

# **Proceedings**

of the

**International Conference on**

***Changing Cities II***

***Spatial, Design, Landscape & Socio-economic Dimensions***

**Under the aegis of**

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## FORWARD

The 1<sup>st</sup> international conference on ‘*Changing Cities*’, which was hosted on Skiathos island, 18-22 June 2013, had started as an idea three years ago. The initial concept was to organise an academic event creative, inspiring, stimulating, and above all, *international*. There had been a belief that such an academic event may contribute in revitalizing academia and promoting tourism in Greece - hit by the economic crisis of public debt in the Eurozone. Given that during the last years, both societies and cities in Greece have been dramatically changing, shrinking in economic, spatial and demographic terms, we have chosen *Changing Cities* as the main theme of this series of conferences. Our aspiration is to provide an international forum for transaction of ideas on cities and bring together architects, urban designers, landscape designers, urban planners, urban geographers, urban economists, urban sociologists and demographers, to investigate new challenges. This goal became a reality. The 1<sup>st</sup> Changing Cities conference had gained strong interest of academics and researchers from many countries and regions around the world; Greece and the Balkans, south Europe and Mediterranean countries, northwest Europe, Middle East and Asia, Far East, North America, Latin America and Africa. A total of about 460 abstracts and 320 papers had been submitted in the conference – most of them, about 60% from abroad.

The 2<sup>nd</sup> Changing Cities conference has also attracted the attention of scholars, not only from Greece, the Balkans and Europe, but also from far-away countries like USA and Canada, Brazil, Chile, Colombia in Latin America, and China, Japan and Australia in the far-east. We have received 510 abstracts and more than 350 papers. Among the scholars participating, there are about 192 Greek academics and researchers. This indicates that despite shortage of research funds, salary cuts, and broken morale, university teachers and researchers in Greek state universities try hard to keep a high-level academic status. Besides, the number of contributions by scholars from abroad (64%) shows the international character of the conference.

The strong interest for this conference allows us to have thoughts about organising the 3<sup>rd</sup> Changing Cities conference in one or two years’ time, spatially hosted in a different Greek resort area.

I would like first to thank the Organising Committee, the keynote speakers, and the members of the international scientific board who supported enthusiastically the academic organization of this conference. I would especially like to thank those colleagues who have also pre-organized special sessions in this conference.

Finally, I would like to thank all the academic, political and scientific organisations which supported this conference: University of Thessaly; the Greek Ministry of Environment, Energy and Climate Change; the Greek Ministry of Tourism; The Regional Authority of Peloponnese; The Technical Chamber of Greece – Branch of Peloponnese; the Association of the Greek Landscape Architects; KTIRIO - Technical Publications; the Association of Greek Urban Planners and Regional Development Engineers; the Association of Greek Urban Planners; the Association of Greek Architects.

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**KEYNOTES SPEECHES**



# Life styles and city of the future

## The shaping of public space in Rome

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### Abstract

In a globalized world the western cities must be measured with new challenges: different composition of the population, loss of sense for traditional public spaces, environmental issues and public health, crisis of local authorities. New tools are needed for operational and cultural renewal of the urban habitat and make the city - as stated in the "global objective" of the EU Thematic Strategy on the Urban Environment - "[ ... ] healthier, pleasant and attractive places to live and to enable communities and local economies to flourish".

Rethinking the city by assuming people's health as a fundamental parameter involves the consideration of a number of variables, so far neglected, that require the collaboration of experts from different disciplines in the search for complex solutions. Issues such as urban mobility, the design of public spaces and the fight against obesity are examples, which, if addressed in trans disciplinary perspective can lead to innovative experiments with great potential. Not only the amount of movement, but also the qualitative characteristics of the environment have direct effects on metabolism. The shape of space has therefore implications on the health and behaviour, making it the central theme of rethinking urban contexts and their landscapes. The paper presented to the International Conference "Changing Cities" aims to illustrate and demonstrate, through a case study on Rome, how the regular movement of people in the city requires structural strategies able to build networks of routes based on systematic itineraries (home-work-services). This research [1], based on the medical input connected with new spatial concepts regarding the public space aims at raising public awareness of body and space care; inducing a cultural and political change; decreasing of chronic diseases through correct life style; changing the offer of public spaces; improving environmental and economic sustainability.

