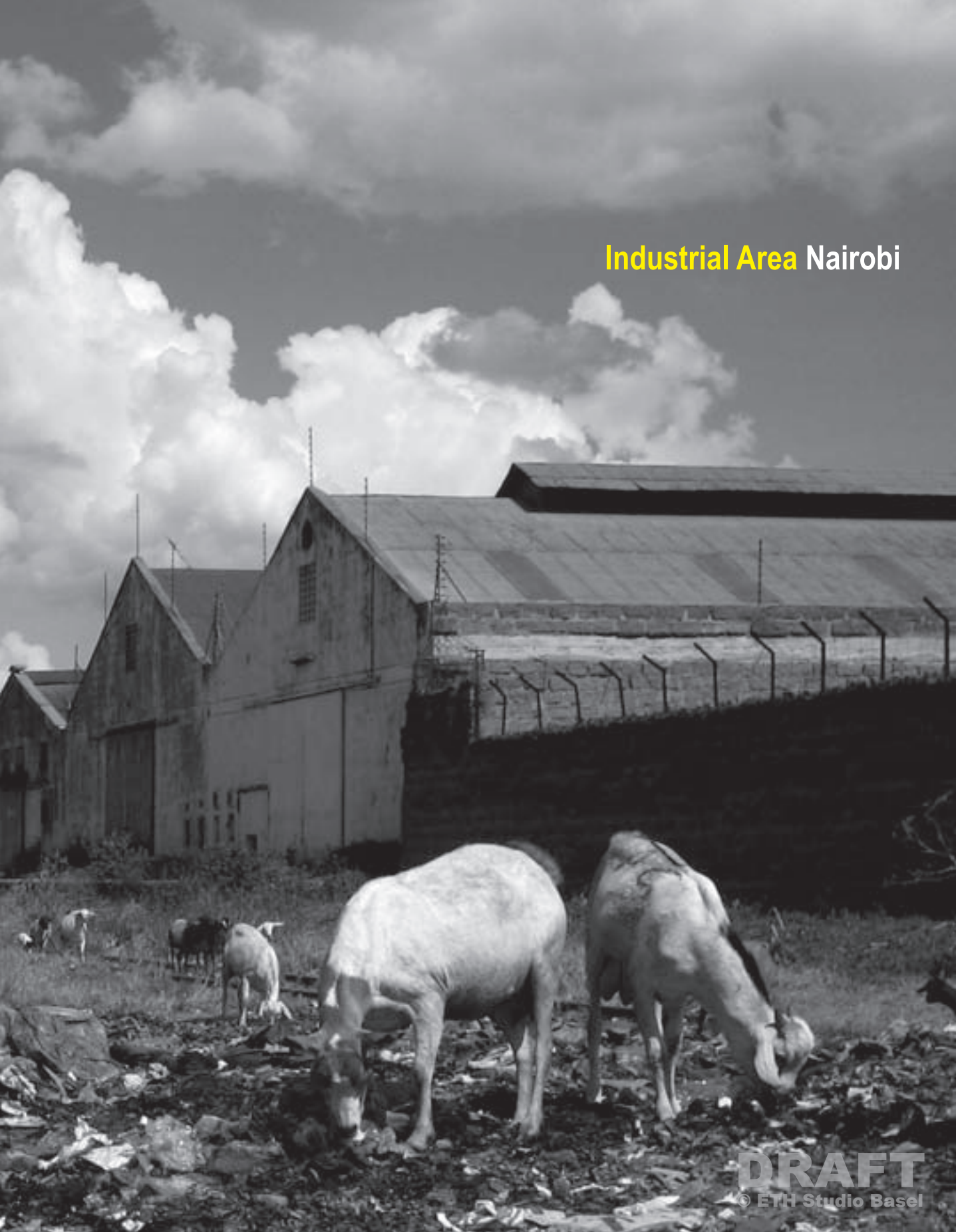


Industrial Area Nairobi



CONCEPT

ETH Studio Basel and Atsuko Koyama and Hannes Rutenfranz

THE NAIROBI STUDIO

ETHZ Studio Basel Contemporary City Institute

Prof. Jacques Herzog

Prof. Pierre de Meuron

Manuel Herz

Ligia Nobre

Shadi Rahbaran

IN COLLABORATION WITH

Harvard University Graduate School of Design

and

University of Nairobi School of Built Environment

Industrial Area Nairobi

Impressions
Introduction
Micro Drills
The Struggle of the Industrial Area
Relocating of Factories
Potential
A Future Scenario



DRAFT
© ETH Studio Basel

Impressions



CROWN





KCC
FRESH
Milk

SHAKE

NEW KENYA CO-OPERATIVE CREAMERIES LTD.





kiosk serving food to factory workers

© ETH Studio Basel







PETROLEUM

TRANSIT GOODS





DRAFT
© Eva Studio Basel











AND TOURIST INDUSTRIAL GARAGE LTD.









director of the industrial railway

ETH StudioBasel



DRAFT
© ETH Studio Basel





DRAFT
car stuck off Lusaka Road
© ETH Studio Basel



DRAFT
© ETH Studio Basel

day labour trail from Kibera to the Industrial Area - about two hours of walking




DRAFT
© ETH Studio Basel



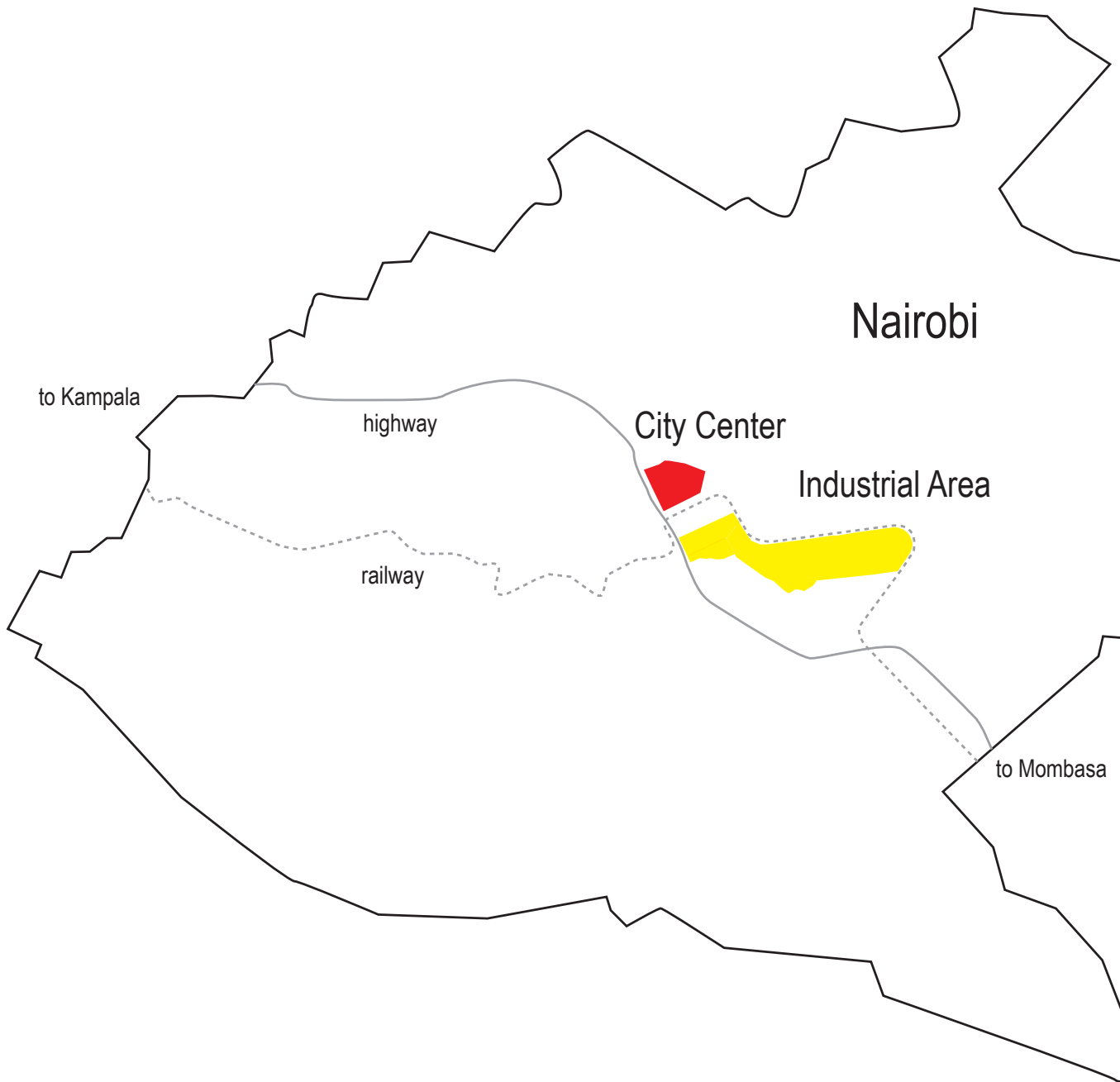


DRAFT oil refineries
© ETH Studio Basel



JOELIZ BONE MEAL LTD.

Introduction



Nairobi

to Kampala

highway

City Center

Industrial Area

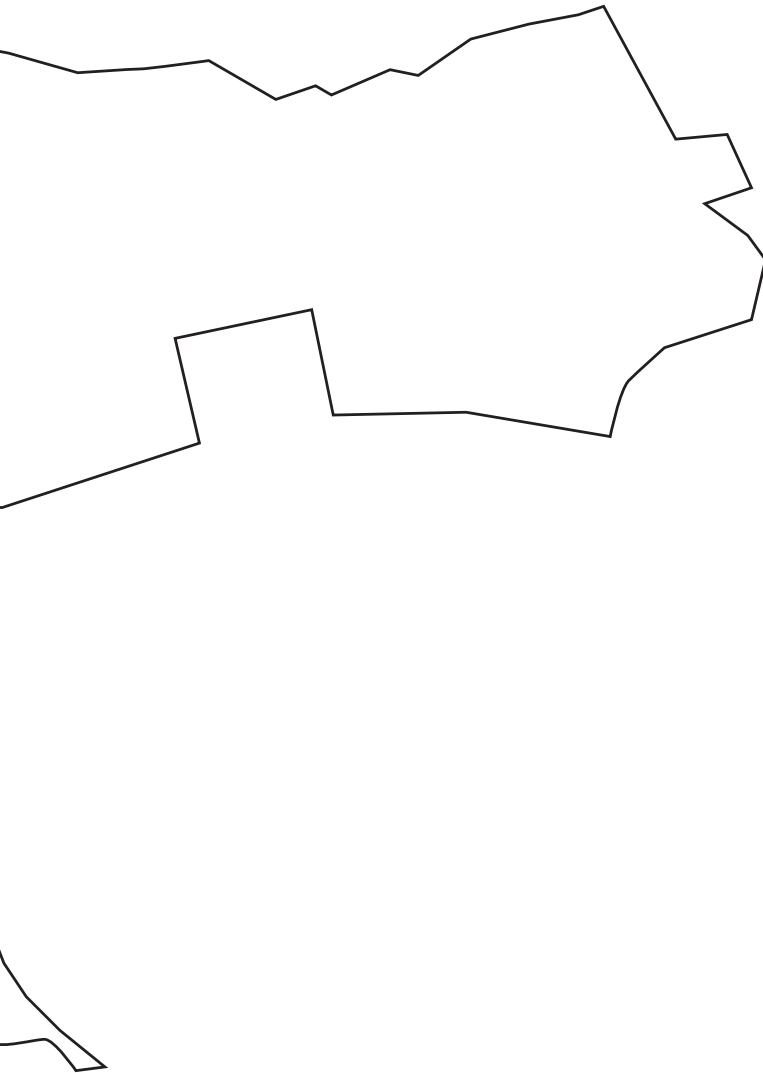
railway

to Mombasa

Industrial Area Nairobi

Capital of the eastern African country of Kenya, Nairobi, just over a hundred years old, has developed into one of the most international cities in the world. As the third UN city after New York and Geneva and host to the headquarters of some of the main UN bodies, it is thoroughly tied into a global network of policy making, diplomacy and governance. A frequent location of large international conferences, such as the World Social Forum 2007, it possesses the infrastructure and becomes a focal point of global exchange of ideas and communication. With a population of approximately three to four million inhabitants the largest city in eastern Africa, it has experienced a large increase in population, mostly based on rural-urban migration and exhibiting one of the highest urban growth rates worldwide. The city is seen as a place of potential, offering economic possibilities.

