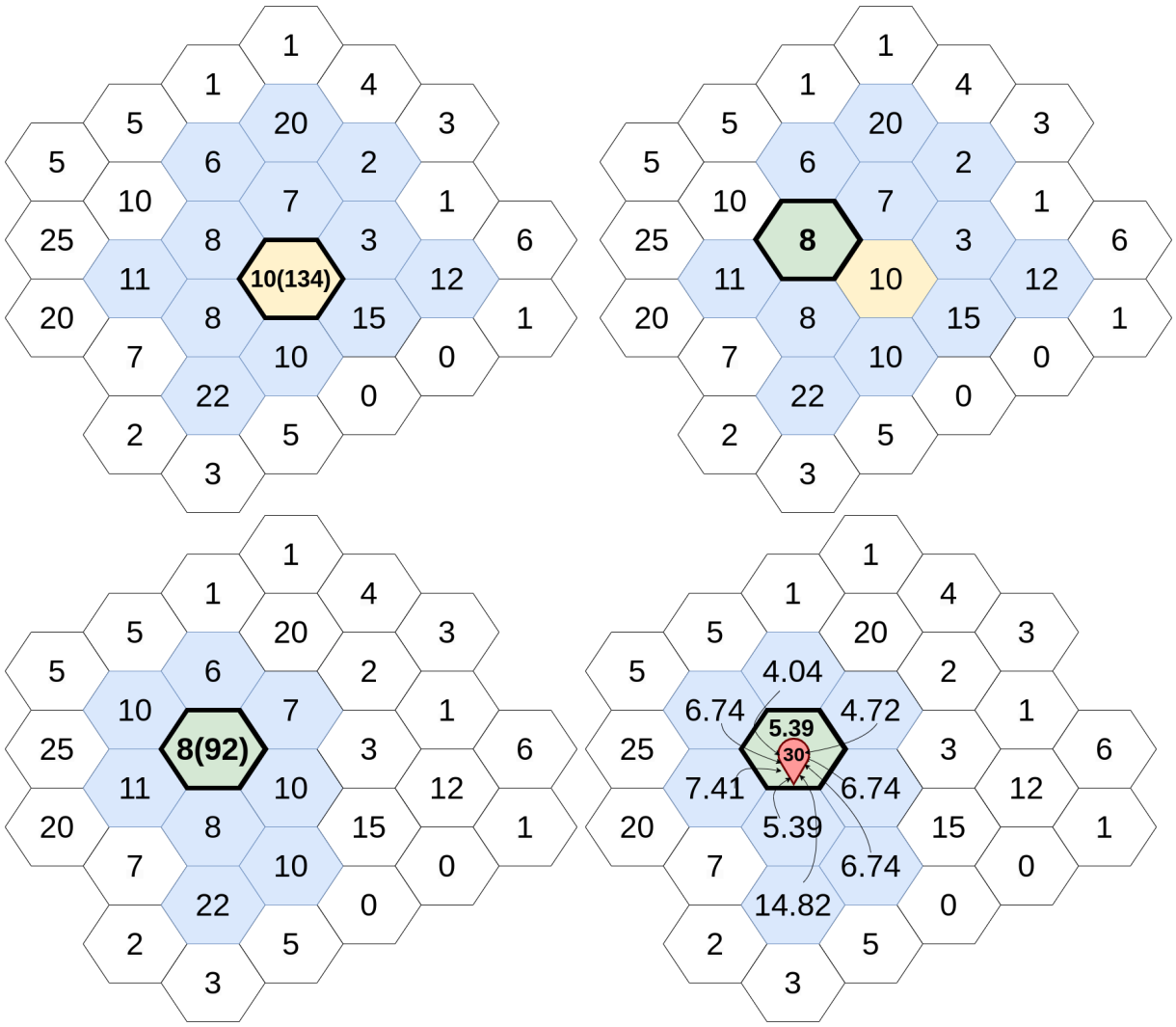


Figure 4: **The POIs relocation steps.** The numbers in the hexagons represent the number of people living in that cell who need a POI, and the numbers within brackets represent the total number of people needing a service in the 15-minute neighbourhood (depicted in blue). The first step selects the hexagon with the largest need for a service in its neighbourhood. Then, a POI is randomly allocated in one of the hexagons of the neighbourhood of the previously selected one. The neighbourhood of this newly chosen hexagon is then calculated, and the needs of the neighbourhood are adjusted so that the number of people served from the allocated POI matches the POI capacity (30 in this example) and that the people needing are reduced proportionally to the resident population.

6 Accessibility with choice: a sensitivity analysis on the number of reachable services

The local access to proximity should not be limiting the choice of citizens too much; therefore, we account for a reasonable degree of choice when building our Proximity Time metric. This measures the average time needed to get to the closest 20 POIs; however, the choice of the number of services is not impacting the results of our analysis as the inequalities within and across cities remain. In Figure 5 we show a map of Rome while varying this parameter. Some areas have a better accessibility when considering a lower amount of services needed, but there is no abrupt transition and the relative differences are consistent.

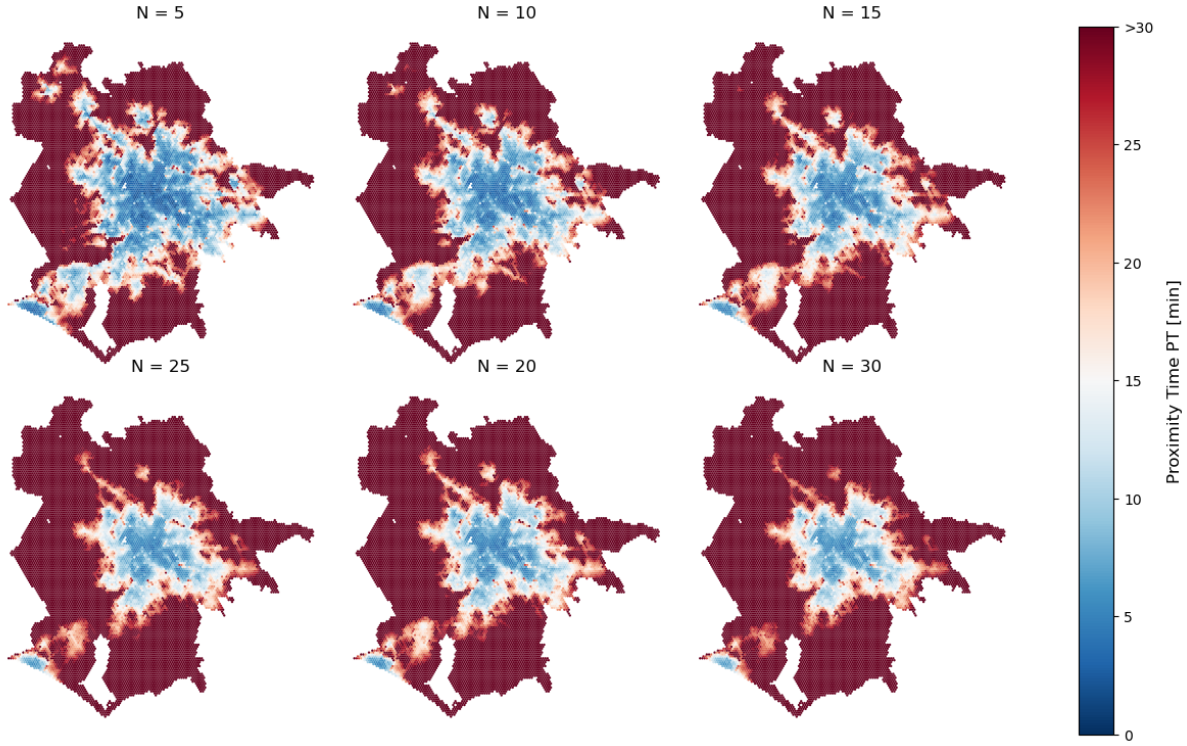


Figure 5: **The Proximity Time for Rome obtained varying the number of POIs considered to be needed for accessibility.** The scores change without abrupt transitions and the inequality in the city is still mantained even when considering a simple accessibility to a few POIs.

7 Accessibility improvements

We show that the higher the percentage of services that are relocated, the higher the (positive) impact on the reduction of times of accessibility in cities: in Figure 6 a scatter plot of the percentage of relocated services vs the accessibility improvement in minutes shows a positive correlation. All cities' average proximity times improve, and the percentage of people experiencing 15-minute accessibility increases

in all cases except Atlanta. In Atlanta, the POIs are scarce with respect to its area and population. Thus, the relocation of the services makes the few 15-minute, most-served areas have fewer services, thus reducing the percentage of people with less than 15 minutes of proximity time.

In Figure 7, we present the rankings of the changes in the accessibility scores of the set of cities we considered in our study. The changes are very heterogeneous, and the improvements in the percentage of people within 15-minute accessibility are not always reflected by the same change in the city's average Proximity Time.

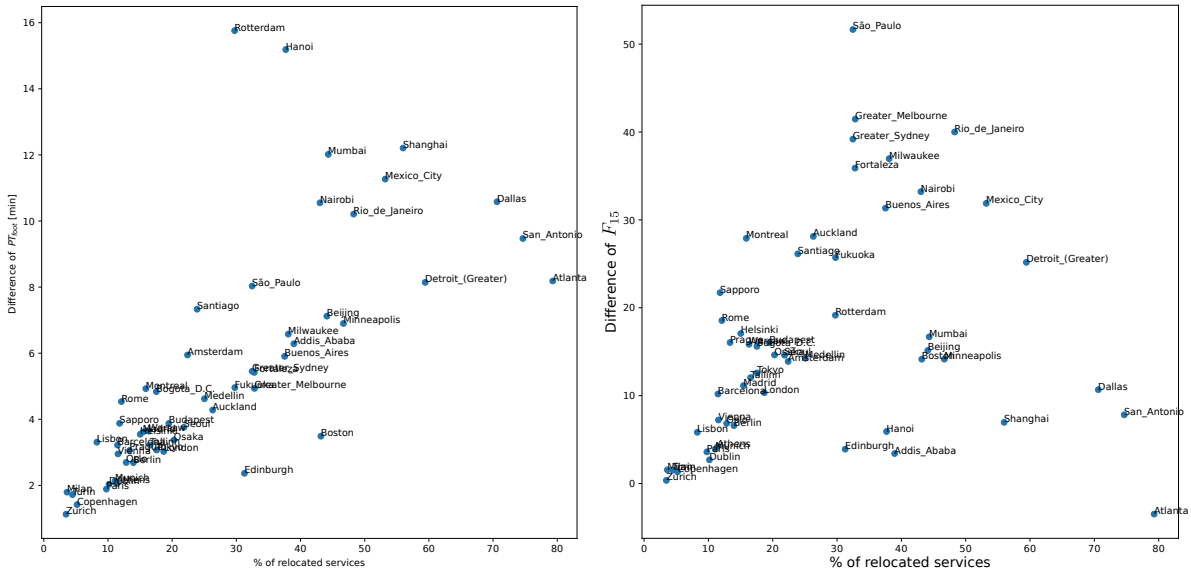


Figure 6: **Relocated percentage of services vs improvement in accessibility time.** The correlation between the percentage of services relocated by the algorithm and the accessibility improvements is present, but it is not straightforward. A higher correlation is present with the Proximity Time than with the percentage of 15-minute people.

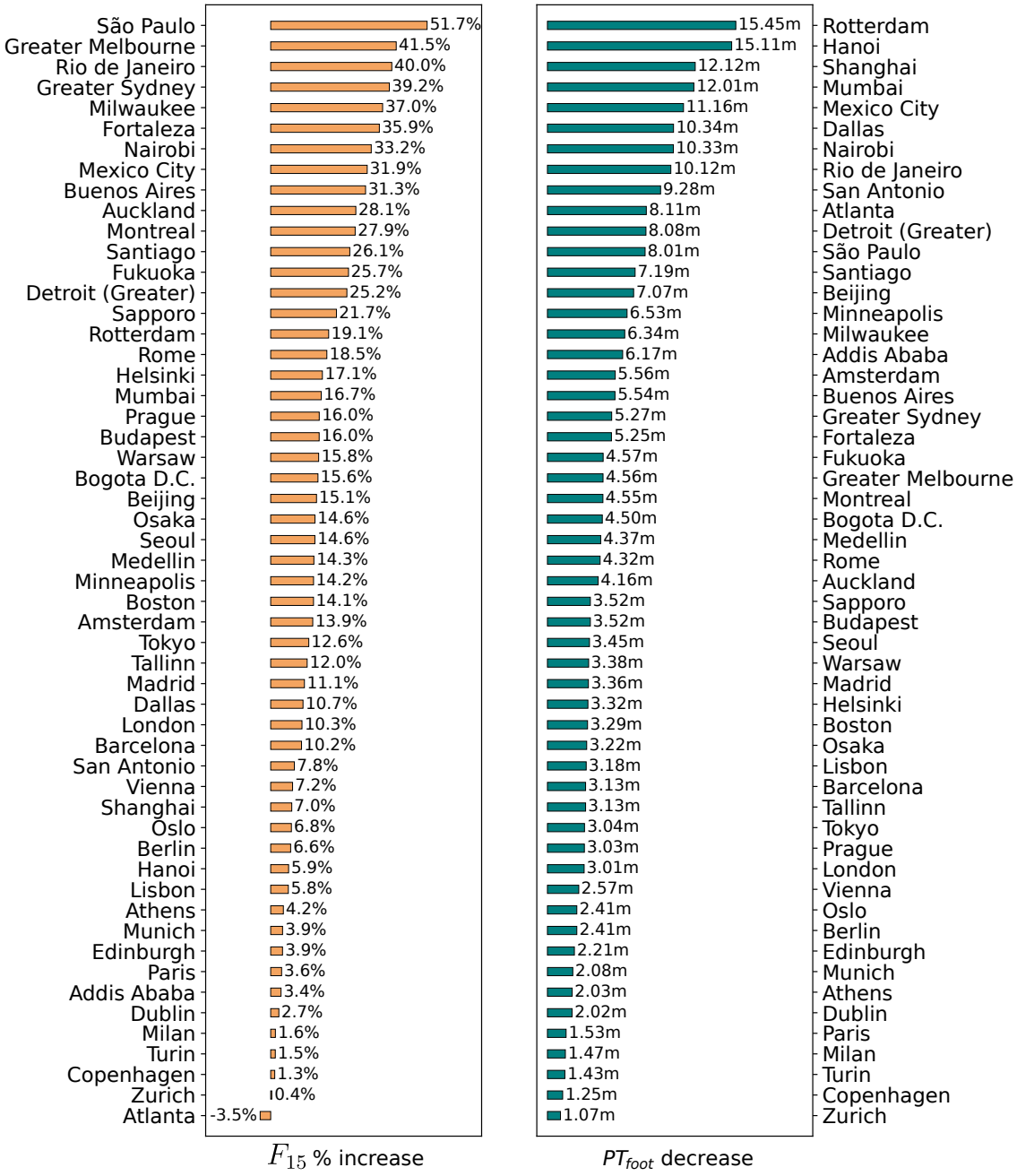


Figure 7: **The improvements of the accessibility metrics in the optimal POI configuration.** On the left are the rankings of the percentage of people with 15-minute accessibility for the cities of our study. On the right is the improvement of the average Proximity Time of the city.

8 POIs vs proximity time scaling

The scaling of the Proximity Time average of the city with the number of POIs, when optimally placed, is shown in Figure 8. Placing a varying number of POIs with the optimal allocation algorithm in different cities, the Proximity Time gets progressively lower The figure is in a log-log scale and shows a power-law scaling with an exponent of -0.5. Again, the scaling of Boston's accessibility is separate from the other cities, like the analogous Figure 4 in the main text, meaning that its urban sprawl makes it difficult to realise the 15-minute city.

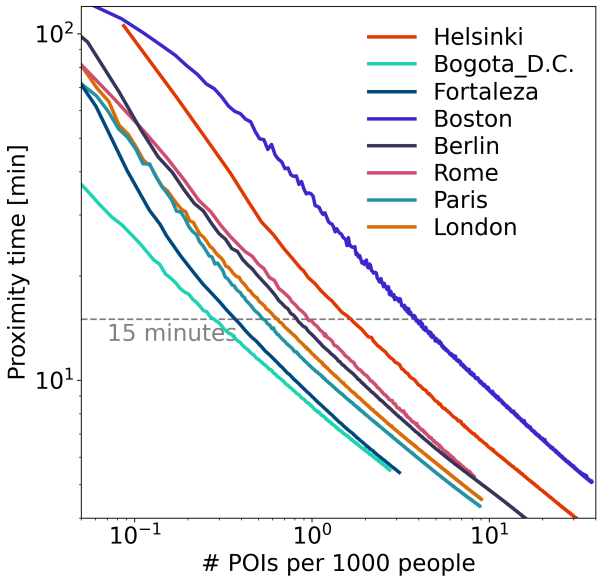


Figure 8: **Number of optimally allocating POIs vs proximity time for selected cities.** Increasing the number of POIs optimally allocated, the optimal reallocation algorithm yields a proximity time which decreases following a power law with an exponent of ~ -0.5.

9 Optimally adding POIs to achieve the *15-minute city*

Our methodology can also be employed to understand how to remove or add POIs to the ones already present in a city. Starting from the original configuration, POIs can be added and removed following the optimal reallocation algorithm. In Figure 9, we present the results of this simulation for the city of Lisbon: it is interesting to notice that by adding POIs strategically, the percentage of people within 15-minute increases very fast while removing them where they are not needed the percentage stays roughly constant: for a policy-maker, this result implies that by fostering activities in a few selected areas the accessibility of the city will quickly improve greatly while moving away some activities from possibly overcrowded areas can have little impact on the overall city accessibility.

Additionally, it can be noted that different categories are far or close to the "optimal" line: the furthest seems to be the category of cultural activities, which are hard to distribute optimally, while the closest is the category of transport, which is placed well with respect with the resident population.

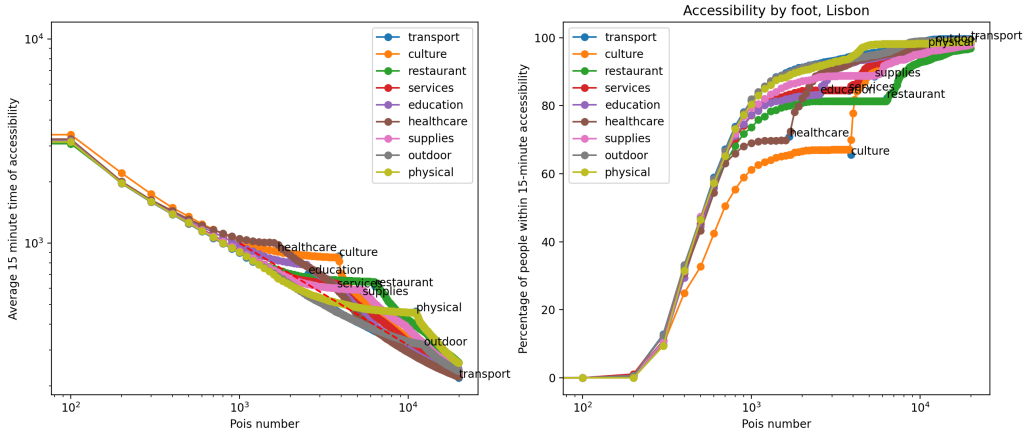


Figure 9: **Adding or removing POIs from current scenarios in Lisbon.** The starting points, denoted by the text, are the real accessibility and POIs number of the category in the city. In this simulation, POIs are progressively added or removed from the real configuration and the time of accessibility is recomputed.

10 How close to equality are cities?

The number of POIs per 1000 inhabitants describes how easy it is for a city to become 15-minute. This number can be compared with the actual accessibility score to understand which cities could reasonably improve their accessibility and which ones are already doing some of their best. In Figure 10, we show no clear trend. Here, the number of POIs per 1000 inhabitants corresponds to the metric shown in Figure 4 in the main text and represents the potential of a city to become a 15-minute city. It is shown plotted against the actual Proximity Time of the city. American cities are again outliers, needing many services and having a high Proximity Time. Some cities from less developed countries have the same accessibility but could easily improve by increasing the number of available services, although this metric can be biased by the incompleteness of POIs data.

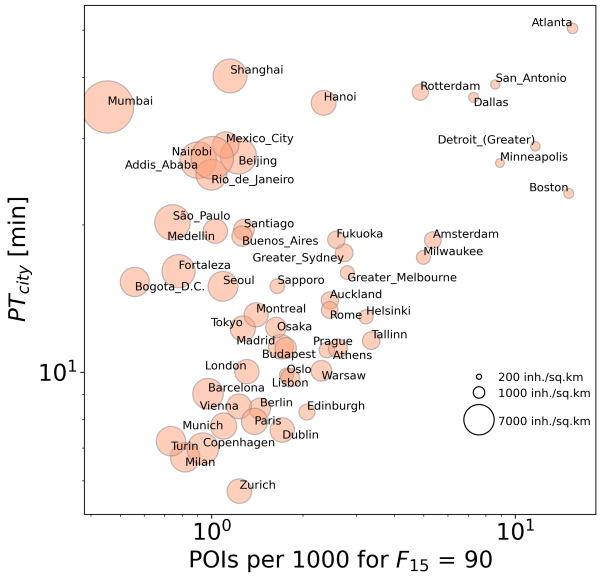


Figure 10: **POIS per 1000 inhabitants required for 15-minute city vs current average accessibility time.** The number of POIs per 1000 inhabitants corresponds to the metric shown in Figure 4 in the main text, thus describing the potential of a city to be a 15-minute city. The size of the points describes the population density of the cities.

11 The number of POIs in cities

We can compare the optimal number of POIs per 1000 people to reach an inclusive 15-minute city with the number of POIs present in the city. For each category, the number is different, so in Figure 11, we can see the comparison between the minimum, maximum, average and median number of POIs of each category in the city with the one for the optimal 15-minute city obtained from our analysis. Interestingly, in many cases, this number lies between the minimum and maximum observed numbers, meaning that it is not unreasonable. The figure also describes the relative difference between the median observed and optimal numbers of POIs, constituting another metric of distance for cities to the ideal 15-minute city. Unsurprisingly, Atlanta is at the bottom also in this list, while Zurich sits atop.

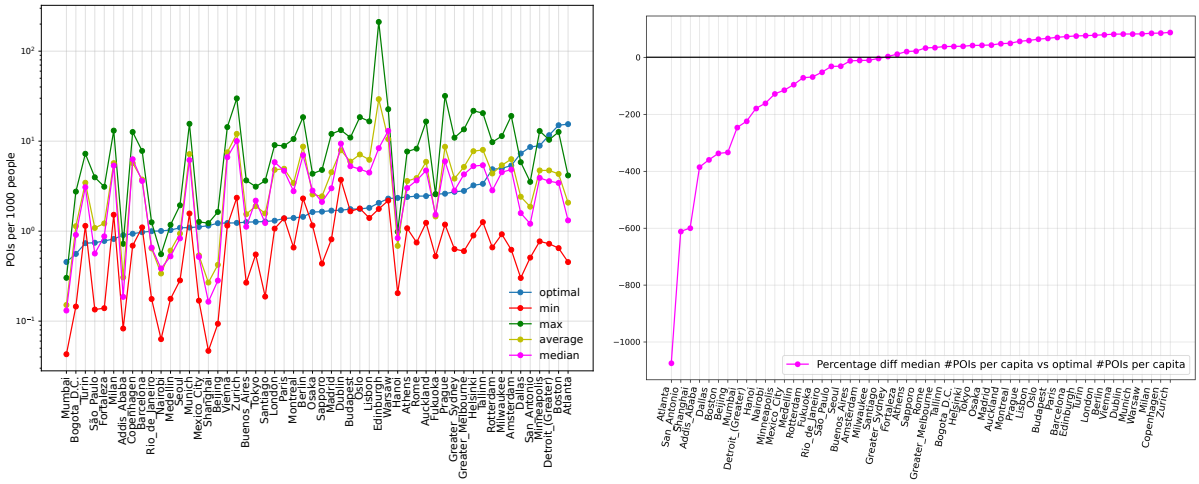


Figure 11: **Number of services vs optimal number of services (per 1000 people).** The top panel compares the optimal number of POIs per 1000 people in the city and the number of services present in the city, specifically the minimum amount of a category, the maximum, the average number of POIs per category and the median. The bottom plot shows the displacement in percentage of the median number of POIs for the categories vs the optimal number of POIs. Some cities have a very high number of services, while some have fewer services compared to what would be needed in the city.

12 All cities' accessibilities maps

Here, we show a description of the accessibility for the 54 cities that we analysed deeply in our work. We plot the accessibility before and after our relocation of services with its time difference, the POIs density before and after, and the population density of cities we consider. In this section, it is possible to look at the shapefiles we used as well. We also add the equivalent of Figure 2 of the main text, showing the POIs per capita map before and after the relocation of services, with the histograms that represent the distribution of POIs per 1000 people inside the grid's hexagons.

