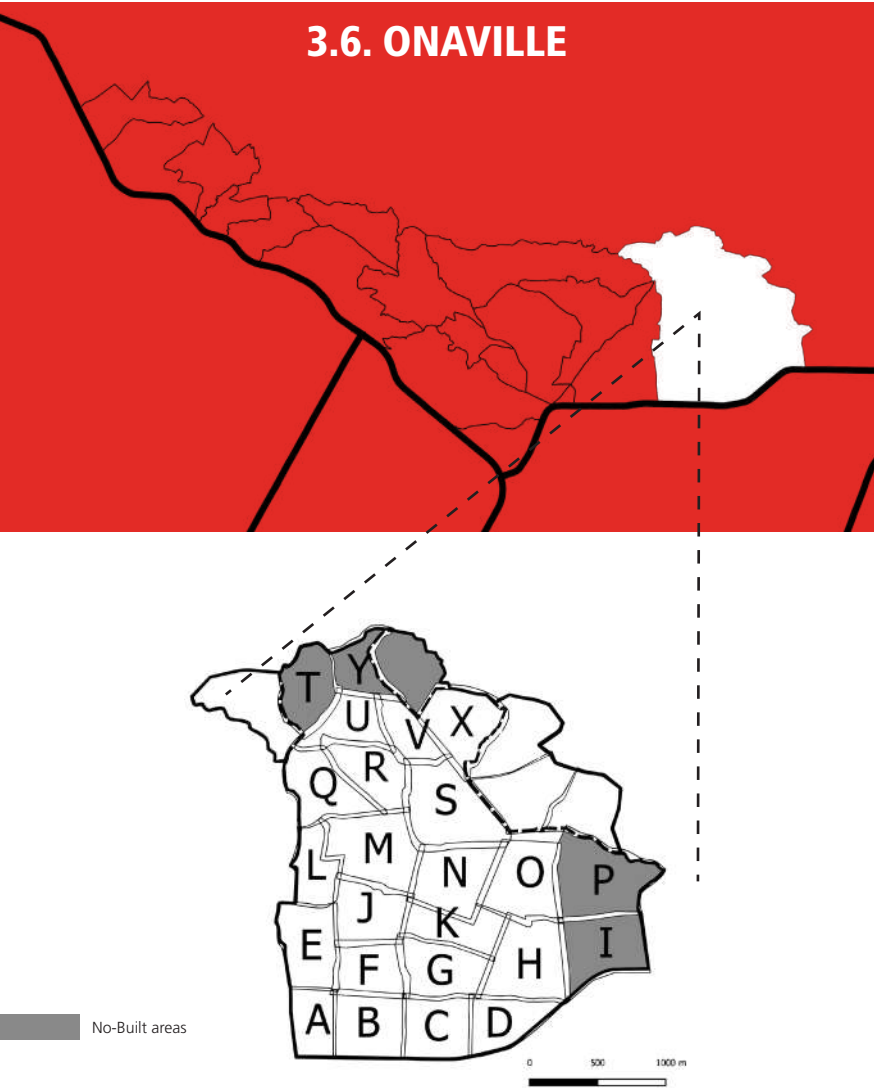




Onaville, located on the far right of the Canaan area, is the neighbourhood with a medium population density (3.500 population per km²). The upper part is a bit hilly but still moderate and development is possible. Onaville does not face many environmental constraints and therefore has a high potential of becoming a rich area for urban development. While Onaville holds few sports facilities, public spaces and some retail services, more is needed to support the population growth of the area.

The following land use proposals in this section are based on a participatory process within three months' time-frame. The UN-Habitat team maps the existing situation and the community validates and proposes ideas. The urban Lab rechecks the suggested interventions and modifies if necessary. After that, a neighbourhood assembly is organized to showcase the overall vision and a land use is later developed.



Fig.145: Onaville: participatory planning process

A. STREET NETWORK

The street network in Onaville needs to be improved in order to accommodate the vehicular flux without leading to congestion. A need to preserve enough spaces for streets is important before the area becomes urbanized. There is one arterial road that connects the national road to the upper part and about ten main roads within the neighbourhood. Secondary streets are the most abundant types of roads in Onaville with an average of 6 metres’ wide. The current situation consist of 8% of space allocated to the streets while UN-Habitat recommends 30%.