The industrial quarter next to Nairobi's center occupies a large area in the south and south west of the city center and can be traced back to the very early years of Nairobi. It takes its distinctive urban pattern from the former presence of the railway, which used to feed and service the industries, workshops and production facilities allocated along the tracks. In the last decades, the railway has all but ceased to operate and the main reason of the original existence of this area has disappeared. Being centrally located, we can see this strategic area of Nairobi having a potential for revitalization, especially as some industries are relocating to places that present better infrastructure for industrial production.



Location

The Nairobi Industrial Area is situated at the southeastern end of the Central Business District. It is sandwiched between the city centre and the railway station in the west, the high-density residential areas Mbotela, Makadara, and Ofafa in the north, and the National Park and a fast growing belt of informal settlements to the south. Geologically it is referred to as the Athi-Kapiti plains extensions, due to an extensive flat terrain. The area is straddled by the Ngong River, Kenya's most polluted river due to massive industrial pollution.

Location

Industriequartier Zürich

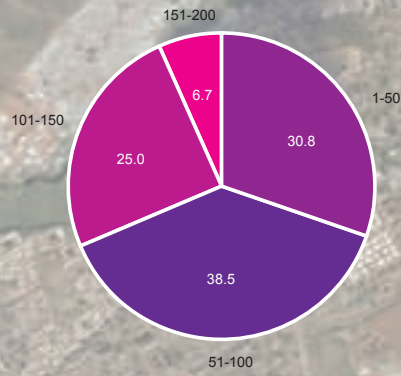
housing

industry/residential

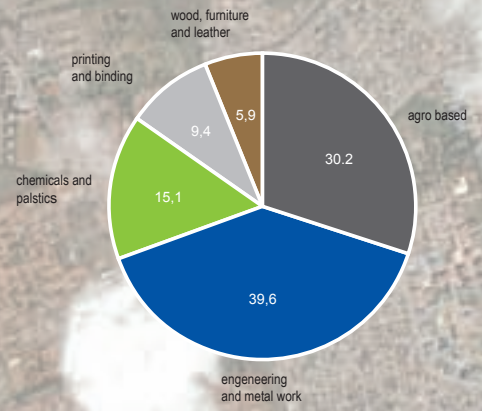
high density factories

1000m

Classification by Number of Employees



Classification by type of Products



industry/void



large scale factories



industry/slum





housing



industry/residential



high density factories

Typologies

Taking a first glance at the area one realizes that it is far off from being a traditional homogenous industrial site. It presents an astonishing range of different typologies – some of them having nothing to do with production, and border conditions. Also the density varies from quite cramped surroundings in the west to larger and less developed plots in the east.



History

In its short time of existence the city of Nairobi has experienced rapid growth both in terms of population and physical expansion. Its history dates back 1895, when a depot of caravan trade was established at the present Ngara area. When the Uganda railway reached the small settlement became the railway headquarters. In 1900, an arbitrary circular boundary of half-mile radius was declared. The town consisted of the railway center, a European business administration centre, an Indian bazaar, the railway quarters, European residential suburbs, and the military barracks outside the town.

In 1919, Nairobi became a municipality with a corporation and the initial circular boundary was changed to include some of the residential estates. It was during this period that an industrial zone was developed as a separate entity from the Central Business District.

The 1948 Master Plan, prepared for the first time for a colonial capital in Africa by a team of professional South African planners, brought in the segregation of residential areas into European, Asians, and Africans. Also the garden city was initiated during this period.

From 1948 to 1963, the city developed more or less on the same lines prescribed by the master plan that followed the modernist separation of different functions. There was provision for the following: industries dealing with bulky goods were located along the railway line, light industries were to be built in the area closer to the center, and a smaller strip for noxious industries was planned in a separated position in the east.

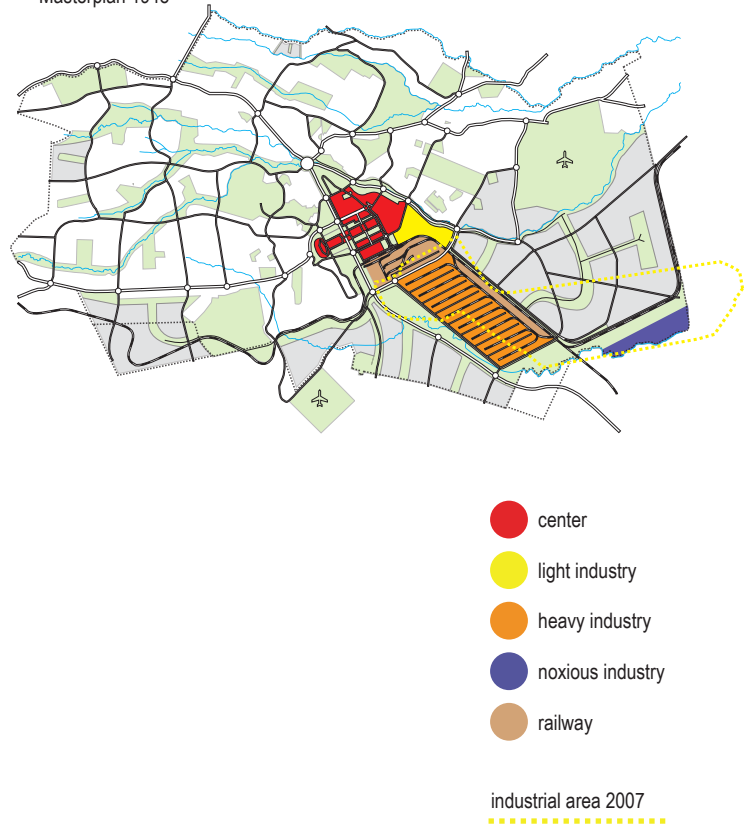
The plan underestimated the development potential of the industrial area in terms of the need of labor. In its proposal for the industrial location, it was defined that the great majority of workers should reside within a one-mile radius of the Industrial Area. The area of low density was left exclusively for white settlers.

The industrial area of 9.6 km² was the largest of East Africa at that time. The master plan advice resulted into a nearly static plan of population of 250,000 people in an area of 87 km².

In 1963, the new independent administration changed the city boundaries with the intention of including adequate land for housing, commercial development and to absorb the urban density. Dormitory areas occupied by the people depending on the area of their employment were planned. The city boundary was extended to 698 km².

Low-income areas to serve the Industrial Area with the required labor were, Kaloleni, Ofafa Jericho, and Makogni. The space of these areas underestimated the expansion potential of the industrial area, and therefore the need for more workers.

Masterplan 1948





Development of Nairobi and its Industrial Area

Zones

The 1948 Master Plan's intention of zoning the area where industries would be located depending on whether they are heavy, light, or noxious has almost not been followed at all.

The oil and gas refineries next to the railway station add up the only real zone. The part closer to the center can on one hand be characterized by a large amount of all kinds of factories, repair shops, and showrooms dealing with vehicles and on the other hand by the infiltration of restaurants, housing, governmental building and cultural facilities. The rest represents a total mix-up of different types of industry what makes an efficient upgrading of infrastructure almost impossible



- infiltration/vehicle
- mix-up of industries
- heavy industry
- railway area



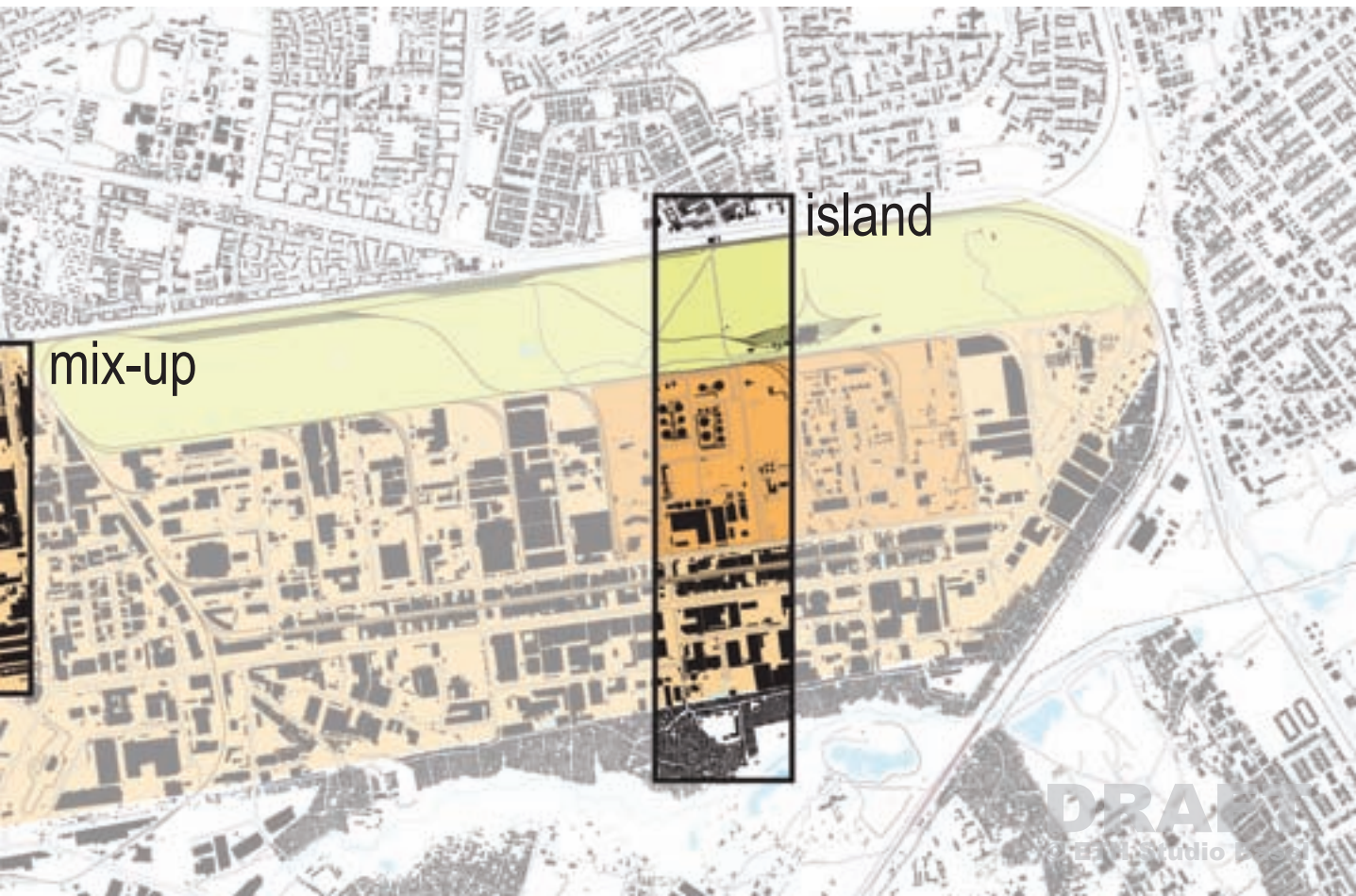


Micro Drills

Micro Drills

To reveal the structure of the area the following pages focus on three different cutouts we identified as significant and characteristic. "Infiltration" shows the western part of the area closest to the city center, where a certain shift of use can be attested. The "mix-up" section deals with the spatial mix up of different types of industry, and "island" relates to the eastern part, which is surrounded by void and informal settlements.