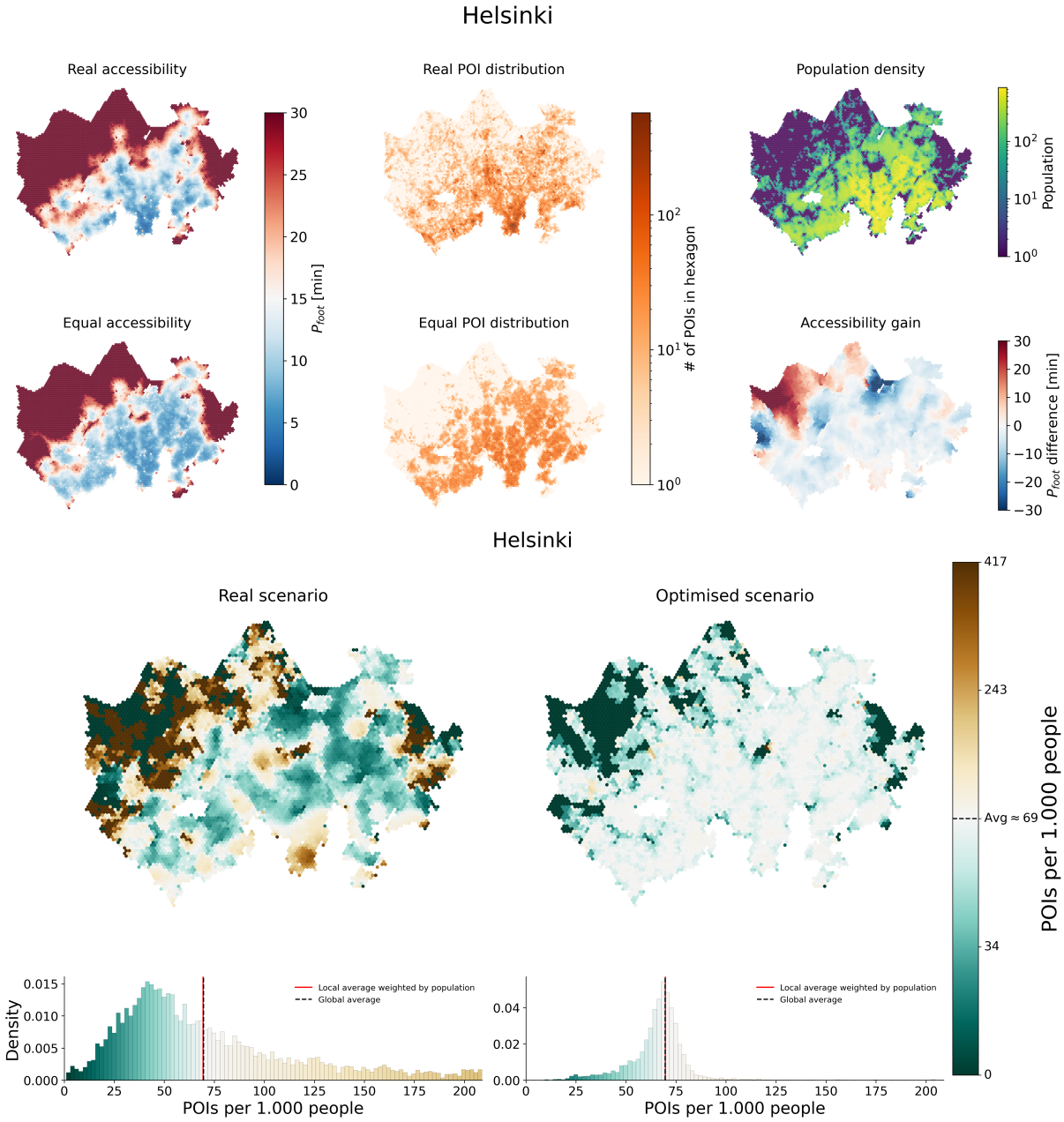


Figure 12: Accessibility of Helsinki

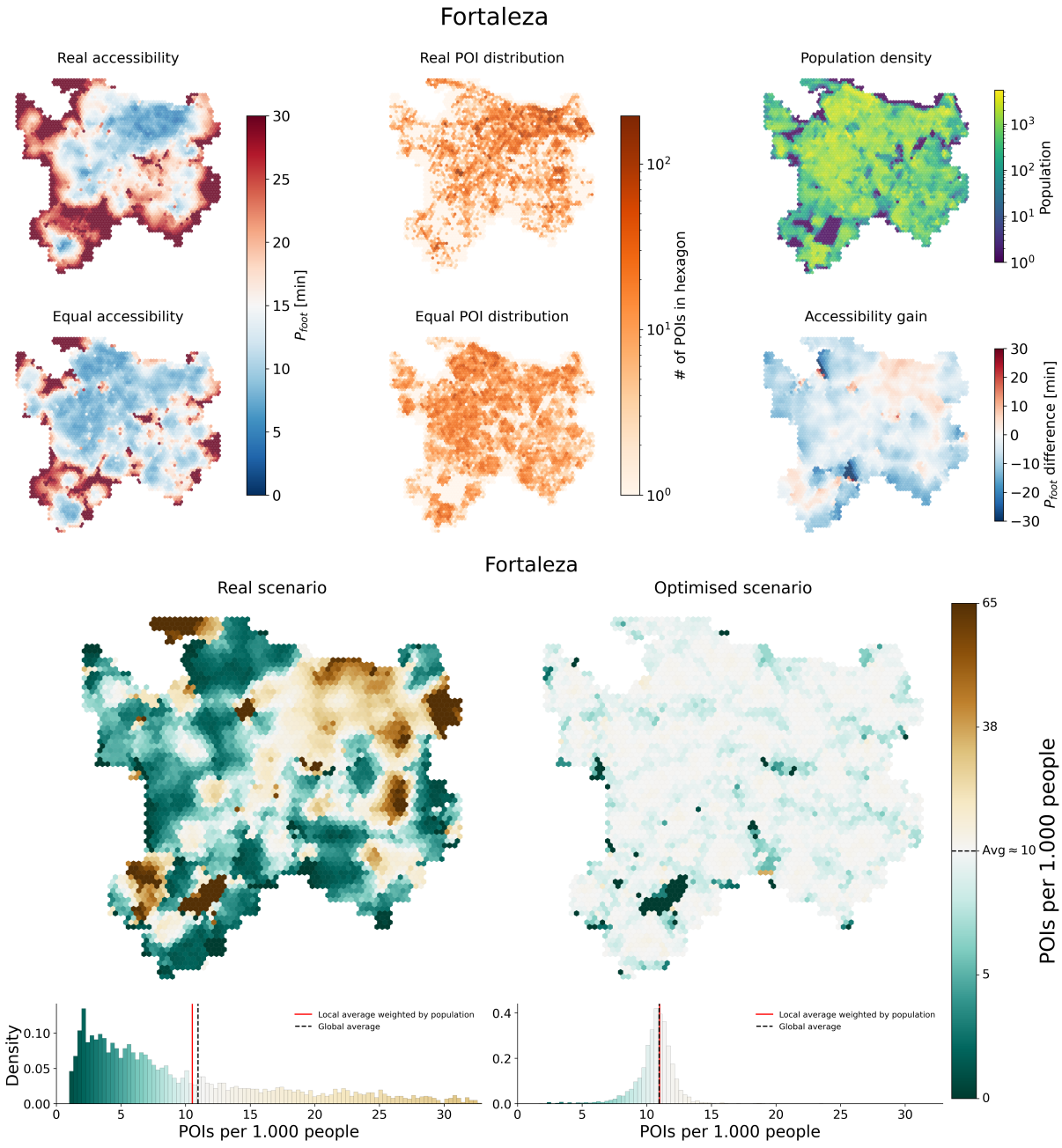


Figure 13: Accessibility of Fortaleza

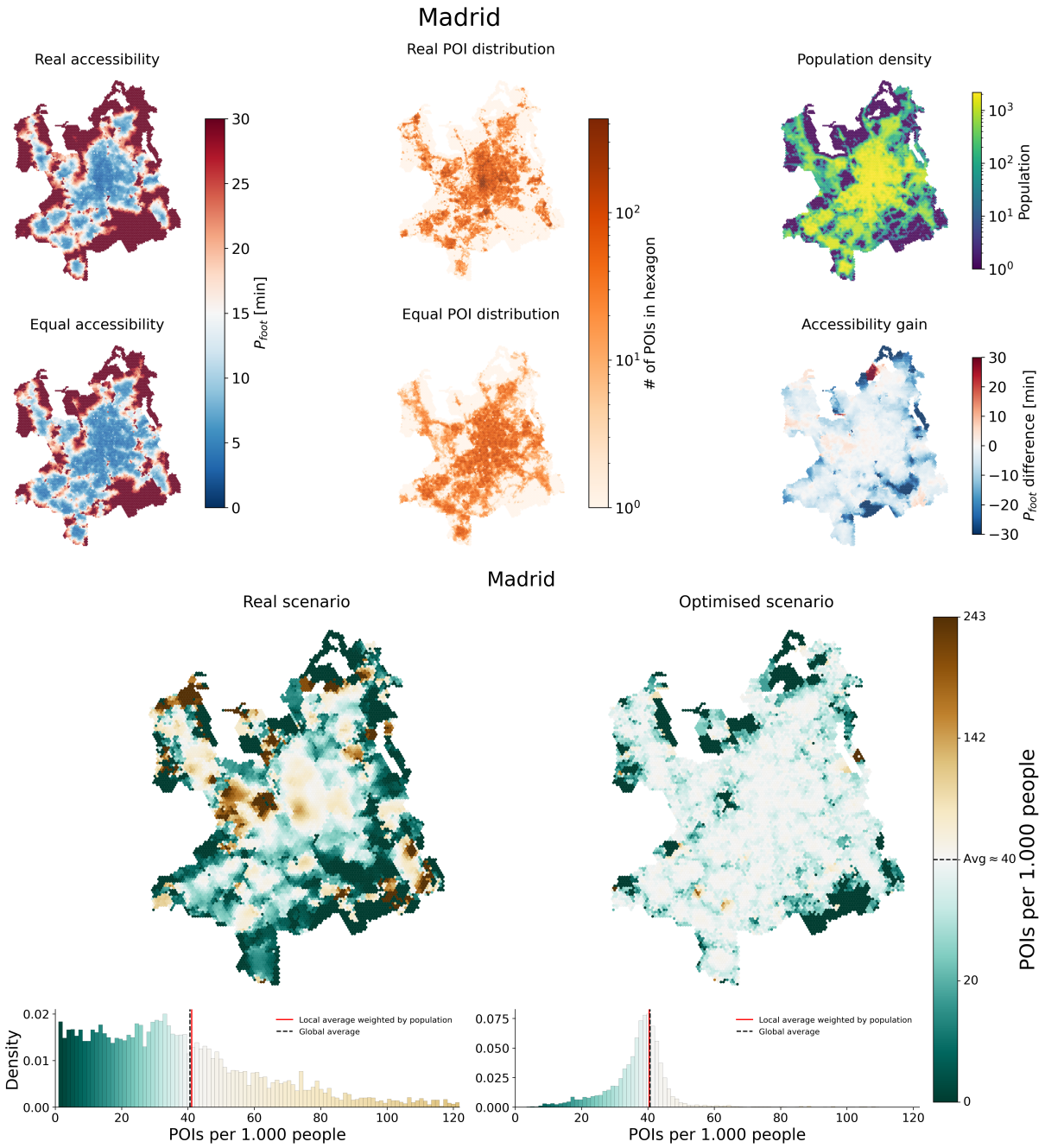


Figure 14: Accessibility of Madrid

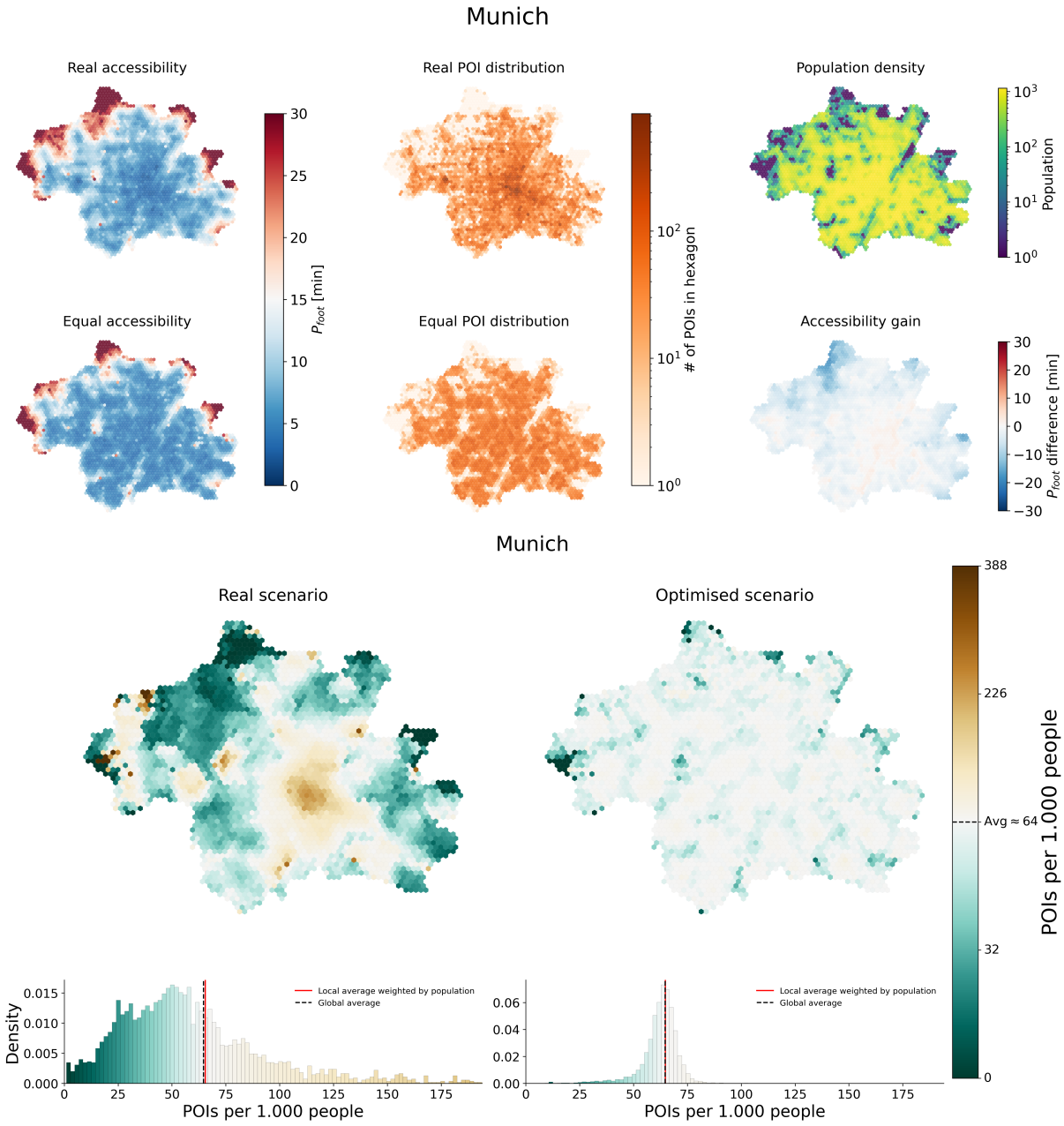


Figure 15: Accessibility of Munich

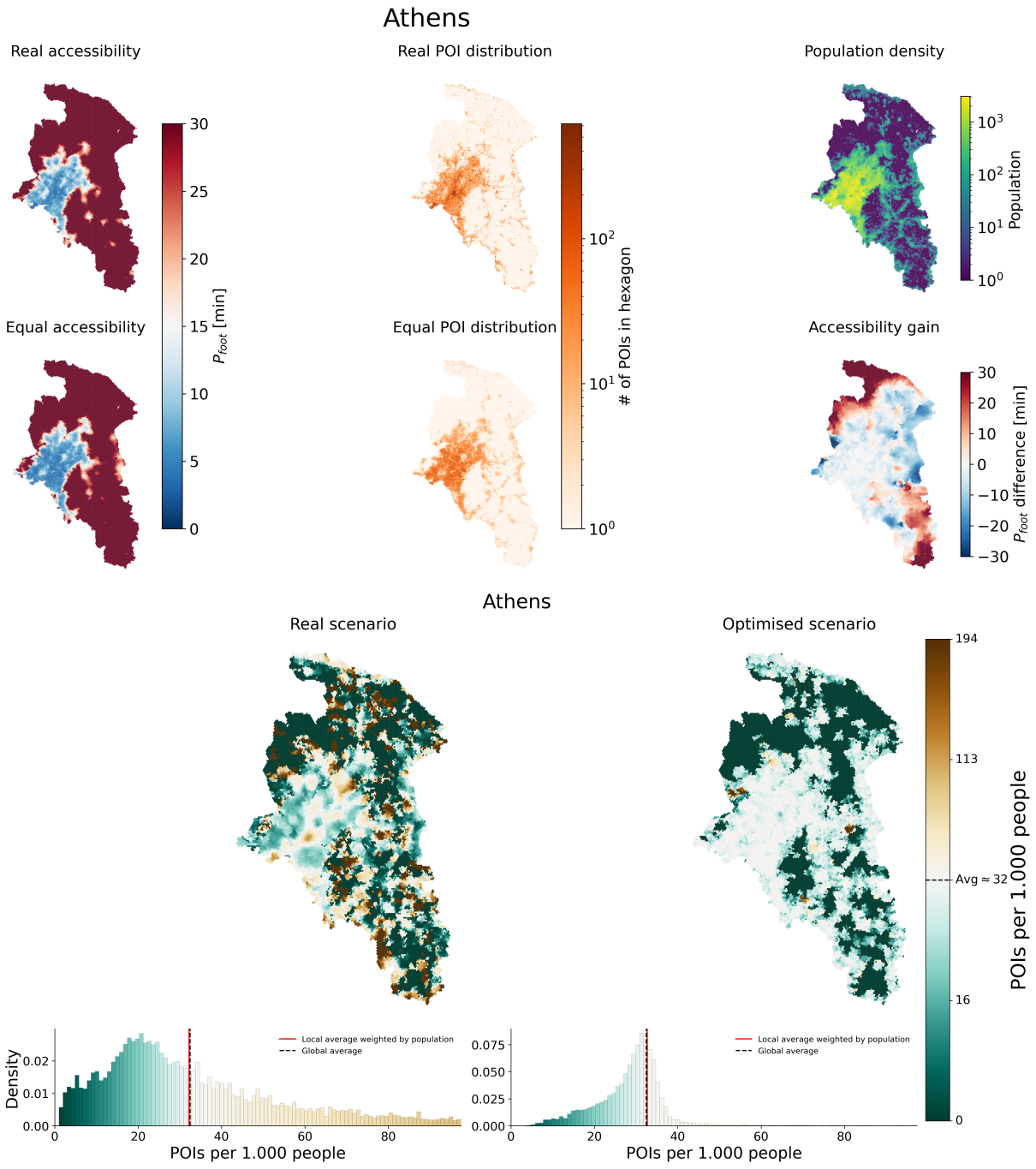


Figure 16: Accessibility of Athens

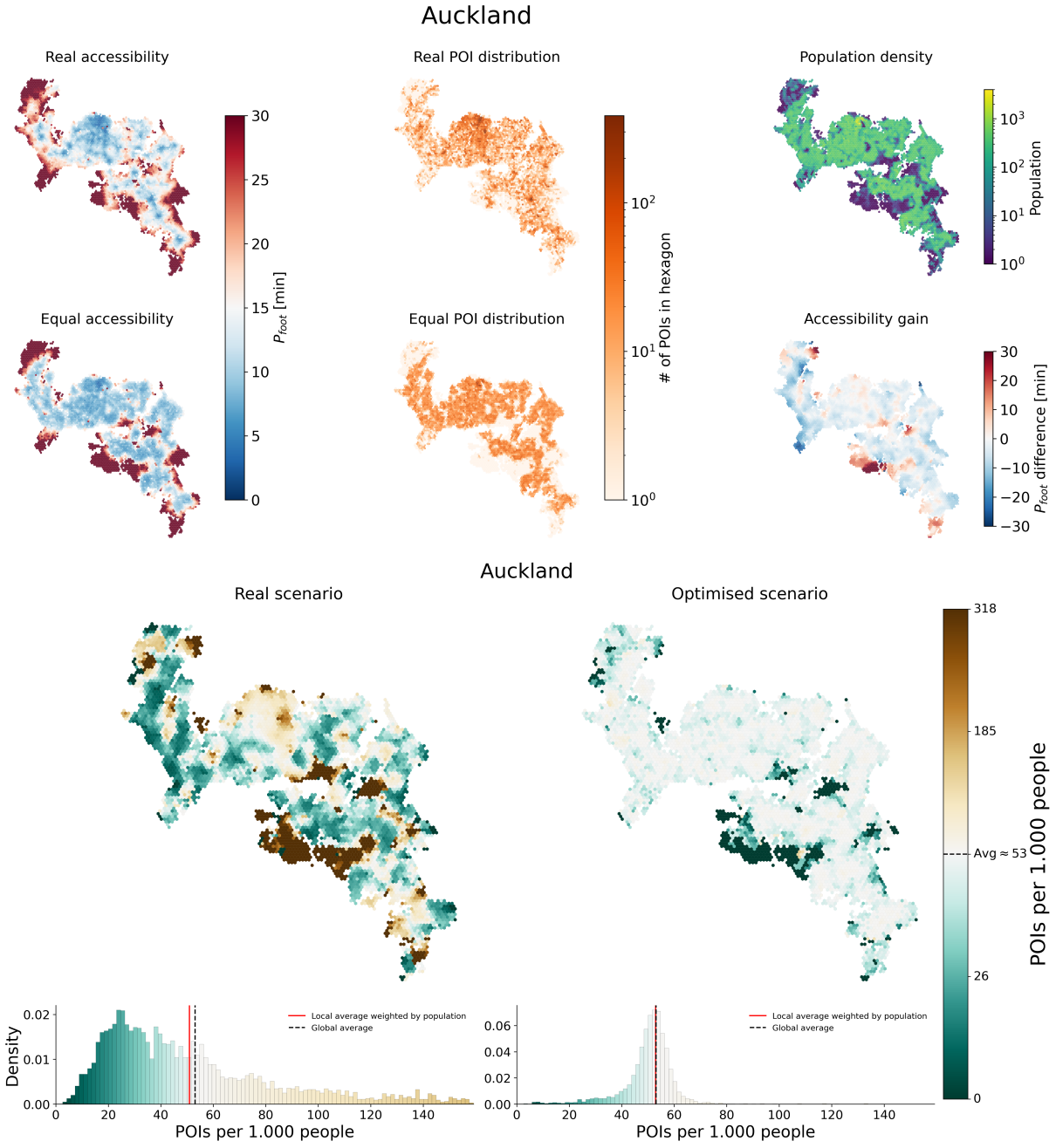


Figure 17: Accessibility of Auckland

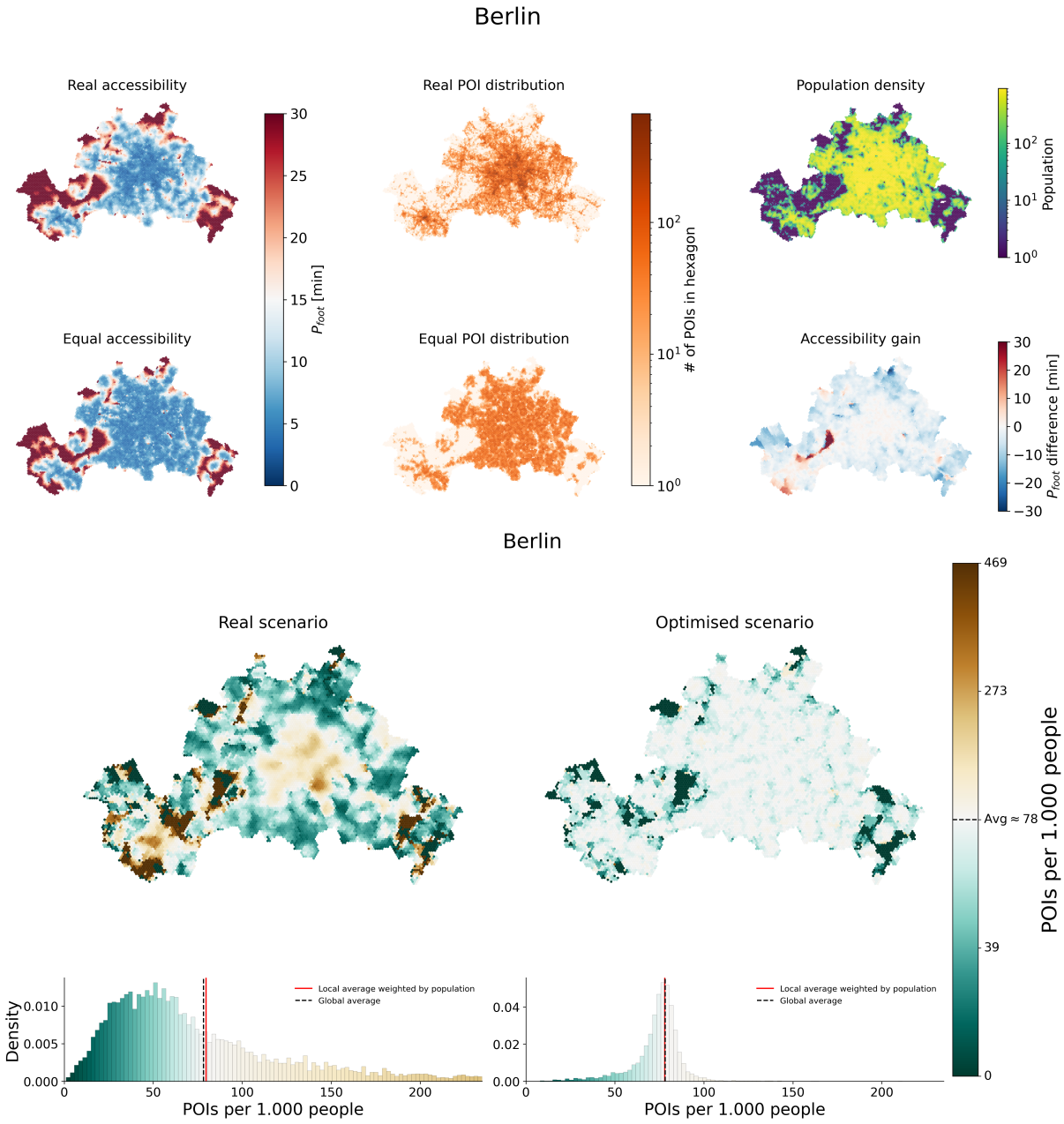


Figure 18: Accessibility of Berlin

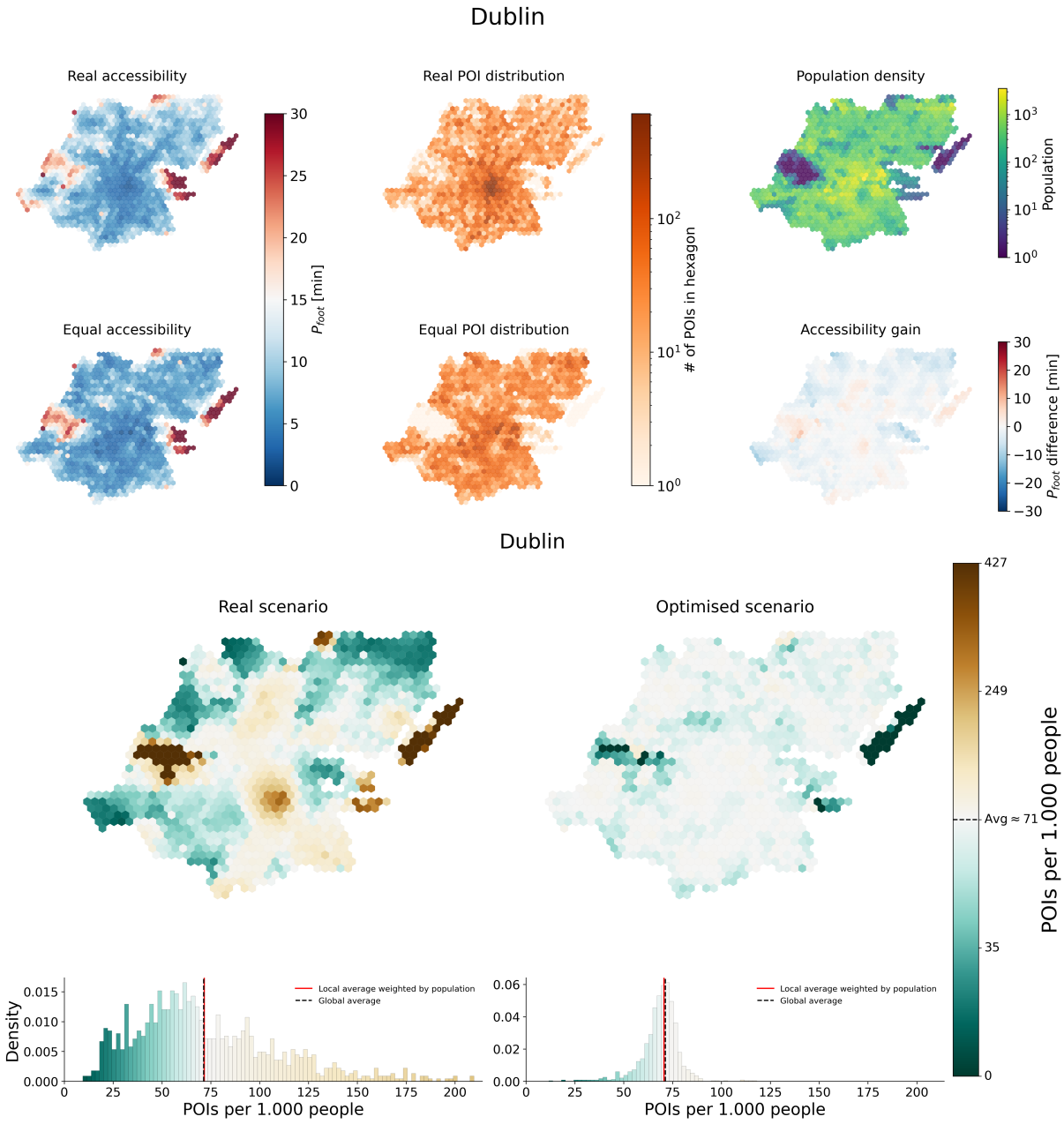


Figure 19: Accessibility of Dublin

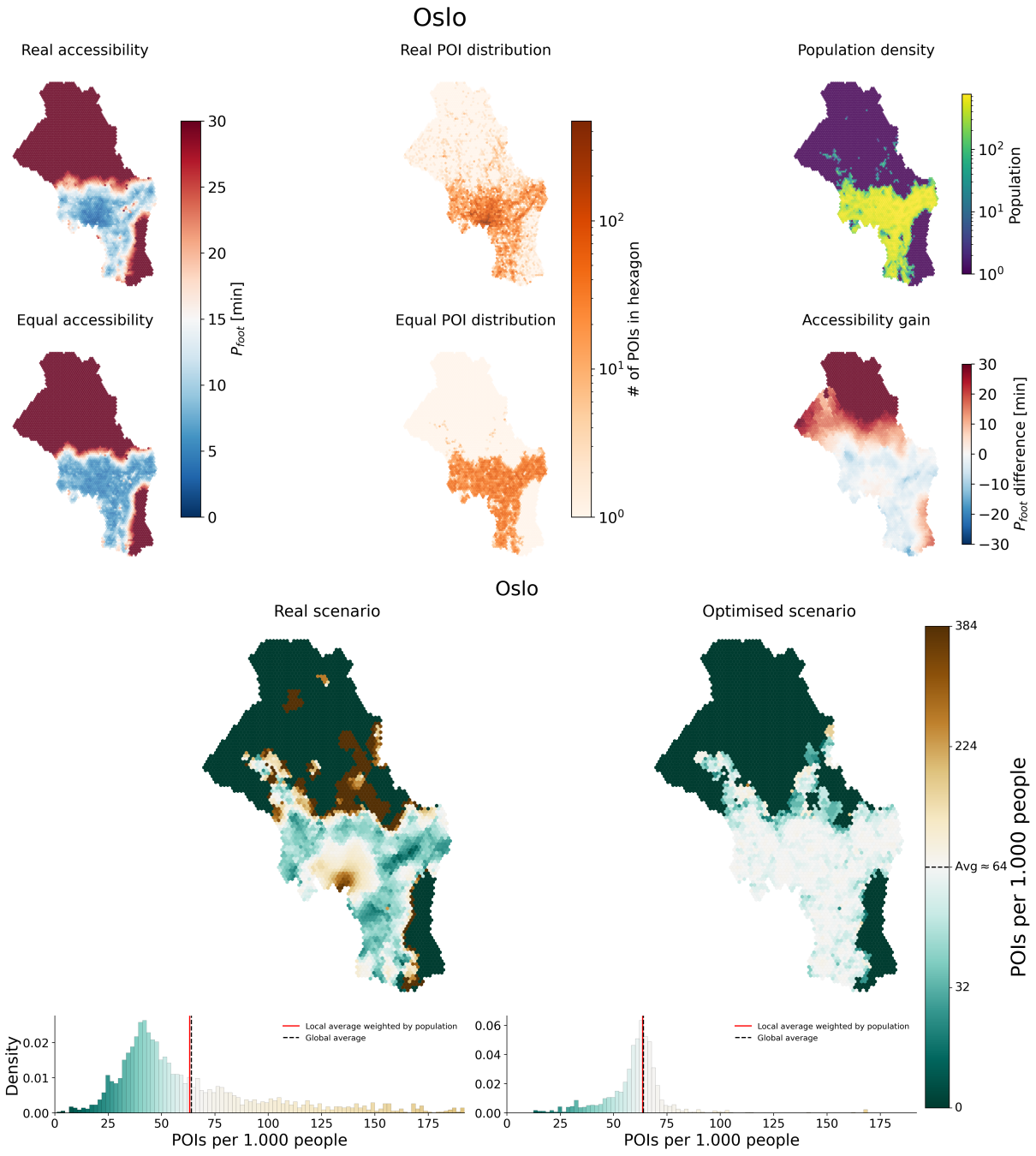


Figure 20: Accessibility of Oslo

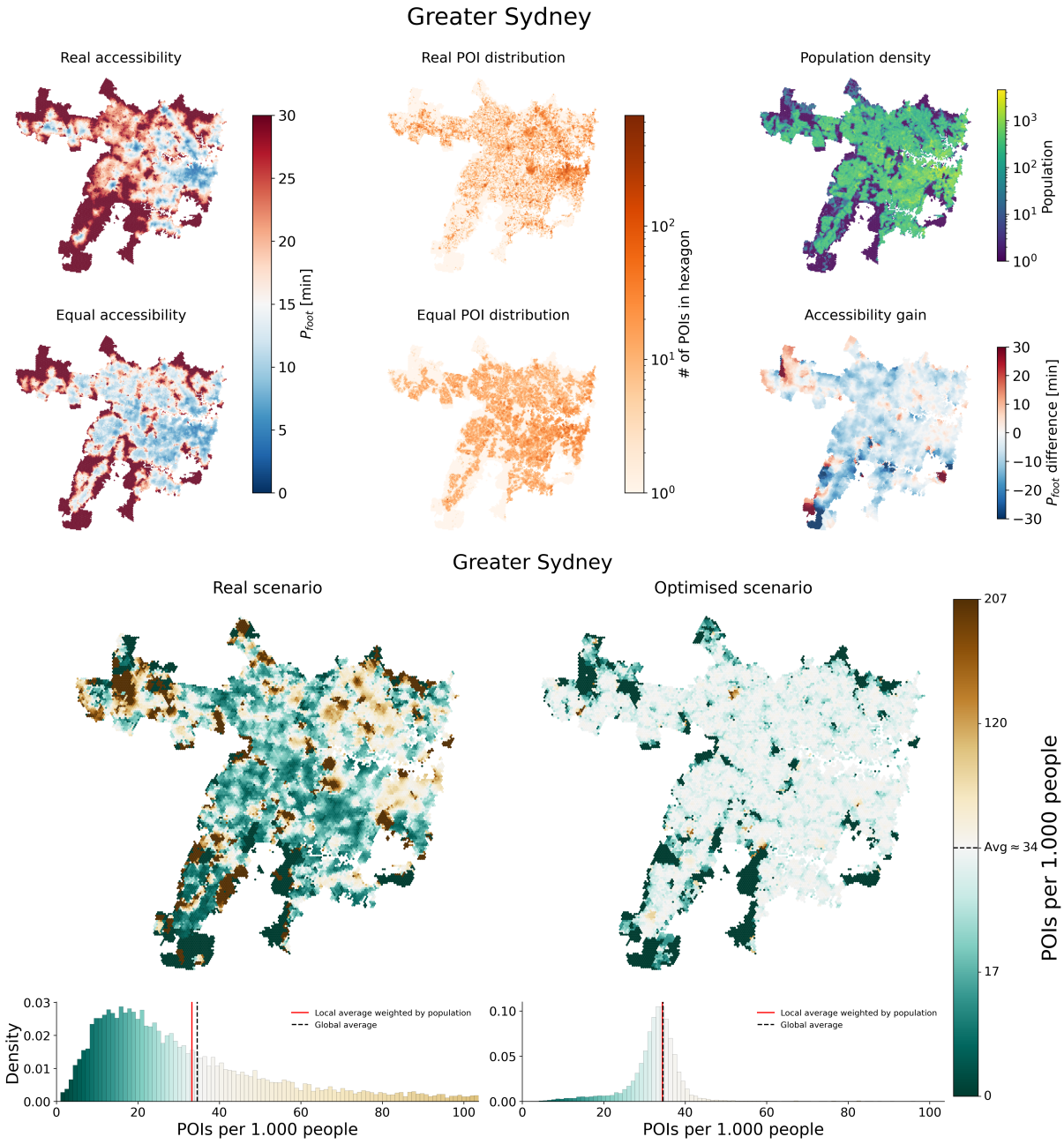


Figure 21: Accessibility of Greater Sydney

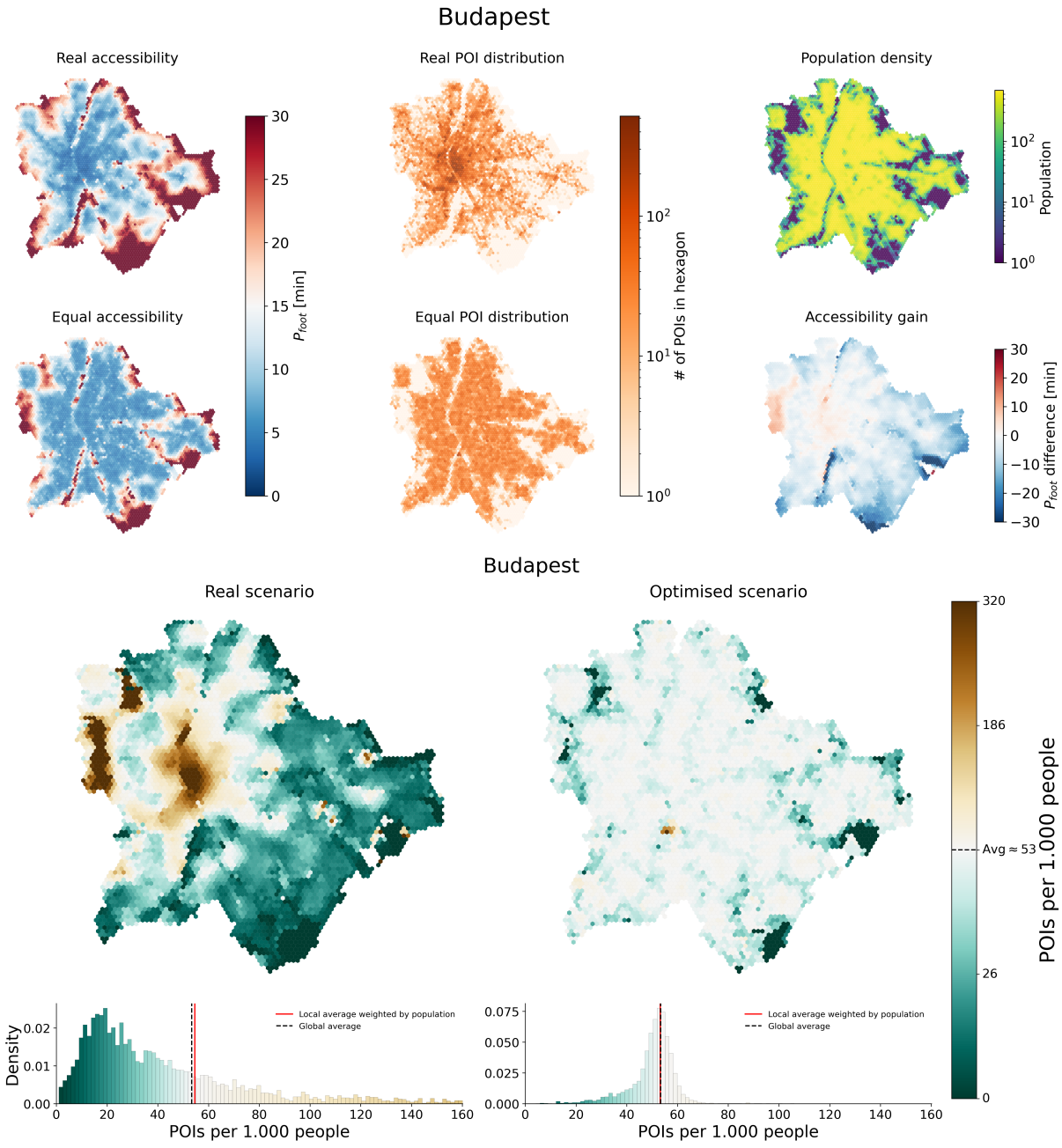