*Keywords: Public Space; Sustainability; Urban Landscape; Chronic diseases; Wellbeing.*

## 1. INTRODUCTION

In recent times media and popular culture have attributed a leading position to health issues, making us more aware that the human body and its wellbeing are now more than ever a crucial concern of contemporary society. Environmental culture is making conscious the population of the need to live in healthy places and to adopt appropriate lifestyles to avoid incurring on more or less serious diseases [2].

Everything is perceived as a potential source of disease. In fact during the nineteenth century the main emerging problems were focused on hygiene and comfort, today instead the excess of comfort is leading to dysfunctions. Health problems have changed from infectious illnesses to chronic diseases. Obesity, diabetes, allergies and asthma are in fact new epidemics, caused not by viruses, but by inadequate environments and lifestyles. The World Health Organization defined obesity as "one of the greatest challenges for public health in the twenty-first century" [3], introducing the parameter of 5,000 steps each day (or a walk of about 3 km), that aims to help to stay healthy and to halve the risk of death. Physical activity, in fact, is not only the result of personal voluntary choices but it is strongly influenced by the quality of the environment that surrounds us, as demonstrates the growing amount of scientific studies on the subject. The project starts from the belief that direct therapeutic action - which exists (and has a high cost: in Europe, 7% of total health expenditure) -

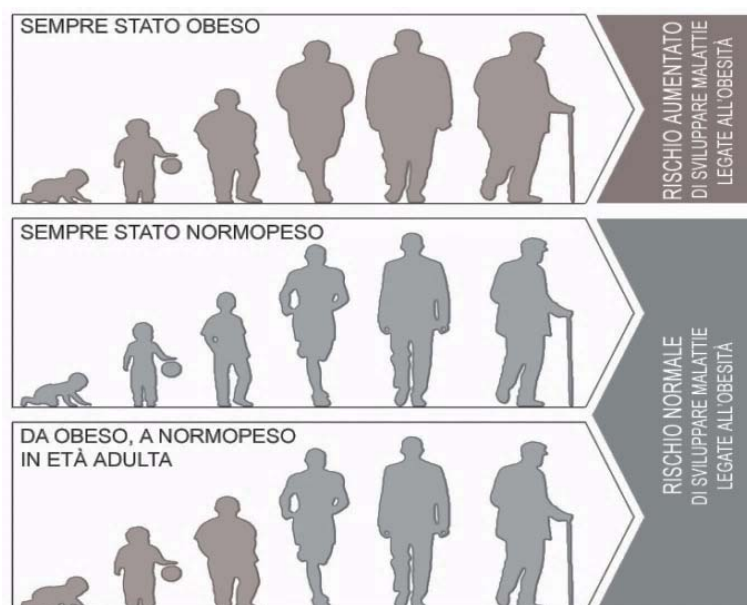
should be complemented by an effective preventive action through the dissemination of valid lifestyles based also on adequate physical activity, and that they should also succeed in rethinking the structure of the city.

Health prevention, fortification and defence of the body become an obsession that invests the social and political discourse, as well as affect the shape of urban space and architecture, the type of habitat where concentrates the majority of the world population (in Europe, even today, approx. 80% of the total). Furthermore, as it is well known, to cure diseases, especially those that tend to become chronic, has a high cost for the public health system and the introduction of alternative habits helps to reduce the cost of welfare, significant rationalization to be made especially in times of crisis.

This paper discusses a research project that starts from these considerations and aims to study cross disciplinary how to make cities more liveable and how to introduce adequate physical activity in the citizens' daily lives.