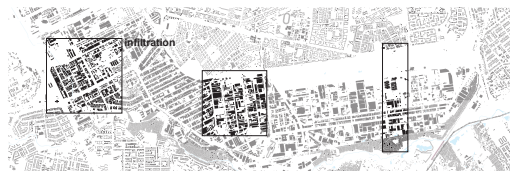


mix-up

island



- culture
- public building
- housing
- restaurant
- elevation



Infiltration

The area close to the city shows an upcoming tendency towards multifunctionality. Commerce, car showrooms, restaurants and cultural institutions have entered the area, taking over space left by relocating factories. But also new buildings are constructed by the intruders.

public building



housing



culture



restaurant



01 Baricho Road



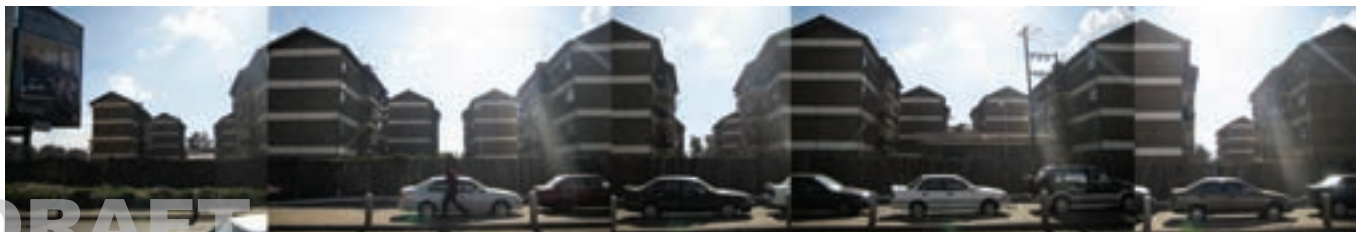
02 Dunga Road

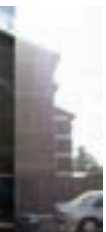


03 Workshop Road



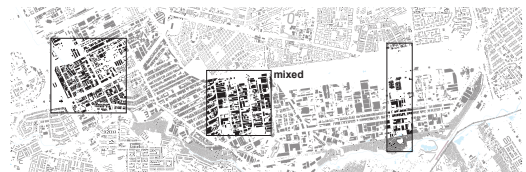
04 Enterprise Road







- vehicle / motor
 - manufacturing
 - engineering
 - undefined
 - chemical
 - cement
 - logistics
 - textiles
 - paper / print
 - tabaco
 - food
 - timber / furniture
- elevation



Mix-up

The biggest part of the area cannot be further zoned into different types of industries. All kinds of industries make up neighbors in the roads. This makes an upgrading of infrastructure a difficult exercise, creates conflicts considering emissions and hazardous materials and complicates orientation.



05 Kituiu Road



06 Kampala Road







- elevation
- residential area
- railway area
- heavy industrial area
- mixed 01
- mixed 02
- mixed 03
- mixed 04
- slum area



Island

In the east, the area becomes a developed strip of land surrounded by a void in the north and a belt of informal settlements in the south, both being a breeding ground for crime in the area.

A section from north to south goes through the undeveloped railway land, the oil refineries of the heavy industrial zone, the mixed industries and finally through the Lunga Lunga slum in the south.

railway land



heavy industry



mixed industries



informal settlements



07 Nanyuki Road



08 Tanga Road



09 Lunga Lunga Road



10 Off Lunga Lunga road / Lunga Lunga slum







The Struggle of the Industrial Area

Atmosphere

Much of the desire to zone industrial estates away from houses or other uses arises from the largely unsatisfactory appearance of the traditional factory area. In this case, it is not only the huddled backstreet, grimy and noisy factories that form the objection, but the strong prevalence of run down buildings and streets, abandoned railway lines, informal kiosks, trash on the streets, unprofessional commercial paintings, bad air, the use of barbed wire and watchtowers, and chaotic traffic which add up to an overall nasty and run down look of the area.





Pollution

Industrial waste and emissions contribute a significant part to Nairobi's pollution problem. Especially the Ngong River is a victim of this awkward condition: „In Nairobi's Industrial Area, various factories discharge waste directly into Ngong River that traverses this manufacturing belt, rendering it the most polluted stream in Kenya (Daily Nation, January 28, 2001).”

Security

Throughout the 1990s, Nairobi had struggled with rising crime, earning a reputation for being a dangerous city and the nickname "Nairobi robbery". In 2001, the United Nations International Civil Service Commission rated Nairobi as among the most insecure cities in the world, classifying the city as "status C." The head of one development agency cited the "notoriously high levels of violent armed robberies, burglaries and carjacking. Crime had risen in Nairobi as a result of urbanization. As a security precaution, most large houses have a watch guard, burglar grills, and dogs to patrol their grounds during the night. Tourists are advised to conceal valuables at night.

Its closeness to bordering informal settlements and unused areas that are not accessible by police vehicles turn the industrial area into a highly crime ridden territory. Especially an Asian minority gets attacked quite frequently, being considered as "light target" by the gangs.

High crime rates have contributed a lot to the poor image of the area. Especially at night it is considered to be a dangerous place to be what diminishes visitors of newly installed cultural facilities and restaurants in the area.

Most companies have installed security equipment: barbed wire, watchtowers/houses, fences, walls and alarm device. All these installations contribute to a steady atmosphere of danger and fear.



Nairobi...two of the victims
and killed the occupants
ng robberies during the day
ea...theft of car parts is also
so shot eight people who w
e industrial area of M



DRAFT
© ETH Studio Basel

the day... industrial are





Mix-up of industries

Back in colonial times, the arriving industrialists occupied the space in a chaotic way. Almost randomly established neighborhoods of totally different industries arose. This mode has been transferred into the future. The intention of the 1948 master plan to concentrate similar types of industry in zones is almost totally ignored up to the present day. Most roads present an assortment of differing industries what makes it almost impossible to efficiently upgrade an industrial in fracture that has been improved for the last time 30 years ago.

If all chemical industries would be centered in one zone, for example, the installation of state-of-the-art waste pipes, is a possible action to take. Being spread over 9.6 km², the solution is far off.





print

food

chemical

chemical

logistics

manufacturer

motor/vehicle

paper

motor/vehicle

engineering

chemical

Living Water INTERNATIONAL

SPILMAN & WALKER

UDV K LTD
ASSOCIATED BATTERY
COLAS EAFRICA LTD
EXPRESS K LTD
KALUWORKS LTD
UNITY AUTO GARAGE LTD
KAMONGO WASTE PAPER LTD
SCANIA KENYA GRANGE
BE BAUMANN ENGINEERING LTD
CHLORIDE EXIDE RETAIL OUTLET

East African Cables

KAMPALA ROAD

BOC KENYA LTD
EAST AFRICAN CABLES
MARSHALLS EA LTD
C DORMAN
LIVING WATER INTERNATIONAL
DECASE CHEMICALS LTD
DODDIA PACKAGING LTD
PG BISON
KENYA BREWERIES MALTING LTD
DODI MOTORS LTD
JAMBO BISCUITS

chemical

manufacturer

motor/vehicle

coffee

engineering

chemical

paper

timber

food

engineering

food



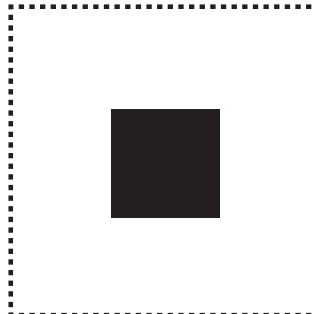
Density

The western part of the industrial area is very dense. Half of the plots have a plot coverage of 75%. Normal plot coverage for industrial areas is 35%.

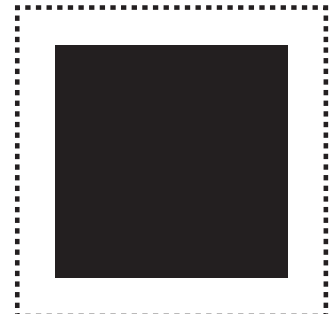
Expanding companies are forced to relocate by lack of space to expand. Reasons can be found in the lack of official planning, and insufficient enforcement of building laws.

„Many companies simply don't have any more **space for expansion.**“

Prof. P.M. Syagga, Department of Real Estate



recommended maximum plot coverage for industrial areas: 35%



half of plots in Nairobi industrial area have a plot coverage of 75%



Road conditions

Many roads crossing the industrial area are in a bad condition. Often, roads are simply too narrow. Some formerly asphalted parts are nothing else than muddy paths, potholes are common, and the dangerous circumstances of stolen canalization grills make an efficient transport impossible. Especially when it rains, lots of vehicles actually get stuck and cannot reach their destination in time.

Recently, there have been attempts to repair some of the run-down roads by the Nairobi City Council. Also, the government seems to be aware of the situation - the budget for roads in industrial areas has been almost doubled. But no integral solution is scheduled so far.



Industrial infrastructure

Most of the industrial infrastructure is far off from being up to date. Many companies complain about frequent electrical power outage, a lack of sufficient water supply and to narrow diameters of waste pipes. The situation leads to relocation of companies to places where infrastructure is on a higher level or to plots that allow the construction of almost autarkic facilities with own power transformers and water tanks.

The industrial railway system that used to serve large parts of the area is all but working today. Only few connections are still in use removing waste oil from the refineries.



„The infrastructure has **not expanded** for the last 30 years!“
Prof. P.M.Syagga, Real Estate Department



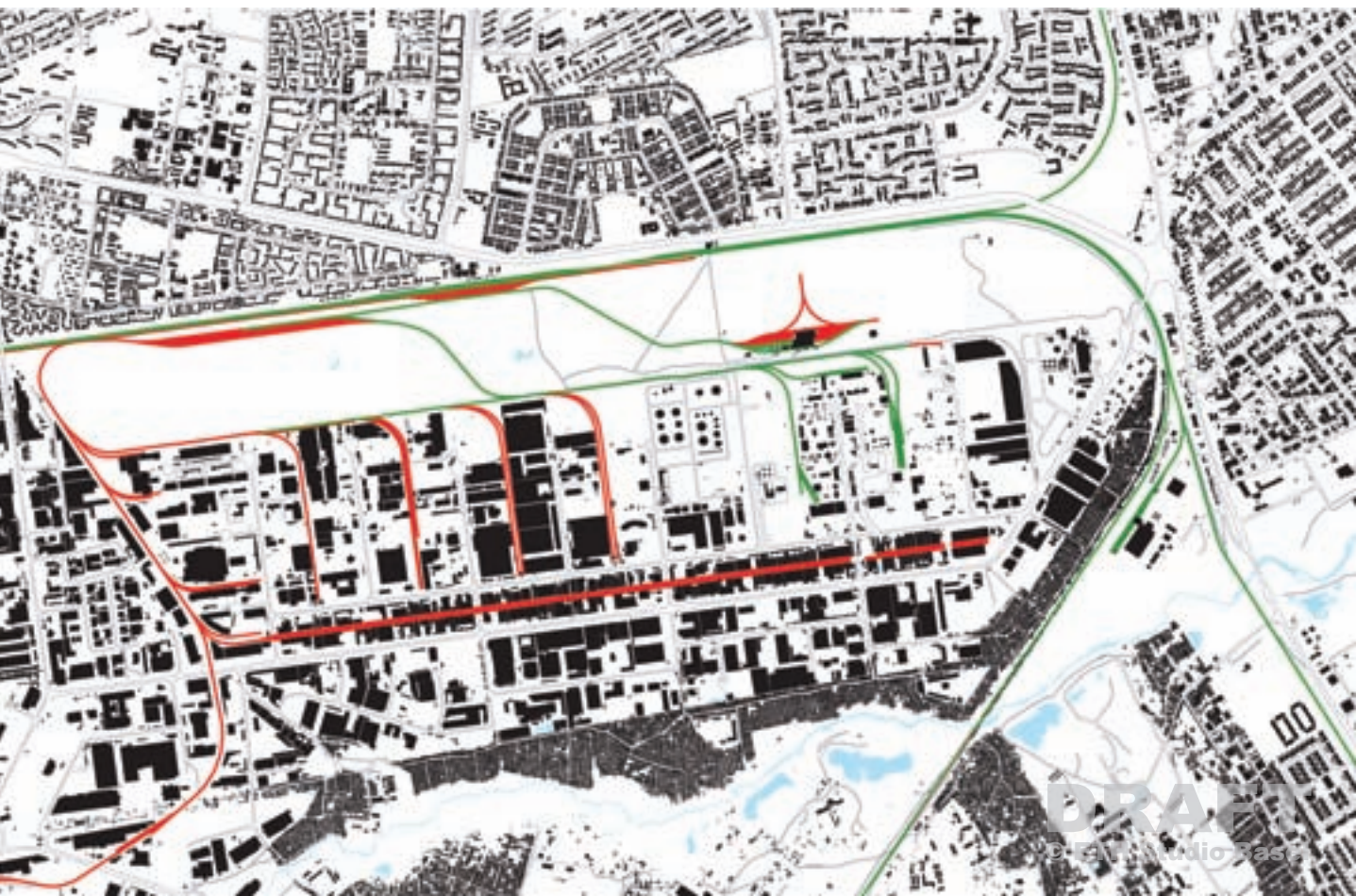


“It all **collapsed** because of **management problems.**”
director, Kenya Industrial Railway



● railway in use

● railway not in use



Congestion

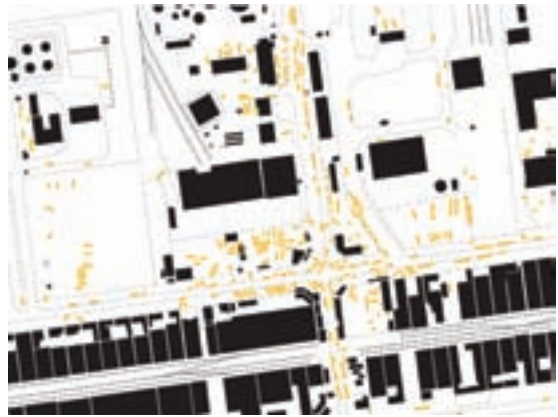
Lack of vision about the growth of the industrial area has led to vehicular congestion on the roads.