Figure 22: Accessibility of Budapest

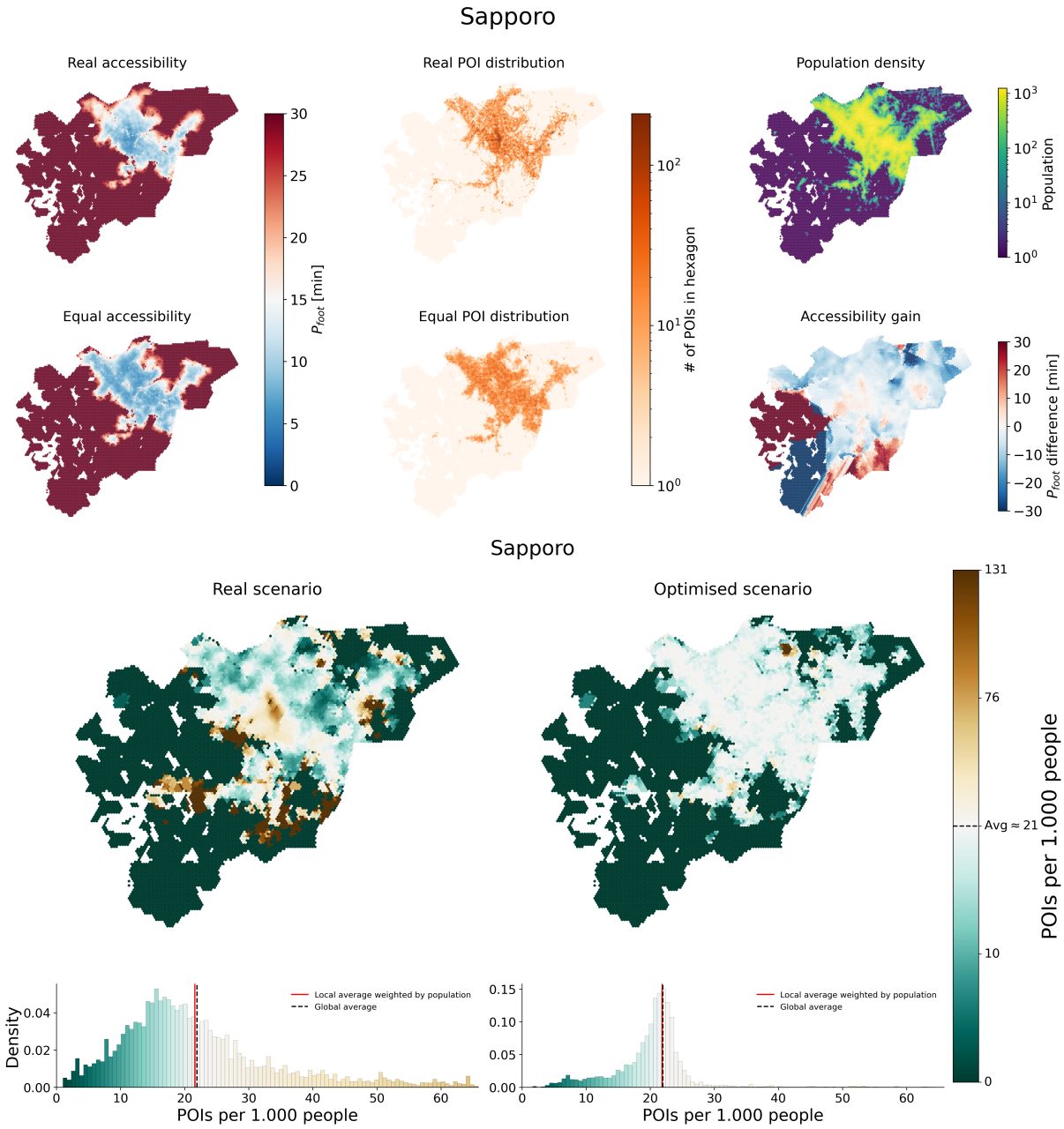


Figure 23: Accessibility of Sapporo

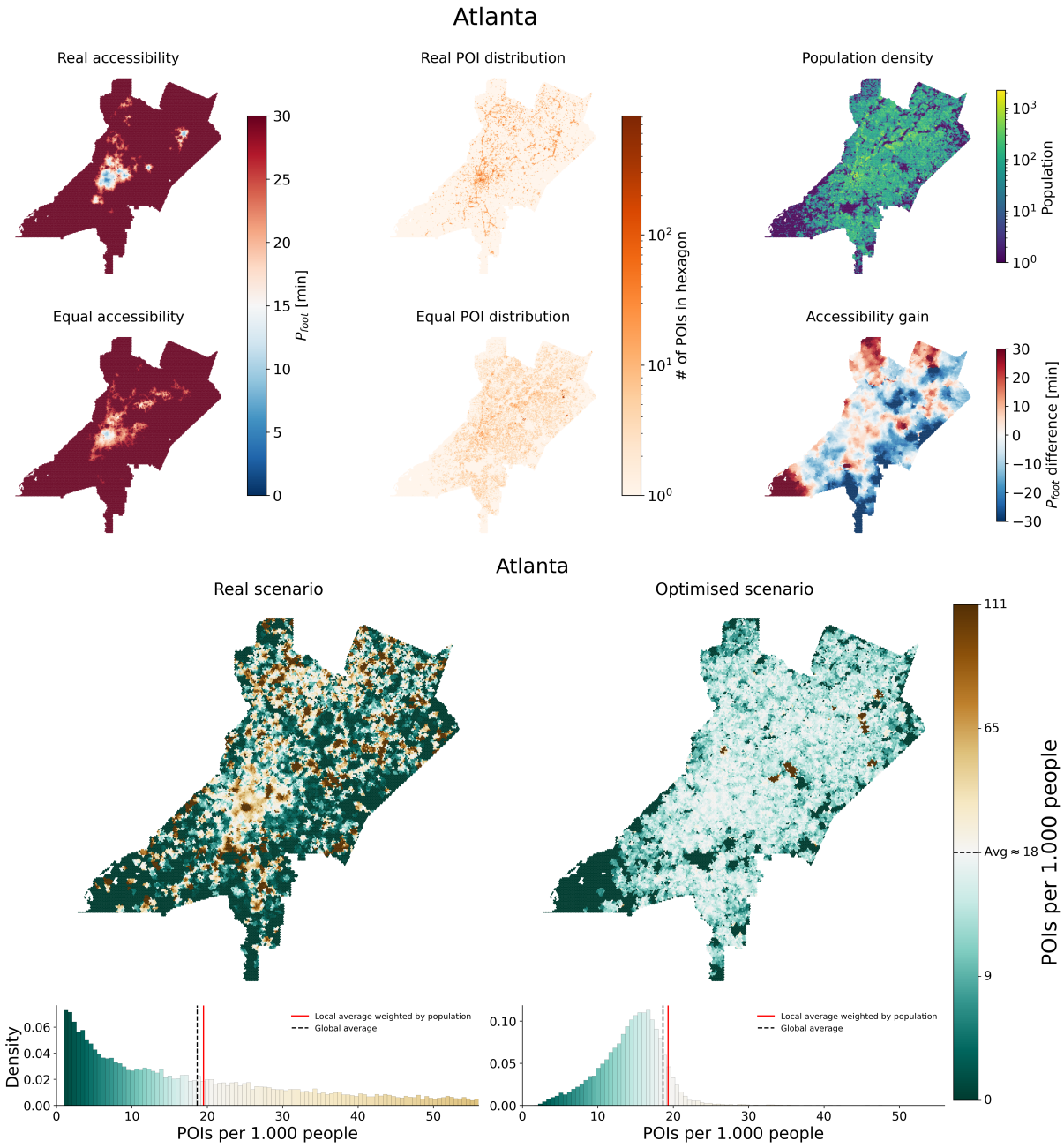


Figure 24: Accessibility of Atlanta

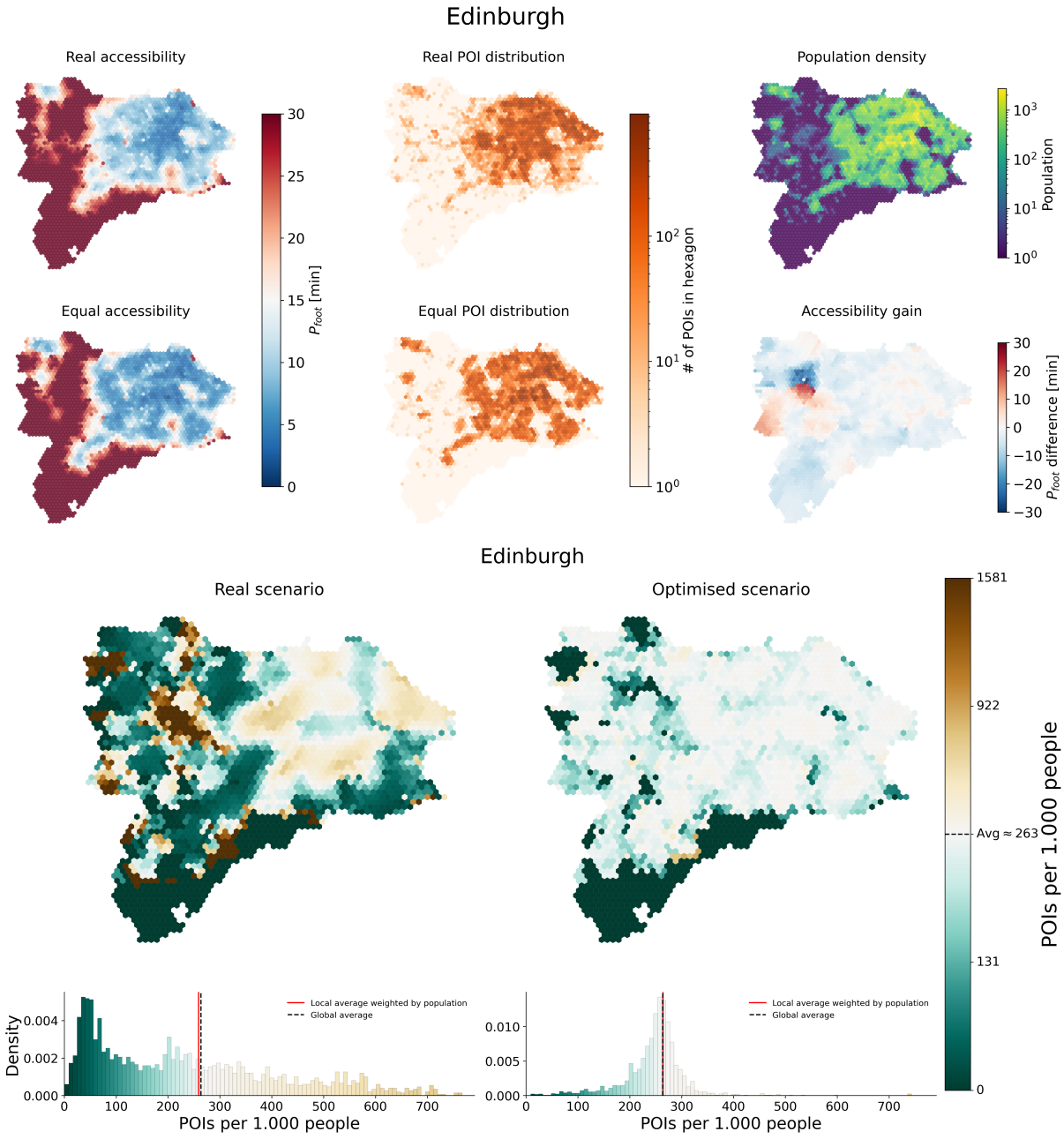


Figure 25: Accessibility of Edinburgh

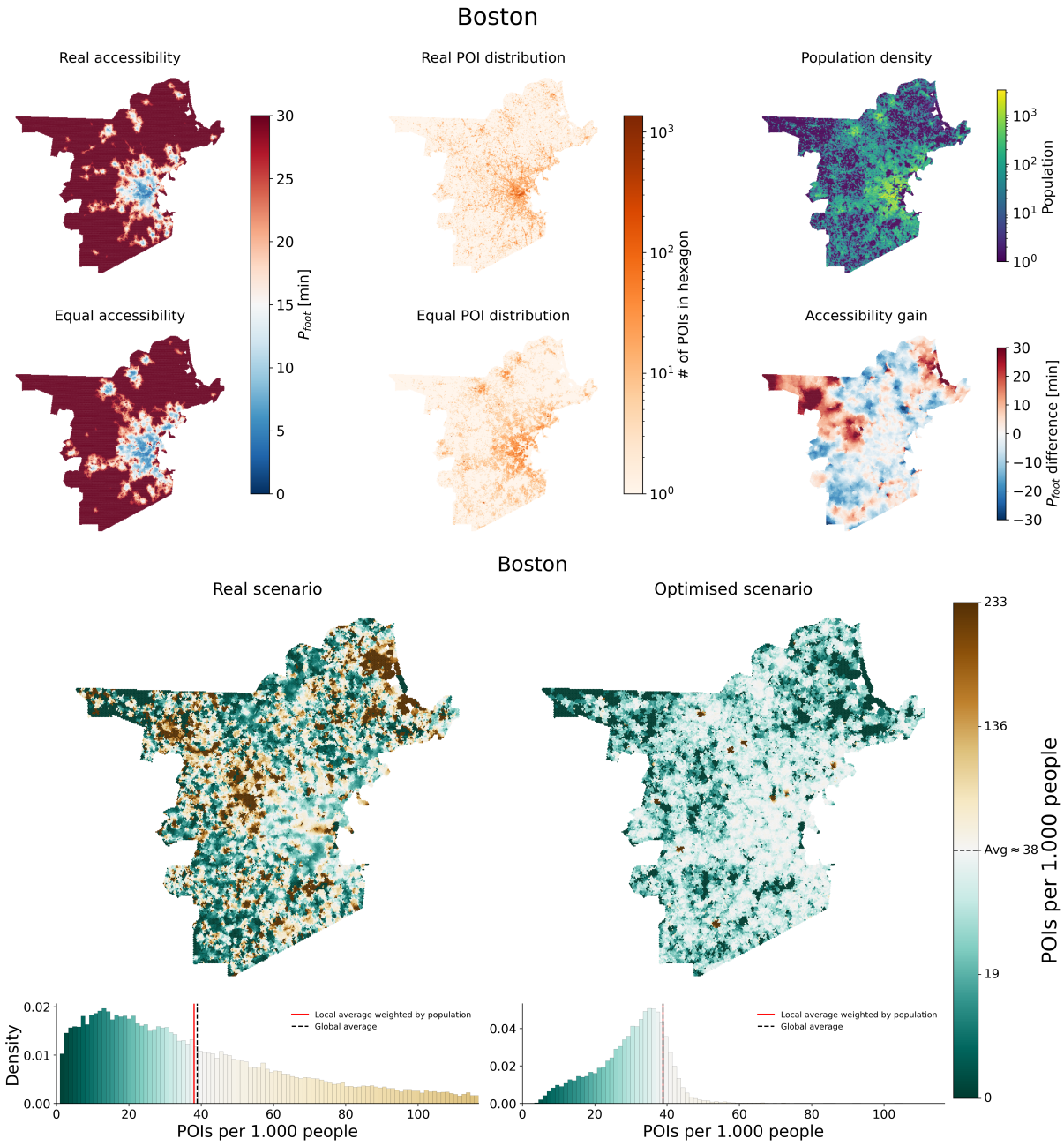


Figure 26: Accessibility of Boston

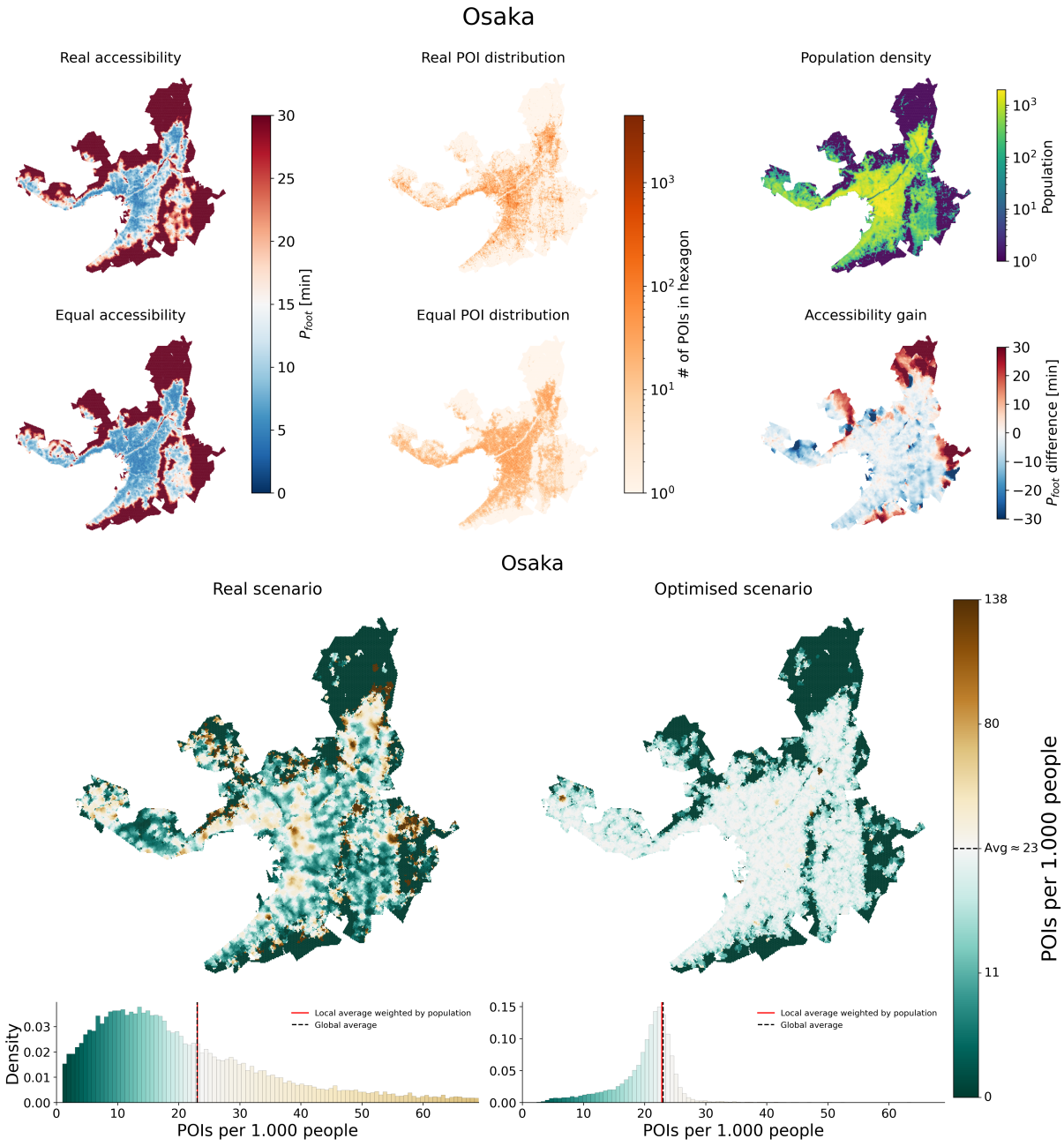


Figure 27: Accessibility of Osaka

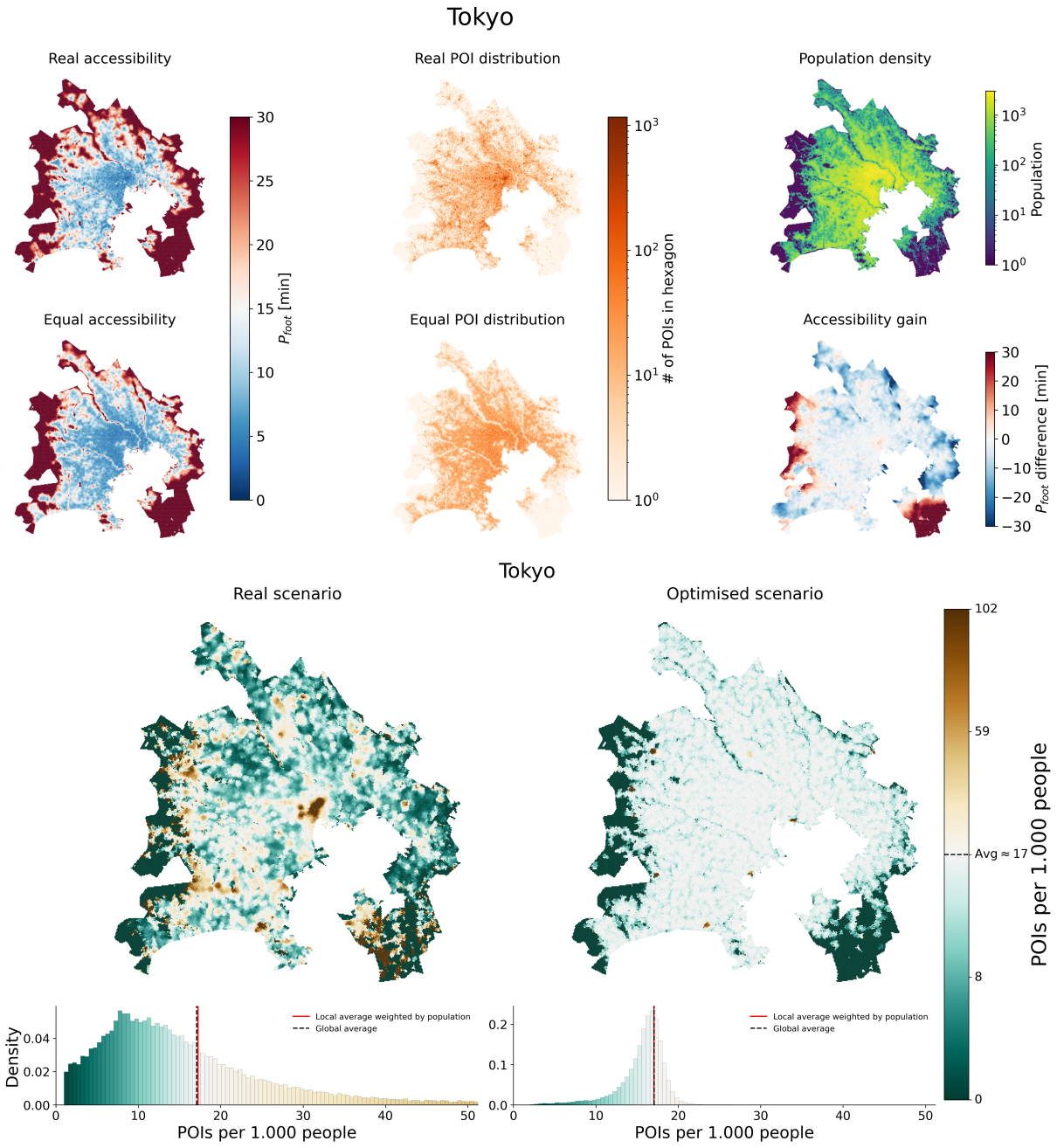


Figure 28: Accessibility of Tokyo

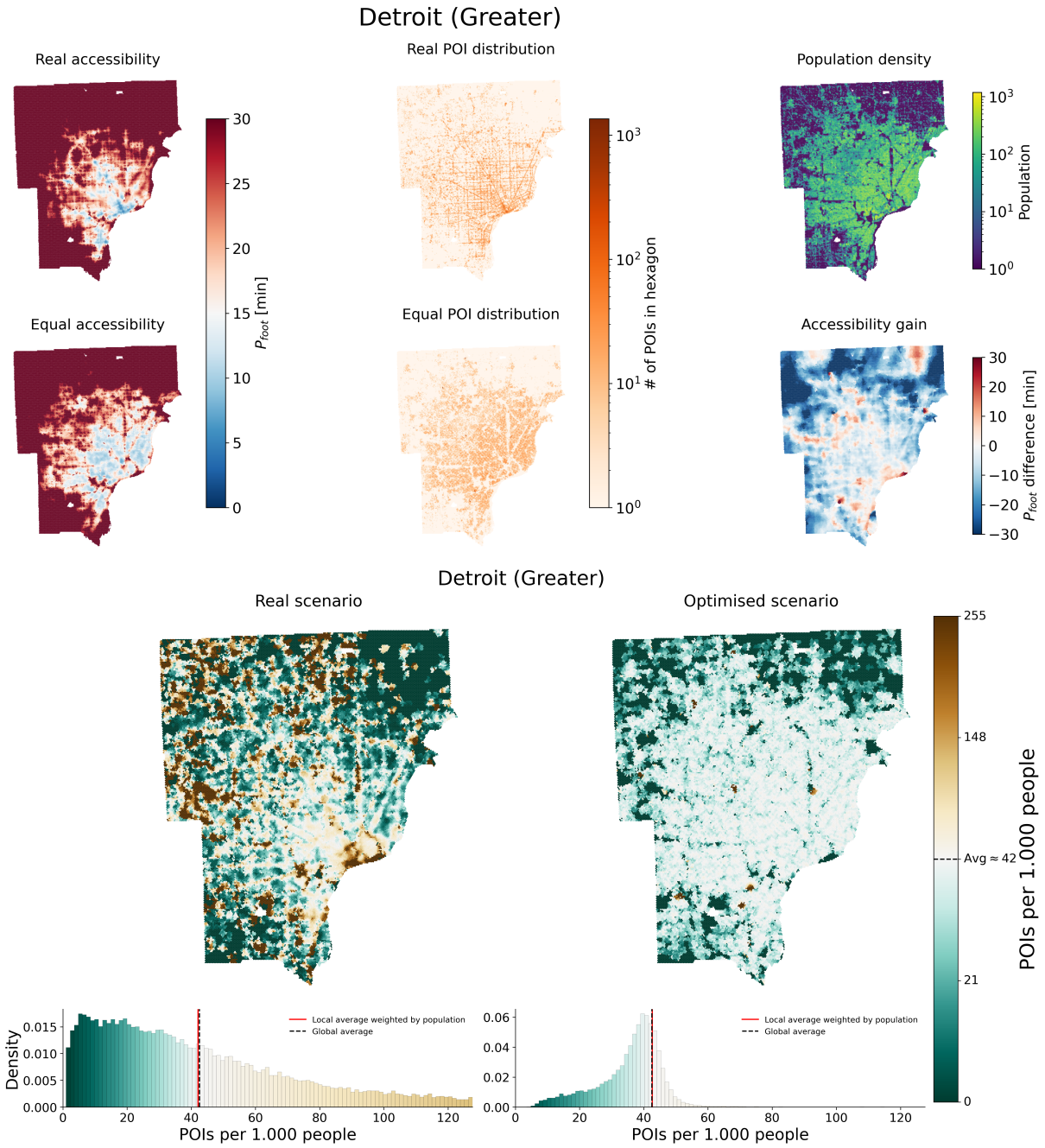


Figure 29: Accessibility of Detroit (Greater)

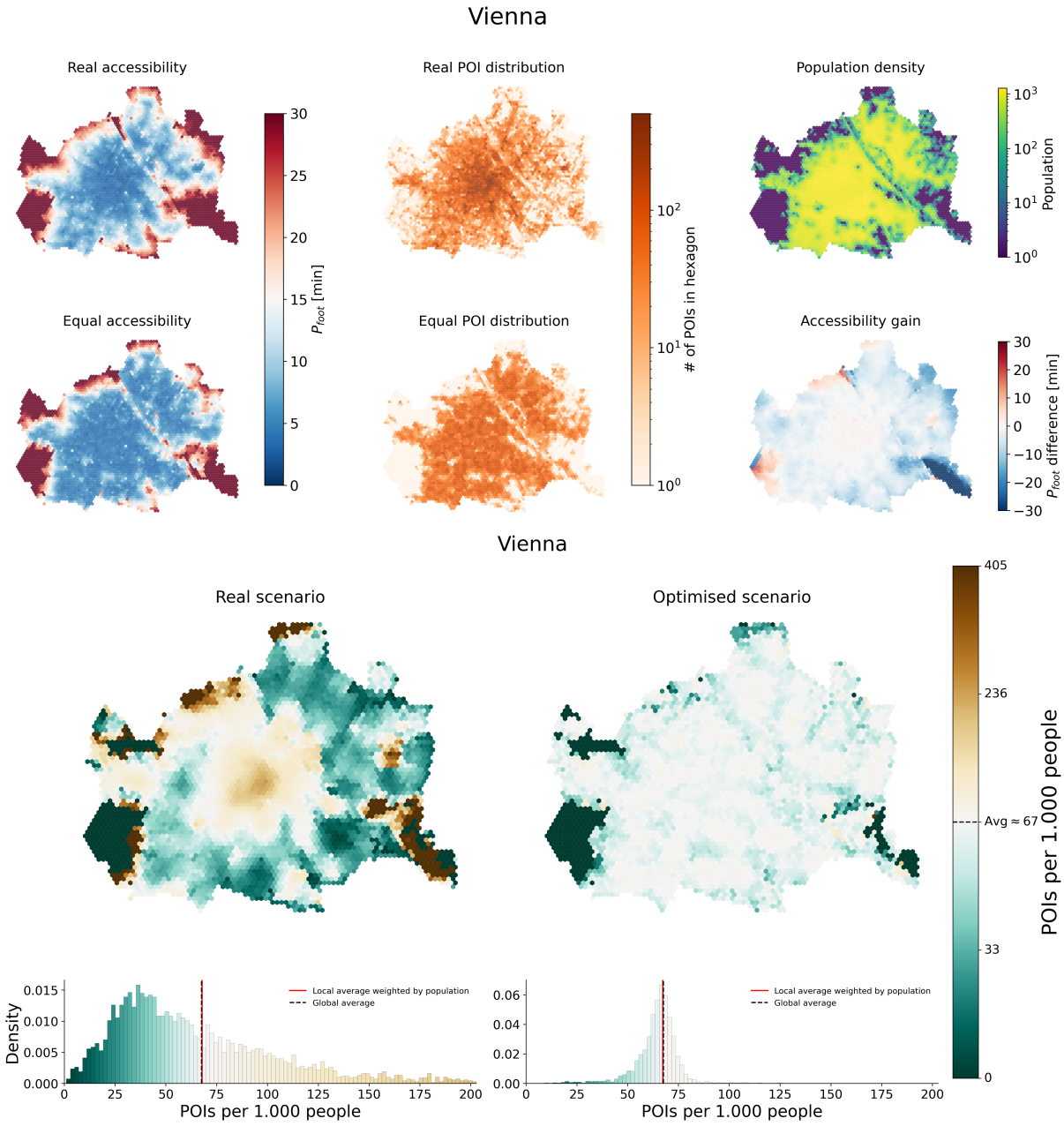


Figure 30: Accessibility of Vienna

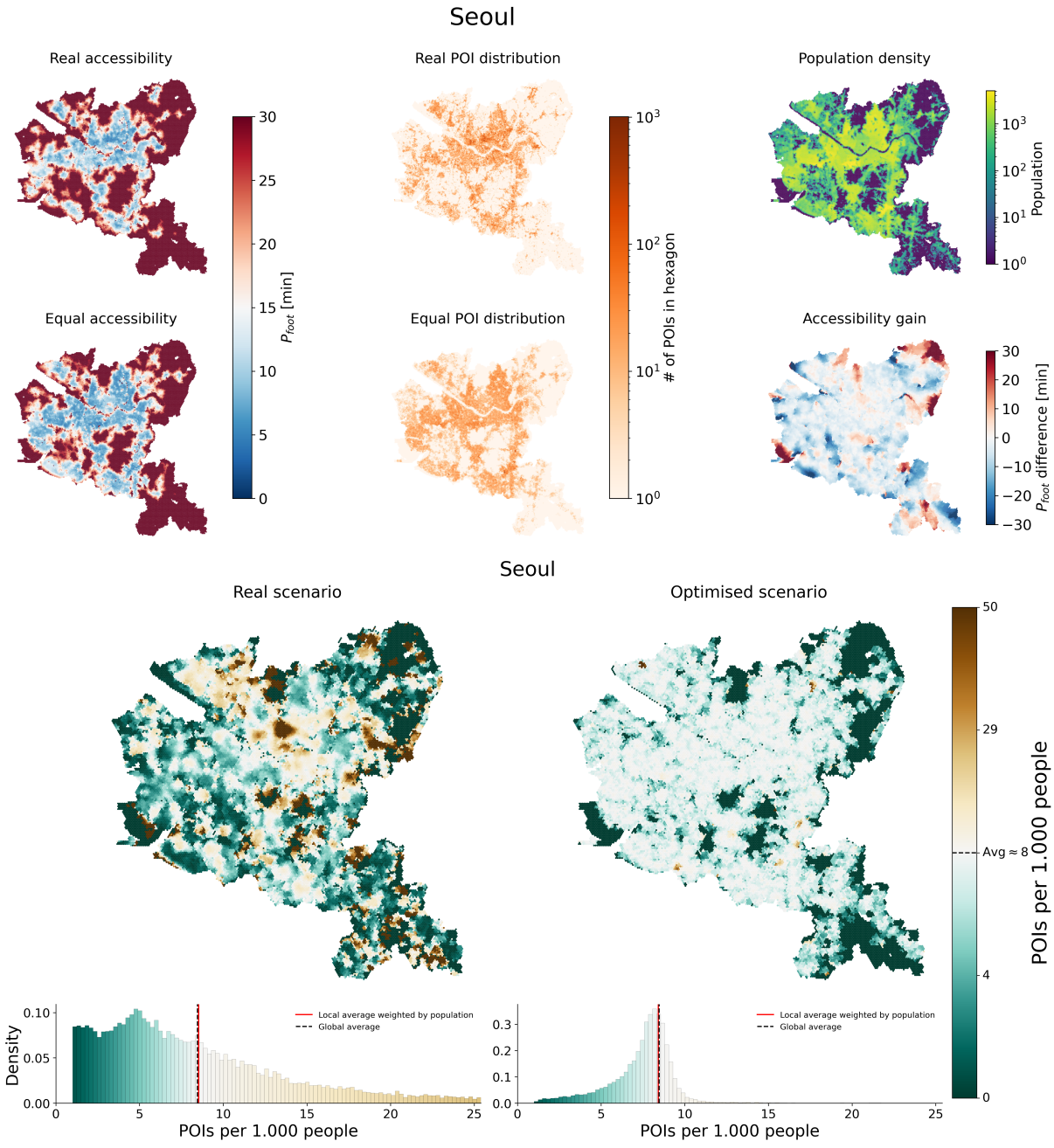


Figure 31: Accessibility of Seoul

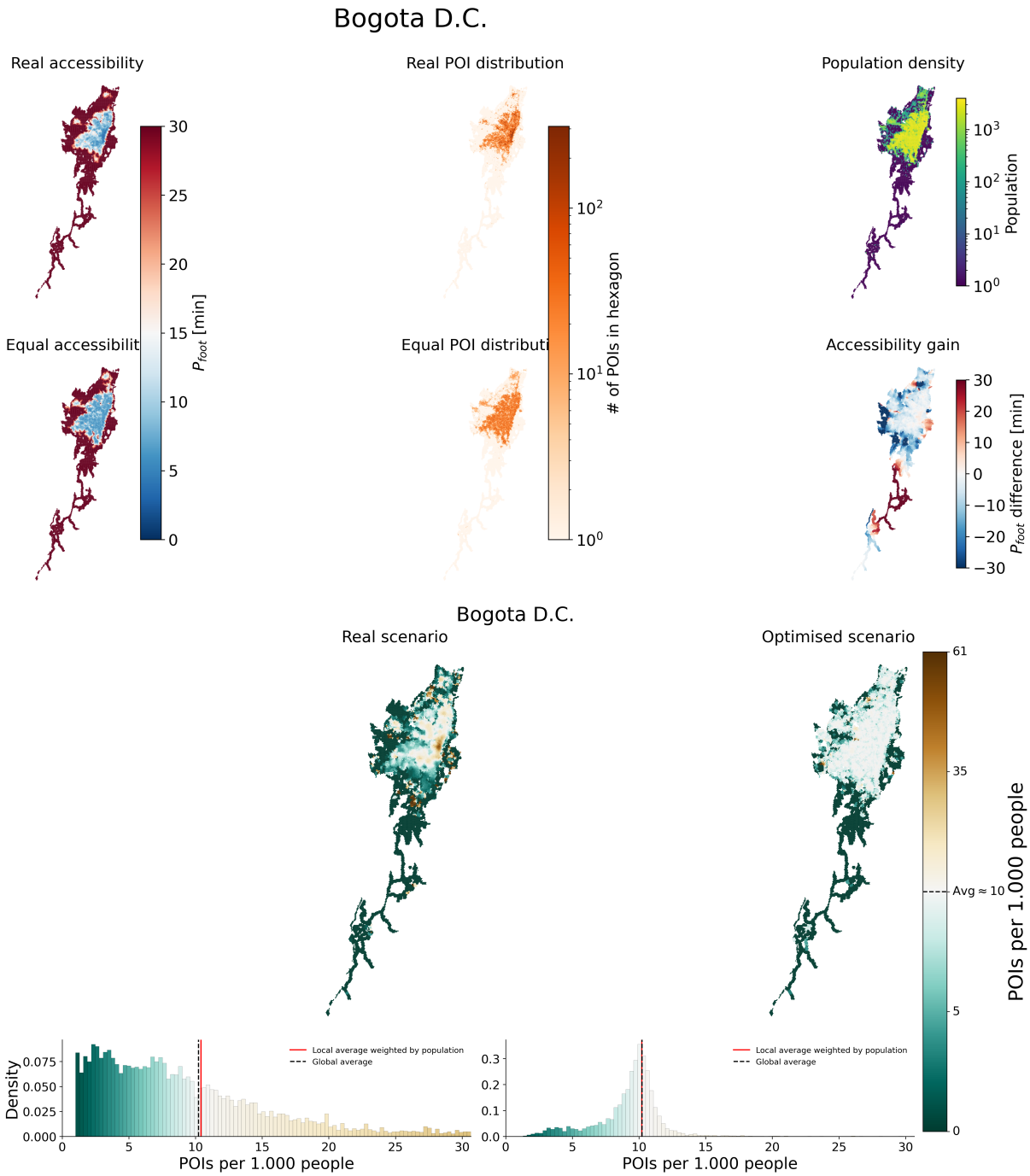


Figure 32: Accessibility of Bogota D.C.