## 2. PHYSICAL ACTIVITY AND HEALTH

A progressive decline in the time dedicated to physical activity dramatically occurring even in children and young adults, has been recently brought to attention. The problem is affecting not only USA where obesity has doubled from 1990 to 2007 but also the entire western world. The ISTAT (National Institute of Statistics) census of 2010 shows that in Italy, less than 31% of the population is actively practicing sport. The Italian Society of Pediatrics shows that more than 40% of children do not practice sport, or is involved in physical activity for less than 2 hours per week. Only a minority of young adults (about 30%) is involved in aerobic activity for more than 4 hours per week that is considered the minimum needed to counteract the negative impact of sedentary life on general health. The negative impact is even greater if one considers that sports in the young subjects are crucial to allow a harmonic psychological and physical development. In our country, 36% of children at the age of 8 is overweight or obese. The relative risk of obese children to become an obese adult increases proportionally with the age and severity of fat excess. Recent estimates indicate that 26 to 41% of obese children will also be obese in their adult life.



**Figure 1.** Obesity and diseases.

A vast amount of studies indicate that adequate physical activity and proper lifestyles could, not only treat obesity, but also prevent diabetes and other chronic diseases [4]. Furthermore an immediate improvement in metabolic status, bone health, skeleton development, cardiovascular fitness, reproductive function, and finally psychological wellbeing, are achieved by adopting a

correct “motion” program. The benefits of physical activity and sports involvement have been found also in social skills, behaviors and ageing. Thus, improving the general population attitude toward good physical activity will also carry on social improvement and urban integration.

The economics and social costs of chronic degenerative disorders is huge, and most governments recognized the need for investments directed toward raising awareness of the need of physical activity.

The research project aims to identify strategies, in terms of proposals, at the metropolitan, urban and local level scale to facilitate and generally encourage slow movement, and particularly walking and cycling, around the city. The novelty of the present project is to provide a multidisciplinary approach to urban enhancement whose interventions are driven also by measurable effects on citizens’ health status. The aim is to develop and validate novel synthetic indicators of efficacy elaborated by the Department of Experimental Medicine to be applied to studies concerning urban intervention carried out by the Department of Architecture and Design with the finality of promoting healthier and improved lifestyles.

### **3. URBAN STRATEGIES**

In a globalized world, western cities need to face new challenges coming from, among others, the changed composition of the populations, perception of loss of common areas and spaces, environmental and public health issues, crisis of local institutions.

New cultural and working tools are necessary to renew the urban habitat and make it a “healthy place, pleasant, where local communities and economies can prosper” as suggested by strategic themes on urban environment from the European Union [5].

Redesigning our cities keeping as a fundamental and central parameter human health and wellbeing requires a new way of thinking, innovative analysis, multidisciplinary collaborations, in order to address such complex questions. Therefore urban mobility, the planning of shared spaces and the increasing problem of obesity and other chronic and metabolic diseases need to be addressed with a cross disciplinary approach. It is emerging as a critical concept the scientific finding that is not just the quantity of activity, but also the quality of the environment where is practiced that helps in preventing diseases.

This project relies on the need of innovation in urban and health policies, in order to overpass traditional sectorial actions and prefer strategies that integrate science with planning disciplines in order to encourage wellbeing of the citizens and to promote savings in public health. Some authorities have already taken steps in this direction. The city of New York has adopted, with Mayor Bloomberg, innovative guidelines, aimed at promoting physical activity and health in the design [6]. The city of Paris has launched the slogan "Manger/Bouger" [7]. In Italy was established the network "Cammina città" [8] and the municipality of Pisa has launched a joint project with the Centre for Obesity of the Hospital-Pisa University and the contribution of UISP for putting in the middle the issue of urban quality in fighting sedentary lifestyles [9]. Encouraging a less static life and the daily practice of motion cannot be accomplished only through warnings or prohibitions (as it is demonstrated by the ever growing number of private transport for urban trips despite the increase of restricted traffic zones, pedestrian areas, augmented parking fees and other forms of deterrence).