The residents of low income provide the necessary army of industrial reserve from which the industrialists draw their workers. Given the low wages they receive, there is need for industrial areas to be in close proximity with low-income areas. Due to lack of vision in the area's history of planning there were calculated too less low-income residential areas close to the places of industrial employment what leads to the huge amount of commuters entering the area on work days.

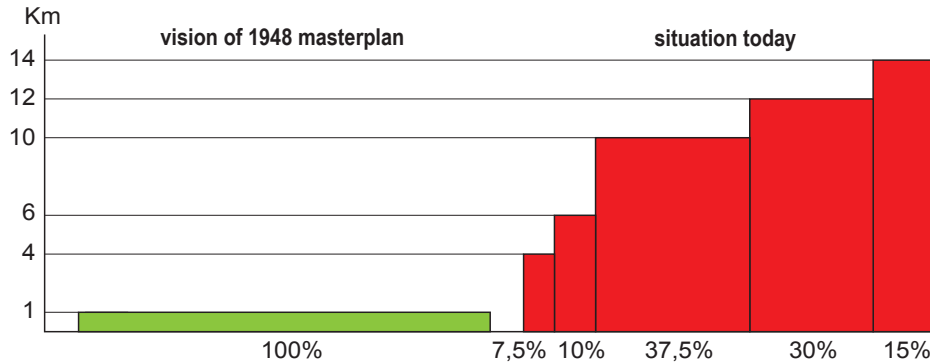
The decay of the railway lines led to an enormous rise of truck transportation congesting a system of roads that was originally not planned for this amount. Especially the heavy industry zone is desperately blocked with petrol trucks that load petrol at the end of the Mombasa-Nairobi Pipeline.

Roads crossing the area are being used by many commuters that try to avoid other traffic jams close to the area, representing a further cause for traffic jams. Also, pedestrians contribute to congestion by walking on paved roads when it rains.

In various interviews held with people working in the area, the congestion problem was addressed as the most serious. Workers who cannot avoid the rush hours are caught in hours-lasting traffic jam every single day.



Distance to place of work



„It’s taking me around **two hours for 12 kilometers** if I can’t avoid the rush hour.“
worker, Unga Farm Care

Official planning - where does the money go to?

"In the budget 2007/08 the Government increased the allocation by 46% from Ksh 42.5 milliard to Ksh 62.1 milliard for rehabilitation of old roads and construction of new roads. It is hoped that the Government will increase the amount of Local Authorities Trust Fund (LATF) to enable Councils to take up more roads in industrial zones. The Minister of Finance has reiterated that the Government will increase the participation of private sector players in road financing, construction and maintenance by making operational the proposed three roads authorities (http://www.kam.co.ke/kam_news.php?id=48)."

Considering the Industrial Area Nairobi as one of the most important production sites of the country the question arises where this huge amount of money goes. The quote is a typical example for the wide gap between governmental intentions and the reality. Kilometers of maintained road have actually been decreasing in Nairobi for the last few years. This refers to the disconnect between setting and expenditure priorities, and budgeting leaves a large proportion of city finances to be applied with discretion and waste.

Nevertheless, walking around in the industrial area, one can actually find some road works going on, but they seem to be popping out in a rather spontaneous way without any transparent planning and little effect on the situation as a whole.

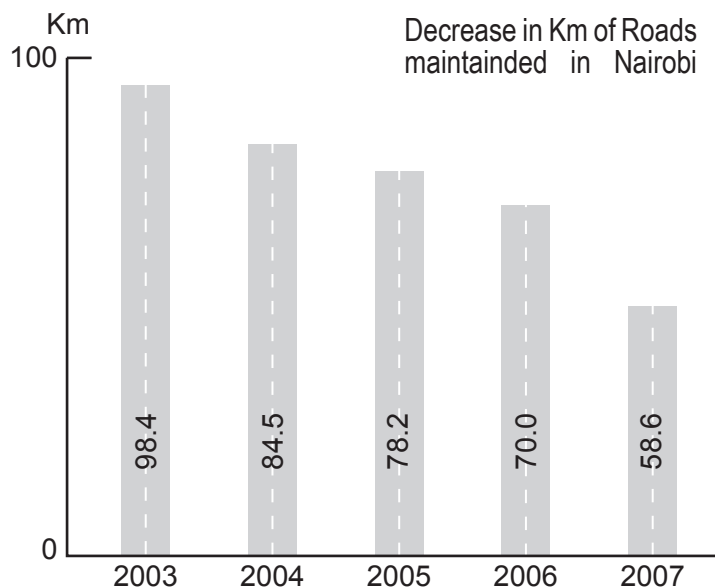
Official planners at least show a certain awareness of the problems, but admit without hesitation a lack of professional planning. "If someone reports a hole in a street for example, nothing will be done until an accident happens", states Steve Tumbo, town planner for the industrial area at the Ministry of Land, blaming the state of affairs to a lack of financial resources and a law that forbids ministries to seek help from external planning bureaus.

Right now, there is no existing development plan for the industrial area - there are not even maps to be found at the responsible authorities that show the present situation.



„I can't find the **maps**...someone might have borrowed them.“

William Orina, technician, Ministry of Land,
asked for maps about the industrial area





current roadworks of the Nairobi City Council on different streets



„The Nairobi City Council wants to create more **employment** but doesn't face the challenge!“

Charles Osengo, town planner, Nairobi City Council



„**Demystify the city!** We need crazy major who says: Yes, we are **replanning**, and we pay for voids.“

P.M. Sygga, Department of Real Estate



„There is **NO** plan!“

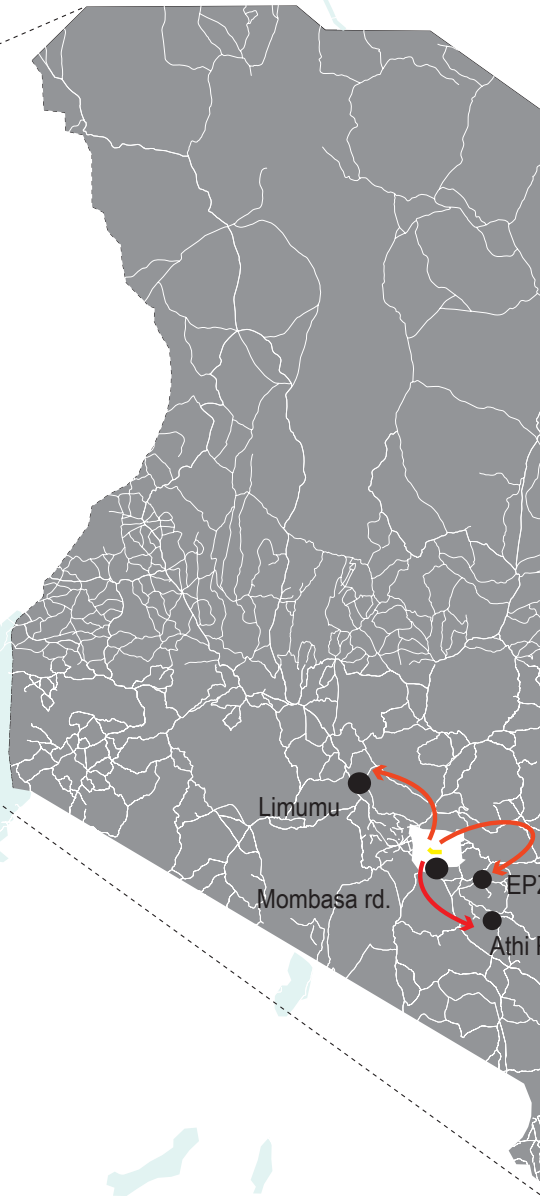
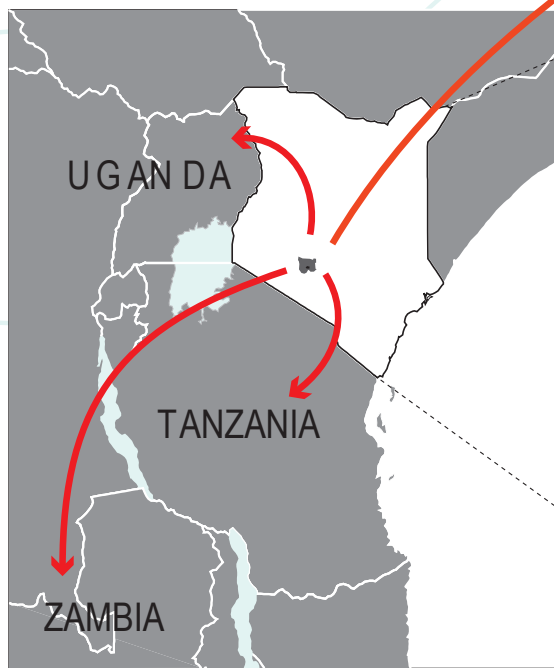
Steve Tumbo, town planner for Industrial Area, Ministry of Land