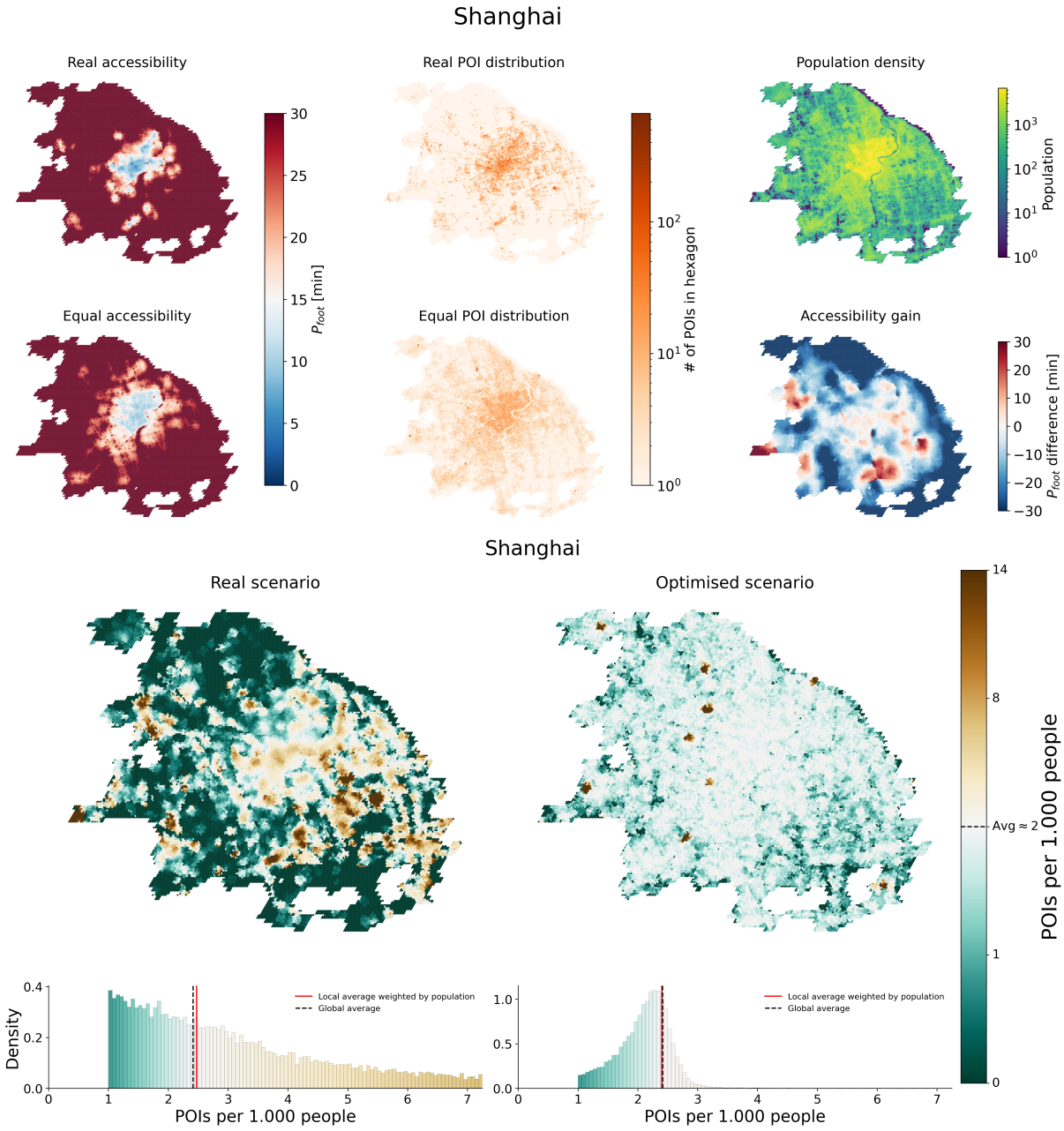


Figure 33: Accessibility of Shanghai

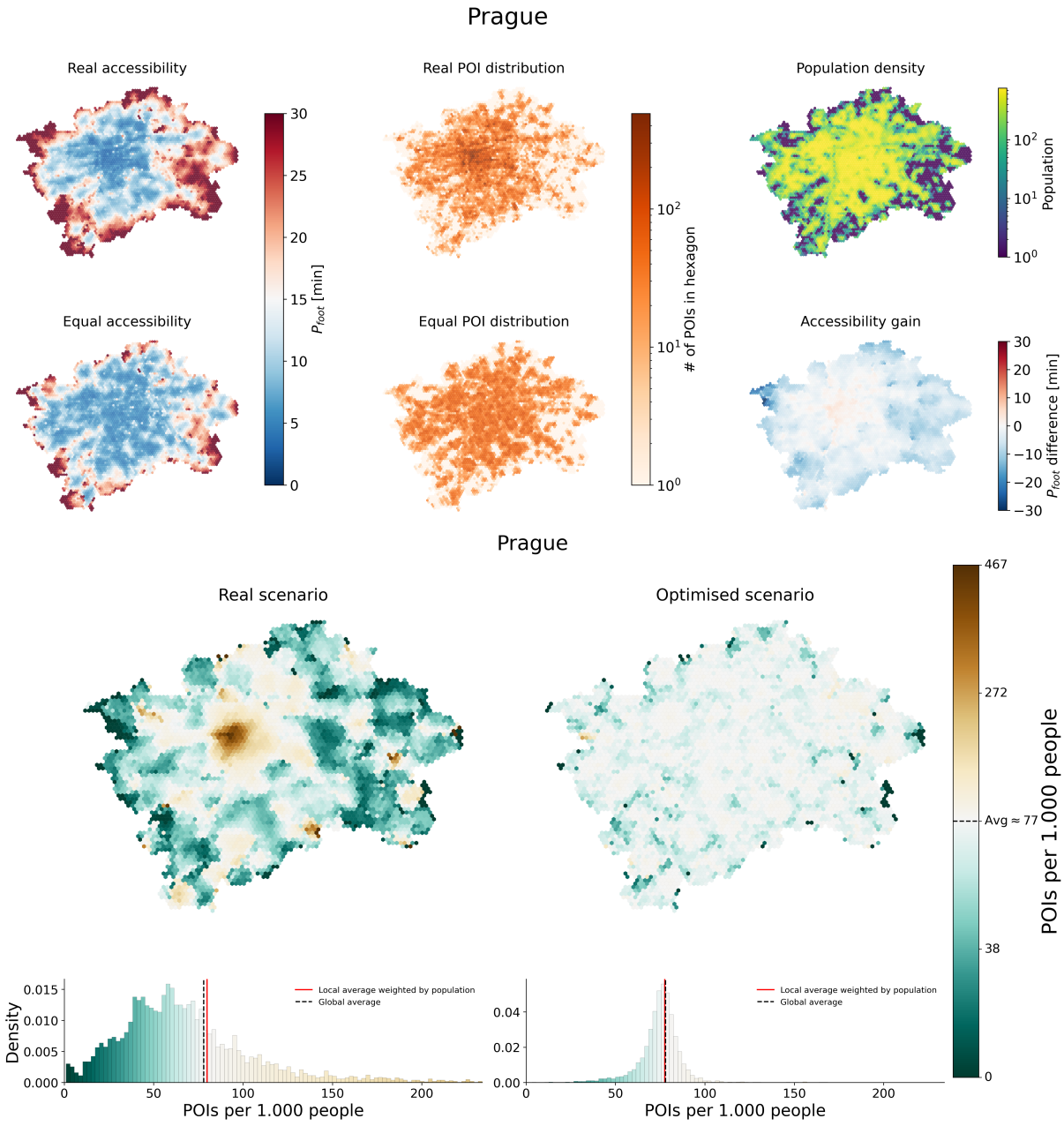


Figure 34: Accessibility of Prague

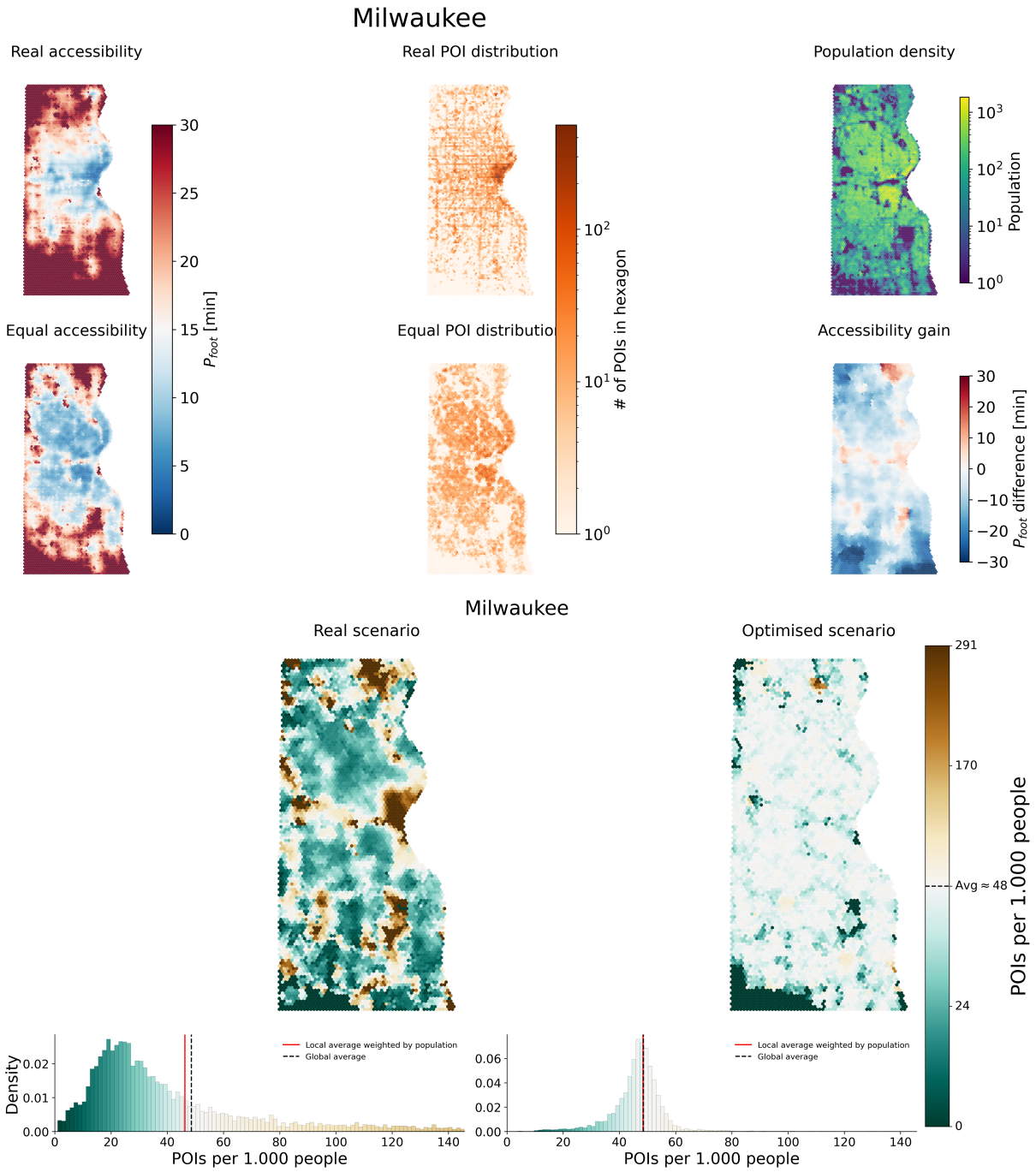


Figure 35: Accessibility of Milwaukee

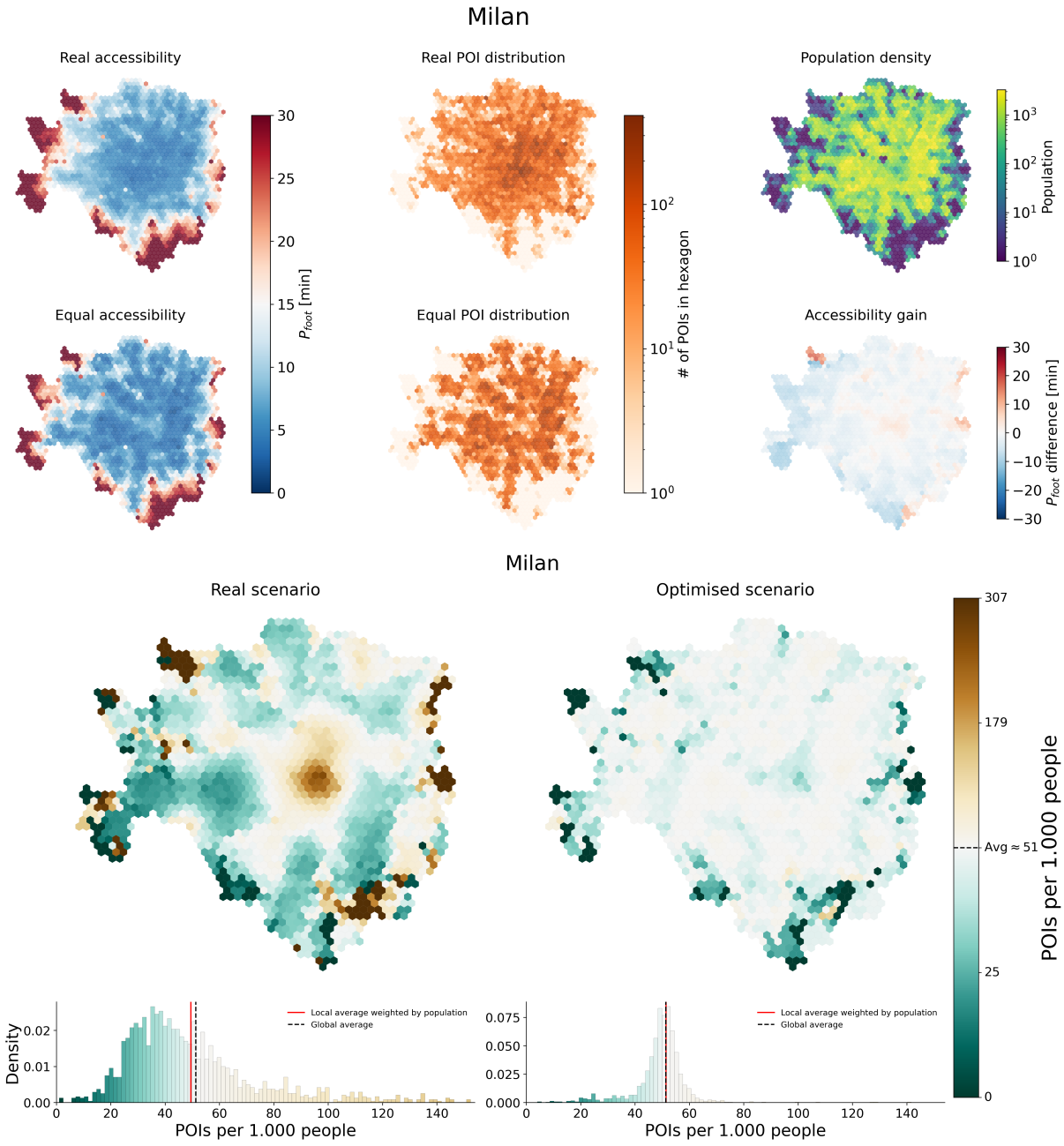


Figure 36: Accessibility of Milan

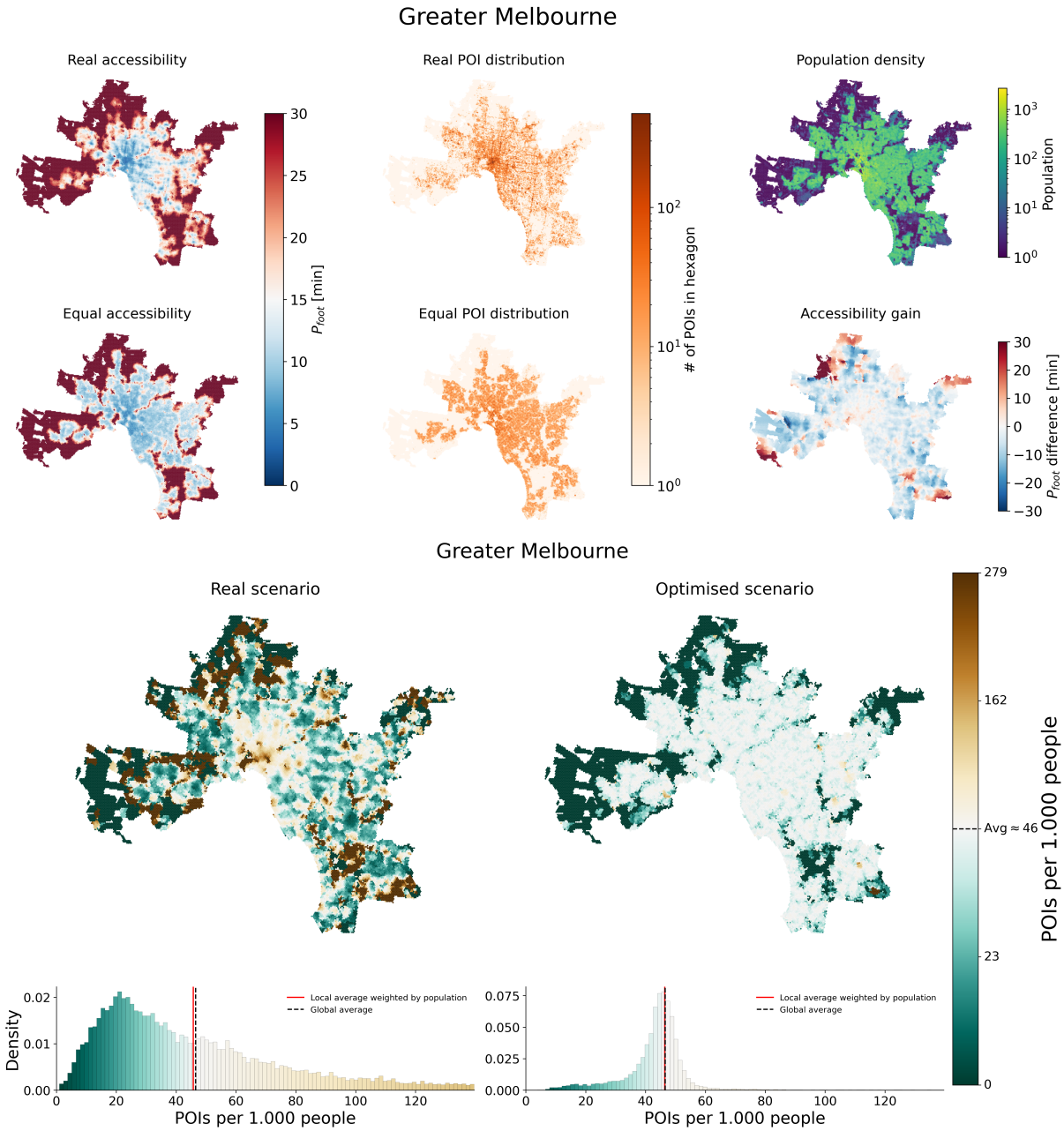


Figure 37: Accessibility of Greater Melbourne

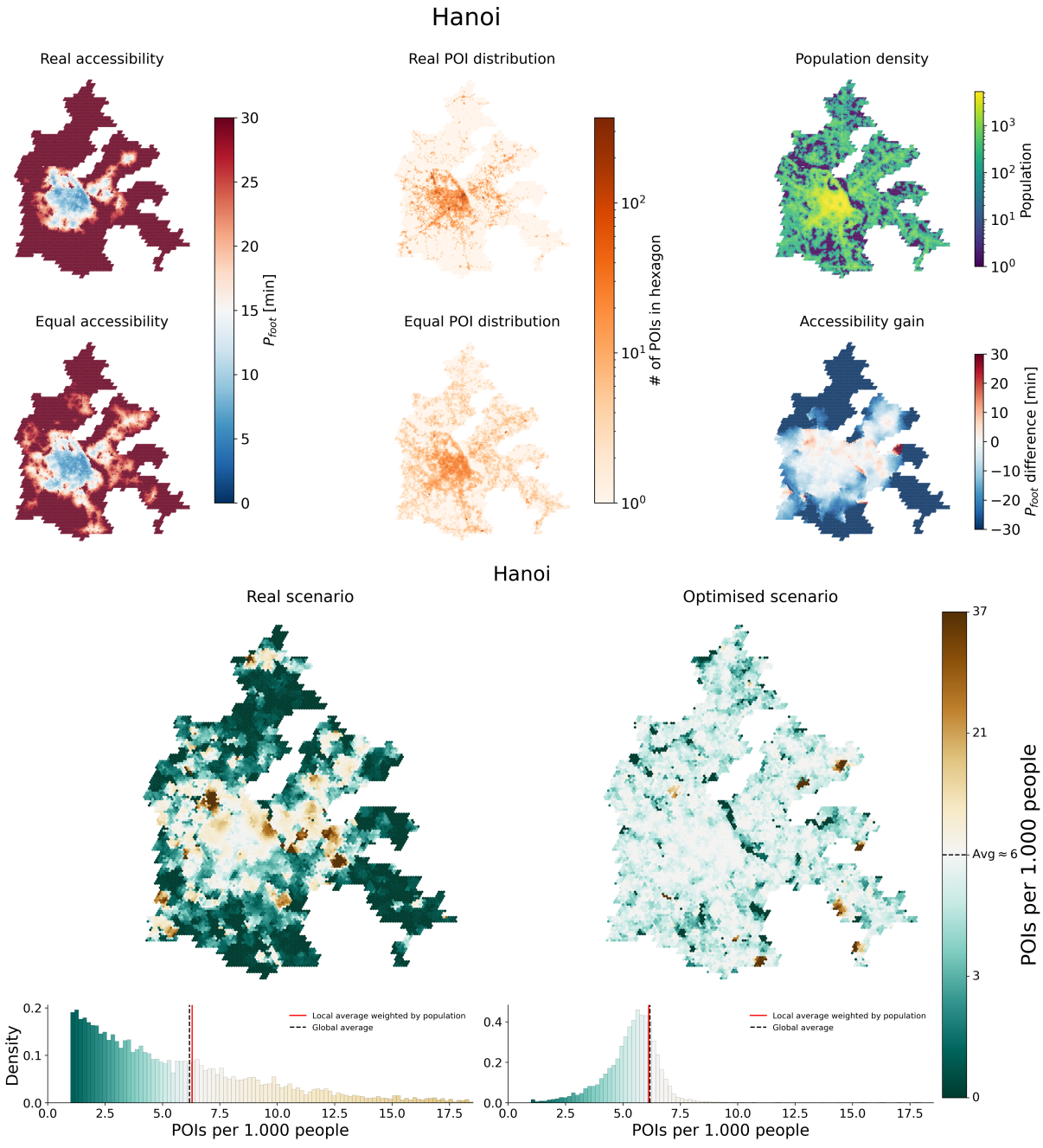


Figure 38: Accessibility of Hanoi

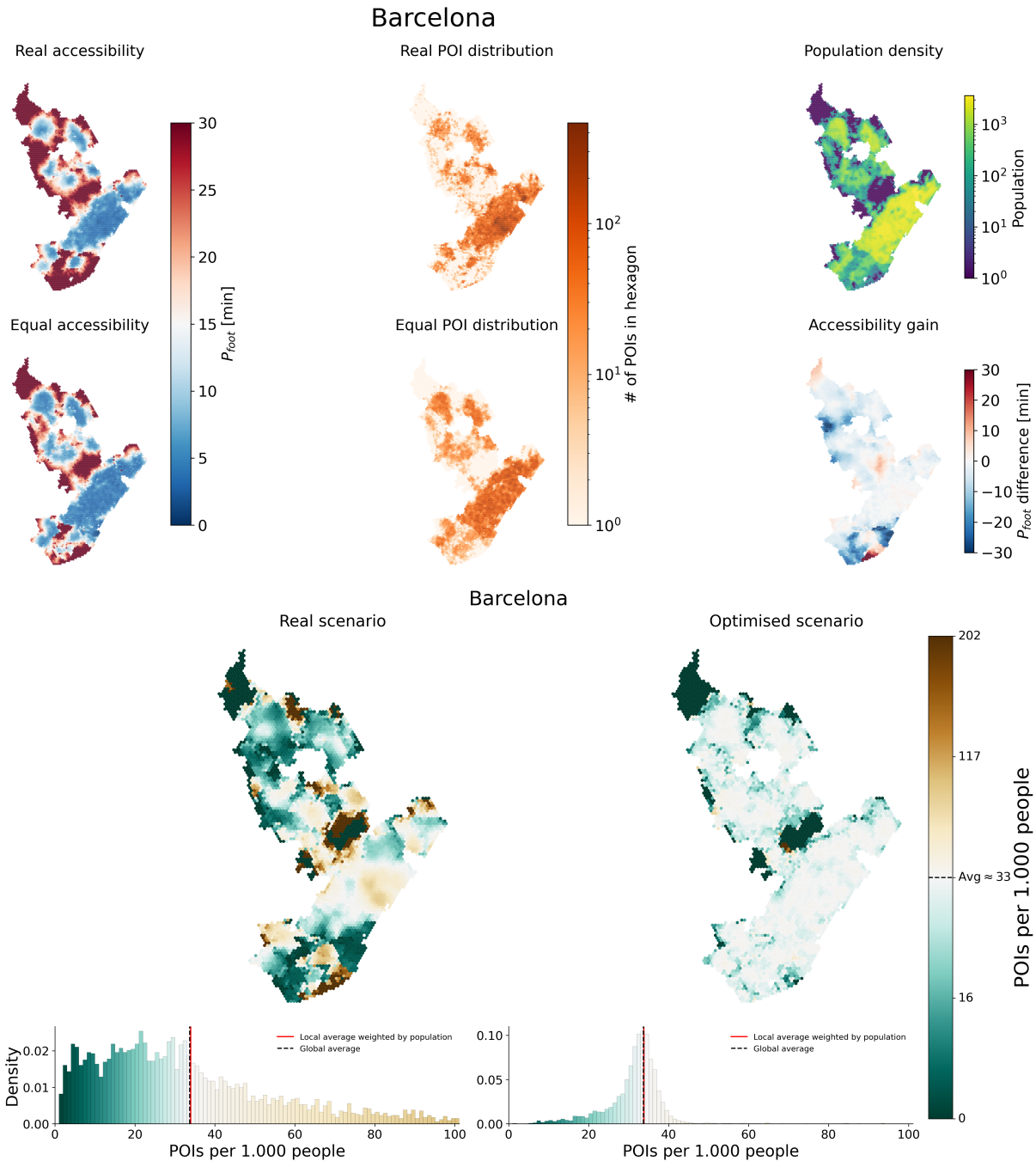


Figure 39: Accessibility of Barcelona

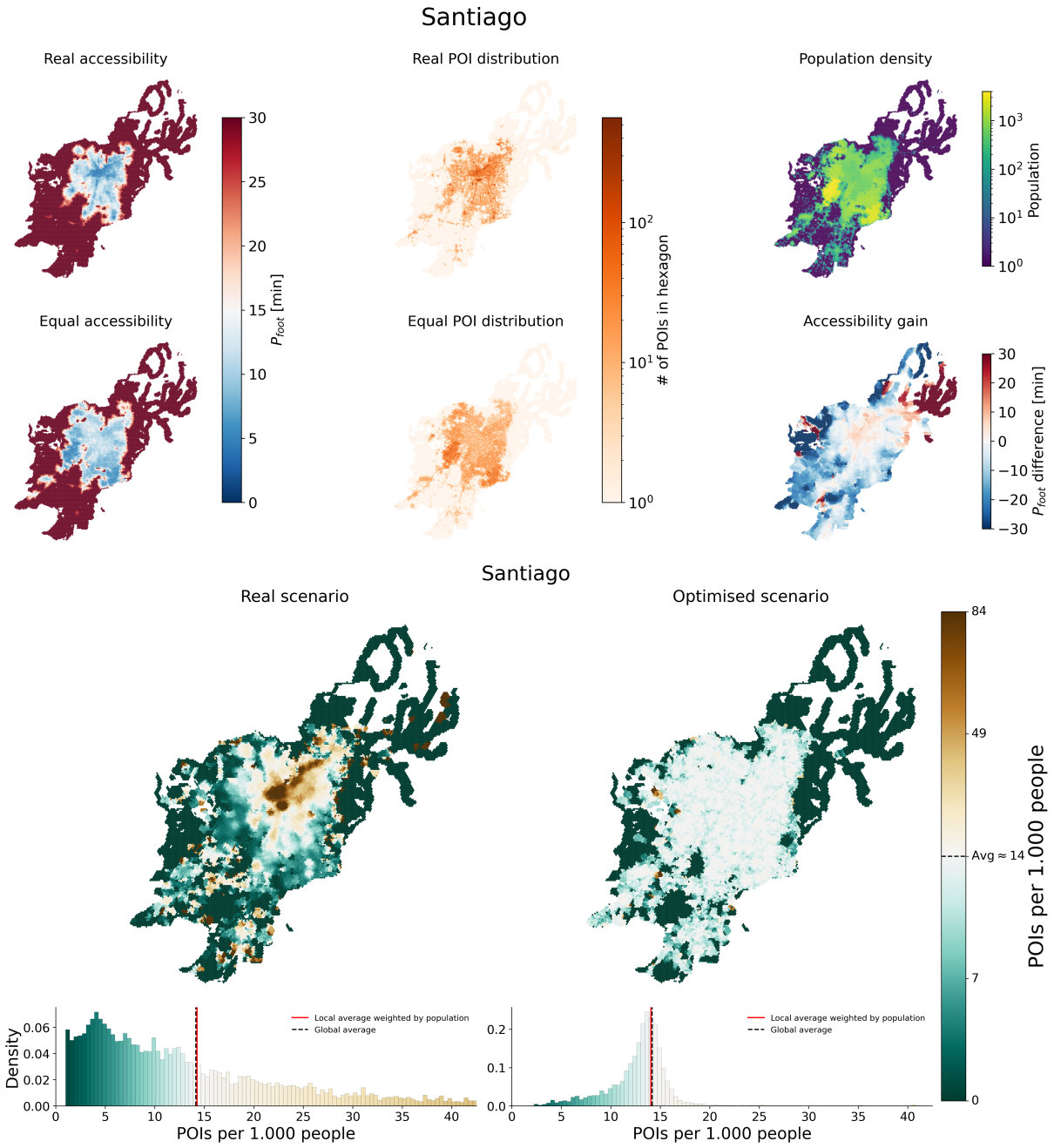


Figure 40: Accessibility of Santiago

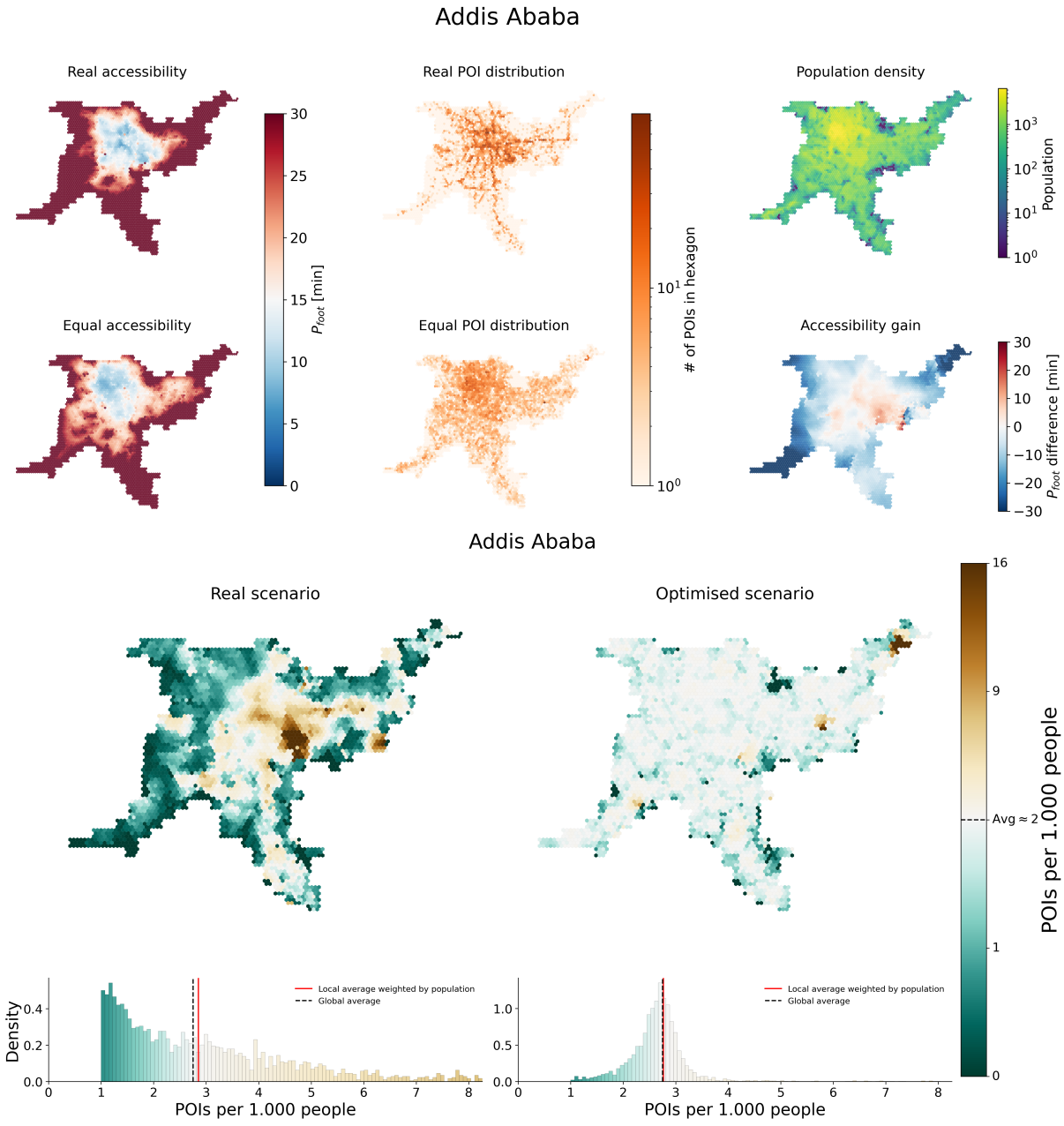


Figure 41: Accessibility of Addis Ababa

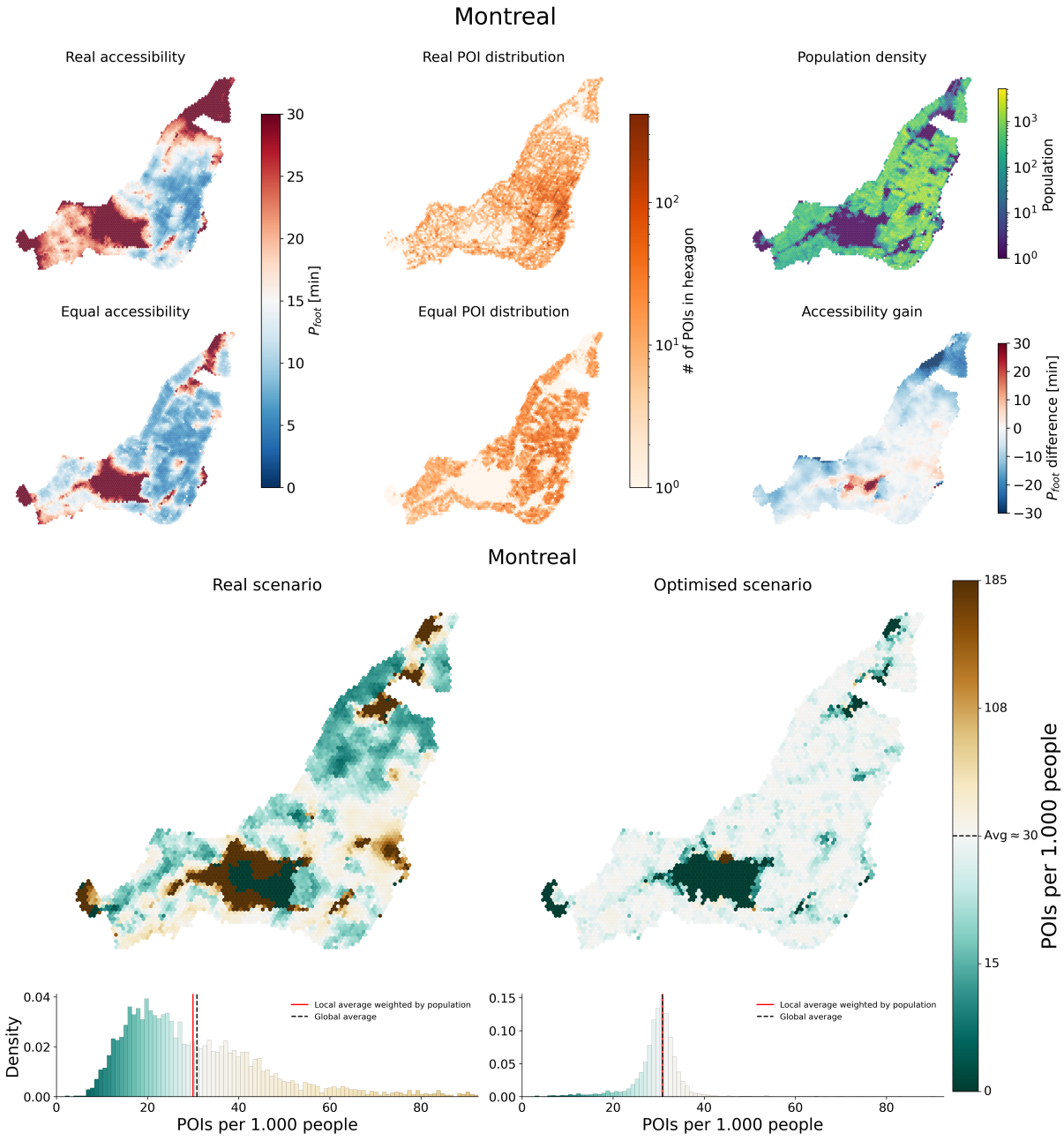


Figure 42: Accessibility of Montreal

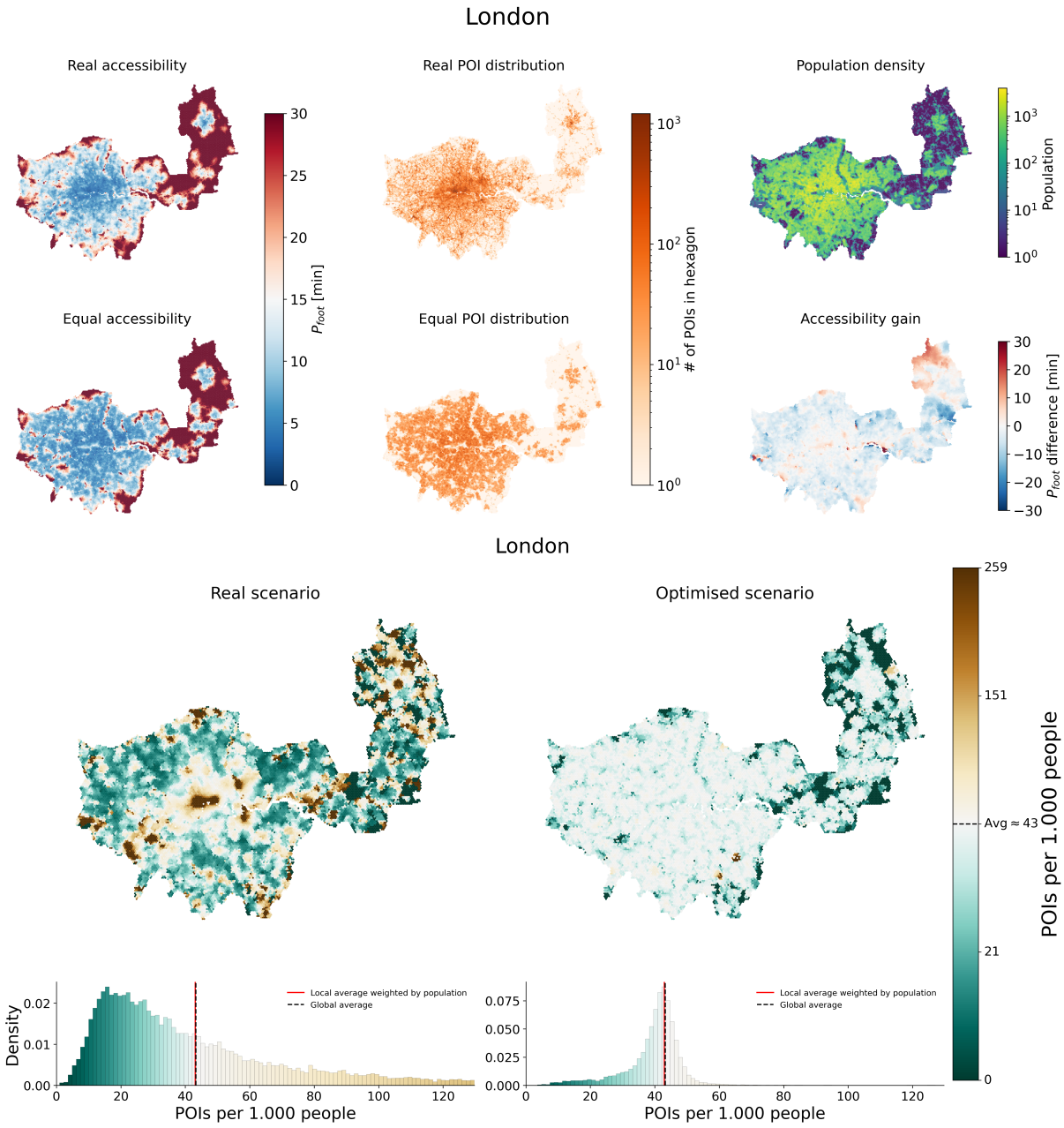


Figure 43: Accessibility of London

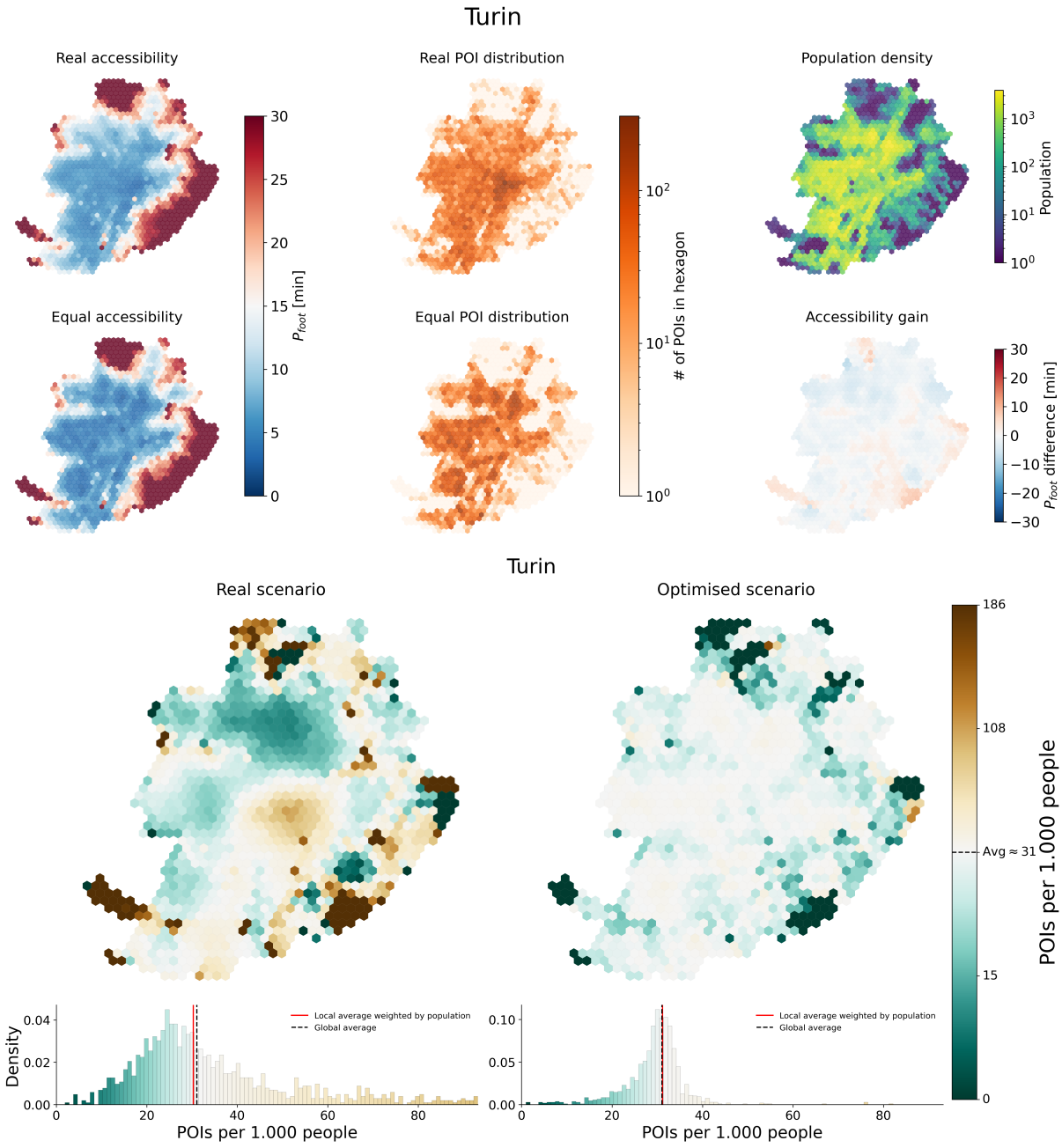


Figure 44: Accessibility of Turin

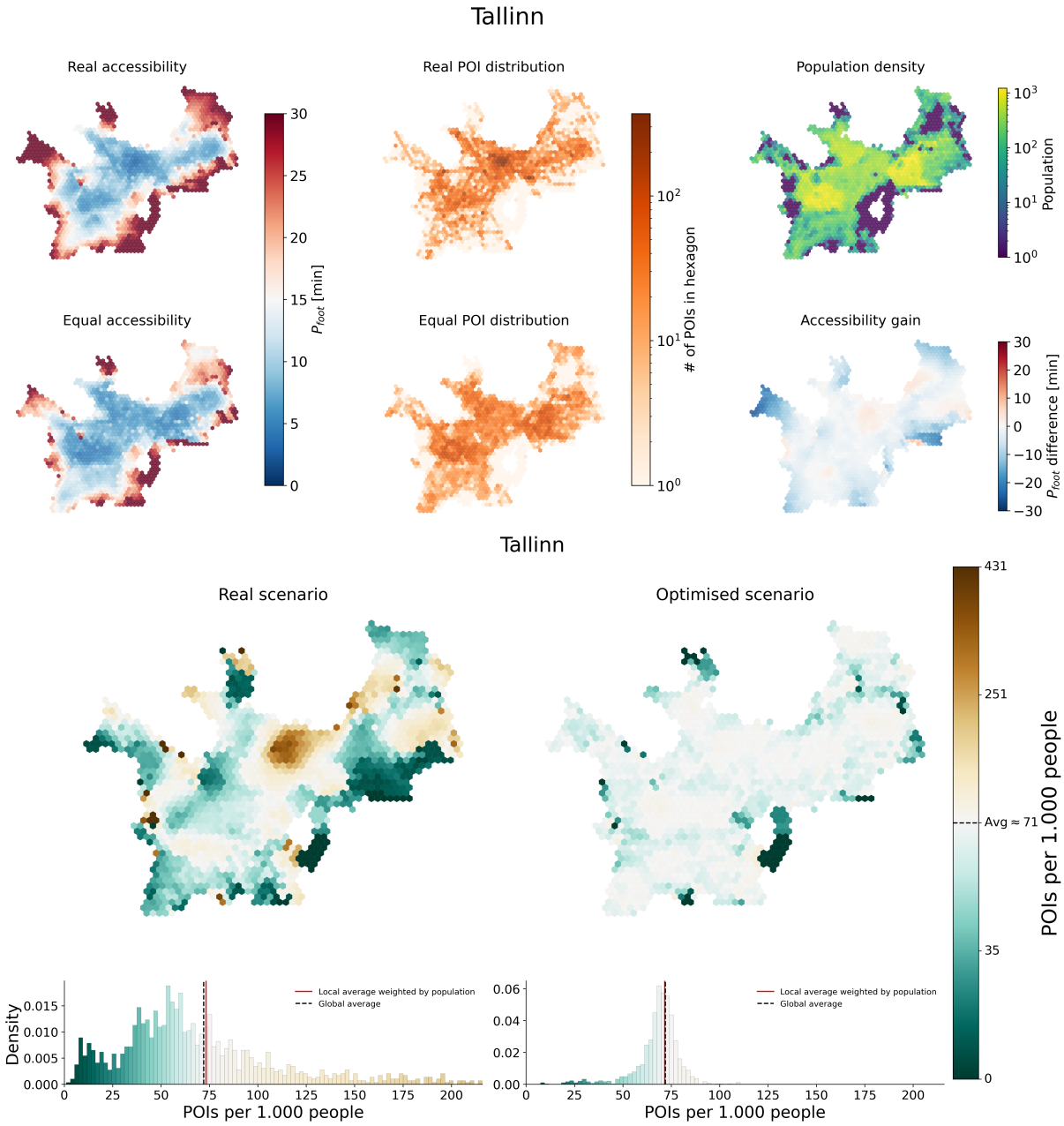


Figure 45: Accessibility of Tallinn

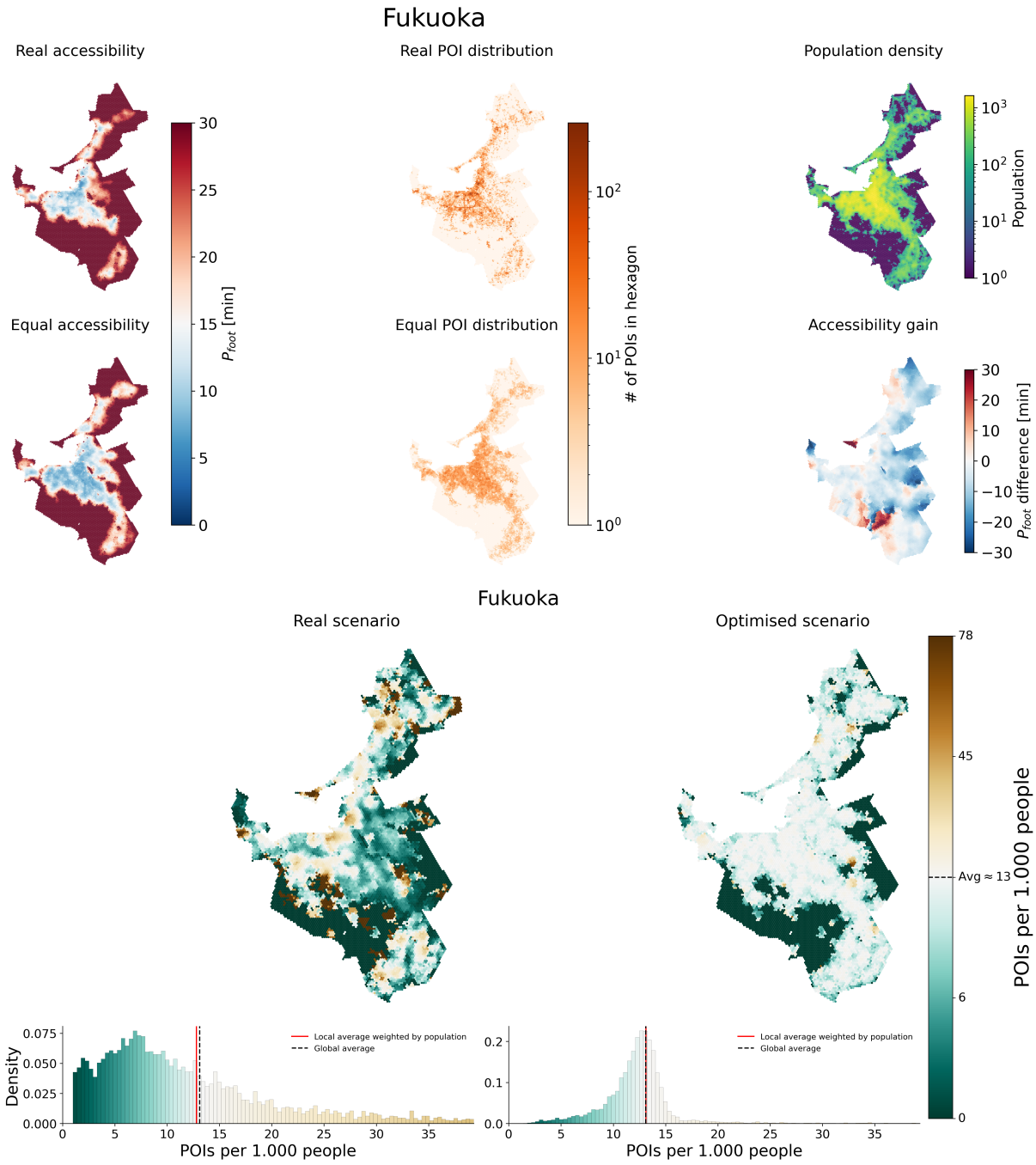


Figure 46: Accessibility of Fukuoka

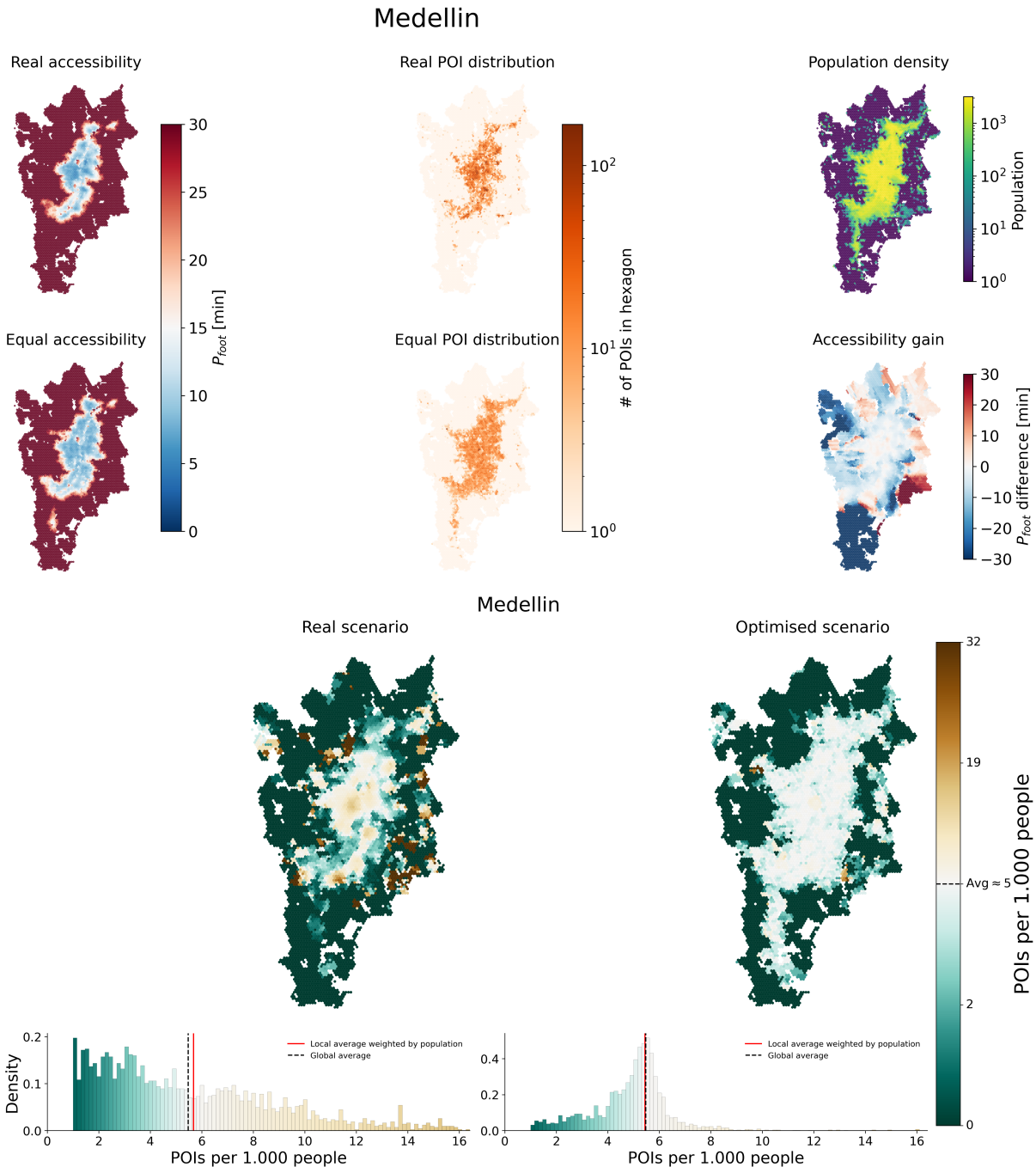


Figure 47: Accessibility of Medellin

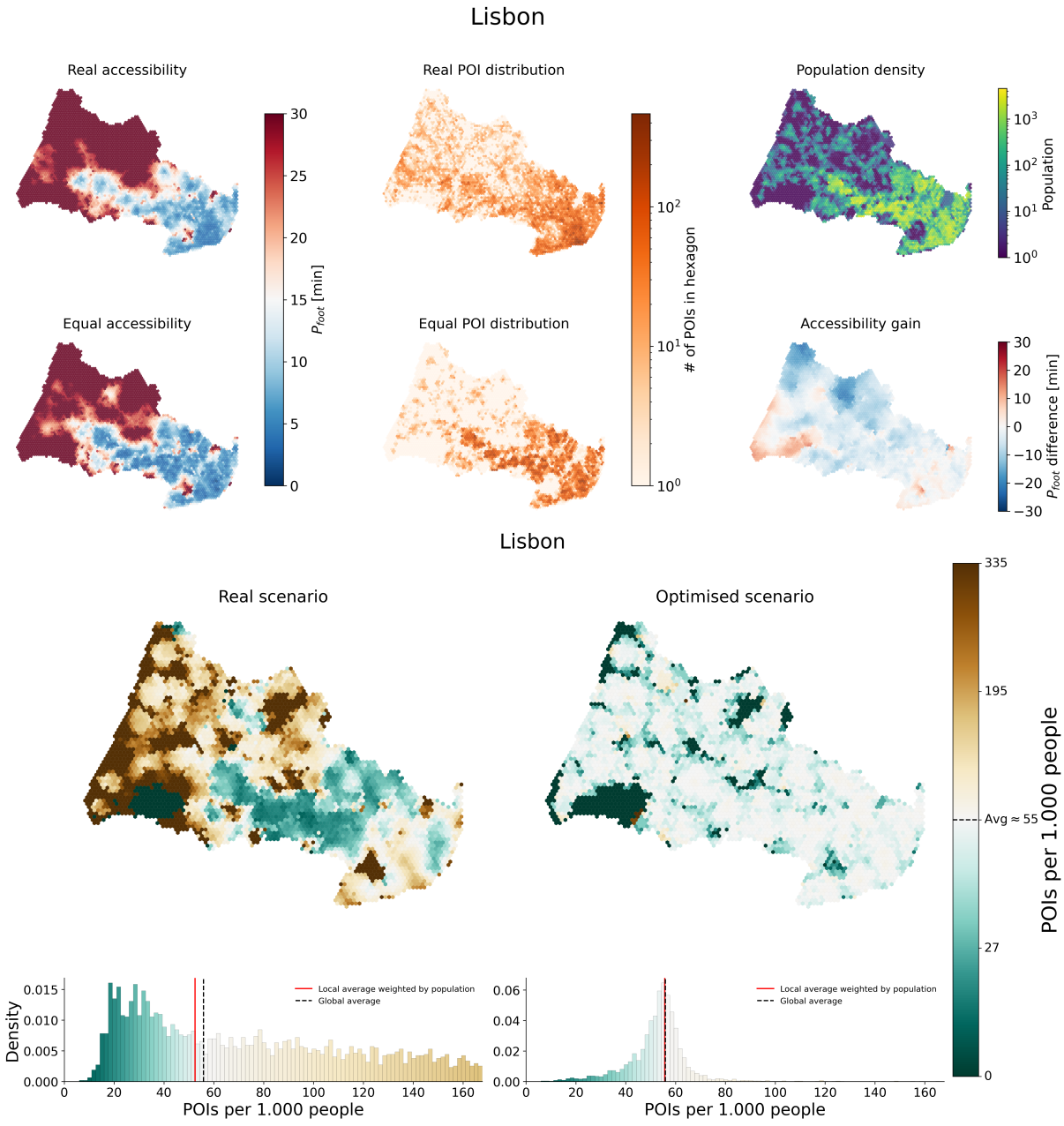


Figure 48: Accessibility of Lisbon

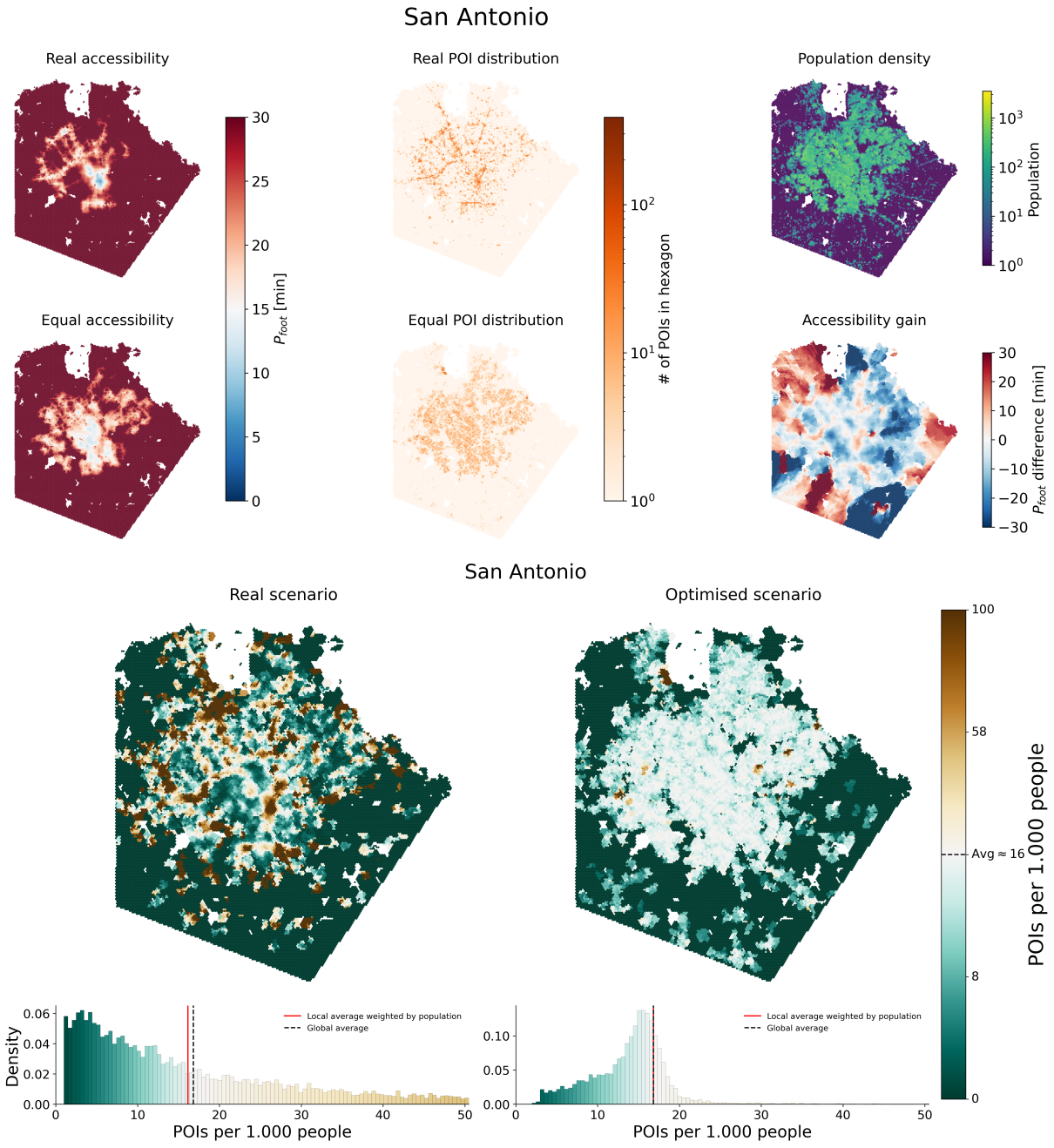


Figure 49: Accessibility of San Antonio

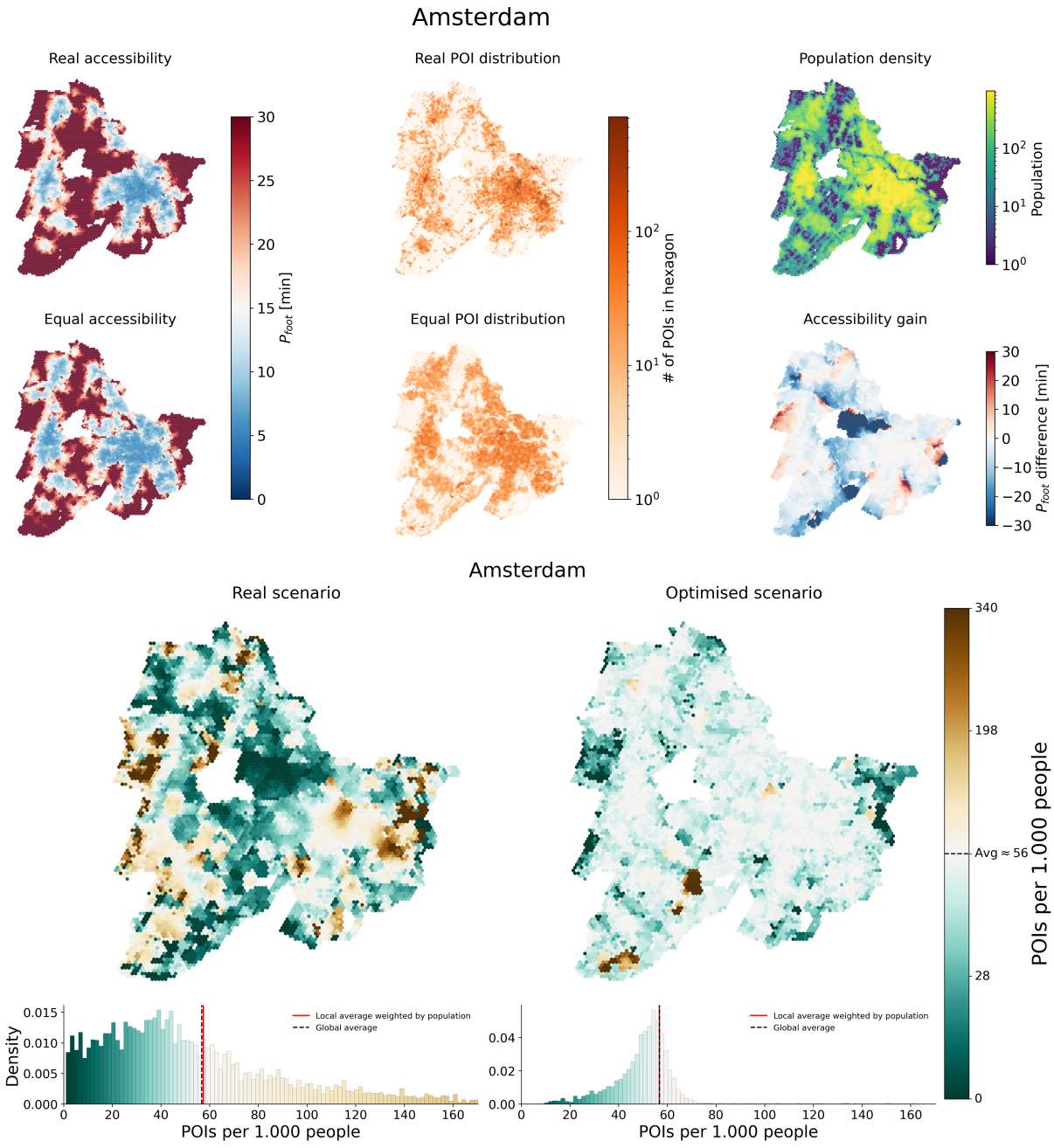


Figure 50: Accessibility of Amsterdam

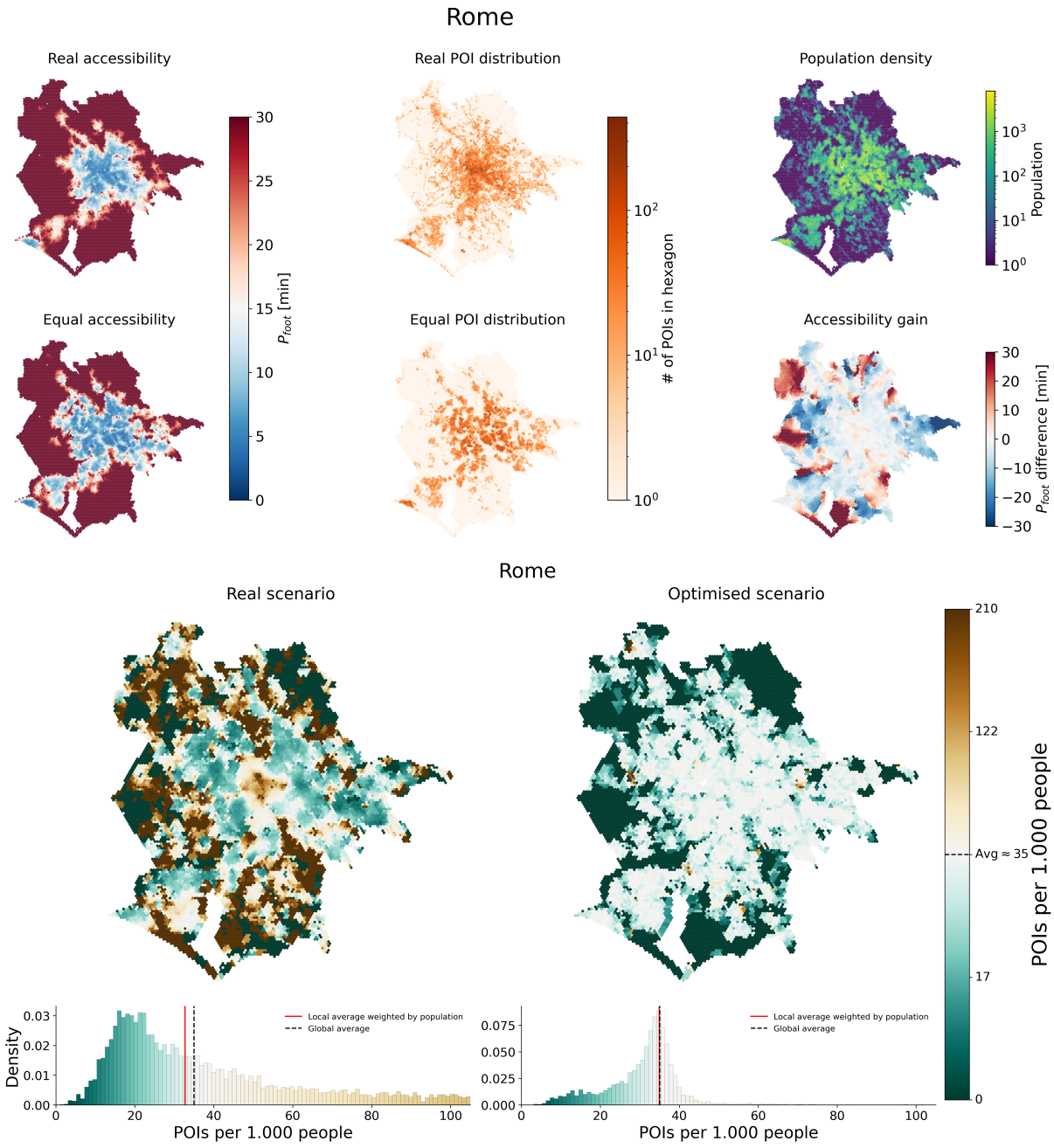


Figure 51: Accessibility of Rome

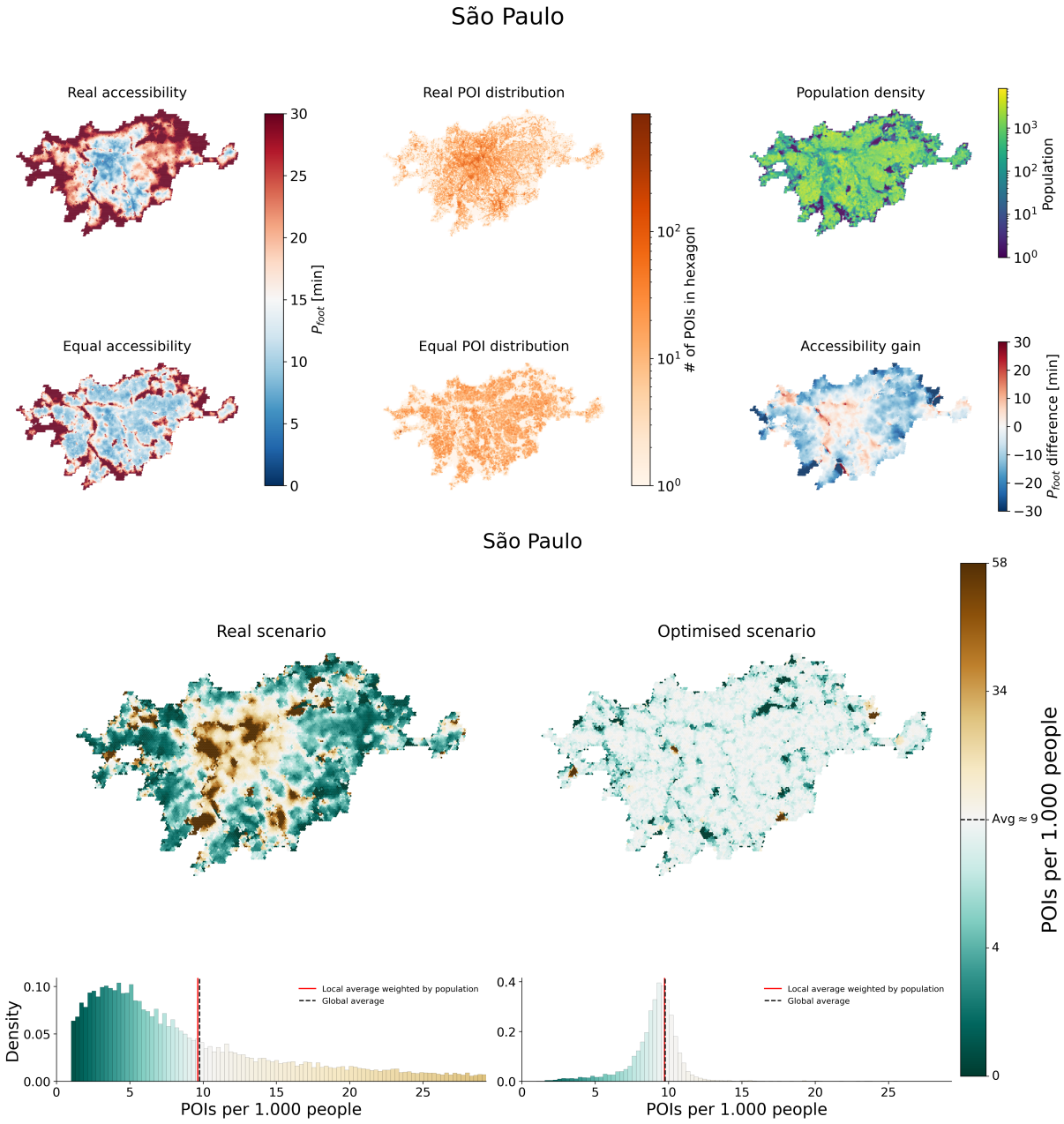


Figure 52: Accessibility of São Paulo

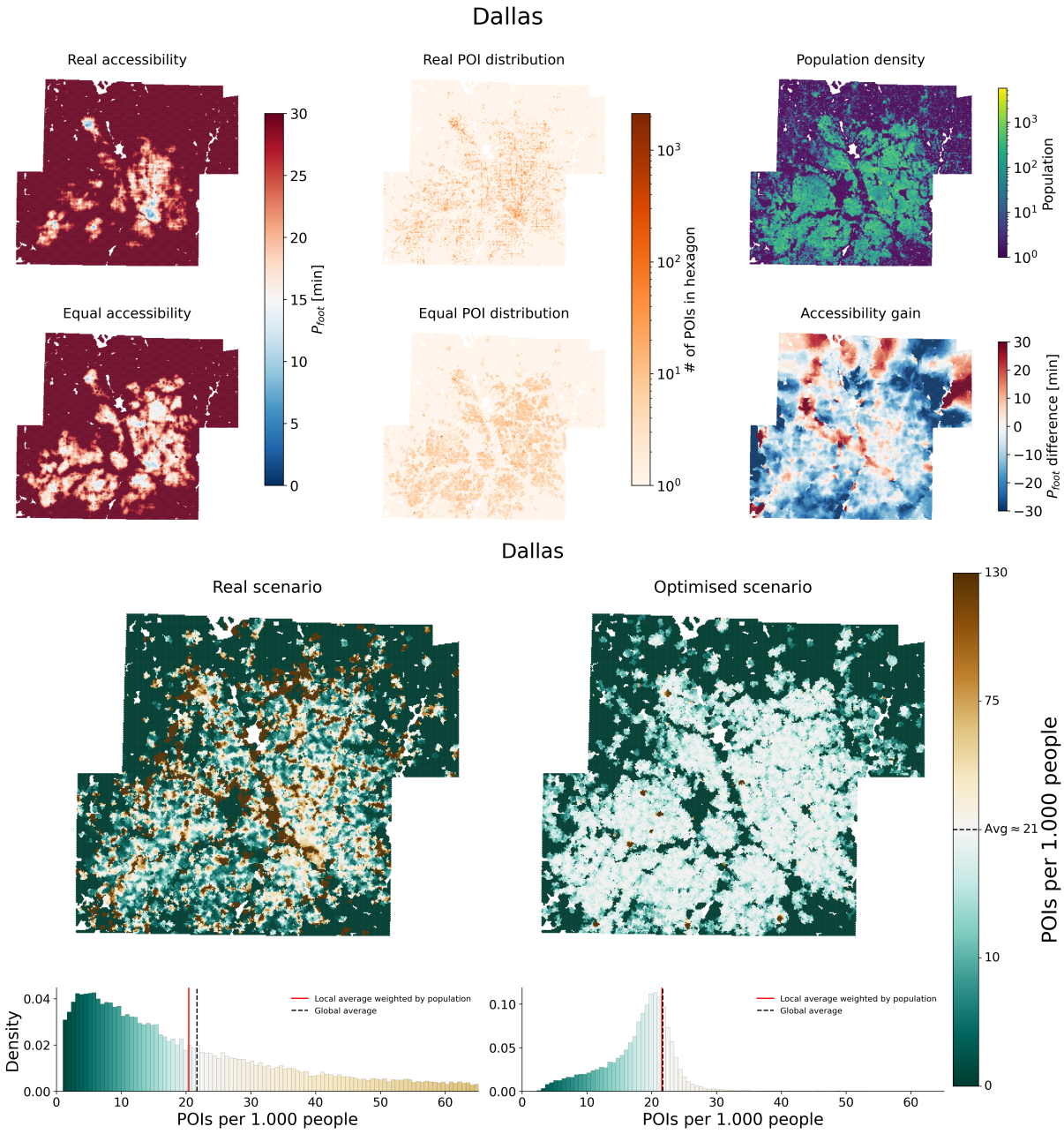


Figure 53: Accessibility of Dallas

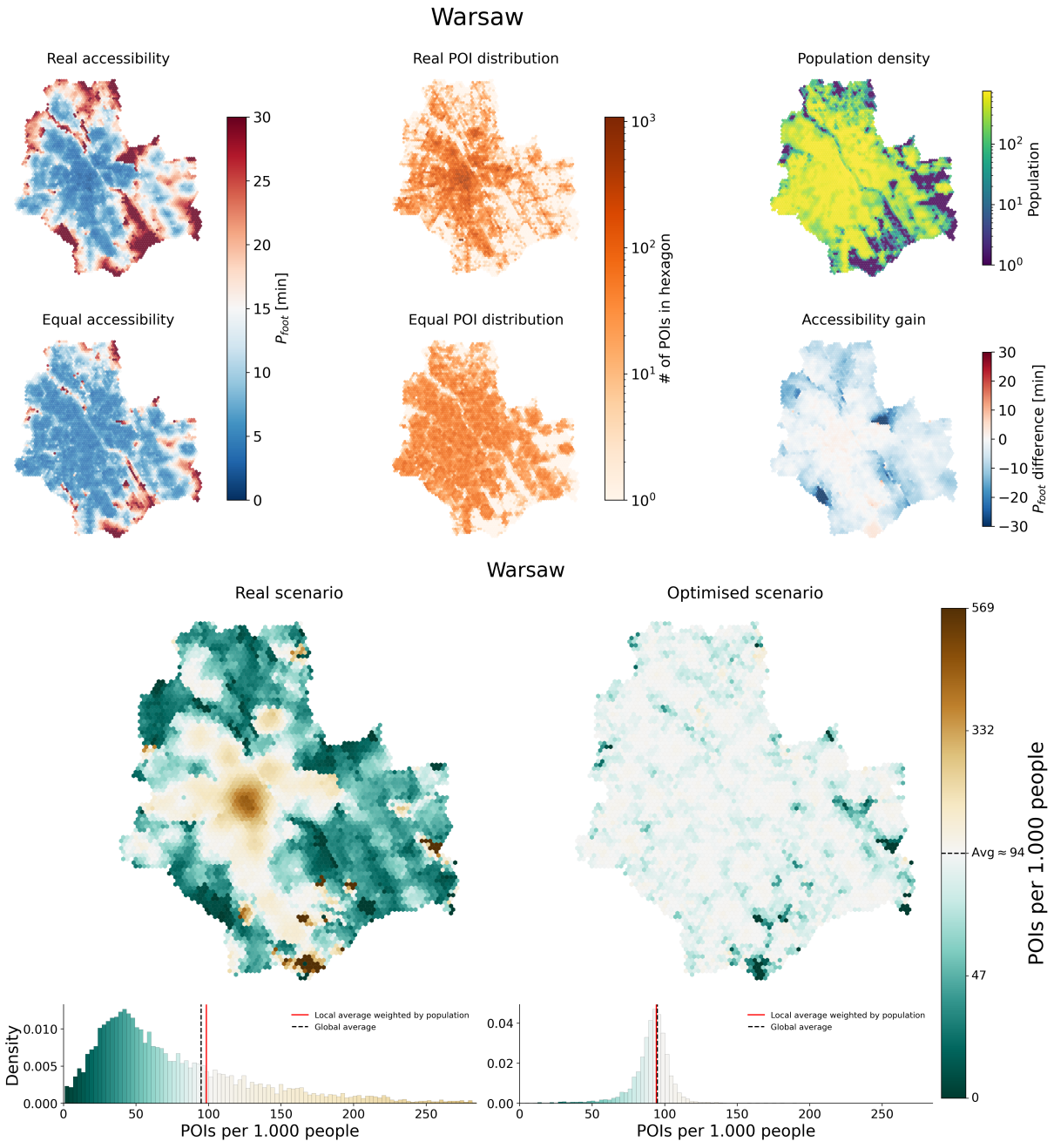


Figure 54: Accessibility of Warsaw

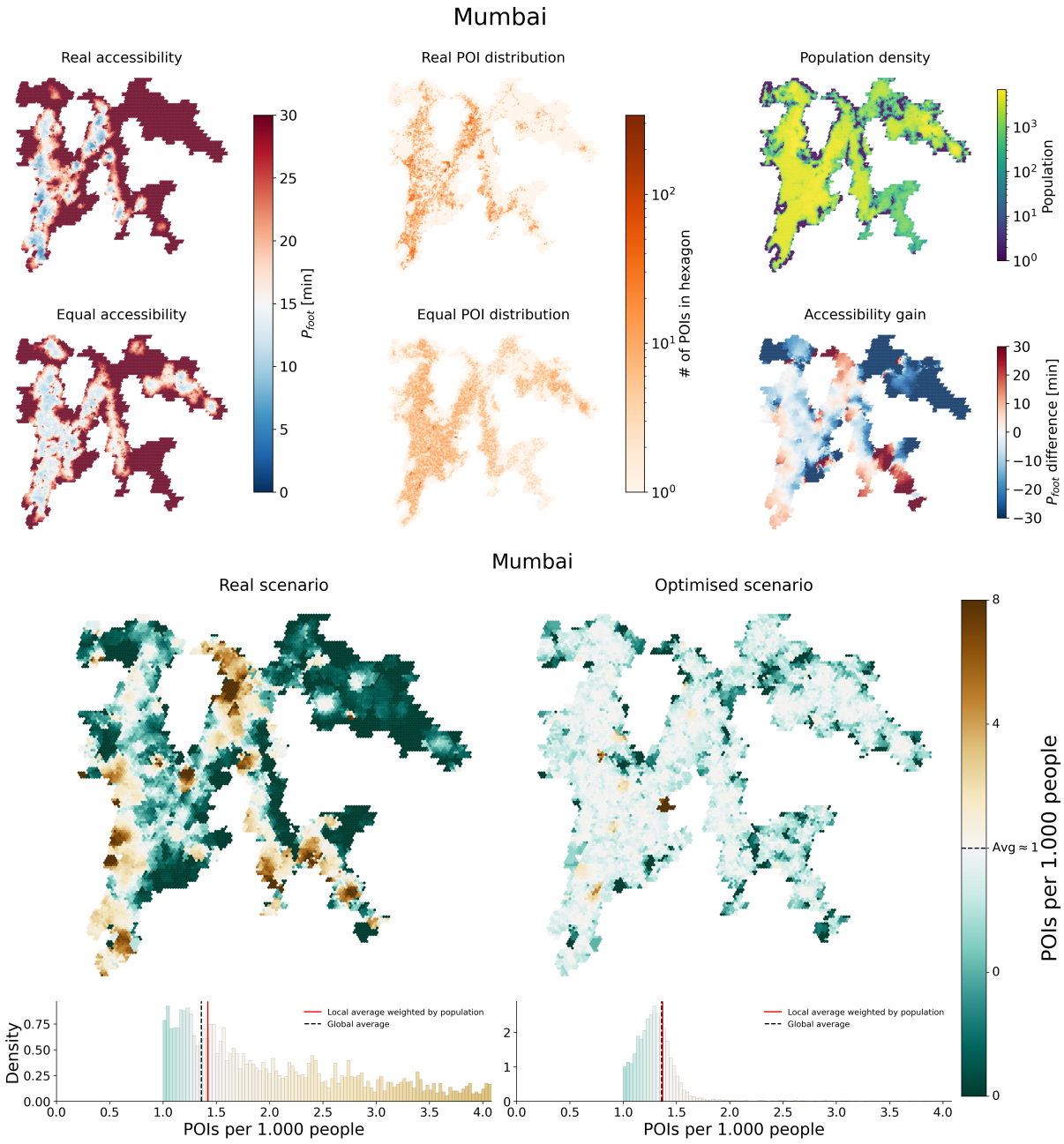


Figure 55: Accessibility of Mumbai

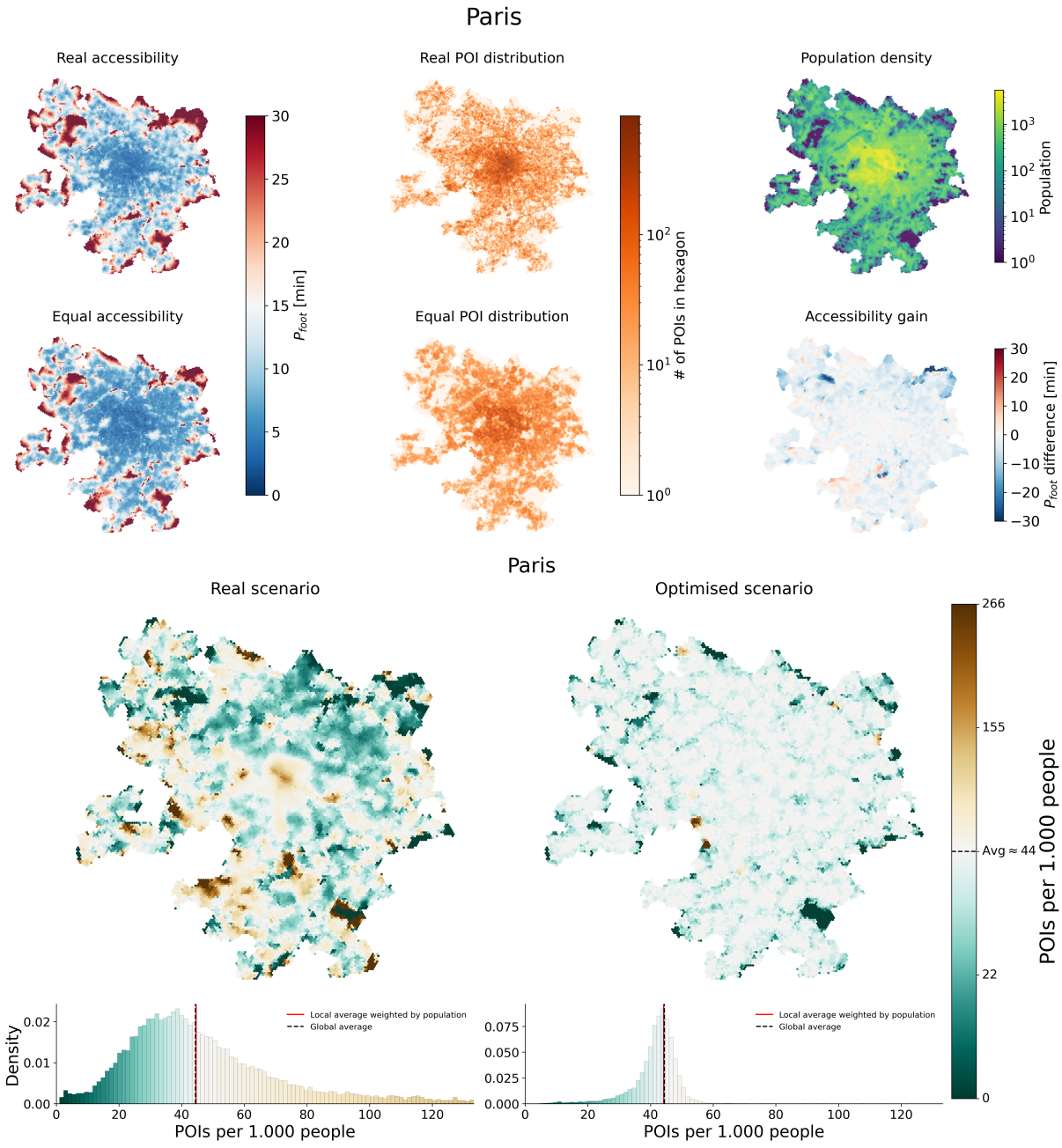


Figure 56: Accessibility of Paris

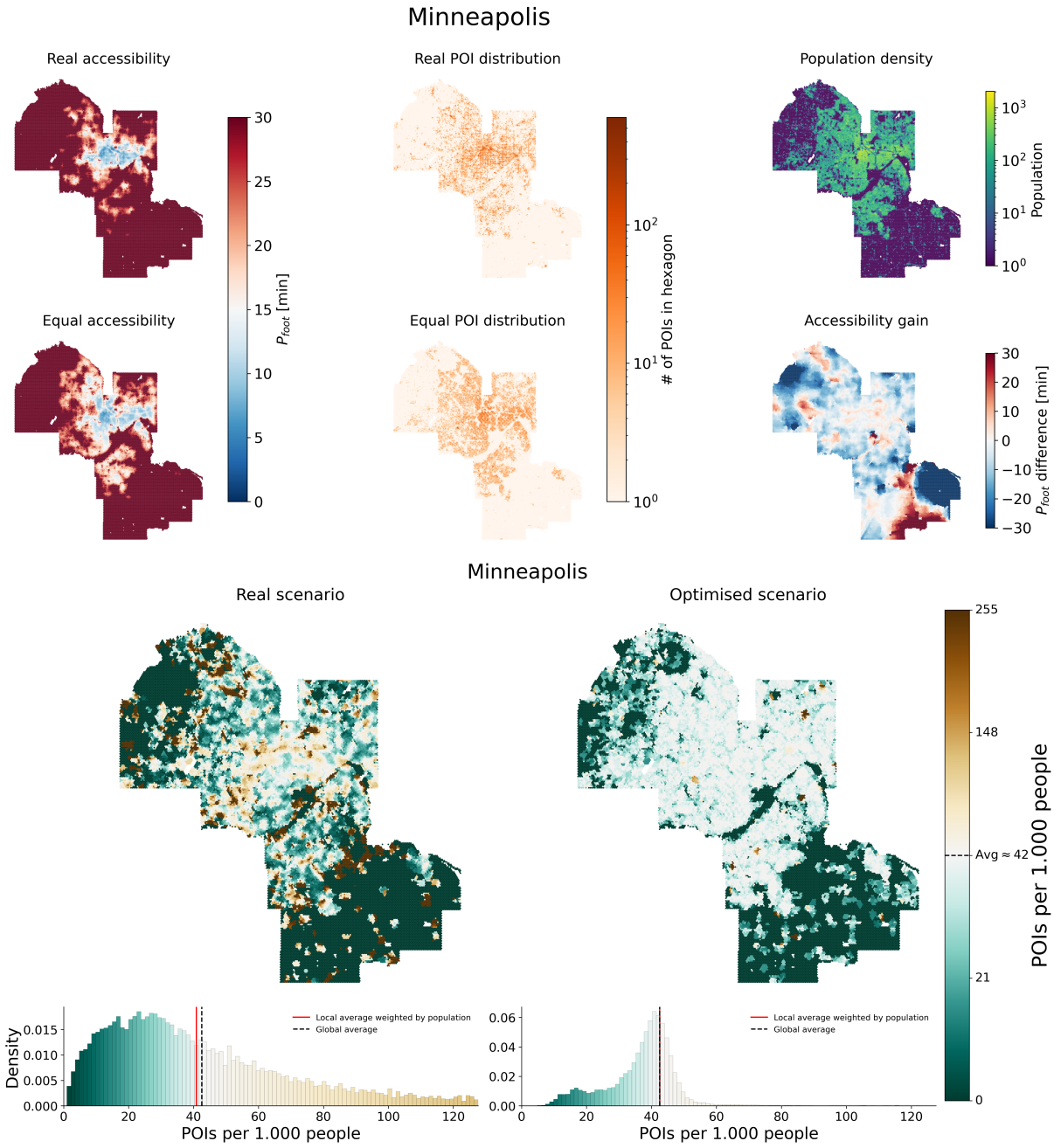


Figure 57: Accessibility of Minneapolis

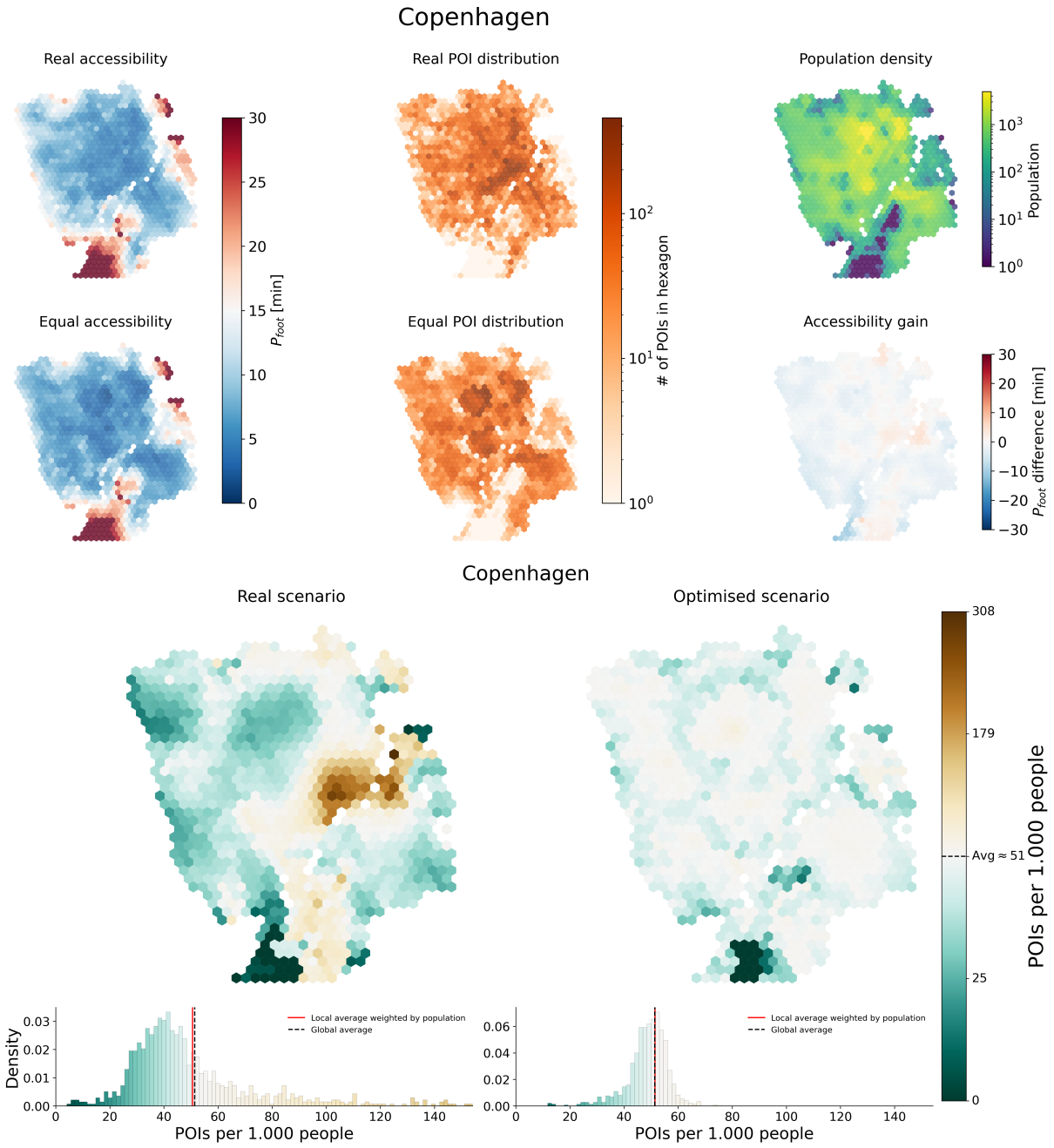


Figure 58: Accessibility of Copenhagen

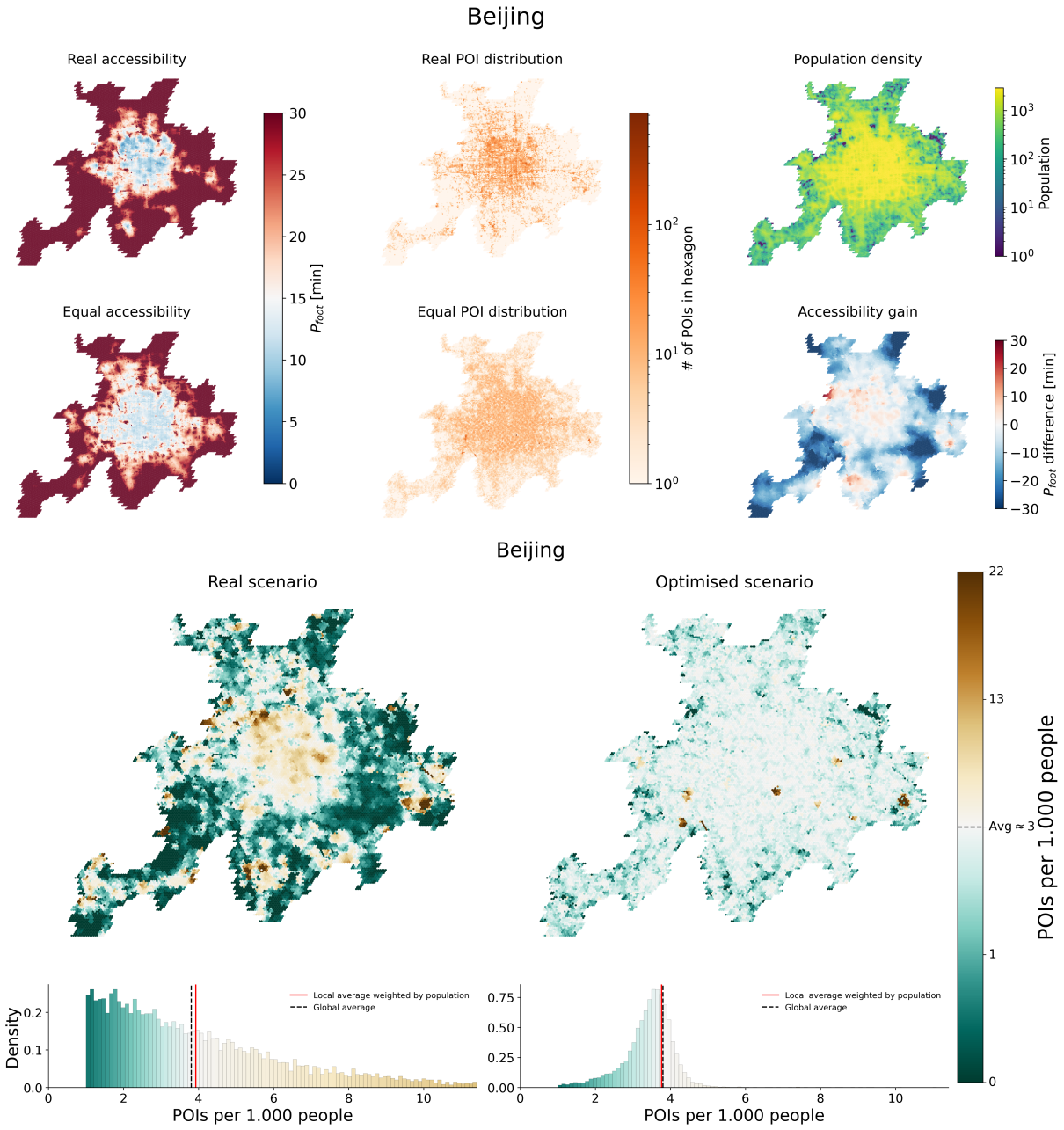


Figure 59: Accessibility of Beijing

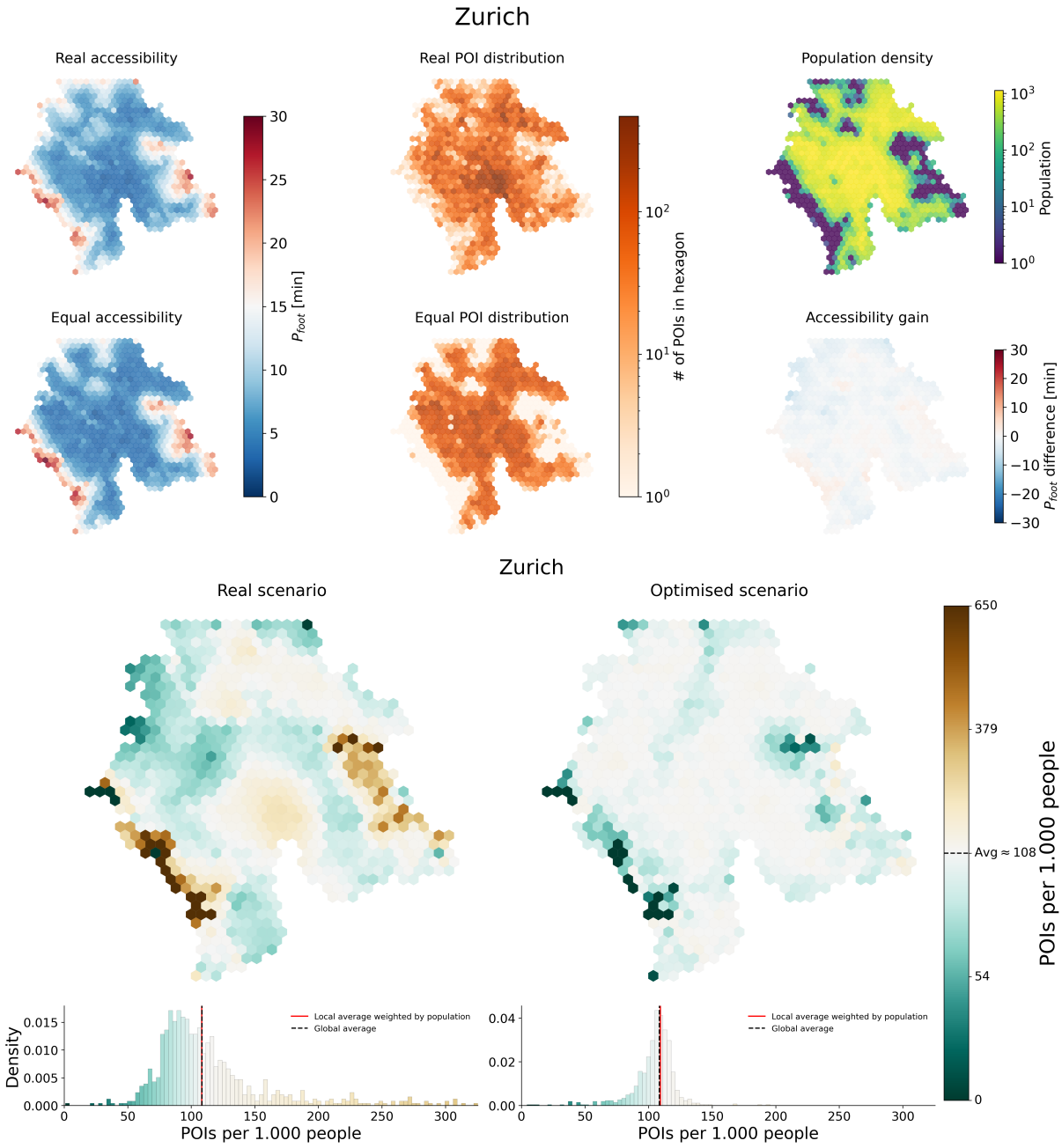


Figure 60: Accessibility of Zurich

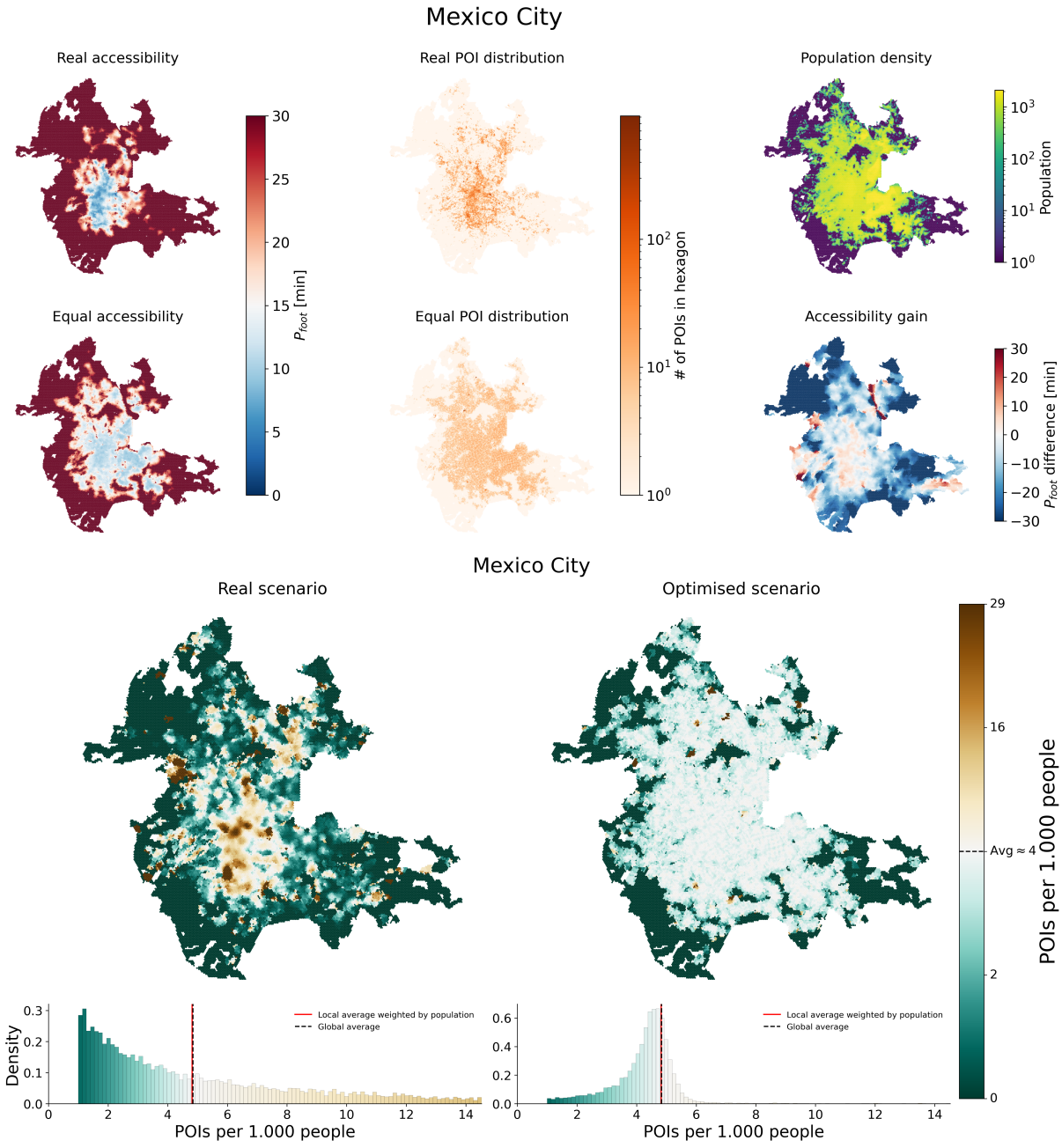


Figure 61: Accessibility of Mexico City

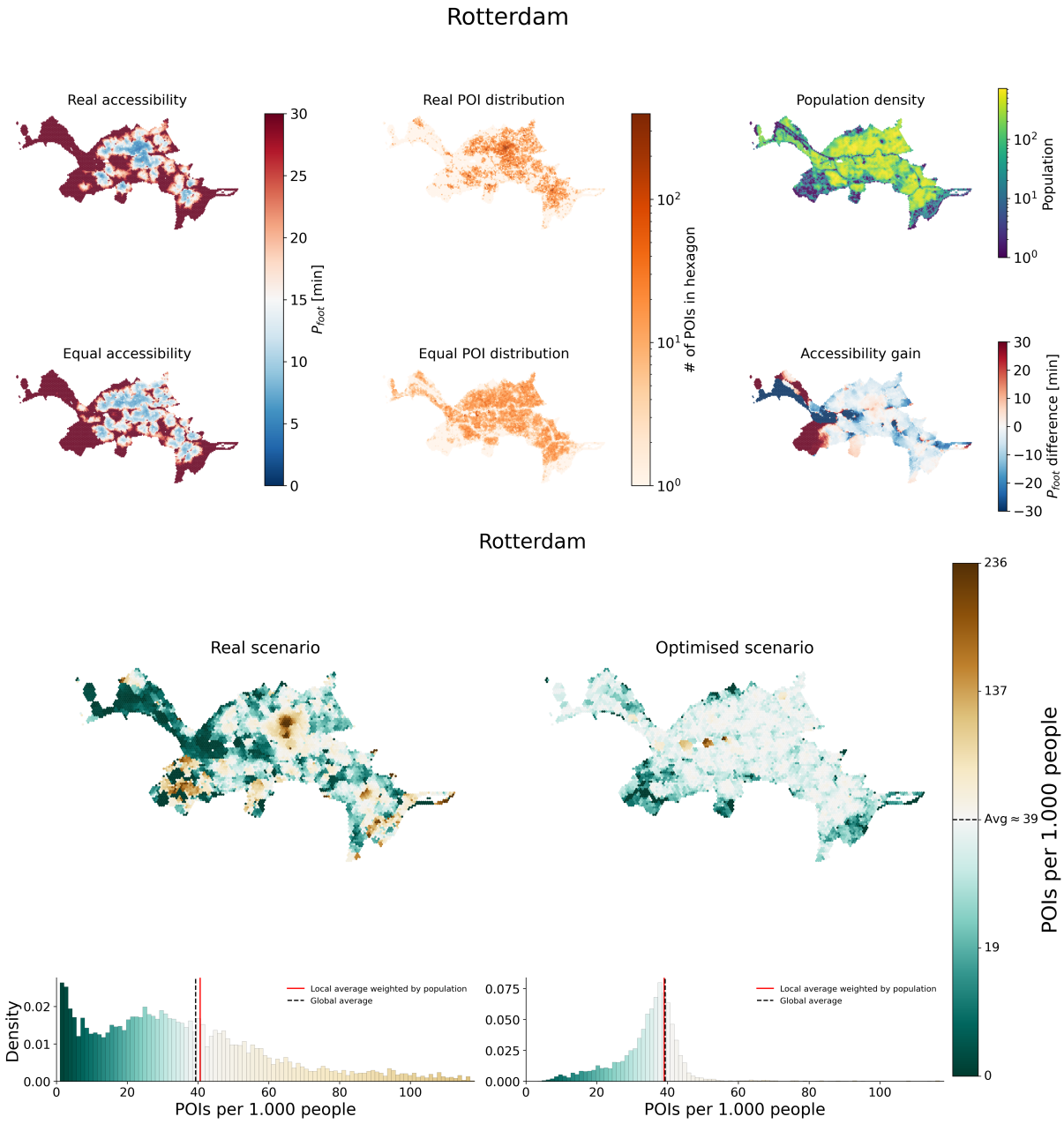


Figure 62: Accessibility of Rotterdam

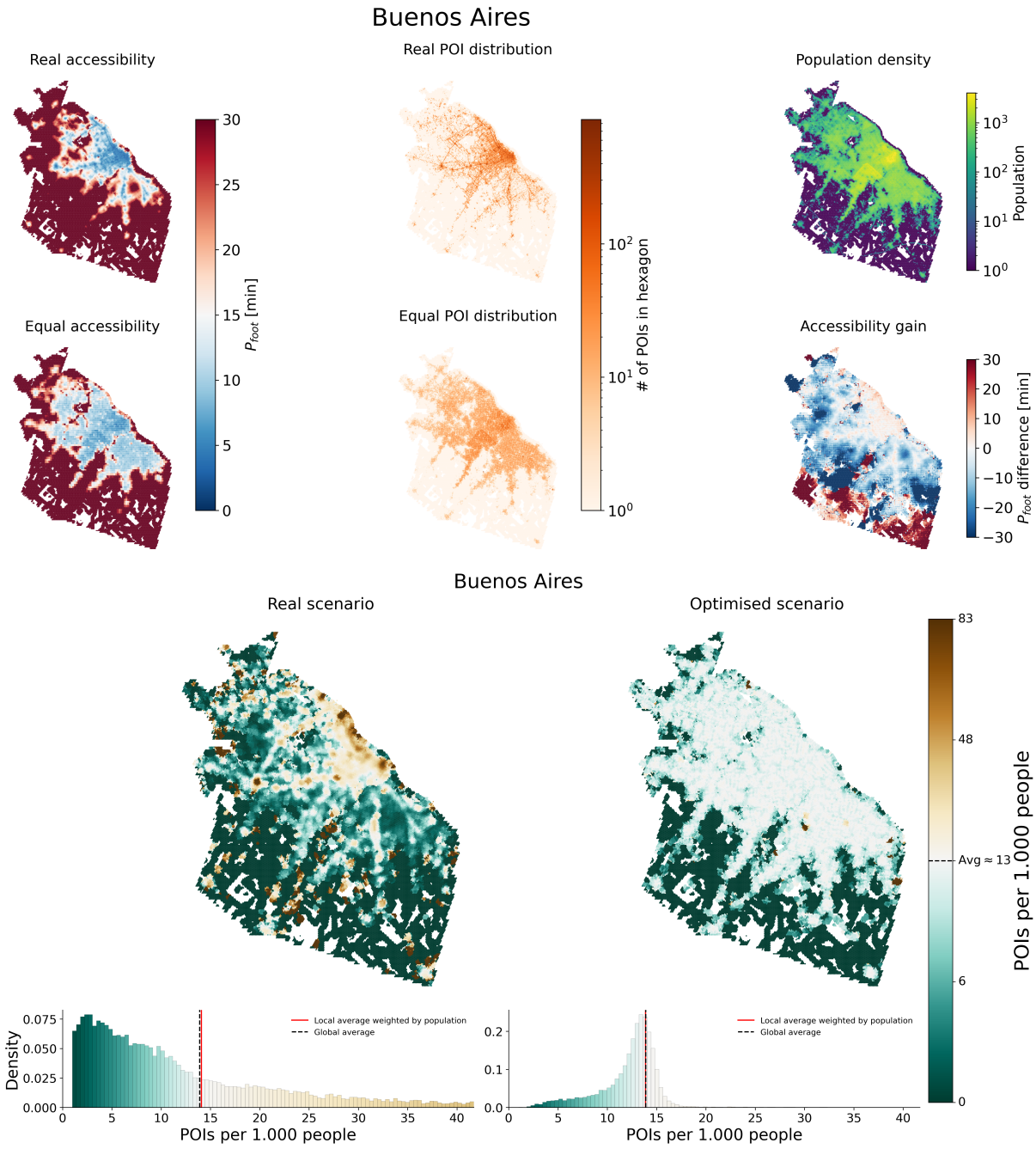


Figure 63: Accessibility of Buenos Aires

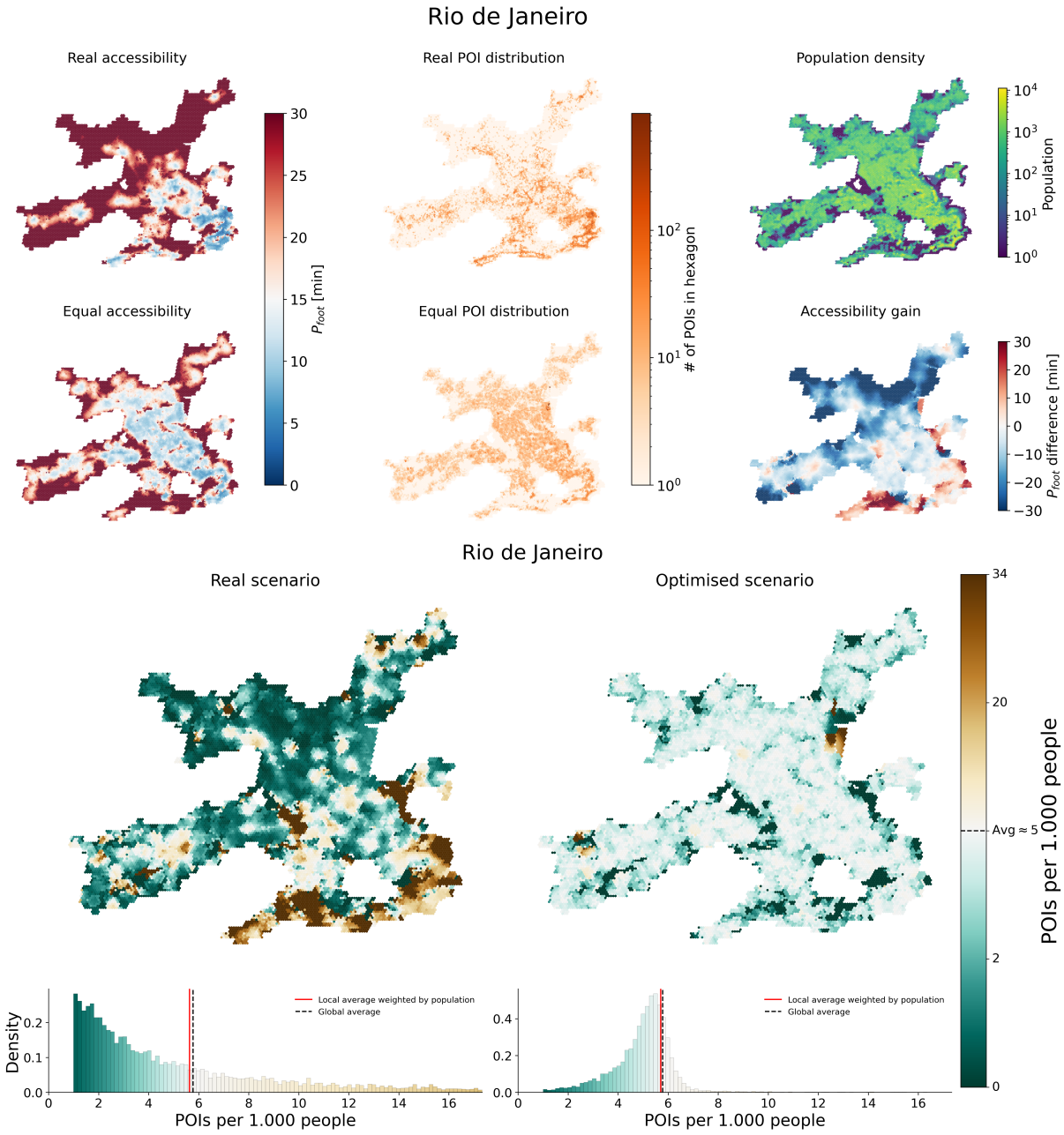


Figure 64: Accessibility of Rio de Janeiro

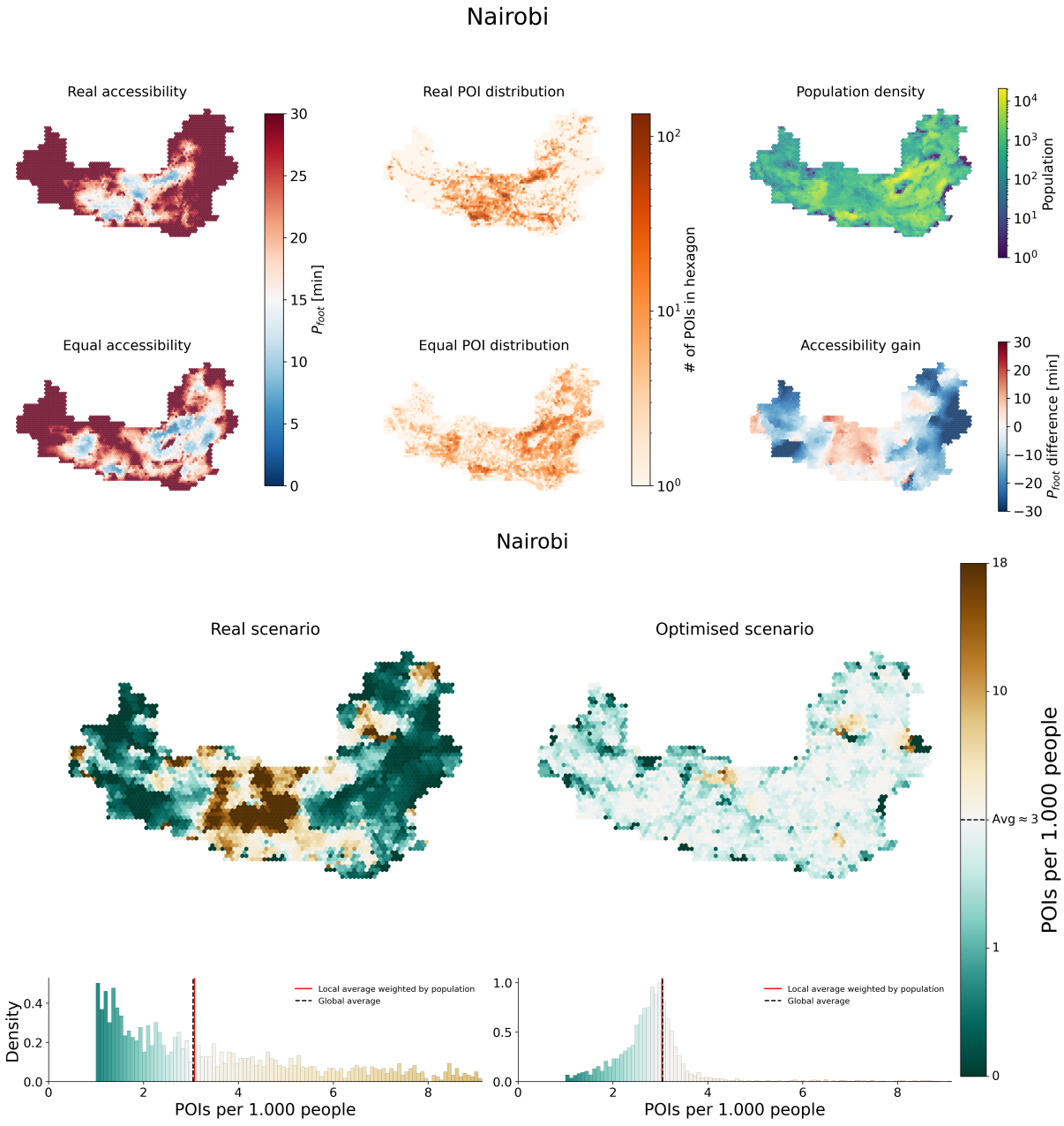


Figure 65: Accessibility of Nairobi

13 The categorisation of OSM POIs

Here we include the table of all the OpenStreetMap POIs tags that we map into the 9 categories considered in our work, i.e. *healthcare*, *services*, *transport*, *outdoor*, *supplies*, *restaurant*, *culture*, *education*, *physical*. The first two columns are the category and tag contained in the POIs data, while the third column is the corresponding category that we chose. POIs categorised as *ignore* or *delete* are not considered.