Existing situation

Streets percentage

UN-Habitat: 30%

8%

Streets km/sq.km

UN-Habitat: 18 km/sq.km

13.64 km/sq.km

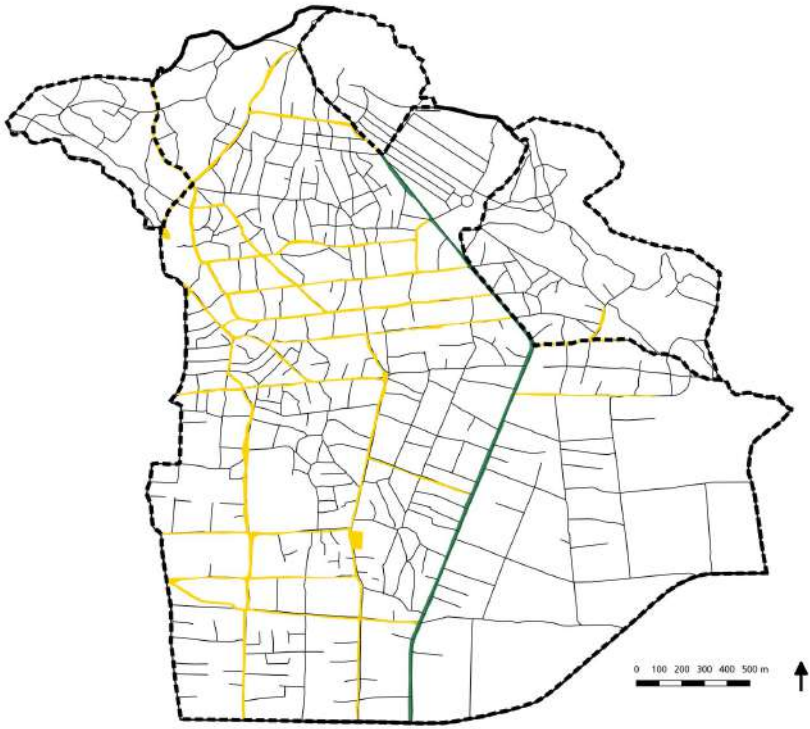


Fig.146: Onaville: existing street network

Proposed street network

Streets percentage

33% -Option A

Arterial road: 24m

Main roads: 18m

Secondary streets: 12m

24% - Option B

Arterial road: 18m

Main roads: 12m

Secondary streets: 9m

Streets km/sq.km

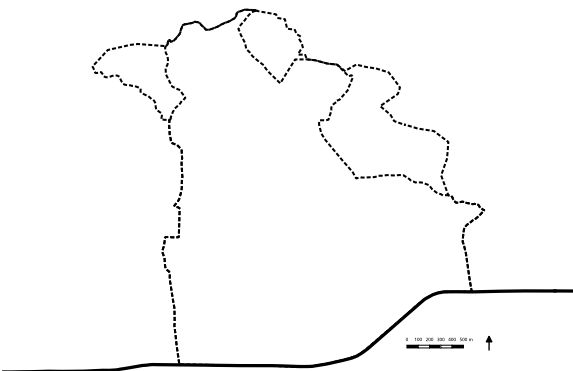
UN-Habitat: 18 km/sq.km

20.1 km/sq.km

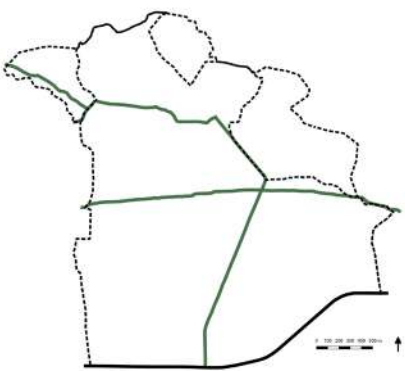


Fig.147: Onaville: Proposed street network

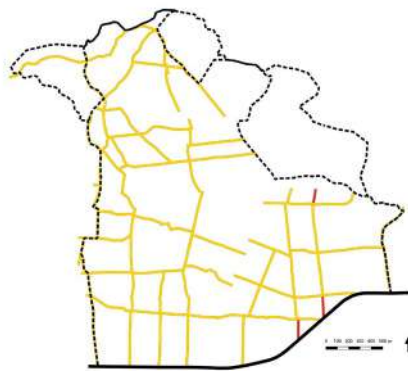
Layers of the proposed street network



National road



Arterial road



Main roads



Secondary streets

Fig.148: Onaville: Layers of the proposed street network

B. PUBLIC SPACES

Existing Public Spaces



Fig.149: Onaville: Existing Public spaces

Proposed by the community



Fig.150: Onaville: Public spaces proposed by the community

Proposed by UN-Habitat LAB



Fig.151: Onaville: Public spaces proposed by UN-Habitat LAB

#	PUBLIC SPACES IN ONAVILLE	STATUS	NAME	m²	Ha	%
	Neighbourhood area			6,100,000	610	100%
1	Football field	Existing		3,600	0.36	
2	Public space	Existing		1,300	0.13	
3	Public space	Existing		3,500	0.35	
4	Public space	Existing	Horeb? (park)	6,500	0.65	
				14,900	1.49	0.24%
5	Public space	Proposed by the community		6,000	0.6	
6	Sports centre	Proposed by the community	Centre Sportif	43,200	4.32	
7	Market	Proposed by the community		33,600	3.36	
8	Public space	Proposed by the community		20,000	2	
9	Public space	Proposed by the community	Centre communautaire Onaville	4,900	0.49	
10	Public space	Proposed by the community		14,600	1.46	
11	Public space	Proposed by the community	Place Onaville	220	0.022	
					12.252	2.01%
12	Public space	Proposed by the LAB		16,000	1.6	
13	Public space	Proposed by the LAB		5,600	0.56	
					2.16	0.35%
Total:				159020	15.902	2.61%