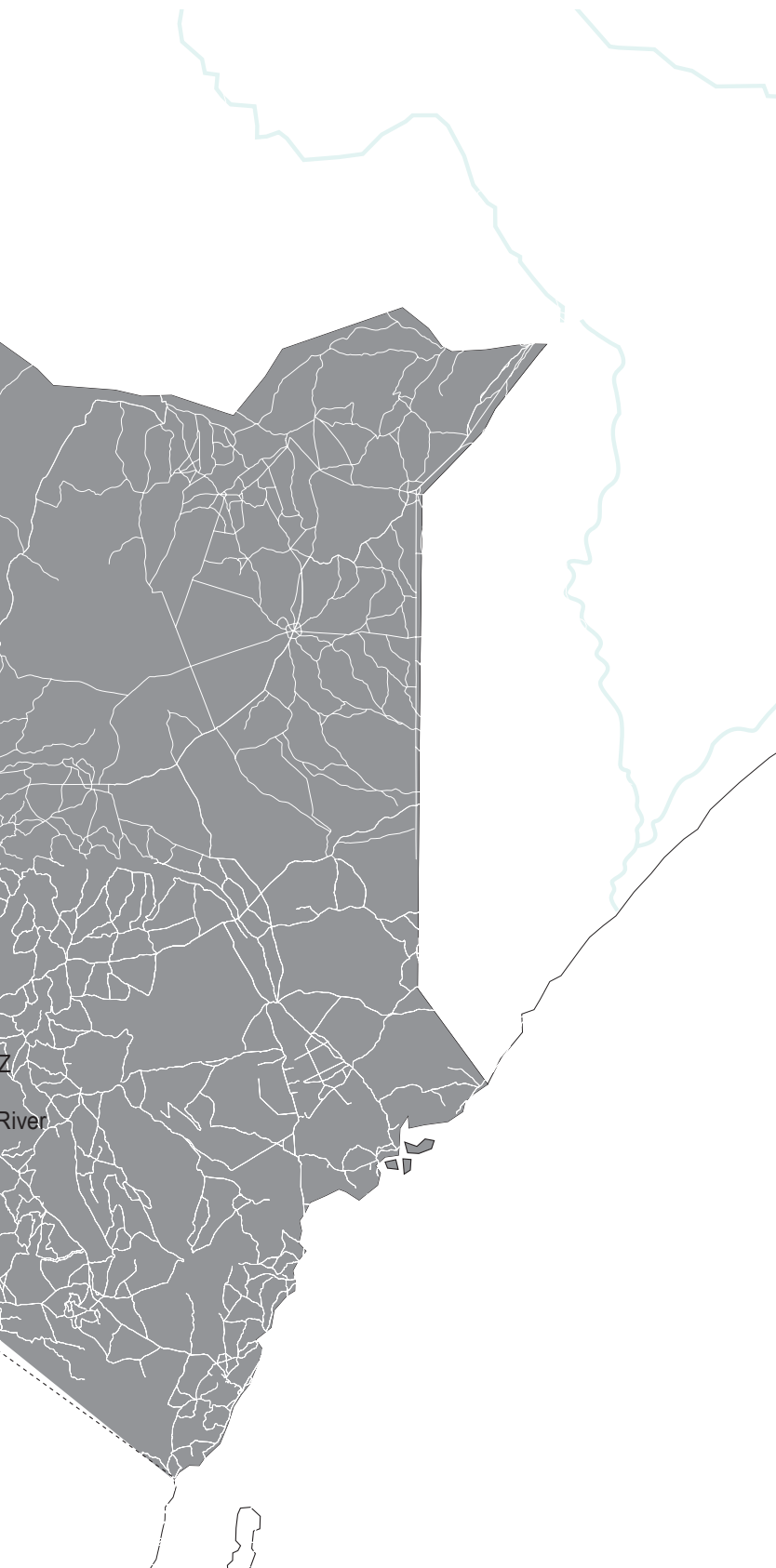




Relocation of Factories

FAR EAST



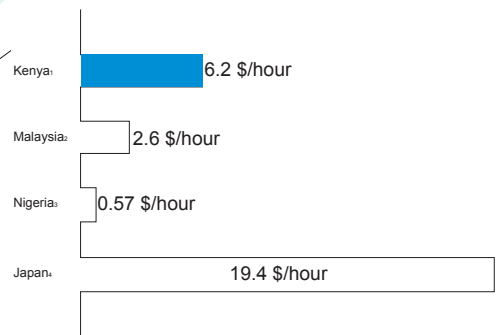


Relocation of Factories

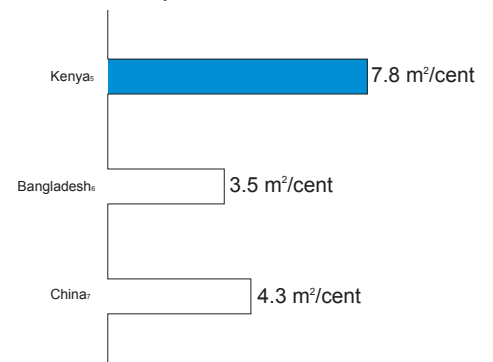
Due to the problematic surroundings in the Industrial Area, lots of companies resolve to seek for other industrial sites that allow more efficient production conditions an provide a better industrial infrastructure.

Some find new plots on Nairobi's on low density Mombasa Road, in satellite industrial areas like Athi River or Kilima Mbogo, in Kenya's Export Processing Zones or even abroad running after lower production costs.

cost of labor



cost of electricity



source:

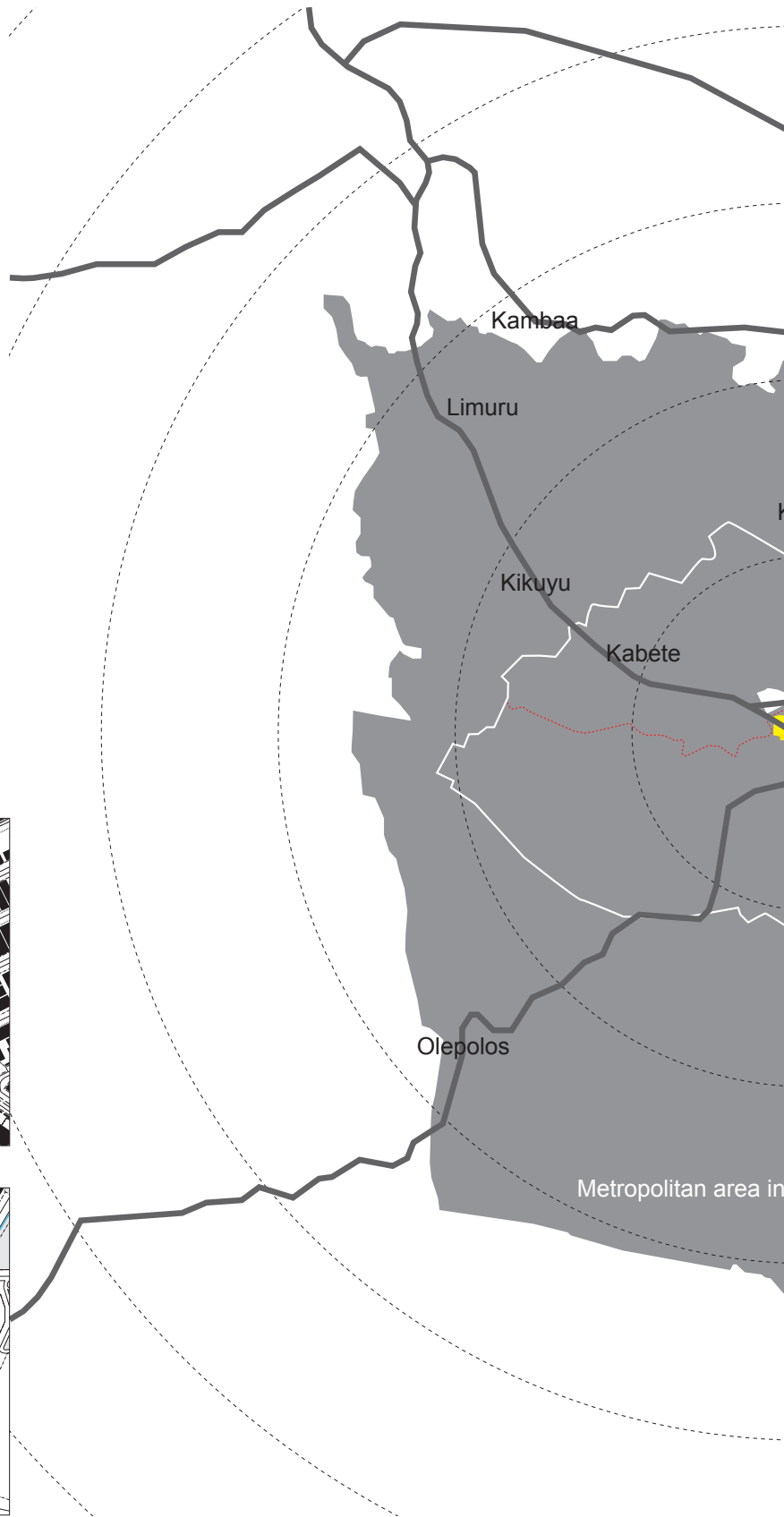
1. Institute of Quantity Surveyors of Kenya (February, 2004)
2. Institution of Surveyors of Malaysia (March, 2004)
3. Nigerian Institute of Quantity Surveyors (September, 2002)
4. Japan Society of Cost and Project Engineers (November, 2004)
5. Kenya Power and Lighting Company (2005)
6. Ramaswamy, K.V. (2004) "Global Opportunities and Textile Industries in South Asia", in M. Battacharaya, South Asia in the Era of Globalization: Trade, Industrialization and Welfare, New York; Nova Science Publishers

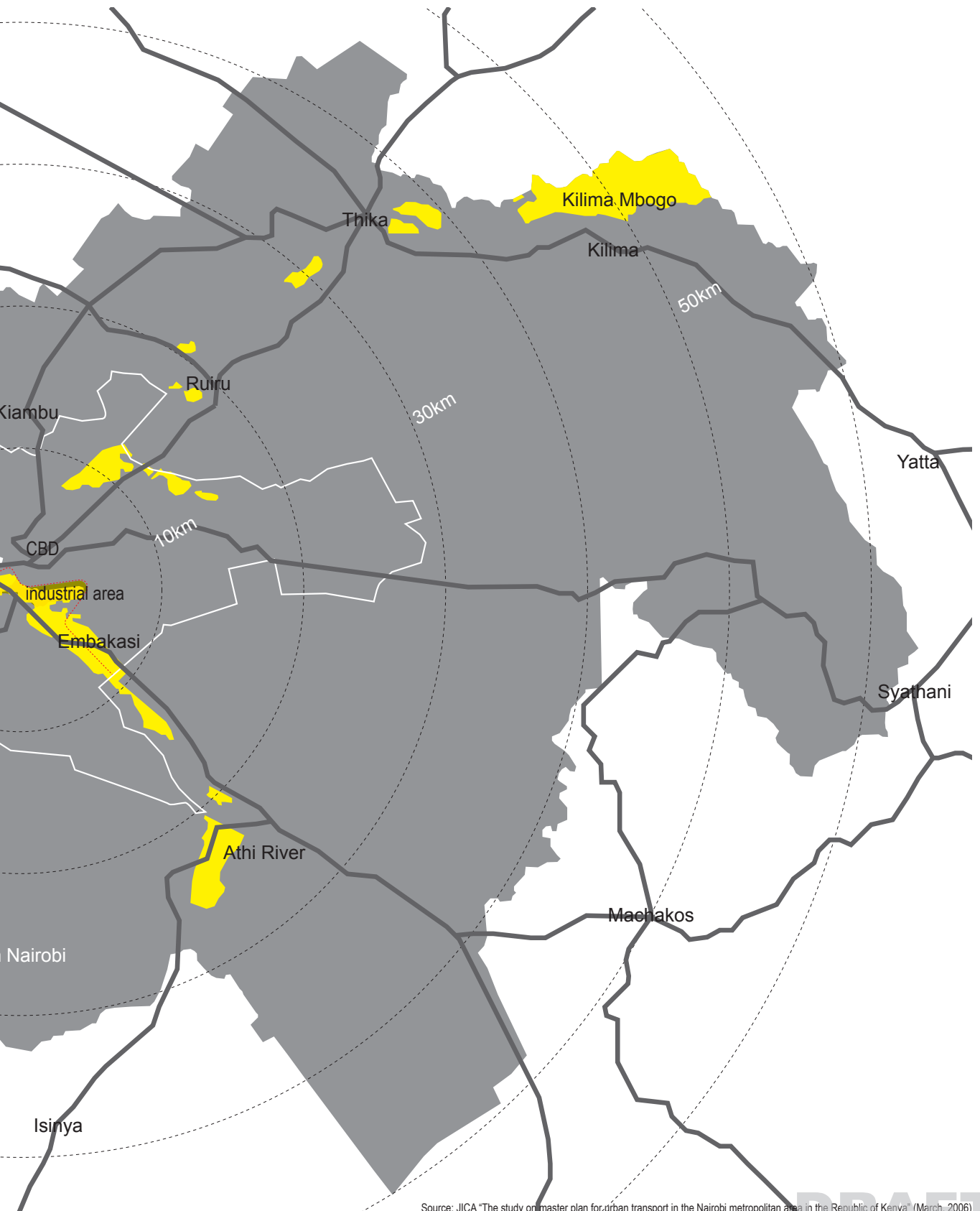
Comparison of density

Industrial Area



Mombasa Road





Source: JICA "The study on master plan for urban transport in the Nairobi metropolitan area in the Republic of Kenya" (March, 2006)

Export Processing Zones

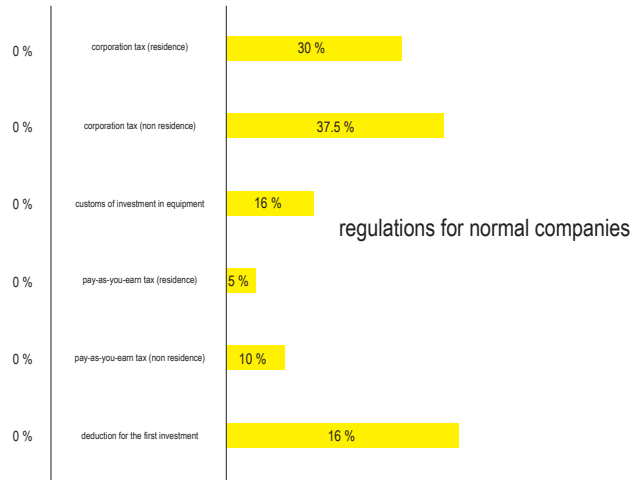
The EPZ Authority was established in 1990, by the EPZ Act and is part of the Laws of Kenya.

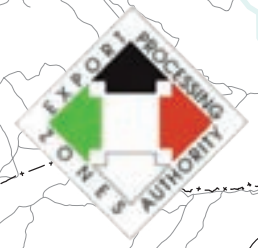
In EPZs companies receive governmental incentives. All produced goods are determined for export purpose.

Some of the benefits in detail are:

- total exemption of the corporation tax - after 10 years, partial exemption (25%)
- total exemption of the pay-as-you-earn for the first 10 years
- total exemption of deduction of the first investment during the first 20 years
- total exemption of customs of investment in plant and equipment

regulations for companies in EPZs





Kerjo Valley
Kenya Flourspar EPZ Ltd.

Mvita Industrial Park EPZ Ltd.