3dr:type		ignore
FIXME		ignore
TMC		ignore
abandoned		delete
abandoned	no	ignore
abandoned:amenity		delete
abandoned:leisure		ignore
access		ignore
accessibility		ignore
addr		ignore
admin_level		ignore
aeroway	aerodrome	ignore
aeroway	apron	ignore
aeroway	gate	ignore
aeroway	hangar	ignore
aeroway	helipad	ignore
aeroway	heliport	ignore
aeroway	office	ignore
aeroway	parking_position	ignore
aeroway	runway	ignore
aeroway	taxiway	ignore
aeroway	terminal	ignore
aeroway	tower	ignore
aeroway	windsock	ignore
agricultural	no	ignore
air_conditioning		ignore
alt_addr		ignore
alt_name		ignore
alt_name_1		ignore
alt_phone		ignore
amenity	Fontanile	ignore
amenity	Lasergame	physical
amenity	animal_boarding	ignore
amenity	animal_breeding	services
amenity	animal_shelter	services
amenity	archive	ignore
amenity	art_gallery	culture
amenity	arts_centre	culture
amenity	atm	services

amenity	bank	services
amenity	baptistery	culture
amenity	bbq	restaurant
amenity	bar	restaurant
amenity	bench	outdoor
amenity	bicycle_parking	services
amenity	bicycle_rental	services
amenity	bicycle_repair_station	services
amenity	biergarten	restaurant
amenity	boat_rental	services
amenity	boat_storage	services
amenity	bureau_de_change	services
amenity	bus_station	transport
amenity	cafe	restaurant
amenity	canteen	restaurant
amenity	car_rental	services
amenity	car_sharing	services
amenity	car_wash	services
amenity	casino	services
amenity	charging_station	ignore
amenity	childcare	services
amenity	cinema	culture
amenity	clinic	healthcare
amenity	clock	ignore
amenity	club	services
amenity	college	education
amenity	community_centre	services
amenity	community_centres	services
amenity	compressed_air	supplies
amenity	conference_centre	culture
amenity	convention_centre	culture
amenity	courthouse	ignore
amenity	coworking_space	ignore
amenity	dancing_school	physical
amenity	dentist	healthcare
amenity	dispenser	ignore
amenity	dive_centre	physical
amenity	doctors	healthcare
amenity	dojo	physical
amenity	drinking_water	ignore
amenity	driving_school	services
amenity	events_venue	culture
amenity	fablab	education
amenity	ferry_terminal	transport
amenity	film_studio	ignore
amenity	food_court	restaurant

amenity	fountain	ignore
amenity	fuel	supplies
amenity	funeral_hall	services
amenity	fast_food	restaurant
amenity	fire_station	ignore
amenity	fixme	ignore
amenity	gambling	ignore
amenity	gambling;vending_machine	supplies
amenity	grave_yard	ignore
amenity	hospital	healthcare
amenity	hunting_stand	ignore
amenity	ice_cream	restaurant
amenity	institute	ignore
amenity	internet_cafe	services
amenity	kindergarten	services
amenity	kitchen	restaurant
amenity	language_school	education
amenity	left_luggage	services
amenity	letter_box	ignore
amenity	library	culture
amenity	luggage_storage	services
amenity	marketplace	supplies
amenity	ministry	services
amenity	monastery	culture
amenity	money_transfer	services
amenity	mortuary	services
amenity	motorcycle_parking	ignore
amenity	music_school	culture
amenity	newsagent	services
amenity	nightclub	services
amenity	nursing_home	services
amenity	parcel_locker	services
amenity	payment_terminal	services
amenity	parking	ignore