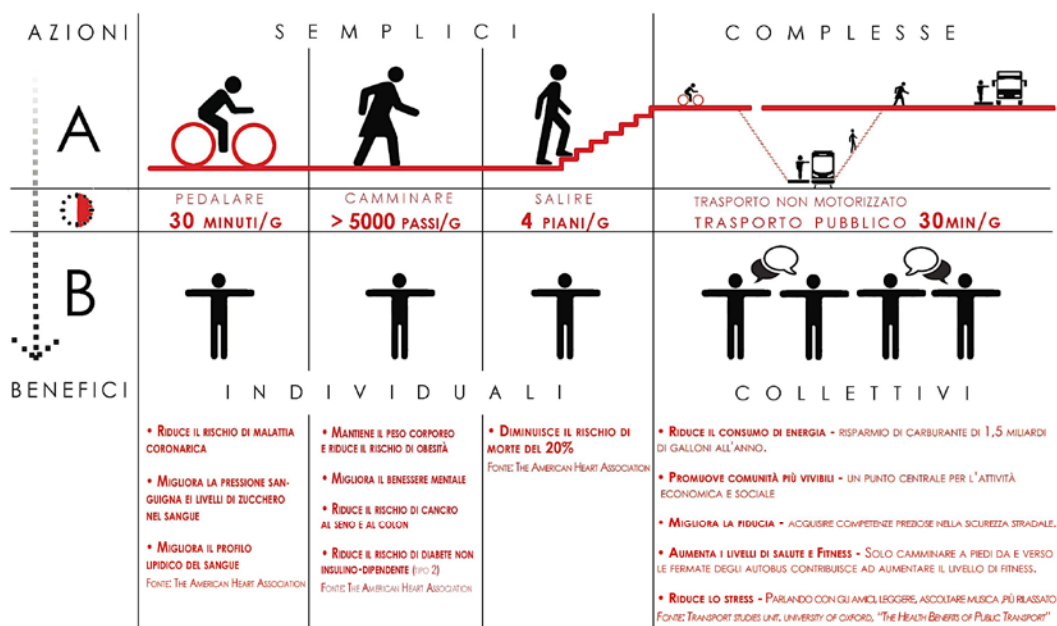
It is intuitive that the presence of easy to access and well-kept green areas could be appealing for residents and could tickle them to practice or increase their physical activity. Nevertheless no data are available on the characteristics that such areas should have in order to maximize the effects or the impact on mood, wellbeing etc.

Taking into account the abovementioned facts the scope of this project has been to investigate in further detail, which could be the best characteristics that urban spaces should have in order to encourage physical activity and realize “slow motion” urban systems. For years we have been facing the issue of sustainable mobility on one side and that of the pedestrians on the other. The first tends to focus on technical measures to ensure proper and ordered communication flows within the

city, and the second is mainly limited to the city centres or free-car areas. In both cases the problem of health seems to be entirely ignored.

Some simple data collected regarding the general benefits to human health if one leads an active life are interesting and can help in rethinking the structure of our cities. For i.e.:

- Walking up to the equivalent of 20 stories a week reduces the risk of death by 20%;
- The population living in cities with sidewalks on most of the roads are 47% more likely to take a moderate active life for at least 5 days a week and 30 minutes per day;
- People using public transport are active for at least 30 minutes a day;
- Those who live in multi-functional and liveable communities in comparison to those living in cities dependent on car have an average improvement of physical activity by more than 160%;
- Multifunctional urban centres are associated with a 12% reduction of obesity;
- Walking results in a saving of approximately € 700.00 per year, calculating fuel costs and public health.



**Figure 2.** Individual and collective benefits to the health and the environment obtained through simple and complex actions of movement.

Thus urban strategies for active living can be:

1. Increasing pedestrian areas and cycle paths for daily mobility;
2. Encouraging multifunctional districts and networks connecting urban systems;
3. Creating equipped urban axes as the backbone of a branched out system;
4. Increasing public transport interchanges and creating mobility nodes (exchange between public transport, private and soft mobility);
5. Increasing trees and vegetation;
6. Enhancing the use of open spaces not only for leisure, but also for daily use;
7. Increasing the functions that support sports' facilities and outdoor recreation;
8. Designing outdoor gyms dedicated to specific age groups;
9. Enhancing recreational trails;
10. Creating synergies between public and private open spaces;
11. Creating a communication that encourages the active life (signage, advertising, educational programs);