Nakuru

De La Rue Currency & Security Print EPZ Ltd.
Eidemany Property EPZ Ltd.
Embakasi Zone EPZ Ltd.
Hillingham Group EPZ Ltd.
Indigo EPZ Ltd.
Jusem Trust Co Ltd.
Kisorani EPZ Ltd.
Mombasa Holdings EPZ Ltd.
S/S Maita EPZ Ltd.
Sameer Industrial Park EPZ Ltd.
SunFlag EPZ Ltd., (i)
SunFlag EPZ Ltd., (ii)
Uguzi Wasana EPZ Ltd.

Nairobi

Thika
Saw Africa EPZ Ltd.

Voi
Wild Life Works Ltd.

Ashton Apparel EPZ Ltd.
Birch Investments EPZ Ltd.
Changamwe Holdings EPZ Ltd.
Comarco Properties EPZ Ltd.
East Africa Gas EPZ Ltd.
East African Molasses EPZ Co. Ltd.
Emirates Agencies EPZ Ltd., (i)
Emirates Agencies EPZ Ltd., (ii)
Gold Crown Foods EPZ Ltd.
Kapric Apparels EPZ Ltd.
Malony Investments EPZ Ltd.
Mazeras EPZ Ltd.
Militar Investment EPZ Ltd.
Mogani Industrial Park EPZ Ltd.
MVP EPZ Ltd.
Penguin Paper & Book Co. EPZ Ltd.
Plastex EPZ Ltd.
Twin Leaves EPZ Ltd.
Zois EPZ Ltd., (i)
Zois EPZ Ltd., (ii)

Mombasa

Source:
1. Japan External Trade Organization
"the Africa which is changed by the companies in the south Africa and China -" (March, 2006)
2. Export Processing Zone Authority (<http://www.epzakenya.com/>)



Potential



independent gentrification



infiltration of restaurants, culture, and education

Potential

An independent shift of use is already happening in the area. Car showrooms, banks, restaurants, nightclubs, housing, and even schools have infiltrated. Some of these pioneers of multifunctional use find space in old industrial facilities left by re-locating companies, or even get involved in constructing new buildings.

Considering the closeness to the overcrowded city center, this autonomous gentrification offers a great potential to reduce the problem of congestion. The ongoing modification could be strengthened by the government offering incentives to companies willing to leave the area. Official planners don't seem to have realized this chance, though.

Nairobi never had a logistic center. Goods are spread in a quite chaotic manner throughout the city. An upgrading of the neglected old railway lines in combination with the left facilities being used as storage could bring a more efficient logistic structure to the city.

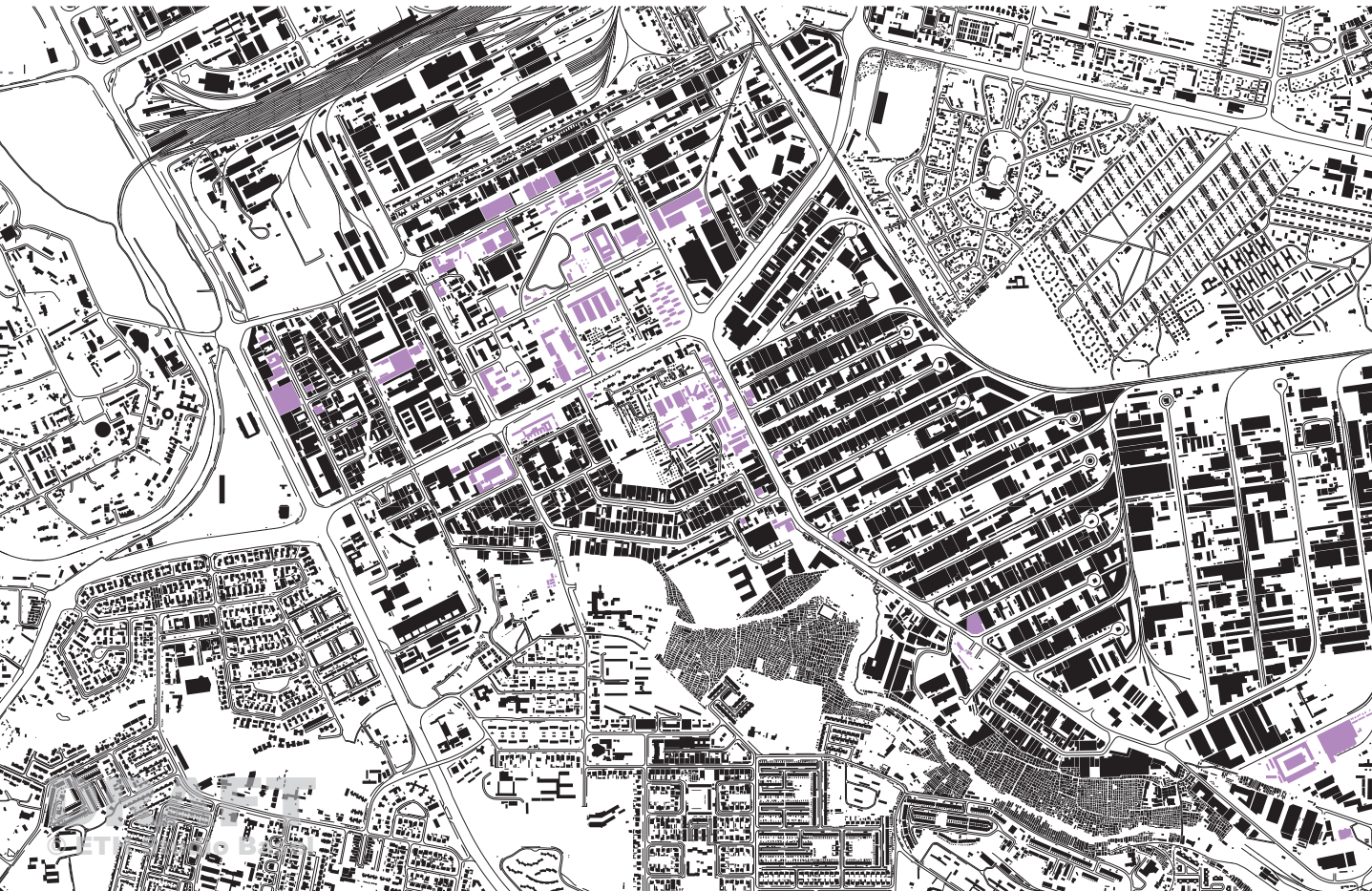
Also the vast unused strip of railway land at the northern limits of the area offers great potential, being so close to the center of Nairobi.



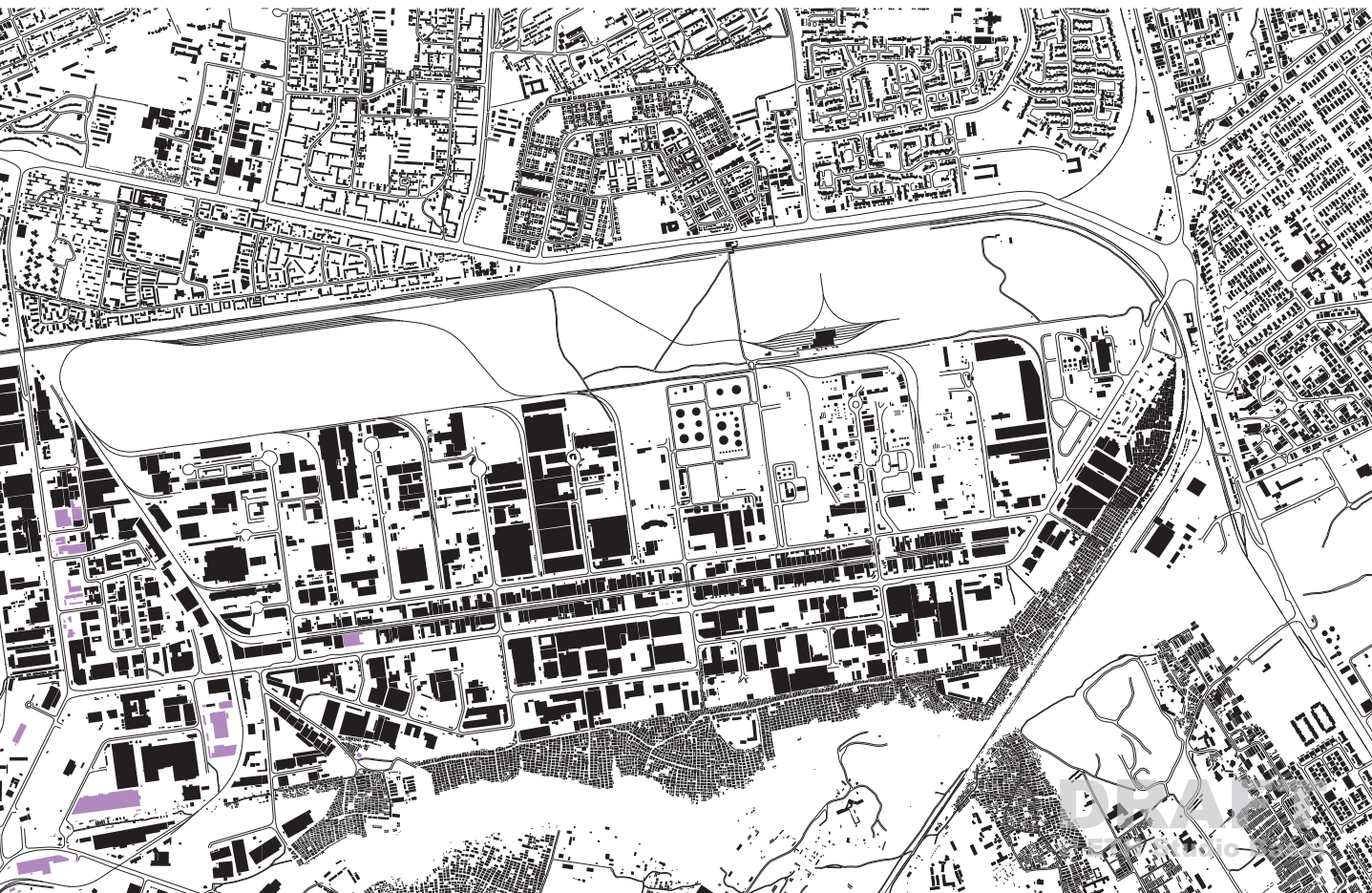
construction of new buildings

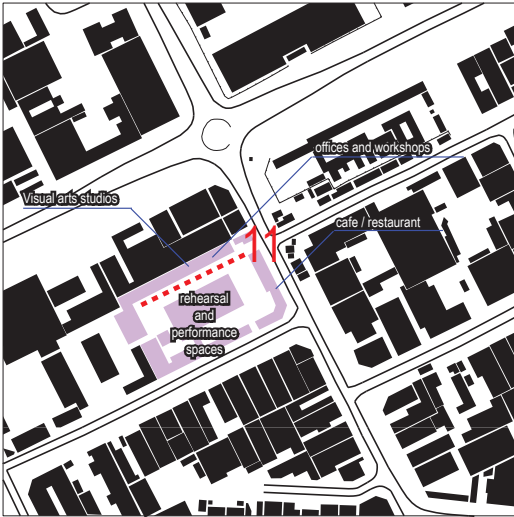


shift of use



● facilities not used for industry





traditional Kenyan music

11 court of the Godown Art Center



Infiltration of Culture - the Godown Arts Center

The idea of creating base to support local artists in Nairobi was initiated in March 2001, by a group drawn from the visual arts, theatre arts, dance and puppetry. In time, the group expanded to include acrobatics, musicians and filmmakers.

In January 2003, the group finally found a suitable building in the Industrial Area to unite all members under one roof. The facility consists of an arrangement of old godowns, what means warehouse. A lease agreement was entered into with CMC, a multinational car company that owns the property. After nine months of renovation activity, the space was ready for artist organizations to move in.

The Godown facilities are also used by non-resident artists and organizations for exhibitions and book launches, workshops and rehearsals.

Currently, the Godown is developing programmatic governance and fundraising frameworks to help secure its organizational and financial sustainability in the long term.

In the beginning the group was inspired by Soho and other revitalized old industrial areas around the world. The intention was to enter this area as pioneers of new Kenyan cultural movement, giving the area a new footprint.

Today, after four years of existence, director Joy Mboya, is struggling with some doubts. Visitors don't show up as expected. The space could offer culture to much more people than actually show up to visit the exhibitions, performances and shows. This is due to the poor image the area has. 'Normal' people from Nairobi would never enter the crime ridden and congested Industrial Area voluntarily. Also no help from the government has been offered to the institution. One day the major passed the Godown by chance, he was surprised and admitted he had never head of the institution before.