amenity	parking_entrance	ignore
amenity	parking_space	ignore
amenity	pharmacy	healthcare
amenity	photo_booth	services
amenity	photobooth	services
amenity	physiokinesitherapy	healthcare
amenity	piano	ignore
amenity	place_of_worship	ignore
amenity	planetarium	culture
amenity	police	ignore
amenity	police_booth	ignore
amenity	post_box	ignore

amenity	post_depot	ignore
amenity	post_office	services
amenity	prison	ignore
amenity	pub	restaurant
amenity	public_bookcase	culture
amenity	public_building	ignore
amenity	ranger_station	ignore
amenity	reception_desk	ignore
amenity	recording_studio	services
amenity	recycling	ignore
amenity	rescue_station	services
amenity	research_center	ignore
amenity	research_centre	ignore
amenity	research_institute	ignore
amenity	restaurant	restaurant
amenity	school	education
amenity	seminary	ignore
amenity	service_point	ignore
amenity	shelter	ignore
amenity	shower	ignore
amenity	smoking_area	ignore
amenity	social_centre	services
amenity	social_facility	services
amenity	student_accommodation	ignore
amenity	studio	ignore
amenity	taxi	transport
amenity	telephone	ignore
amenity	theatre	culture
amenity	ticket_office	culture
amenity	toilets	ignore
amenity	tourism	ignore
amenity	townhall	ignore
amenity	toy_library	culture
amenity	university	education
amenity	vending_machine	supplies
amenity	veterinary	services
amenity	waiting_room	ignore
amenity	waste_basket	ignore
amenity	waste_disposal	ignore
amenity	waste_transfer_station	ignore
amenity	water_point	ignore
amenity	watering_place	outdoor
amenity	weighbridge	ignore
amenity	yes	ignore
amenity_1	fast_food	restaurant
amenity_1	toilets:access=customers	ignore

amenity_1	wine	supplies
amperage		ignore
architect		ignore
area		ignore
artist		ignore
artist_name		ignore
artwork_type		culture
atm	yes	services
atm	no	ignore
attraction	amusement_ride	outdoor
attraction	animal	outdoor
attraction	big_wheel	outdoor
attraction	bumper_boats	outdoor
attraction	bumper_car	outdoor
attraction	bumper_cars	outdoor
attraction	carousel	outdoor
attraction	carriage_ride	outdoor
attraction	dark_ride	outdoor
attraction	drop_tower	outdoor
attraction	haunted_house	outdoor
attraction	historic	culture
attraction	maze	outdoor
attraction	playset	outdoor
attraction	pneumatic_slide	outdoor
attraction	roller_coaster	outdoor
attraction	slide	outdoor
attraction	swing_carousel	outdoor
attraction	tourism	ignore
attraction	train	culture
attraction	trampoline	outdoor
atttraction	virtual_reality	ignore
attraction	water_ride	outdoor
attraction	water_slide	outdoor
automated		ignore
backrest		ignore
bar		restaurant
barbed_wire		ignore
barrier		ignore
beacon		ignore
beauty	nails	services
beauty	tanning	services
beds		ignore
bench	no	ignore
bench	yes	outdoor
bic		ignore
bicycle		ignore

bicycle_parking	Verona_rack	ignore
bicycle_parking	anchors	ignore
bicycle_parking	bollard	ignore
bicycle_parking	building	services
bicycle_parking	ground_slots	ignore
bicycle_parking	informal	ignore
bicycle_parking	lockers	services
bicycle_parking	rack	services
bicycle_parking	stands	services
bicycle_parking	wall_loops	services
bicycle_parking	wave	services
bin		ignore