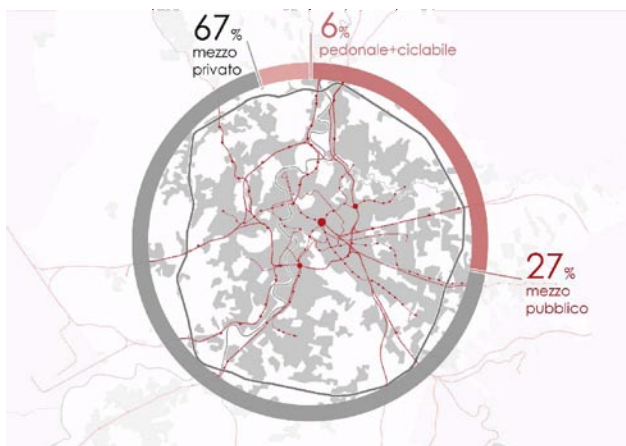
12. Play Streets (temporary playgrounds, but also areas for outdoor activities: ping pong, checkers and playing cards on fixed tables, etc.);
13. City Farming.

### 3. ROME'S URBAN ENHANCEMENT AND HEALTH PREVENTION: GYM CITY, CONNECTION CITY, STAGE CITY

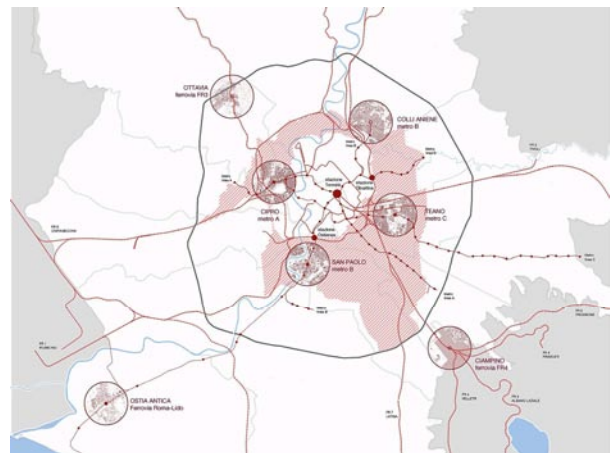
To engage the mind and the body in physical activity requires a change of habits and an encouragement given by a positive transformation of the urban environment. An experiment was conducted on the city of Rome. Data concerning the citizens' lifestyle were collected in the schools of the city and have been driven also from the Lazio Health Regional Reports confirming increasing obesity and sedentary life.

Some crucial questions we have asked ourselves are: what obstructs in the city of Rome the opportunity to have a healthy lifestyle? How to deal with this problem in a period of crisis and little availability of public resources? How can we connect the existing infrastructural system and the environmental resources to encourage the use of public space?

Particularly significant and problematic numbers emerged concerning the public transport. In Rome, though not as developed as in other European capitals, public transport is sufficiently widespread, but not effective: only 37 km of underground and a network of 3000 km of trams and buses running mainly on roads open to private vehicular traffic. As a result out of 5 million daily commutes 67% take private vehicles. In particular, what is lacking to facilitate traveling and abandonment of private cars within the city is an integrated public transport and pedestrian and cycle paths network, able to support the infrastructural system and to connect existing resources.



**Figure 3.** Rome: use of private and public transportation and pedestrian and bicycle paths.



**Figure 4.** Rome: 7 nodes of public mobility

From these results and questions we have been working, in accordance with the Planning Department of the City of Rome, on a strategic program centered on seven significant nodes of public mobility, on which to apply the strategy of "urban acupuncture". Around these nodes we organized, in a diameter of 3 km (5000 steps recommended by the WHO), open spaces that connect schools, abandoned green areas, existing, parks, public services, heritage sites and monuments in order to encourage slow movement through the presence of bike and pedestrian paths. In these nodes there will be "infiltrations" of active tissue in the body of the city, which will allow regenerating the entire urban system. Among these 7 sites we studied in detail a first particularly interesting node, at the metro station of "Teano" on the line C, in the district of Pigneto and Centocelle.