Table 26. Onaville: Percentage of public spaces

There are currently only a few existing public spaces within Onaville. Four public spaces of which one is a football field, cover 0.24 per cent of the land mass. The UN-Habitat recommended coverage of an area by public space is 15 per cent. This recommendation also implies that the public spaces are distributed equally among a neighbourhood, however the four public spaces found in Onaville are situated only in the north-eastern and central parts. In order to meet demand, build community and enhance the urban life for the inhabitants, the presence of public spaces is essential. Ideally they should be easily accessible within a distance of no more than 400m in order to reduced car dependency, facilitate availability and improve walkability. These goals of the community were voiced strongly along with improvement of the green space network during participatory processes. The results have meant an increase of 2.0 per cent of the land mass for public space in seven new areas. This also includes a market as well as another sports centre.

Non-aedificandi areas also have the potential to become public spaces. To further meet the UN-Habitat recommended land cover for public space, three public spaces are therefore proposed, one of which is a buffer zone and two that are reforestation projects. These areas have been designed with the potential to become public spaces. If these suggestions are to be implemented, designated public space in the neighbourhood of Onaville would reach 11 per cent of the total land mass. Land for public space should be encouraged to be developed in order to promote sustainable social dynamics within the new urban neighbourhood.

#	PUBLIC SPACE IN ONAVILLE		STATUS	NAME	m2	Ha	%
	Neighbourhood area				6,100,000	610	100%
	Public spaces				159020	15.902	2.61%
14	Reforestation	Proposed by the LAB			200,000	20	
15	Reforestation	Proposed by the LAB			230,000	23	
16	Buffer area next to ravine	Proposed by the LAB			93,000	9.3	
Total:					523000	52.3	8.57%
Total open public spaces:					682020	68.202	11.18%

Table 27. Onaville: Total percentage of public spaces

The World Health Organization (WHO) recommends 9m²/inhabitant

Existing	Proposed public space	Proposed P.S + non-aedificandi
14,900 m²	159,000 m²	682,000 m²
22,700 inhabitants	49,000 inhabitants	49,000 inhabitants
0.65 m²/inhabitant	3.2 m²/inhabitant	13.9 m²/inhabitant

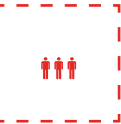
Table 28. Onaville: Public space area per inhabitant diagram

Proposed public spaces with 400 metres buffer



Fig.152: Onaville: Overall public spaces' land use and buffer area (400m)

C. RESIDENTIAL AREAS



6.43 km²
Neighbourhood area

22,663
Inhabitants
(source ARC household survey 2016)

3,524
people/km²

Existing residential areas



Fig.153: Onaville: Existing settlements

Onaville is a neighborhood with medium density. This is due to it being situated far from the more urbanized areas of Port-au-Prince as well as factors of a very challenging terrain.