board_type	history	ignore
board_type	nature	ignore
board_type	notice	ignore
board_type	plants	ignore
board_type	public_transport	ignore
board_type	wildlife	ignore
bollard		ignore
bottle	no	ignore
bottle	yes	ignore
boules	bocce	physical
boules	boccia	physical
boules	yes	physical
boundary		ignore
branch		ignore
brand		ignore
bridge	yes	ignore
bridge	viaduct	ignore
bridge	aqueduct	ignore
bridge	boardwalk	ignore
bridge	proposed	ignore
bridge	covered	ignore
bridge:material		ignore
bridge:structure		ignore
bridge:support	abutment	ignore
bridge:support	pier	ignore
bridge:support	yes	ignore
building	Holiday_House	ignore
building	abbey	culture
building	administrative	ignore
building	apartments	ignore
building	aqueduct	ignore
building	arch	ignore
building	arena	culture

building	baptistery	culture
building	barn	ignore
building	baseplate	ignore
building	basilica	culture
building	bell_tower	ignore
building	booth	ignore
building	bridge	ignore
building	bungalow	ignore
building	bunker	ignore
building	cabin	ignore
building	canopy	ignore
building	carport	ignore
building	cathedral	ignore
building	chapel	ignore
building	checkpoint	ignore
building	chicken_house	ignore
building	church	ignore
building	cinema	culture
building	cistern	ignore
building	civic	ignore
building	city_gate	ignore
building	city_wall	ignore
building	citywalls	ignore
building	classroom	ignore
building	clinic	healthcare
building	clubhouse	ignore
building	college	education
building	commercial	ignore
building	condominium	ignore
building	congress_centre	culture
building	construction	ignore
building	container	ignore
building	convent	ignore
building	courthouse	ignore
building	cowshed	ignore
building	detached	ignore
building	door	ignore
building	dormitory	ignore
building	elevator	ignore
building	entrance	ignore
building	factory	ignore
building	farm	ignore
building	farmhouse	ignore
building	farm_auxiliary	ignore
building	fast_food_restaurant	restaurant
building	fence	ignore

building	fire_station	ignore
building	foreign_school	education
building	garage	ignore
building	garages	ignore
building	gasometer	culture
building	gatehouse	ignore
building	government	ignore
building	grandstand	ignore
building	greenhouse	ignore
building	guard_booth	ignore
building	guardhouse	ignore
building	gym	physical
building	gymnasium	physical
building	hall	ignore
building	hangar	ignore
building	hospital	healthcare
building	hotel	ignore
building	house	ignore
building	hut	ignore
building	industrial	ignore
building	kindergarten	services
building	kiosk	ignore
building	library	culture
building	light_construction	ignore
building	light_structure	ignore
building	mall	supplies
building	manufacture	ignore
building	market	supplies
building	mausoleum	culture
building	monastery	culture
building	multiple	ignore
building	museum	culture
building	no	ignore
building	nursing_home	services
building	obelisk	culture
building	office_highrise	ignore
building	office_tower	ignore
building	office	ignore
building	overpass	ignore
building	palace	ignore
building	parking	ignore
building	pavilion	ignore
building	pergola	ignore
building	petrol_station	ignore
building	pillar	ignore
building	place_of_worship	culture