The project aims to make minimal interventions that put into order urban space by eliminating the problems that prevent its use in front of public buildings and encourage the return of citizens on the road by eliminating obstacles and barriers that prevent the use of space. The idea is to act through

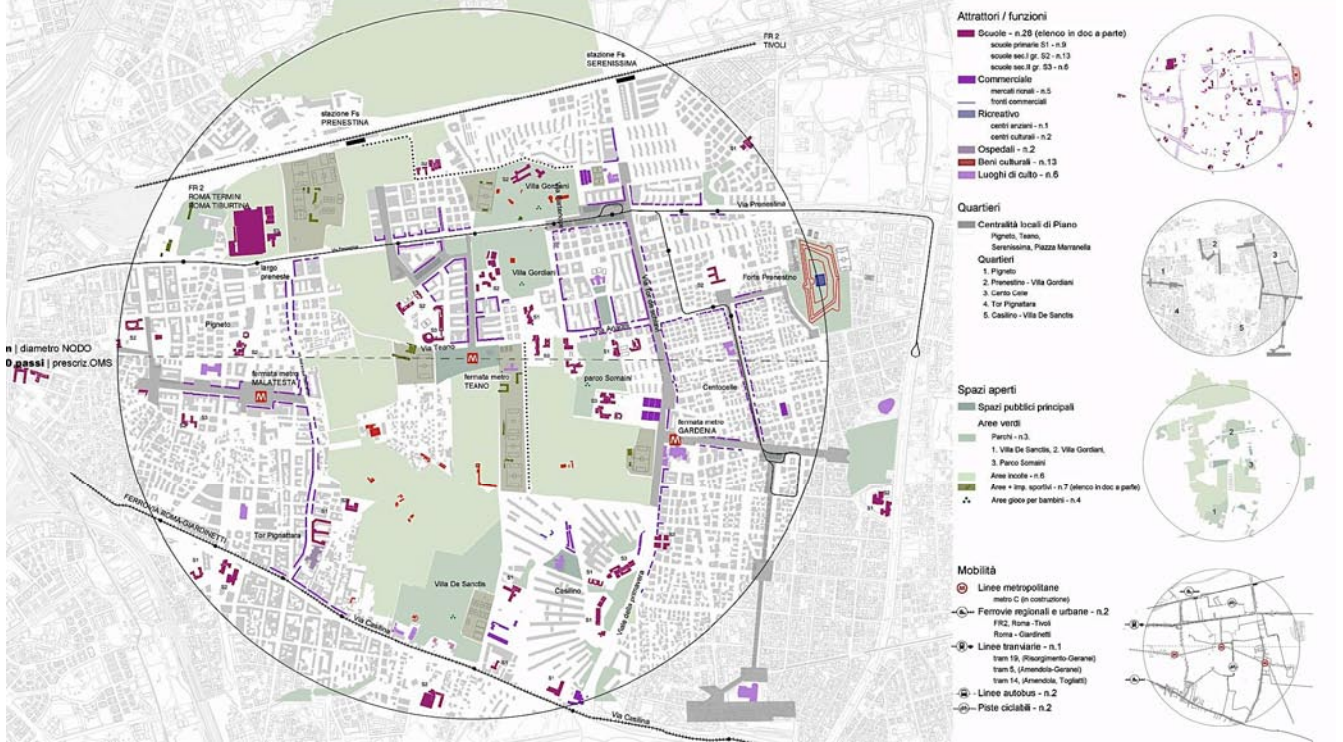


Figure 5. Rome: analysis of the resources.

proposals of urban regeneration at low cost, with the objective of making palatable to an enlarged audience the pedestrian and bicycle mobility and the use of public transport. The choice has been to locate in this area a strategic axis of urban regeneration capable of creating a network through existing resources and to induce a virtuous cycle of change in the life styles of the people.