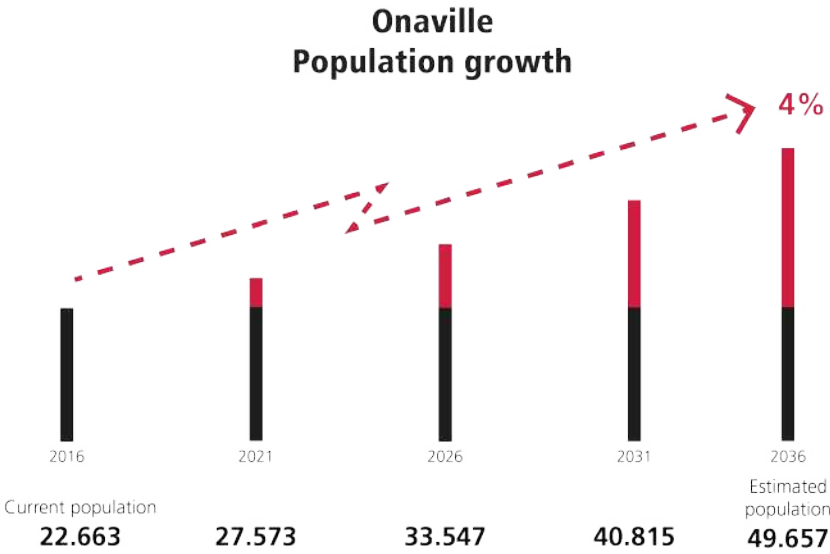


Fig.154: Onaville: Projected population increase

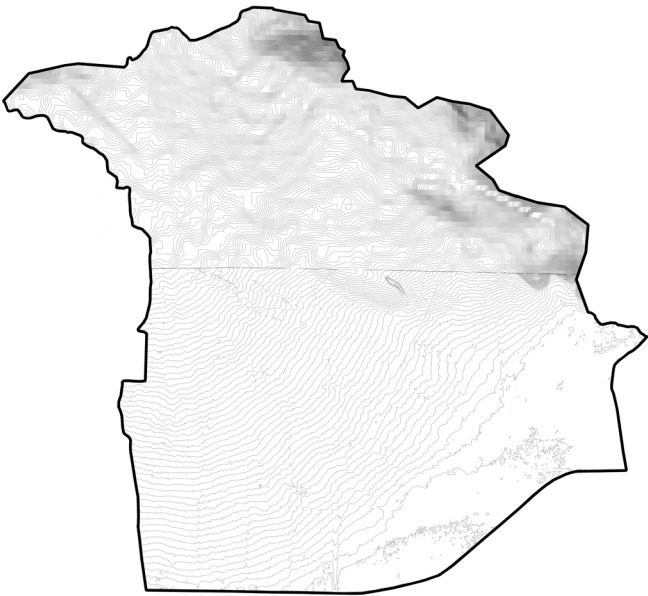


Fig.155: Onaville: Contours

The expected growth of Onaville is 4 per cent annually.

Proposed densities

Low density

Low density housing are suggested where topography is too challenging to be built or where flooding is likely to occur proving challenging for sustainable construction. As seen on the above plan, most of the northern part of Onaville have been designated as such. For low-density settlements, it is proposed that the density be 8 000 people per square kilometre, mainly in the northern area. The existing dwellings may remain although it is recommended that the site not be built further resulting in a low density portion of the neighborhood. In the future, as technology availability and improves and emerges, these areas have the potential to become higher density.

Medium density

The topography, where medium density housing is proposed, is fairly steep but still considered suitable for settlements. The level of densification also depends on proximity to arterial roads and main streets as well as commercial and service-oriented areas. The areas in between these important connections and the more urbanized areas is therefore suggested as medium density housing. A density of 12 000 people per square kilometre is suggested in these areas to encourage social mixing and better opportunities for interaction of more vulnerable populations.

High density

For high density areas, a density of 15 000 people per square kilometre is suggested. This type of neighborhood profile is suggested mostly along arterial roads, main streets and at junctions. High density areas are preferably combined with commercial and service facilities in order to promote a mixed used. In Onaville this has been proposed in the southern and central parts of the neighborhood. Encouraging a compact urban form aims to increase the built area and residential population densities. It also has the goal of intensifying urban economic, social and cultural activities while manipulating urban size, form and structure with larger goals of improving environmental, social and global sustainability benefits.

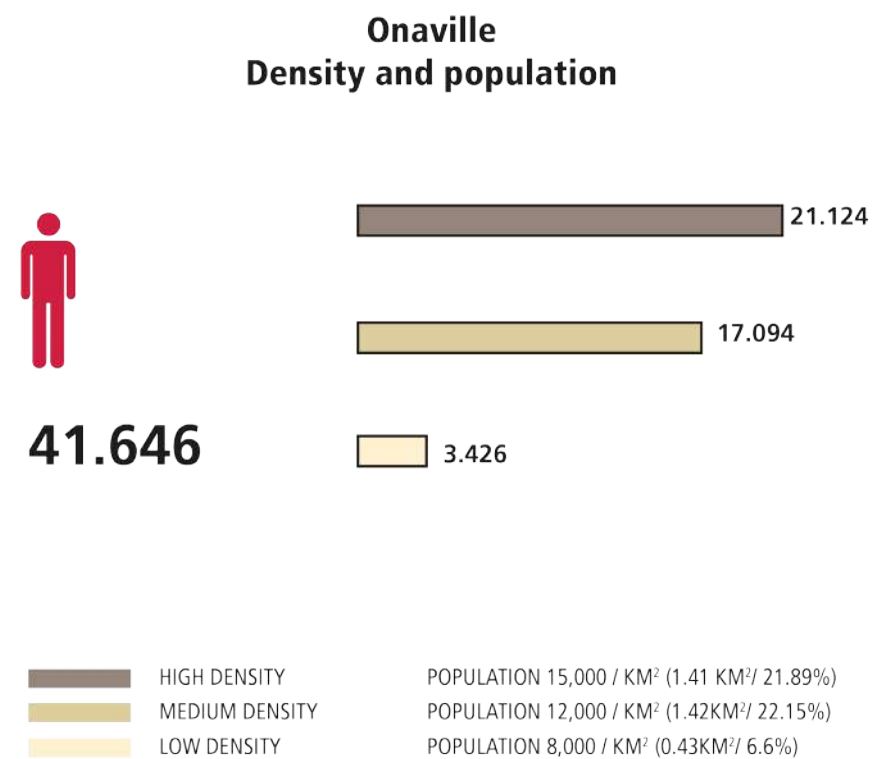


Fig.156: Onaville: Diagram of population in the new proposed residential areas.

Throughout Onaville, not all areas for residential land-use are to be purely monofunctional; integration of mixed-use land types into the residential urban fabric is key to encouraging walkability, promoting inclusion of vulnerable populations and maintaining social cohesion. These areas are distributed equally throughout the neighborhood with the goal of incubating small local businesses, artisan workspaces, eateries and government service centres. Mixed-use nodes in the neighborhood are designed to augment the existing commercial areas providing ease of access and possibilities for new urban form.