Kuona Trust
studios & website development



Patricia Kyungu, Manager

“The Godown provides work space for our visual artists. It is also a place where art lovers, and even those not aware of art can come to see the work of the artists.”

Sarakasi Trust
Acrobatics



James Munga, Administration

“We support acrobats who come from disadvantaged backgrounds; acrobatics is an economic resource for them. At the Godown, they have space to meet, train, and exchange techniques.”

Nairobi
Electronic arts



Anne Ikiara, Manager

“I like the blend of art-forms at the Godown. It is an inspiration for our students here at Nairobi, where we teach electronic art.”

Twin Roots
Record studio



Kamau Karanja, Artist

“The Godown provides us with a base from which to plan and carry out our activities with the children and youth in performance and social awareness.”



“If we could only get some support from the city...”

Joy Mboya, Director of Godown Art Center

RAMOMA

Promoting Kenyan visual arts



Peterson Kamwathi, Artist

"The Godown is exclusively a space for the arts. This lends the performing and visual arts field a "seriousness" and firm grounding."

Medeva TV

Film/video creative and technical training



Faith Koli, Producer

"The synergies created between the artforms, and the atmosphere for working make the Godown the place to be for a creative person."

Kete Bul Studios

Recording studio



Gabriel Omondi, Engineer

"The environment is positive, we are working next to like-minded people, and there are opportunities to showcase our music, to be exposed to visitors to the Centre and to interact with key-players in the arts sector."

CITD

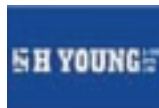
Center for International Theatre Development



Philip Arnoult, Director

"The Godown, as it is now has served as a catalyst for reshaping the cultural landscape of East Africa. Fully completed and fully renovated, it will make a major contribution over the next decades to the region."

sponsors:



Source: The Godown Art Center (<http://www.thegodownartcentre.com>)



proximity to the city center



space in waiting



the vast strip of land in the north, owned by Kenya Railway





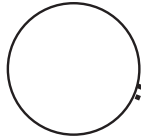
DRAFT

worker relaxing on one of the few green spaces

© ETH Studio Basel

A Future Scenario

Kampala



Kakamega Eldoret



Nakuru



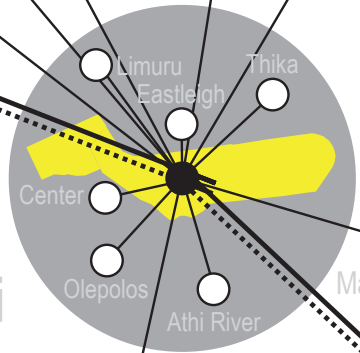
Nyeri



Meru



Nairobi



Limuru



Thika



Eastleigh



Center



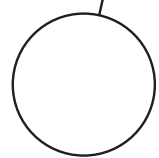
Olepolos



Athi River



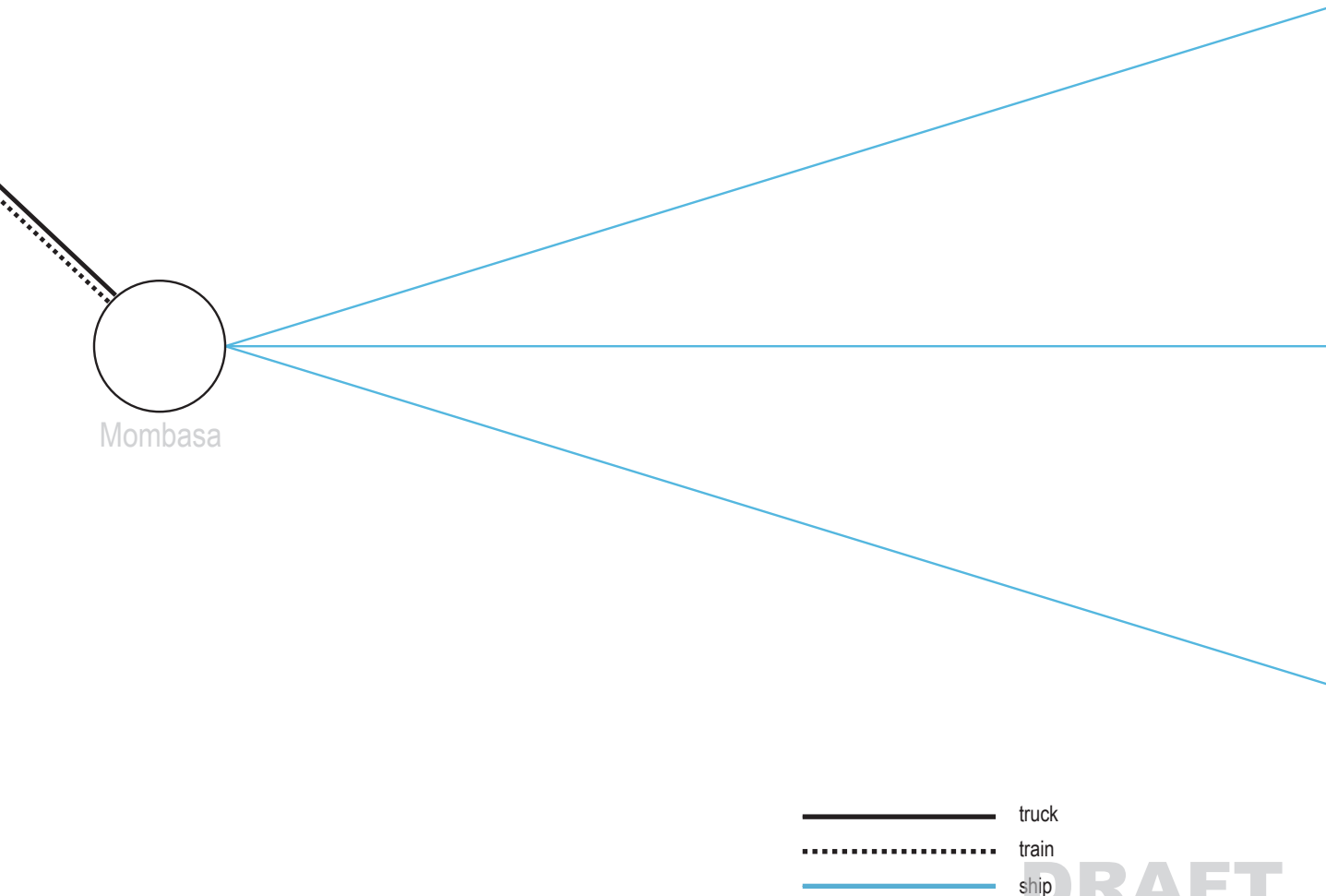
Machakos

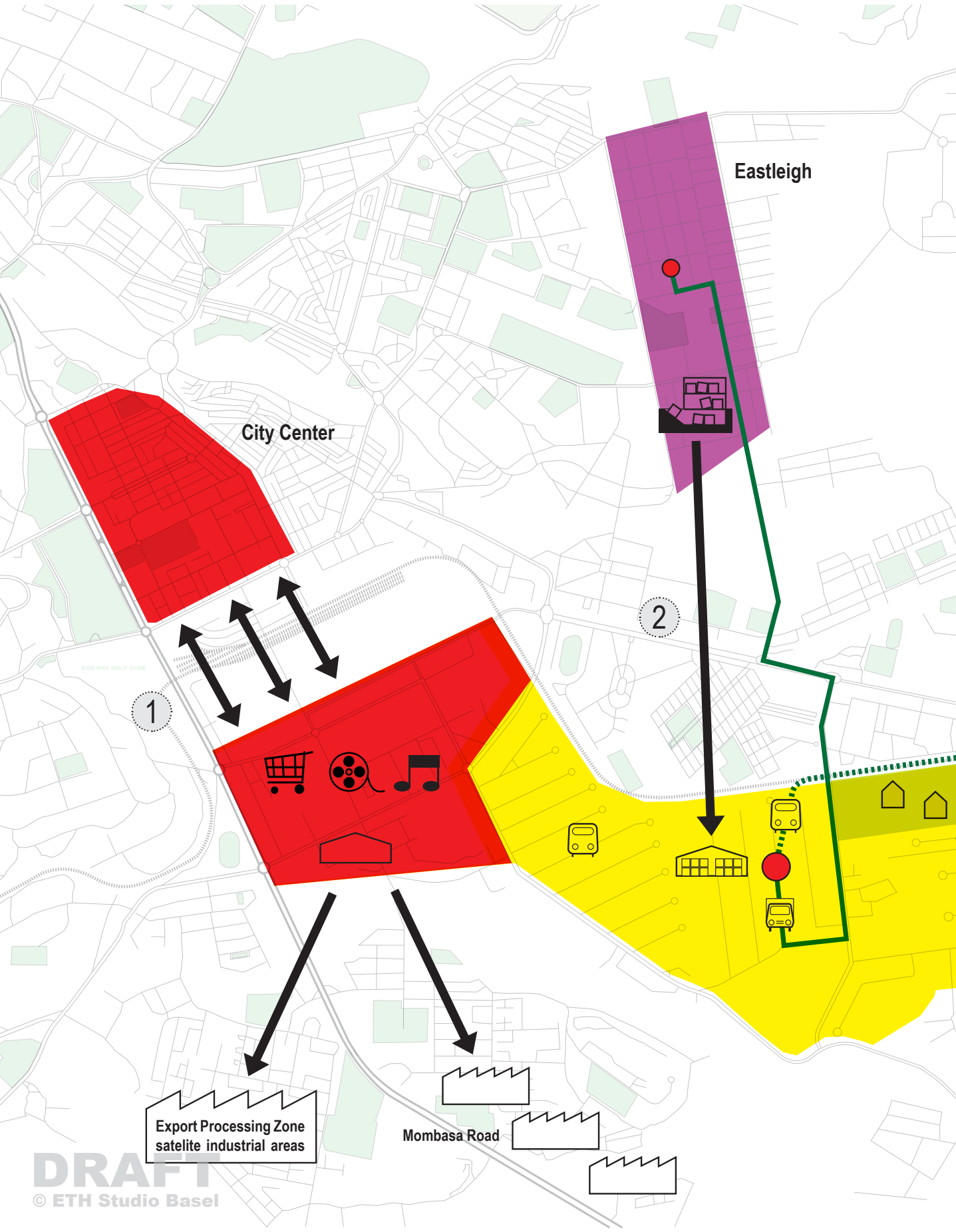


Dodoma

The Industrial Area as a Logistic Center

Since colonial times the Industrial Area hold a central position in Nairobi's, Kenya's and West Africa's flow of goods, but failed to meet the necessity of appropriate logistic structures and facilities. Today, the majorities of goods still enter Kenya at the harbor in Mombasa, and are transported via trucks to Nairobi. The railway line is in a poor condition and cannot compete with truck transport in terms of cost and time. Arriving the capital, goods are mostly stored in a chaotic and inefficient way without any professional logistic approach. Empty space in the Industrial Area could be used to finally install a professional system of storage and distribution of goods. Both, economy and the congestion problem would benefit from this. Of course, this has to be developed together with a well-planned revitalization of the raw railway infrastructure that has been abandoned for so many years now.