STRATEGIE PROGETTUALI

LEGGENDA

- Asse via Teano-Anagni // intervento di riqualificazione diretta
- Sistema degli spazi pubblici // interventi di riqualificazione indiretti
- Aree private potenzialmente integrabili nel sistema
- Aree sportive private
- Aree verdi, parchi pubblici esistenti
- Nuova viabilità programmata
- Itinerario ciclopedonale proposto
- Tracciato pedonale esistente

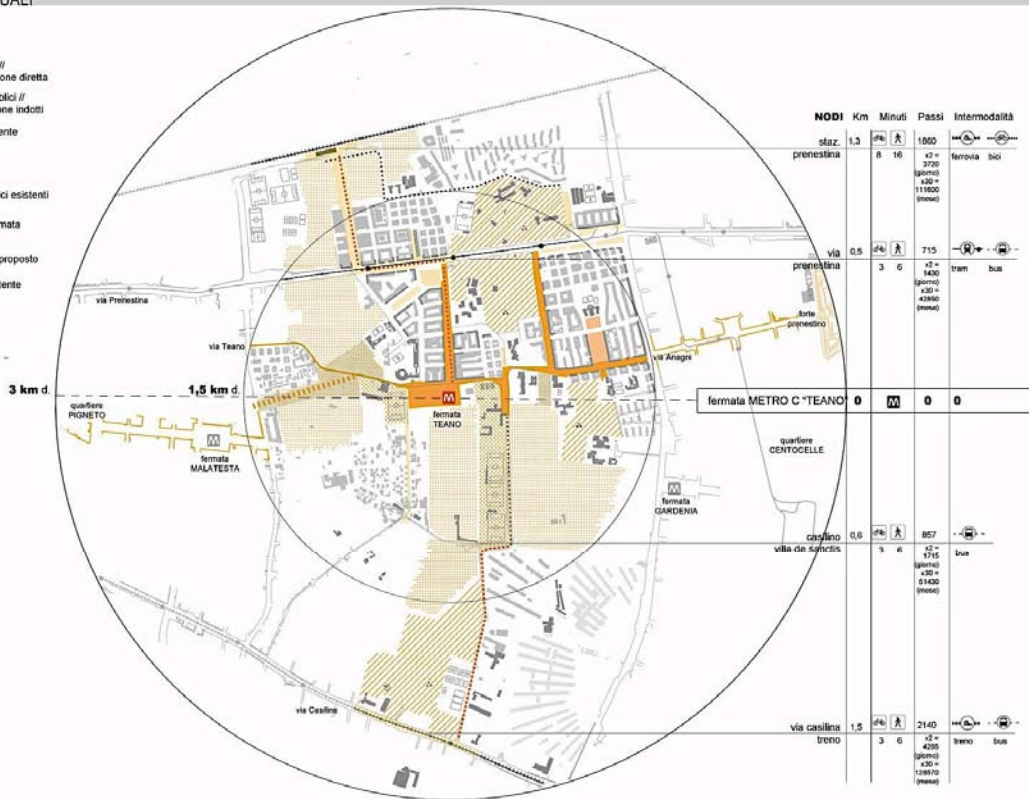


Figure 6. Rome: Axis of urban regeneration.

Around the Teano Metro Station and along via Anagni we focused on enhancing the space in front of many schools and on connecting the existing fragmented mosaic of green areas. Along these walking trails, will be located the spaces for active outdoor life: gyms for seniors, children's playgrounds, sports areas, picnic areas, areas for playing, resting and wifi connection, spaces for street performances and street art. This node has helped to develop a general methodological strategy that is expected to be used elsewhere effectively with results of great interest. In particular, it is testing the strategy used for the redevelopment of the Node Cipro in the 1st Municipality, also in relation to urban transformations in the forthcoming Jubilee.



**Figure 7.** Rome, Node of Teano Metro Station: Gym City, Stage City, Connection City.

#### 4. CONCLUSIONS

Acupuncture is a discipline that uses needles to stimulate certain parts of the body. The therapeutic effects of this technique are due to the regulatory action that the stimulation causes on a wide spectrum of functions starting from incitement exerted at a single point. Our urban nodes will have the ability to reactivate the territory and the population with minimal, but effective actions that tend to bring value to the city in terms of culture, social, environmental, urban regeneration. This is to experience a new environmental development model oriented to the welfare of citizens, which is based on a resilient territorial redevelopment, that is grounded on the potentialities, the resources and the limits of the territory and the liveability of the space that encourages the active life of people.

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