The expected annual growth of Onaville is 4 per cent. This means that the current population of 22,663 will grow to approximately 49,657 people within 20 years. The densification of Onaville, as proposed in numbers seen above, will be able to accommodate 41,646 people.

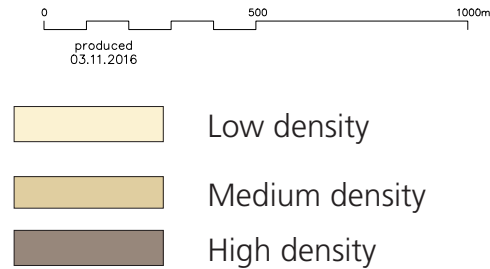


Fig.157: Onaville: Residential areas and proposed densities

D. COMMERCIAL AREAS

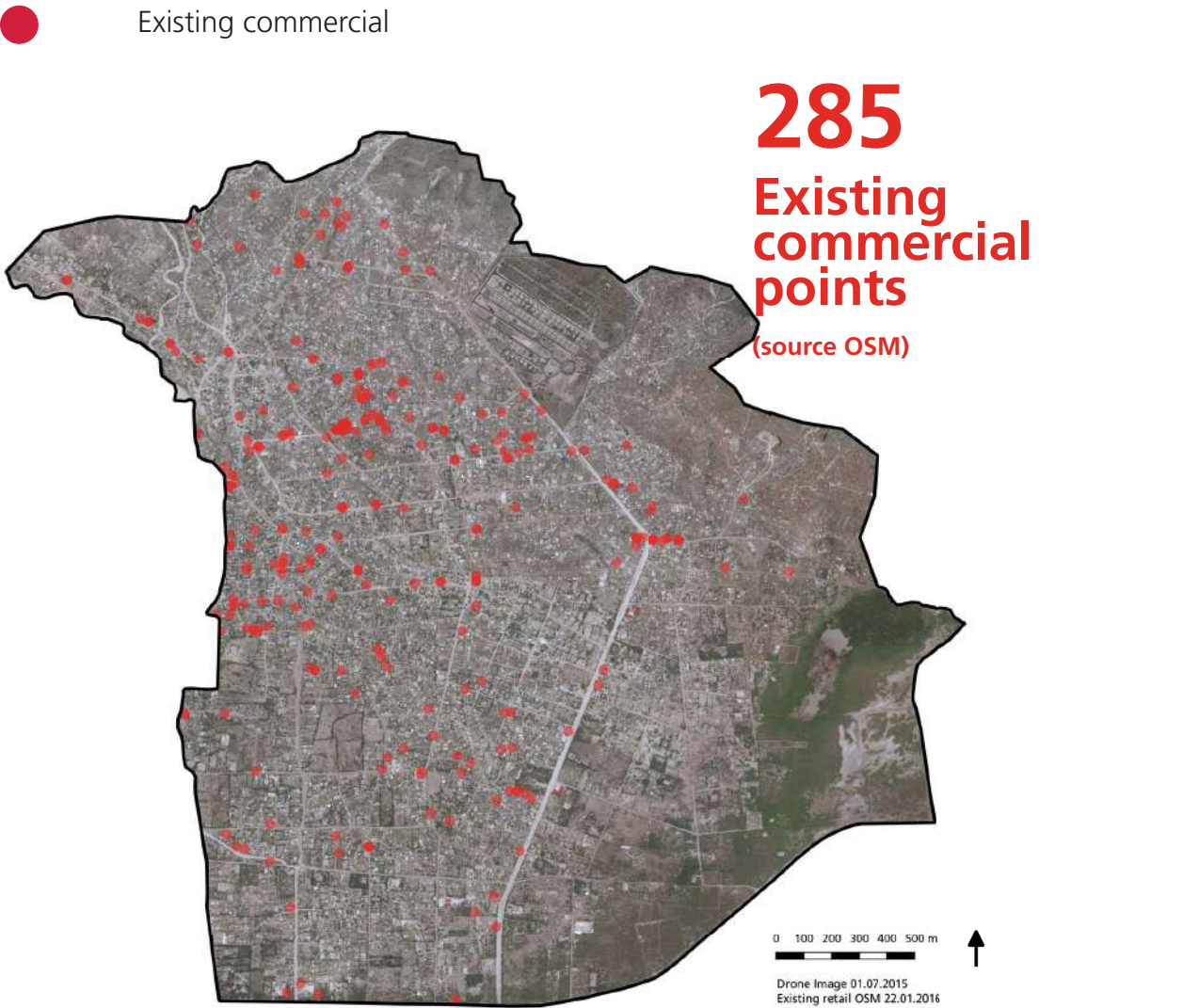


Fig.158: Onaville: Existing commercial points (Source: OSM)

According to OpenStreetmap, there are 285 retail points in Onaville. There is no concentration of commercial activities, the retail shops are dispersed within the neighbourhood and mainly found in the northern area. These shops are a combination of different uses like vegetable shop, merchandise, hairdressers and so on. In order to keep pace with the 4% urban growth, more commercial facilities are needed. With the provision of more centralised commerce facilities and the planning of an adequate street network, Onaville will also induce job opportunities for its residents.