City Center

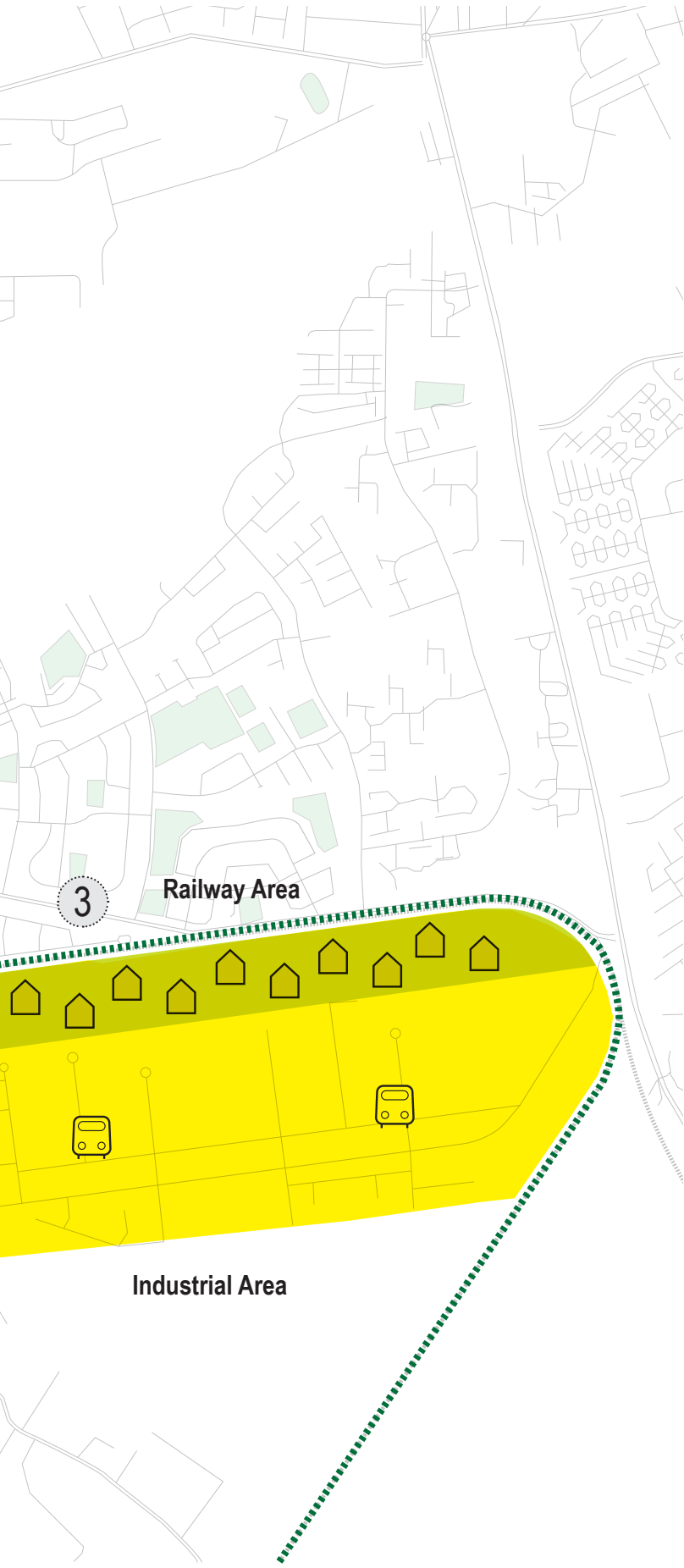
Eastleigh

1

2

Export Processing Zone
satellite industrial areas

Mombasa Road



Benefits for the City Center and Eastleigh

The industrial area proves to be inefficient, unsafe, polluting and not animated towards growing.

Decades of unsystematic official planning have run down this strip of land to an indefensible condition. Especially the abandoned railway demonstrates the necessity of action. Today all goods coming from Mombasa to the capital are transported via trucks, causing immense congestion on the highway and in the city, besides being an economically and ecologically questionable mode of transport.

Current statistics, analyses, maps, development plans of the area do not exist what makes it impossible to come up with serious attempts of urban redesign of the area at this point. The presented future scenario wants to galvanize and to stimulate meditation.

1

Given the high density in the city center of Nairobi and the closeness to the industrial area, official planning should use the already existing desire of companies to relocate by amplifying incentives for new construction of companies in the Export Processing Zones, the satellite industrial areas and on Mombasa road. Abandoned facilities and space should then be used as an extension of the city center by infiltrating more commerce, gastronomy and culture in the way it is already happening independently (e.g. the Godown Arts Center).

The extension should lead to a decrease of high density in the city center and improve the congestion.

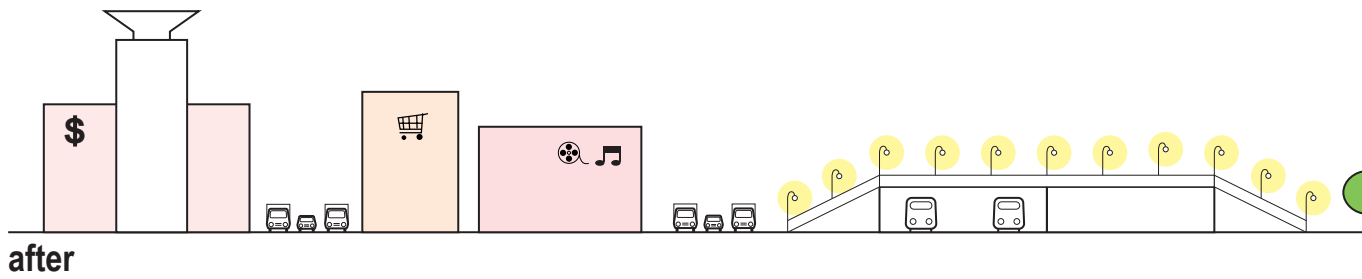
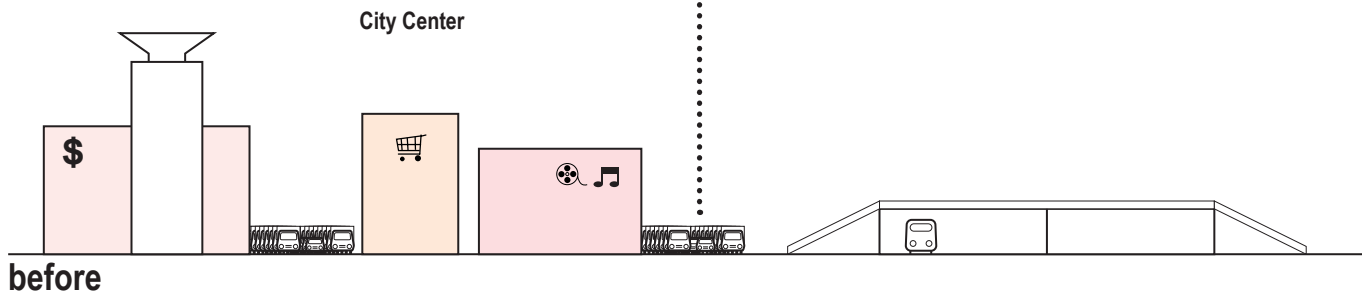
2

Eastleigh, Nairobi's second most important commercial center, also suffers from high density and immense congestion. This is mainly caused by the system of logistics applied by Somali trades people. Large amounts of goods are transported directly into the area by huge trucks, and directly brought into small and insufficient storages, mostly in the cellars of the shops. There is no logistic center used.

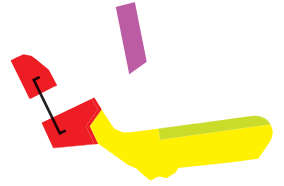
Empty space, caused by relocating companies in the industrial area, could be used for Nairobi's first logistic center. The railway should be installed again, what would allow the following mode of transport for goods sold in Eastleighs: goods are transported efficiently and safe by railroad to the new logistic center in the industrial area, then the goods are stored professionally in the assumed facilities, finally the goods are transported via small trucks just-in-time to the shops in Eastleigh.

3

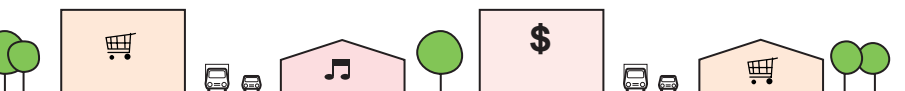
The unused and crime ridden vast strip of railway land in the north of the area could be used for company housing. The original idea of the 1948 master plan stated that workers should reside within a 1000m radius to their work place. Having more workers living within foot reach to their workplace would have a positive effect on the congestion problem.



1

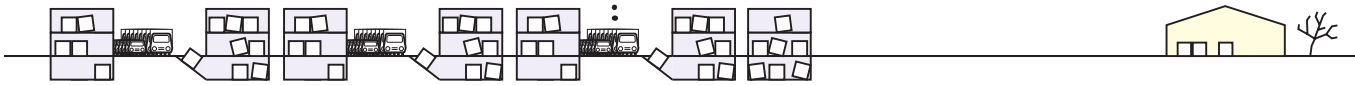


Industrial Area West

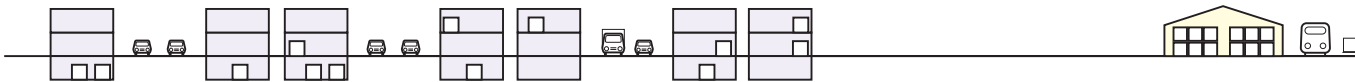




Eastleigh

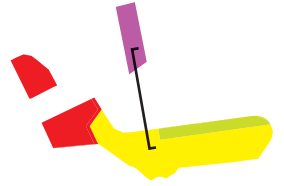


before



after

2



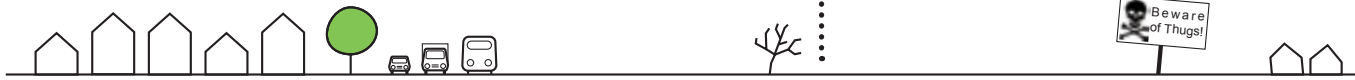
Industrial Area West





Makadara Residential Area

Railway Area



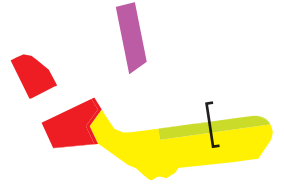
before

the void: 400m

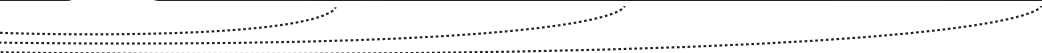
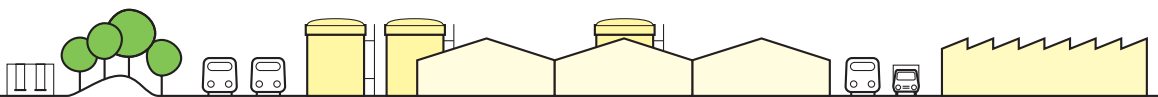
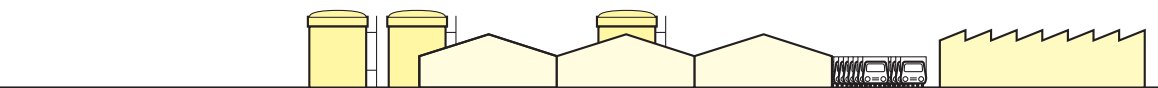


after

3



Industrial Area East



distance to work: max 1000m

sources

Introduction

Osengo, C., "A Case Study of the Nairobi Industrial Area", University of Nairobi (1977)

Relocation of factories

Institute of Quantity Surveyors of Kenya (February, 2004)

Institution of Surveyors of Malaysia (March, 2004)

Nigerian Institute of Quantity Surveyors (September, 2002)

Japan Society of Cost and Project Engineers (November, 2004)

Kenya Power and Lighting Company (2005)

Ramaswamy, K.V. (2004), "Global Opportunities and Textile Industries in South Asia", in M. Battacharaya, R. Smyth and M. Vicziany eds., South Asia in the Era of Globalization: Trade, Industrialization and Welfare, New York; Nova Science Publishers

JICA "The study on master plan for urban transport in the Nairobi metropolitan area in the Republic of Kenya" (March, 2006)

Japan External Trade Org., "The Africa which is changed by the companies - the companies in the south Africa and China - " (March, 2006)

Export Processing Zone Authority (<http://www.epzkenya.com/>)

Struggle of the Industrial Area

Daily Nation (January 28, 2001) Osengo. C. "A Case Study of the Nairobi Industrial Area", University of Nairobi (1977)

Interview with Professor P. M. Syagga, Department of Real Estate

Osengo. C. "A Case Study of the Nairobi Industrial Area", University of Nairobi (1977)

Interview with Mr. William Orina, technician, Ministry of Land

Interview with Mr. Charles Osengo, town planner, Nairobi City Council

Interview with Mr. Steve Tumbo, town planner for industrial area, Ministry of Land

Interview with the director, Kenya Industrial Railway

Mutero, J. "Nairobi Report", Reference Document for the Stakeholder Meeting, Nairobi (2007)

Potential

the Godown Art Center (<http://www.thegodownartcentre.com>)

Interview with Joy Mboya, director of the Godown Art Center

Thanks to:

Embassy of Switzerland in Nairobi, Ambassador Mr. Georges Martin, Winnie Mit-tulah, interview partners : Joy Mboya, Professor P. M. Syagga, Professor Charles Osengo, Steve Tumbo, William Orina, Guideon and Allan from Nairobi University, all helping guides and taxi drivers in Nairobi and everyone that made this project possible.

(C) ETH Studio Basel
Spitalstrasse 8
4056 Basel Switzerland
+41 61 2731685
studio-basel@nsl.ethz.ch
<http://www.nsl.ethz.ch/basel/>

DRAFT
© ETH Studio Basel