building	pneumatic	ignore
building	pneumatic_hall	ignore
building	podium	ignore
building	police	ignore
building	police_cabin	ignore
building	post_office	services
building	power	ignore
building	power_distribution	ignore
building	power_station	ignore
building	presbytery	ignore
building	propylaea	culture
building	public	ignore
building	public_administration	services
building	public_bath	services
building	pyramid	culture
building	quadrifrons	culture
building	reception	ignore
building	refrigerator	ignore
building	religious	ignore
building	residential	ignore
building	residential;commercial	ignore
building	restaurant	restaurant
building	retail	supplies
building	retail_outlet	supplies
building	riding_hall	ignore
building	roof	ignore
building	roundhouse	ignore
building	ruins	ignore
building	school	education
building	school;yes	education
building	semidetached_house	ignore
building	service	services
building	shed	ignore
building	shelter	ignore
building	shop	ignore
building	shopping_mall	supplies
building	silo	ignore
building	skywalk	ignore
building	slaughterhouse	ignore
building	sport	ignore
building	sports_arena	culture
building	sports_centre	physical
building	sports_hall	physical
building	stable	ignore
building	stadium	culture
building	stage	ignore

building	staircase	ignore
building	stairs	ignore
building	stands	ignore
building	static_caravan	ignore
building	station	ignore
building	storage	ignore
building	storage_tank	ignore
building	substation	ignore
building	subway_station	transport
building	supermarket	supplies
building	synagogue	ignore
building	technical_installation	ignore
building	temple	culture
building	tent	ignore
building	terrace	ignore
building	theatre	culture
building	ticket_office	ignore
building	toilets	services
building	tomb	ignore
building	tower	ignore
building	train_station	ignore
building	transformer	ignore
building	transformer_tower	ignore
building	transportation	transport
building	unfinished	ignore
building	university	education
building	utility_room	ignore
building	villa	ignore
building	warehouse	ignore
building	water_tower	ignore
building	wayside_shrine	ignore
building	well	ignore
building	yes	ignore
buildingpart	room	ignore
building:colour		ignore
building:flats		ignore
building:height		ignore
building:levels		ignore
building:levels:underground		ignore
building:material		ignore
building:min_level		ignore
building:part	apartments	ignore
building:part	bell tower	ignore
building:part	bell_tower	ignore
building:part	castle	culture
building:part	chapel	ignore

building:part	church	ignore
building:part	column	ignore
building:part	commercial	ignore
building:part	cupola	ignore
building:part	dome	ignore
building:part	garages	ignore
building:part	grandstand	ignore
building:part	lantern	ignore
building:part	loggia	ignore
building:part	no	ignore
building:part	penthouse	ignore
building:part	pergola	ignore
building:part	pos	ignore
building:part	pronaos	ignore
building:part	public	ignore
building:part	retail	supplies
building:part	roof	ignore
building:part	ruins	ignore
building:part	school	education
building:part	steps	ignore
building:part	supermarket	supplies
building:part	tambour	ignore
building:part	terrace	ignore
building:part	theatre	culture
building:part	tower	ignore
building:part	transportation	transport
building:part	yes	ignore
building:shape		ignore
building:use	apartments	ignore
building:use	commercial	supplies
building:use	government	ignore
building:use	hangar	ignore
building:use	outdoor_seating	ignore
building:use	residential	ignore
building:use	storage	ignore
building:year		ignore
buried:wikidata		ignore
bus	designated	ignore
bus	no	ignore
bus	urban	transport
bus	yes	transport
button_operated		ignore
cables		ignore
camera		ignore
capacity		ignore
capital		ignore

car_sharing	yes	transport
cemetery	grave	ignore
cemetery	sector	ignore
charge		ignore
check_date		ignore
circuits		ignore
circumference		ignore
clothes		supplies
cmt		ignore
community:gender	female	ignore
community:gender	male	ignore
collection_times		ignore
colonnade:left		ignore
colonnade:right		ignore
color		ignore
colour		ignore
comment		ignore
communication:mobile_phone	yes	ignore
construction	apartments	ignore
construction	cicleway	ignore
construction	hall	ignore
construction	minor	ignore
construction	no	ignore
construction	parking	ignore
construction	primary	ignore
construction	residential	ignore
construction	service	ignore
construction	station	ignore
construction	subway	ignore
construction	subway_station	transport
construction	tertiary	ignore
construction	trunk	ignore
construction	trunk_link	ignore
construction	yes	ignore
construction_date		ignore
construction:railway:etcs		ignore
contact		ignore
contractor		ignore
country		ignore
couplings:diameters		ignore
covered		ignore
club	amateur_radio	ignore
club	automobile	ignore
club	billard	ignore
club	board_games	ignore
club	culture	ignore

club	linux	ignore
club	military	ignore
club	scout	ignore
club	social	ignore
club	sport	physical
club	yes	ignore
craft	beekeeper	ignore
craft	brewery	ignore
craft	builder	ignore
craft	camera_repair	services
craft	car_repair	services
craft	carpenter	services
craft	caterer	services
craft	cleaning	services
craft	coachbuilder	services
craft	confectionery	services
craft	distillery	supplies
craft	dressmaker	supplies
craft	electrician	services
craft	electronics_repair	services
craft	gardener	services
craft	glaziery	supplies
craft	goldsmith	supplies
craft	handicraft	services
craft	heating_engineer	services
craft	hvac	services
craft	joiner	services
craft	key_cutter	services
craft	laboratory	services
craft	locksmith	services
craft	optician	services
craft	parquet_layer	supplies
craft	photographer	services
craft	photographic_laboratory	services
craft	plumber	services
craft	pottery	supplies
craft	printer	services
craft	sawmill	ignore
craft	scaffolder	ignore
craft	sculptor	services
craft	shoemaker	services
craft	stonemason	services
craft	tailor	services
craft	tiler	services
craft	turner	services
craft	upholsterer	services

craft	watchmaker	services
craft	window_construction	services
craft	winery	supplies
craft	yes	ignore
crane		ignore
created_by		ignore
crop		ignore
crossing		ignore
crossing_ref		ignore
cuisine		restaurant
cuisine_1		restaurant
cuisine_2		restaurant
currency		ignore
cutting		ignore
cycleway		ignore
damage		ignore
dance:teaching	yes	physical
date		ignore
delivery	no	ignore
delivery	only	ignore
delivery	yes	ignore
departures_board	no	transport
departures_board	realtime	transport
departures_board	timetable	transport
departures_board	yes	transport
denomination		ignore
denotation	agricultural	ignore
denotation	alley	ignore
denotation	avenue	ignore
denotation	park	outdoor
denotation	part_of_fence	ignore
denotation	single	ignore
denotation	street	ignore
denotation	urban	ignore
desc		ignore
description		ignore
destination		ignore
diet		restaurant
diet:vegan		restaurant
diet:vegetarian		restaurant
diplomatic		ignore
direction		ignore
disabled		ignore
dispensing	no	ignore
dispensing	yes	ignore
display		ignore

distretto_scolastico		education
disused		ignore
disused:shop		ignore
dog	yes	ignore
dog	leashed	ignore
dog	no	ignore
dog	limited	ignore
door		ignore
drinking_water		ignore
drive_through	no	ignore
drive_through	yes	ignore
ele		ignore
electrified		ignore
email		ignore
embankment		ignore
embassy		delete
embassy	no	ignore
emergency		ignore
end_date		ignore
entrance		ignore
exit_to		ignore
facebook		ignore
fax		ignore
fee		ignore
female		ignore
fence_material		ignore
fence:material		ignore
fence_type		ignore
fire_hydrant		ignore
fixme		ignore
flag:wikidata		ignore
flat_steps	yes	ignore
flickr		ignore
floorplanpart	no	ignore
floorplanpart	yes	ignore
flow		ignore
food	ice_cream	restaurant
food	yes	ignore
foot		ignore
footway		ignore
fountain	Nasone	ignore
fountain	bubbler	ignore
fountain	decorative	ignore
fountain	dog_fountain	ignore
fountain	drinking	ignore
fountain	dry	ignore

fountain	mist	ignore
fountain	nasone	ignore
fountain	roman_travertine_block	ignore
fountain	roman_wolf	ignore
fountain	sarcophagus	culture
fountain	scenic	culture
fountain	stone_block	ignore
fountain	trough	ignore
fountain	wall_mounted	ignore
fountain	water	ignore
frequency		ignore
fuel	charcoal	ignore
fuel:cng	no	ignore
fuel:cng	yes	supplies
fuel:diesel	no	ignore
fuel:diesel	yes	supplies
fuel:lpg	no	ignore
fuel:lpg	yes	ignore
fuel:octane_95	no	ignore
fuel:octane_95	yes	supplies
fuel:octane_98	no	ignore
fuel:octane_98	yes	supplies
gambling		ignore
gate_type		ignore
gauge		ignore
generator		ignore
genus		ignore
gfoss_id		ignore
golf	bunker	ignore
golf	clubhouse	ignore
golf	driving_range	ignore
golf	fairway	ignore
golf	green	ignore
golf	hole	ignore
golf	path	ignore
golf	rough	ignore
golf	tee	ignore
golf	water_hazard	ignore
goods	delivery	ignore
goods	no	ignore
goods	yes	supplies
government	administrative	ignore
government	aerospace	ignore
government	archives	ignore
government	cadaster	ignore
government	culture	culture

government	customs	ignore
government	data_protection	ignore
government	education	education
government	environment	ignore
government	healthcare	healthcare
government	intelligence	ignore
government	justice	ignore
government	migration	ignore
government	ministry	ignore
government	office	ignore
government	parliament	ignore
government	pension_fund	ignore
government	presidency	ignore
government	prosecutor	ignore
government	public_service	ignore
government	register_office	ignore
government	social_welfare	ignore
government	statistics	ignore
government	tax	ignore
government	taxation_office	ignore
government	transportation	transport
government	yes	ignore
grades		ignore
guest_house	apartment	ignore
guest_house	bed_and_breakfast	ignore
guest_house	guest_house	ignore
guest_house	hostel	ignore
handrail		ignore
hazmat	no	ignore
healthcare		healthcare
healthcare:speciality		healthcare
height		ignore
hgv		ignore
highspeed		ignore
highway		ignore
historic		culture
historic:civilization		culture
historic:period		culture
hoops		ignore
horse		ignore
hotspot		ignore
ice_cream	artisanal	restaurant
ice_cream	industrial	restaurant
ice_cream	yes	restaurant
ice_cream:type		restaurant
image		ignore

incline		ignore
indoor		ignore
industrial		ignore
informal	yes	ignore
information	board	ignore
information	guidepost	ignore
information	map	ignore
information	office	ignore
information	route_marker	ignore
information	tactile_map	ignore
information	trail_blaze	ignore
inscription		ignore
intermittent	no	ignore
intermittent	yes	ignore
internet_access		ignore
int_name		ignore
int_ref		ignore
ise	Zona extraterritoriale della Santa Sede	ignore
is_capital		ignore
is_in		ignore
isced		ignore
junction		ignore
kerb		ignore
lamp_mount		ignore
lamp_type		ignore
landcover	grass	ignore
landcover	trees	ignore
landcover	water	ignore
landuse	allotments	ignore
landuse	basin	ignore
landuse	brownfield	ignore
landuse	cemetery	ignore
landuse	churchyard	ignore
landuse	civic	ignore
landuse	commercial	ignore
landuse	community_food_growing	ignore
landuse	construction	ignore
landuse	cultural	ignore
landuse	depot	ignore
landuse	education	education
landuse	farmland	ignore
landuse	farmyard	ignore
landuse	flowerbed	ignore
landuse	forest	ignore
landuse	garages	ignore
landuse	grass	ignore

landuse	green	ignore
landuse	greenfield	ignore
landuse	greenhouse_horticulture	ignore
landuse	harbour	ignore
landuse	industrial	ignore
landuse	institute	ignore
landuse	institutional	ignore
landuse	landfill	ignore
landuse	meadow	ignore
landuse	military	ignore
landuse	observatory	culture
landuse	orchard	ignore
landuse	parking	ignore
landuse	pedestrian	ignore
landuse	plant_nursery	ignore
landuse	pond	ignore
landuse	public	ignore
landuse	quarry	ignore
landuse	radio	ignore
landuse	railway	ignore
landuse	recreation_ground	outdoor
landuse	religious	ignore
landuse	research	ignore
landuse	reservoir	ignore
landuse	residential	ignore
landuse	retail	supplies
landuse	traffic_island	ignore
landuse	village_green	ignore
landuse	vineyard	ignore
lanes		ignore
lane_markings		ignore
language		ignore
layer		ignore
lcn	yes	ignore
leaf_cycle		ignore
leaf_type		ignore
leisure	-1	ignore
leisure	adult_gaming_centre	services
leisure	amusement_arcade	services
leisure	arcade_hall	services
leisure	beach_resort	outdoor
leisure	bleachers	outdoor
leisure	bowling_alley	physical
leisure	club	ignore
leisure	common	ignore
leisure	dance	physical

leisure	dog_park	outdoor
leisure	escape_game	services
leisure	fishing	outdoor
leisure	fitness_centre	physical
leisure	fitness_station	physical
leisure	garden	outdoor
leisure	golf_course	physical
leisure	hackerspace	ignore
leisure	horse_riding	physical
leisure	ice_rink	outdoor
leisure	indoor_play	ignore
leisure	marina	outdoor
leisure	miniature_golf	outdoor
leisure	nature_reserve	outdoor
leisure	outdoor_seating	ignore
leisure	park	outdoor
leisure	picnic_table	outdoor
leisure	pinch	ignore
leisure	pitch	outdoor
leisure	playground	outdoor
leisure	racetrack	physical
leisure	recreation_center	services
leisure	recreation_ground	outdoor
leisure	sauna	services
leisure	slipway	ignore
leisure	sports_centre	physical
leisure	sports_hall	physical
leisure	stadium	culture
leisure	swimming_pool	physical
leisure	tanning_salon	services
leisure	track	physical
leisure	water_park	outdoor
leisure	yoga	physical
length		ignore
level		ignore
lgbtq		ignore
light_rail	yes	ignore
light:colour		ignore
light:count		ignore
light:lit		ignore
light:shape		ignore
light:tilt		ignore
line	bay	ignore
line	busbar	ignore
lit		ignore
loc_name		ignore

loc_ref		ignore
local_ref		ignore
location		ignore
male		ignore
man_made		ignore
map_size		ignore
map_type		ignore
mapillary		ignore
material		ignore
maxaxleload		ignore
maxheight		ignore
maxspeed		ignore
maxstay		ignore
maxweight		ignore
maxwidth		ignore
max_age		ignore
max_level		ignore
memorial	bust	culture
memorial	column	culture
memorial	fountain	culture
memorial	ghost_bike	culture
memorial	obelisk	culture
memorial	plaque	culture
memorial	sculpture	culture
memorial	statue	culture
memorial	stele	culture
memorial	stolperstein	culture
memorial	stopelstein	culture
memorial	war	culture
memorial	war_memorial	culture
memorial	yes	culture
military		ignore
military_service		ignore
minspeed		ignore
min_age		ignore
min_height		ignore
min_level		ignore
mobile		ignore
mofa	no	ignore
moped		ignore
motorcar		ignore
motorcycle		ignore
motorroad	no	ignore
motorroad	yes	ignore
motor_vehicle		ignore
mtb	no	ignore

mtb	yes	ignore
mtb:scale		ignore
mtb:scale:imba		ignore
museum		culture
music	live	services
music	yes	ignore
name		ignore
name_1		ignore
natural	bare_rock	ignore
natural	beach	outdoor
natural	cave	outdoor
natural	cave_entrance	outdoor
natural	cliff	outdoor
natural	grass	ignore
natural	grassland	ignore
natural	heath	ignore
natural	mud	ignore
natural	park	outdoor
natural	peak	physical
natural	sand	ignore
natural	scree	ignore
natural	scrub	ignore
natural	shrub	ignore
natural	spring	ignore
natural	stone	ignore
natural	tree	ignore
natural	tree_row	ignore
natural	tree_stump	ignore
natural	valley	ignore
natural	water	ignore
natural	waterm	ignore
natural	wetland	ignore
natural	wood	ignore
nat_name		ignore
nat_ref		ignore
network		ignore
network:wikidata		ignore
noaddress		ignore
nobrand		ignore
noexit		ignore
nohousenumber		ignore
noname		ignore
noref		ignore
not		ignore
note		ignore
obelisk:height		ignore

obelisk:size		ignore
obelisk:weight		ignore
odbl		ignore
office	Box direzionale CORIME	ignore
office	Comune di Roma - Dipartimento IV	ignore
office	Senato della Repubblica	ignore
office	UN_Specialised_Agency	ignore
office	accountant	ignore
office	administration	ignore
office	administrative	ignore
office	advertising_agency	ignore
office	architect	services
office	architect;engineer	services
office	association	ignore
office	automobile_club	ignore
office	bank	services
office	club	ignore
office	company	ignore
office	construction_company	ignore
office	consultant	ignore
office	consulting	ignore
office	cooperative	ignore
office	corner_noleggio_a_medio_e_lungo_termine	ignore
office	coworking	ignore
office	coworking_space	ignore
office	digital_imaging	ignore
office	diplomatic	ignore
office	editor	ignore
office	educational_institution	education
office	employment_agency	services
office	employment_consultant	services
office	energy_supplier	services
office	engineer	services
office	engineering	services
office	estate_agent	services
office	fanclub	ignore
office	film_production	ignore
office	financial	services
office	financial_advisor	services
office	fire_station	ignore
office	foundation	services
office	government	services
office	insurance	services
office	it	ignore
office	jewellery	ignore
office	labour_union	services

office	lawyer	services
office	legal	services
office	media	ignore
office	medical	healthcare
office	missionary	ignore
office	moving_company	services
office	newspaper	ignore
office	ngo	services
office	oil;gas	services
office	physician	healthcare
office	political_party	ignore
office	property_management	ignore
office	publisher	ignore
office	religion	ignore
office	research	education
office	research_institute	education
office	school	education
office	security	ignore
office	service	ignore
office	social	ignore
office	software	ignore
office	tax_advisor	ignore
office	taxi	services
office	telecommunication	services
office	travel_agent	services
office	truck-mounted_crane_rental	ignore
office	union	ignore
office	utility	ignore
office	video	ignore
office	wedding_planner	services
office	yes	ignore
office	zer0'clock	ignore
official_name		ignore
official_ref		ignore
old_addr		ignore
old_name		ignore
old_official_name		ignore
old_ref		ignore
oneway		ignore
opening_hours		ignore
operator		ignore
outdoor_seating		ignore
oven	electrical	restaurant
oven	wood_fired	restaurant
overtaking	no	ignore
owner		ignore

par		ignore
parking		ignore
parking_space		ignore
park_ride		ignore
passenger_lines		ignore
payment		ignore
period	aurelian	culture
person:date_of_death		ignore
phone		ignore
phone1		ignore
phone2		ignore
phone_1		ignore
phone_2		ignore
pillar:type	dry_barrel	ignore
place		ignore
plant		ignore
platform		ignore
platforms		ignore
playground	climbingframe	physical
playground	climbingwall	physical
playground	roundabout	outdoor
playground	seesaw	outdoor
playground	slide	outdoor
playground	slide;spinny;swing	outdoor
playground	springy	outdoor
playground	structure	outdoor
playground	swing	ignore
playground	zipwire	physical
playground:theme	playground	outdoor
plug		ignore
population		ignore
postal_code		ignore
power		ignore
private	residents	ignore
private	yes	ignore
proposed		ignore
proposed:highway		ignore
proposed:junction		ignore
proposed:name		ignore
proposed:tunnel		ignore
psv		ignore
public_transport	no	ignore
public_transport	platform	transport
public_transport	station	transport
public_transport	stop	transport
public_transport	stop_area	transport

public_transport	stop_position	transport
railway	abandoned	ignore
railway	buffer_stop	ignore
railway	construction	ignore
railway	crossing	ignore
railway	crossing;tram_crossing	ignore
railway	crossing;tram_level_crossing	ignore
railway	disused	ignore
railway	halt	ignore
railway	level_crossing	ignore
railway	light_rail	ignore
railway	miniature	ignore
railway	monorail	ignore
railway	narrow_gauge	ignore
railway	platform	transport
railway	preserved	ignore
railway	proposed	ignore
railway	rail	ignore
railway	railway_crossing	ignore
railway	razed	ignore
railway	roundhouse	ignore
railway	service_station	ignore
railway	signal	ignore
railway	station	transport
railway	stop	transport
railway	stop;station	transport
railway	subway	ignore
railway	subway_entrance	transport
railway	switch	ignore
railway	tram	ignore
railway	tram_crossing	ignore
railway	tram_level_crossing	ignore
railway	tram_stop	transport
railway	turntable	ignore
railway	wash	ignore
railway	workshop	ignore
railway	yard	ignore
railway:etcs		ignore
railway:preferred_direction		ignore
railway:radio	gsm-r	ignore
railway:scmt		ignore
railway:track_ref		ignore
ramp		ignore
rank		ignore
recycling		ignore
recycling_type		ignore

religion	christian	ignore
religion	christian;jewish	ignore
religion	jewish	ignore
religion	multifaith	ignore
religion	muslim	ignore
religion	none	ignore
ref		ignore
residential		ignore
restaurant		restaurant
restaurant:type		restaurant
restaurant:type:it		restaurant
road_marking		ignore
roof		ignore
room		ignore
rooms		ignore
route_ref		ignore
ruins	acqueduct	culture
ruins	baths	culture
ruins	building	ignore
ruins	castle	culture
ruins	cemetery	culture
ruins	crepidoma	culture
ruins	excavation	ignore
ruins	mausoleum	culture
ruins	temple	culture
ruins	thermae	culture
ruins	tomb	culture
ruins	tower	ignore
ruins	villa	ignore
ruins	wall	ignore
ruins	yes	ignore
screen		ignore
seamark		ignore
seats		ignore
second_hand	no	supplies
second_hand	only	supplies
second_hand	yes	supplies
segregated		ignore
self_service	no	ignore
self_service	only	ignore
self_service	yes	ignore
service	TGE company	ignore
service	alley	ignore
service	bus	transport
service	crossover	ignore
service	dealer	ignore

service	dealer; repair	services
service	driveway	ignore
service	drive-through	ignore
service	electrical	services
service	emergency_access	ignore
service	emergency_access;driveway	ignore
service	parking_aisle	ignore
service	parts	supplies
service	parts;repair	supplies
service	polizia	ignore
service	repair	services
service	siding	ignore
service	spur	ignore
service	tyres:parts:car_parts	ignore
service	tyres;repair	services
service	yard	ignore
service_times		ignore
service:bicycle:pump	no	ignore
service:bicycle:pump	yes	services
service:bicycle:repair	yes	services
service:bicycle:retail	no	ignore
service:bicycle:retail	yes	supplies
service:vehicle:inspection	yes	services
service:vehicle:car_repair	yes	services
service:vehicle:tyres	yes	services
shelter	no	ignore
shelter	yes	ignore
shelter_type	gazebo	ignore
shelter_type	lean_to	ignore
shelter_type	pavilion	ignore
shelter_type	picnic_shelter	outdoor
shelter_type	public_transport	transport
shelter_type	sun_shelter	ignore
shelter_type	weather_shelter	ignore
shelter_type	wildlife_hide	ignore
shop	accessories	supplies
shop	alcohol	supplies
shop	anime	supplies
shop	antiques	supplies
shop	appliance	supplies
shop	art	supplies
shop	artist	supplies
shop	baby_goods	supplies
shop	bag	supplies
shop	bakery	supplies
shop	bathroom_furnishing	supplies

shop	beauty	supplies
shop	beauty; piercing	supplies
shop	bed	supplies
shop	beverages	supplies
shop	bicycle	supplies
shop	bookmaker	supplies
shop	books	supplies
shop	boutique	supplies
shop	building_supplies	supplies
shop	butcher	supplies
shop	cafe	restaurant
shop	camera	supplies
shop	cannabis	supplies
shop	car	supplies
shop	car;car_repair	services
shop	car_electrician	services
shop	car_hifi	supplies
shop	car_parts	supplies
shop	car_repair	services
shop	car_repair;car	services
shop	car_wash	services
shop	caravan	supplies
shop	carpet	supplies
shop	charity	supplies
shop	cheese	supplies
shop	chemist	supplies
shop	chocolate	supplies
shop	clothes	supplies
shop	clothes;tailor	supplies
shop	coffee	supplies
shop	collector	supplies
shop	comics	supplies
shop	communications	supplies
shop	computer	supplies
shop	confectionery	supplies
shop	construction_supplies	supplies
shop	convenience	supplies
shop	copyshop	supplies
shop	cosmetics	supplies
shop	costumes	supplies
shop	craft	supplies
shop	curtain	supplies
shop	dairy	supplies
shop	deli	supplies
shop	dental_supplies	supplies
shop	department_store	supplies

shop	dog_spa	services
shop	doityourself	supplies
shop	doors	supplies
shop	dry_cleaning	services
shop	duty_free	supplies
shop	e-cigarette	supplies
shop	electric_supplies	supplies
shop	electrical	supplies
shop	electrical_repair	services
shop	electronics	supplies
shop	electronics_repair	services
shop	engraver	supplies
shop	erotic	supplies
shop	estate_agent	services
shop	fabric	supplies
shop	fair_trade	supplies
shop	farm	supplies
shop	fashion	supplies
shop	fashion_accessories	supplies
shop	finance	services
shop	fireworks	supplies
shop	fishing	supplies
shop	fishmonger	supplies
shop	flooring	supplies
shop	florist	supplies
shop	food	supplies
shop	frame	supplies
shop	frozen_food	supplies
shop	fuel	supplies
shop	funeral_directors	services
shop	furniture	supplies
shop	games	supplies
shop	garden_centre	ignore
shop	general	supplies
shop	gift	supplies
shop	glazery	supplies
shop	glaziery	supplies
shop	greengrocer	supplies
shop	grocery	supplies
shop	haberdashery	supplies
shop	hairdresser	services
shop	hairdresser_supply	supplies
shop	hardware	supplies
shop	hat	supplies
shop	health_food	supplies
shop	hearing_aids	supplies

shop	heating	supplies
shop	heating_cooling	supplies
shop	herbalist	supplies
shop	hifi	supplies
shop	hobby	supplies
shop	household_goods	supplies
shop	household_linen	supplies
shop	houseware	supplies
shop	hunting	supplies
shop	ice_cream	restaurant
shop	interior_decoration	supplies
shop	internet	services
shop	jewelry	supplies
shop	kiosk	supplies
shop	kitchen	supplies
shop	laundry	services
shop	leather	supplies
shop	lighting	supplies
shop	locksmith	supplies
shop	lottery	supplies
shop	mall	supplies
shop	massage	services
shop	medical_supply	supplies
shop	metal construction craft	supplies
shop	mobile_phone	supplies
shop	model	services
shop	money_lender	services
shop	motorcycle	supplies
shop	motorcycle_repair	supplies
shop	music	supplies
shop	musical_instrument	supplies
shop	nails	services
shop	negozio_di_lampade	supplies
shop	newsagent	services
shop	newspaper_agent	services
shop	no	ignore
shop	noodles	supplies
shop	nutrition_supplements	supplies
shop	optician	supplies
shop	orthopedics	supplies
shop	outdoor	supplies
shop	paint	supplies
shop	party	supplies
shop	pasta	supplies
shop	pastry	supplies
shop	pawnbroker	supplies

shop	perfumery	supplies
shop	pet	supplies
shop	pet_grooming	services
shop	photo	services
shop	pizza	restaurant
shop	pottery	supplies
shop	printer_ink	supplies
shop	printing	services
shop	pyrotechnics	supplies
shop	radiotechnics	supplies
shop	religion	supplies
shop	rental	services
shop	scrap_yard	services
shop	scuba_diving	supplies
shop	seafood	supplies
shop	second_hand	supplies
shop	security	supplies
shop	sewing	supplies
shop	shoe_repair	services
shop	shoes	supplies
shop	sports	supplies
shop	stationery	supplies
shop	supermarket	supplies
shop	tailor	supplies
shop	tattoo	services
shop	tea	supplies
shop	telecommunication	supplies
shop	ticket	supplies
shop	tiles	supplies
shop	tobacco	supplies
shop	toys	supplies
shop	trade	supplies
shop	travel_agency	services
shop	truck	supplies
shop	tyres	supplies
shop	vacant	ignore
shop	vacuum_cleaner	supplies
shop	variety_store	supplies
shop	video	supplies
shop	video_games	supplies
shop	watches	supplies
shop	weapons	supplies
shop	wholesale	supplies
shop	window_blind	supplies
shop	wine	supplies
shop	wood	supplies

shop	workshop	supplies
shop	yes	supplies
shop	yoga	physical
short_name		ignore
shoulder		ignore
sidewalk		ignore
site_type	River_port	ignore
site_type	amphitheatre	ignore
site_type	aqueduct	ignore
site_type	building	ignore
site_type	castle	culture
site_type	catacomb	culture
site_type	catacombs	culture
site_type	cistern	ignore
site_type	domus	culture
site_type	fortification	culture
site_type	fountain	ignore
site_type	necropolis	culture
site_type	nymphaeum	culture
site_type	quarry	ignore
site_type	road	ignore
site_type	roman_circus	culture
site_type	roman_road	culture
site_type	roman_villa	culture
site_type	ruins	culture
site_type	settlement	ignore
site_type	stadium	outdoor
site_type	storage	ignore
site_type	street	ignore
site_type	synagogue	ignore
site_type	temple	culture
site_type	tomb	ignore
site_type	tumulus	ignore
site_type	villa	ignore
smoking		ignore
smoothness		ignore
social_facility	ambulatory_care	healthcare
social_facility	assisted_living	healthcare
social_facility	day_care	healthcare
social_facility	daycare	healthcare
social_facility	farm	ignore
social_facility	food_bank	services
social_facility	group_home	services
social_facility	healthcare	healthcare
social_facility	leisure	services
social_facility	nursing_home	services

social_facility	outreach	ignore
social_facility	senior_citizen_centre	services
social_facility	shelter	ignore
social_facility	soup_kitchen	ignore
socket		ignore
sorting_name		ignore
source		ignore
species		ignore
sport		physical
stairs		ignore
stars		ignore
start_date		ignore
station	construction	ignore
station	light_rail	transport
station	rail	transport
station	subway	transport
station	train	transport
step_count		ignore
street_cabinet	FIBER_OPTIC_-_FIBER_TO_THE_CABINET	ignore
street_cabinet	postal_service	services
street_cabinet	power	ignore
street_cabinet	telecom	ignore
studio	audio	ignore
studio	cinema	ignore
studio	radio	ignore
studio	television	ignore
studio	television_and_cinema	ignore
studio	video	ignore
subject		ignore
substation	distribution	ignore
substation	industrial	ignore
substation	minor_distribution	ignore
substation	traction	ignore
substation	transition	ignore
substation	transmission	ignore
subway	yes	transport
supervised		ignore
support	pole	ignore
support	wall_mounted	ignore
surface		ignore
surveillance		ignore
survey		ignore
suspended:highway	bus_stop	transport
suspended:public_transport		ignore
swimming_pool	covered	physical
swimming_pool	indoor	physical

swimming_pool	outdoor	physical
swimming_pool	personal	delete
swimming_pool	yes	physical
swing_gate:type	double	ignore
sym	Flag	ignore
tactile_paving		ignore
takeaway	no	restaurant
takeaway	only	restaurant
takeaway	yes	restaurant
tap	no	ignore
tap	push_button	ignore
tap	yes	ignore
target		ignore
taxi	designated	transport
taxi	no	ignore
taxi	yes	transport
taxon		ignore
to		ignore
toilets	yes	ignore
toilets	no	ignore
toilets:wheelchair	limited	ignore
toilets:wheelchair	no	ignore
toilets:wheelchair	yes	ignore
toll		ignore
tomb	columbarium	ignore
tomb	grave	ignore
tomb	hypogeum	ignore
tomb	mausoleum	culture
tomb	memorial	culture
tomb	pyramid	ignore
tomb	rock-cut	ignore
tomb	sarcophagus	culture
tomb	tumulus	ignore
tomb	vault	ignore
tomb	war_grave	culture
tomb	yes	ignore
tourism	agritourism	restaurant
tourism	apartment	ignore
tourism	aquarium	culture
tourism	artwork	culture
tourism	attraction	culture
tourism	bed_and_breakfast	ignore
tourism	business	ignore
tourism	camp_site	ignore
tourism	caravan_site	ignore
tourism	gallery	culture

tourism	guest_house	ignore
tourism	hostel	ignore
tourism	hotel	ignore
tourism	information	ignore
tourism	motel	ignore
tourism	museum	culture
tourism	picnic_site	outdoor
tourism	route_marker	ignore
tourism	spa_resort	services
tourism	theme_park	services
tourism	viewpoint	outdoor
tourism	yes	ignore
tourism	zoo	outdoor
tourist_bus	no	ignore
tourist_bus	yes	ignore
tower:type	Stazione_Meteo	ignore
tower:type	aircraft_control	ignore
tower:type	bell_tower	ignore
tower:type	bell_towers	ignore
tower:type	communication	ignore
tower:type	defensive	ignore
tower:type	lightning	ignore
tower:type	observation	ignore
tower:type	torre_dell'acqua	ignore
tower:type	transition	ignore
tracks		ignore
tracktype		ignore
traffic_calming		ignore
traffic_sign		ignore
traffic_signals		ignore
trail_visibility		ignore
train	no	ignore
train	yes	transport
tram	no	ignore
tram	yes	transport
tree		ignore
trolleybus	no	ignore
trolleybus	yes	transport
trees		ignore
trolley_wire		ignore
trough		ignore
tunnel		ignore
turn		ignore
type		ignore
uic_name		ignore
uic_ref		ignore

unisex		ignore
url		ignore
usage	branch	ignore
usage	industrial	ignore
usage	main	ignore
use	market	supplies
use	partially	ignore
use	unused	ignore
use	used	ignore
vat		ignore
vatin		ignore
vehicle		ignore
vending		supplies
visibility		ignore
voltage		ignore
wall		ignore
was		ignore
waste		ignore
water	Piscina	outdoor
water	basin	ignore
water	canal	ignore
water	fishpond	outdoor
water	fountain	ignore
water	lake	outdoor
water	pond	outdoor
water	reflecting_pool	ignore
water	reservoir	ignore
water	river	ignore
water	wastewater	ignore
waterway	boatyard	transport
waterway	canal	ignore
waterway	dam	ignore
waterway	ditch	ignore
waterway	dock	transport
waterway	drain	ignore
waterway	lock_gate	ignore
waterway	river	ignore
waterway	stream	ignore
waterway	waterfall	ignore
waterway	weir	ignore
water_source	main	ignore
website		ignore
wetap		ignore
wheelchair		ignore
wood		ignore
width		ignore

wifi		ignore
wikidata		ignore
wikimedia_commons		ignore
wikipedia		ignore
wires	single	ignore
wires	double	ignore
xmas:location		ignore
year		ignore
year_of_construction		ignore
zone:maxspeed		ignore

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