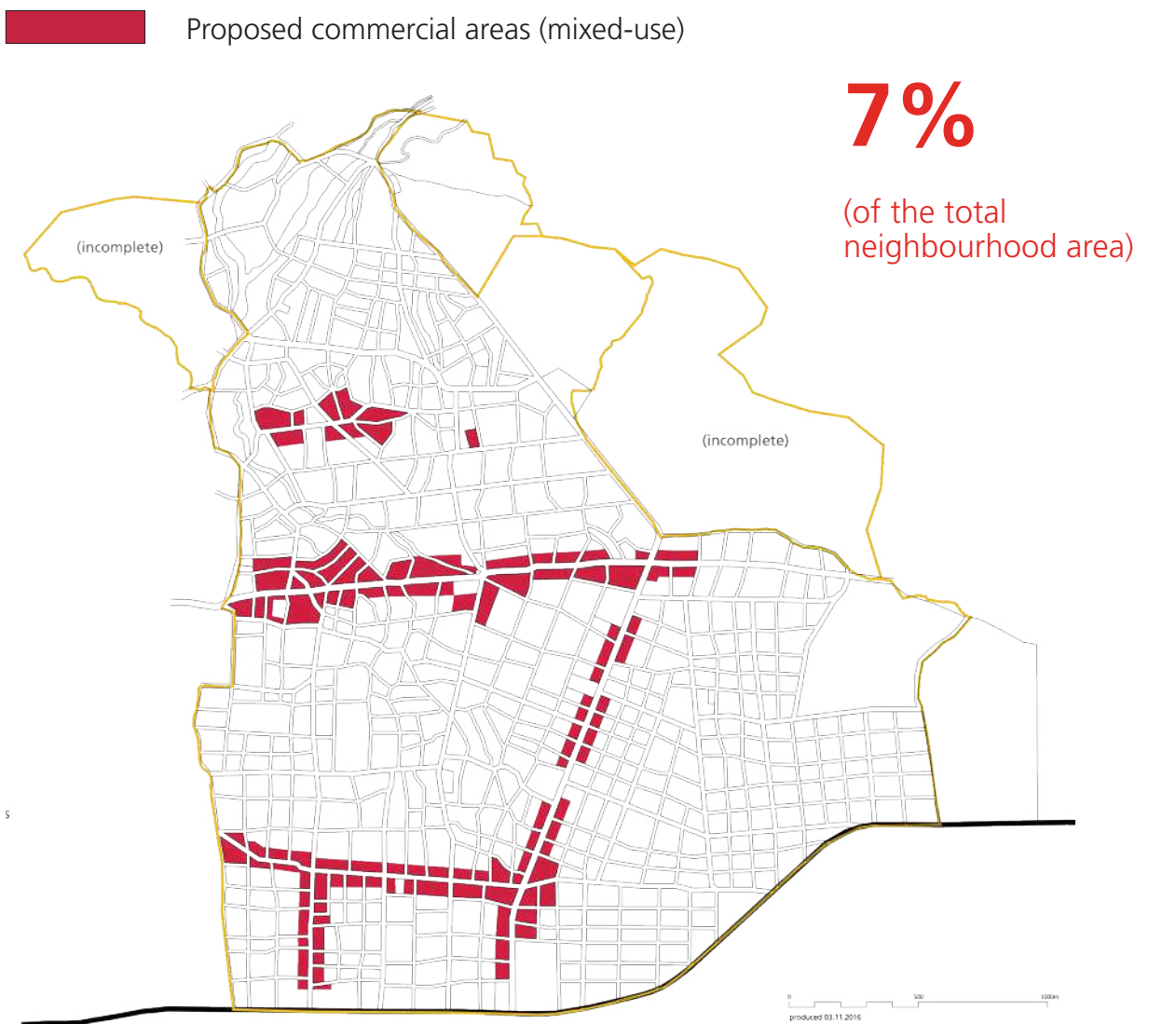


Fig.159: Onaville: Proposed commercial areas

Following the workshop with the communities, different commercial streets were identified. The location of the new commercial shops will be highly concentrated on the arterial roads, as well as on the main roads. This will enable the residents to access those facilities easily. The centres of activities are a booster of employment opportunities and therefore a catalyst for local economy.

It is important to note that the commercial centres are not mono-functional and are not limited to retail activities. These areas are encouraged to be mixed-use where different functions can exist at once. Usually, they have commercial and public facilities on the street level and high residential on the upper level.

E. PUBLIC FACILITIES

- RELIGIOUS - EXISTING
- EDUCATION - EXISTING
- HEALTH - EXISTING
- OTHER PUBLIC FACILITIES - EXISTING

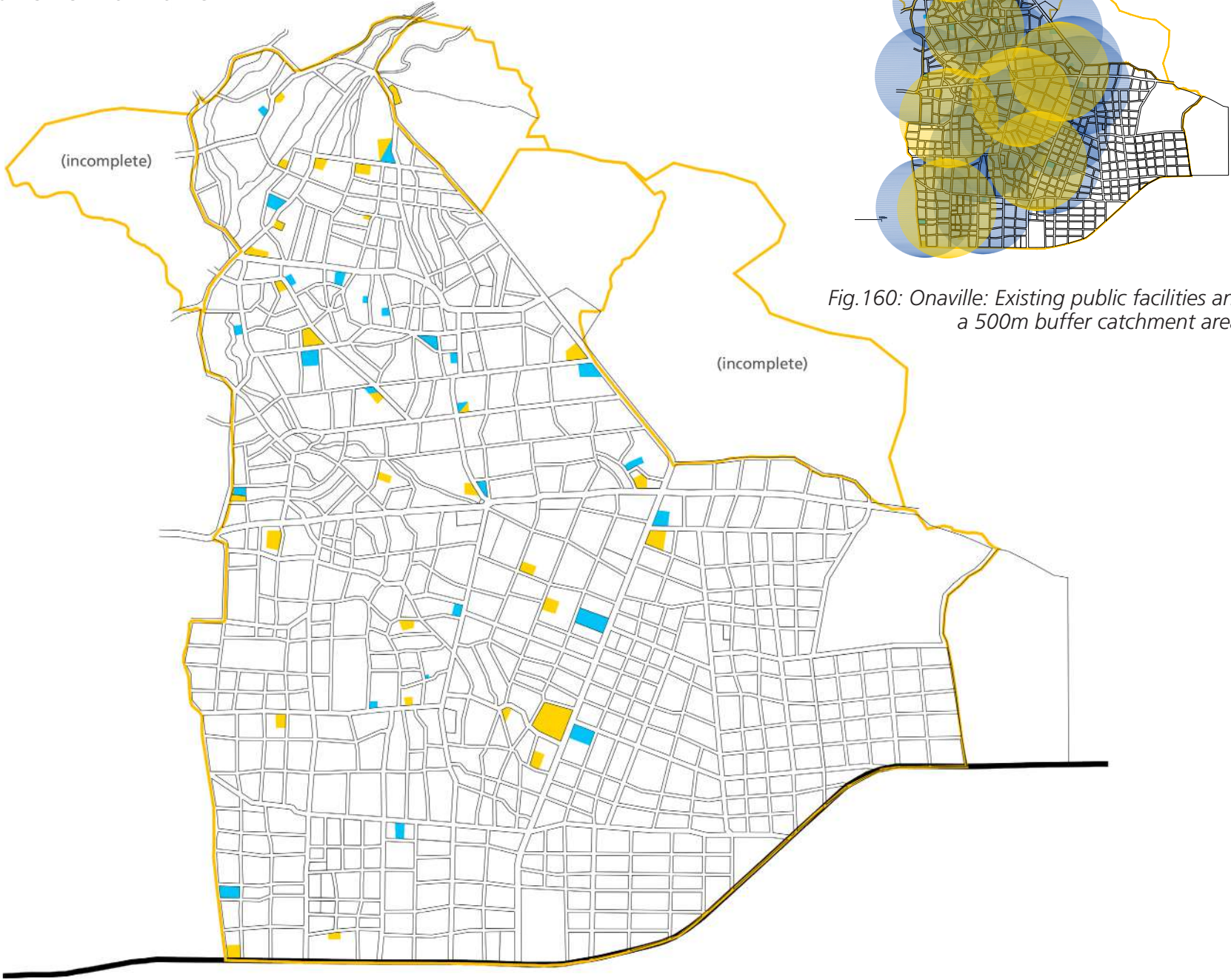


Fig.160: Onaville: Existing public facilities and a 500m buffer catchment area.

There are 25 existing schools within the Onaville area, including kindergartens. These schools are well distributed throughout the neighborhood and are on track to support the growth in population. Therefore no new schools are suggested, however improvement to facilities and quality of education programs are recommended in the SDF.

There are 30 places dedicated for worship in the neighborhood of Onaville. The frequency of worship centres currently follows closely with the density of the population. Where the density is high, more or perhaps larger religious centres can be provided and vice versa in areas considered as low density.

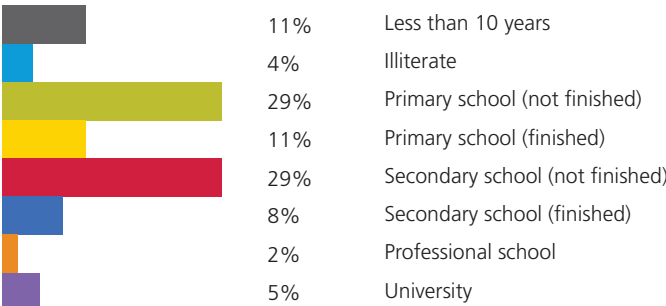


Table 29. Onaville: Participation level (Croix Rouge Americaine, Juillet 2016)

There are no information available about health services, community centres, security stations and others. For planning purposes, and in order to have a long-term sustainable city, it is essential to consider the services mentioned in the new design of the neighbourhood. Generally, these services require good accessibility and therefore their location must be well studied. Normally, it is recommended to locate them within 500 metres from the settlements so that they are easily accessible.

Fig.161: Onaville: Existing public facilities

F. NATURAL RESOURCES AND ENVIRONMENT

Eight percent of the Onaville region is suggested to be non-aedificandi areas. These zones are for the purposes of environmental protection and public engagement in environmental issues, and must be coupled with educational programs to encourage civic and environmental responsibility among civil society. Buffer zones are suggested along rivers that run in the north-eastern part of Onaville. These green corridors are preserved in order to mitigate flood risk and to protect the natural environment. A width of 30 metres on either side is recommended as a minimum width for the buffer zone although the topography of a certain areas may not always allow that recommendation to be enacted. Currently the river passes through several settlements targeted for low density housing, so these areas are not recommended for further expansion.

The north-eastern parts of Onaville are preserved for reforestation projects. Further south, an area is suggested either for reforestation, agricultural or livestock grazing zones. These areas are to be developed according to the Tree Planting Strategy. The Strategy implores the use of certain native species of trees in certain areas. For example, trees and plants that have a large amount of water uptake are recommended for floodplains. This includes fruits, vegetables and grains that can be grown in these contexts for the purposes of agriculture.

#	No-built areas	m2	Ha	%
	Neighbourhood area	6,100,000	610	100%
14	Reforestation	200,000	20	
15	Reforestation	230,000	23	
16	Buffer areas next to ravine	93,000	9.3	
Total:		523000	52.3	8.13%

Table 30. Onaville: Total percentage of no-built areas

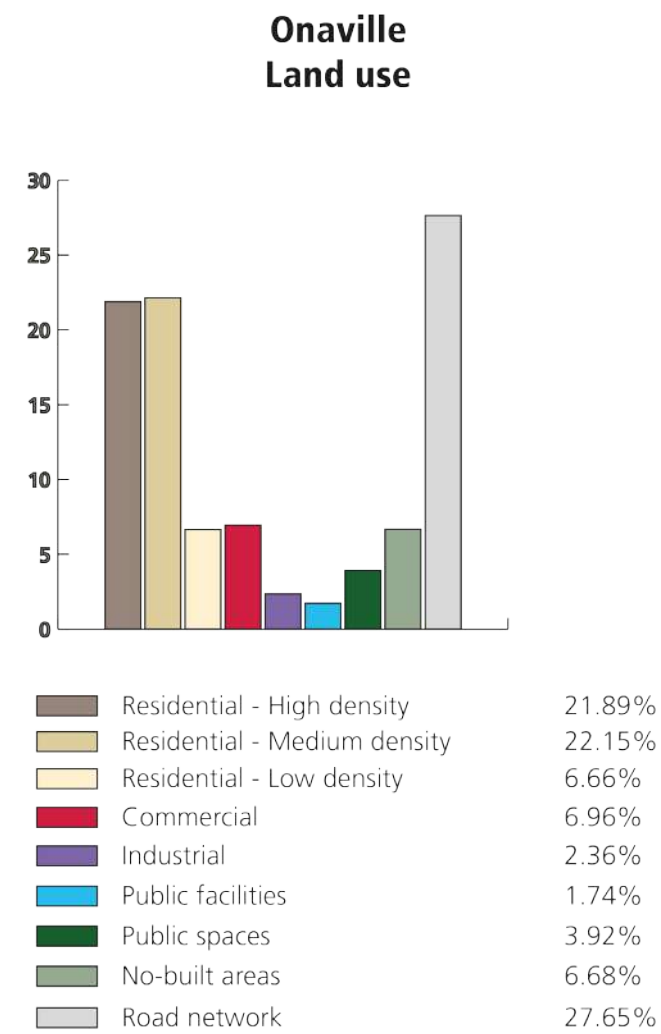
Legend

- Proposed buffer zone along the rivers and ravines
- Proposed area for livestock grazing
- Proposed area for reforestation
- High environmental risk areas
- Existing rivers and ravines
- Quarries



Fig.162: Onaville: No-built areas

G. ONAVILLE LAND USE



The overall land use of Onaville is a result of ongoing engagement with the community. The plans reviewed by the residents and the neighbourhood leaders were the basis of UN-Habitat’s land use proposal. Streets forms 27.6% of the total land in the new proposal, whereas public space and non-aedificandi areas takes 10.6% of Onaville.

Onaville’s land use was also reviewed in its wider area, taking into consideration the neighbourhoods nearby and how they interlink. It is mandatory to situate the individual neighbourhood plans within the overall Canaan area in means to reach a consistent and rich structure.



Fig.163: Onaville: Proposed land use plan