

AMERICAN UNIVERSITY OF BEIRUT

SUSTAINABLE URBAN RENEWAL:
THE CASE OF AL-TAMLIS, TARIQ JDIDEH - BEIRUT

by
RONY TONI HOBEIKA

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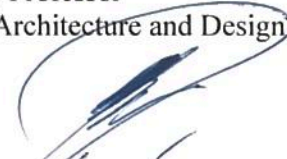
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AN ABSTRACT OF THE THESIS OF

Rony Toni Hobeika for Master of Urban Planning and Policy
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Title: Sustainable Urban Renewal: The Case of Al-Tamlis, Tariq Jdideh - Beirut

After having been long discredited by Jane Jacobs and other postmodern advocacy planners, Urban Renewal is garnering interest by a recent line of researchers (Teaford, 2000). The object of these scholars is not only to critically reinvestigate Urban Renewal in the context of post-WWII city rebuilding in the West, but also to rethink Urban Renewal in the context of 21st century cities struggling with the woes of globalization, slum proliferation and environmental catastrophes (Zipp, 2012). They argue that a reinvestigation of the largely perceived legacy of failure of Urban Renewal may shed light on its positive contributions to the discipline of planning. Furthermore, they extend the line of their predecessors in opting for a re-evaluation of the shortcomings of Urban Renewal by devising strategies to transform it from a program of slum clearance to one of urban vitality (Gans, 1966).

In line with this body of thought, this thesis seeks to re-evaluate the legacy and prospects of Urban Renewal in the context of contemporary urban challenges of sustainable development. By crisscrossing lessons from the failures and contributions of Urban Renewal on cities in the US with much recent case-studies of renewal projects targeting sustainability, and based on theoretical, analytical, and practical planning knowledge, this study synthesizes a framework for assessment of ‘Sustainable’ Urban Renewal of residential neighborhoods. It creates a set of guidelines that may channel renewal efforts within a ‘best practice’ methodology. On the other hand, in an attempt to develop the Urban Planning Workshop on ‘Mobility and Accessibility’ in Tariq Jdideh district of Beirut (2016), this study applies this framework on a theoretical outcome of the workshop: The framework is tested on a Sustainable Urban Renewal proposal for al-Tamlis, a run-down precarious neighborhood currently undergoing market-led speculative redevelopment that threatens its intricate socio-political and historic identities. The framework develops the proposal by identifying its potentials and weaknesses and recommends improvements that can guide the renewal’s economic, social, and environmental sustainability on the long-term.

In the contemporary context of cities struggling to meet the Sustainable Development Goals (SDG’s), this thesis presents Sustainable Urban Renewal, through a framework and a hypothetical case-study, as one instrument of urban planning that champions state interventionism in its market mediatory role as a cornerstone for achieving Sustainability. In the process, it seeks not only to highlight the complexities, possibilities, and limitations of such a model, but ultimately to enrich the discourse on sustainable urban development through the fields of planning history, theory and practice in a particular neoliberal context of Beirut.

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CHAPTER I

INTRODUCTION

A. Introduction

The topic of this thesis emerged from my participation in the urban planning workshop entitled “Mobility and Neighborhood Planning in Tariq Jdideh”. The aim of the workshop was to critically investigate the issues of mobility and accessibility through the case study of Tariq-Jdideh District of Beirut and to propose an integrated urban intervention that addresses the social, economic, environmental and institutional components of this issue. This thesis is a critical revision and assessment of the planning proposal that I conducted on the neighborhood of Al-Tamlis, a deteriorating section lying north of Tariq-Jdideh bordering Corniche-al-Mazraa Avenue. In the course of this proposal, I will examine my planning proposal for the renewal Al-Tamlis by referring to scholarly articles and case studies on Urban Renewal and Sustainability. This thesis is an investigation that combines theoretical, analytical, and practical planning knowledge from the fields of urban history, urban planning and policy-making, and sustainable development to critically reflect upon the legacy of Urban Renewal policies and their prospective application in contemporary city planning.

B. Context Definition: The Case-Study of al-Tamlis

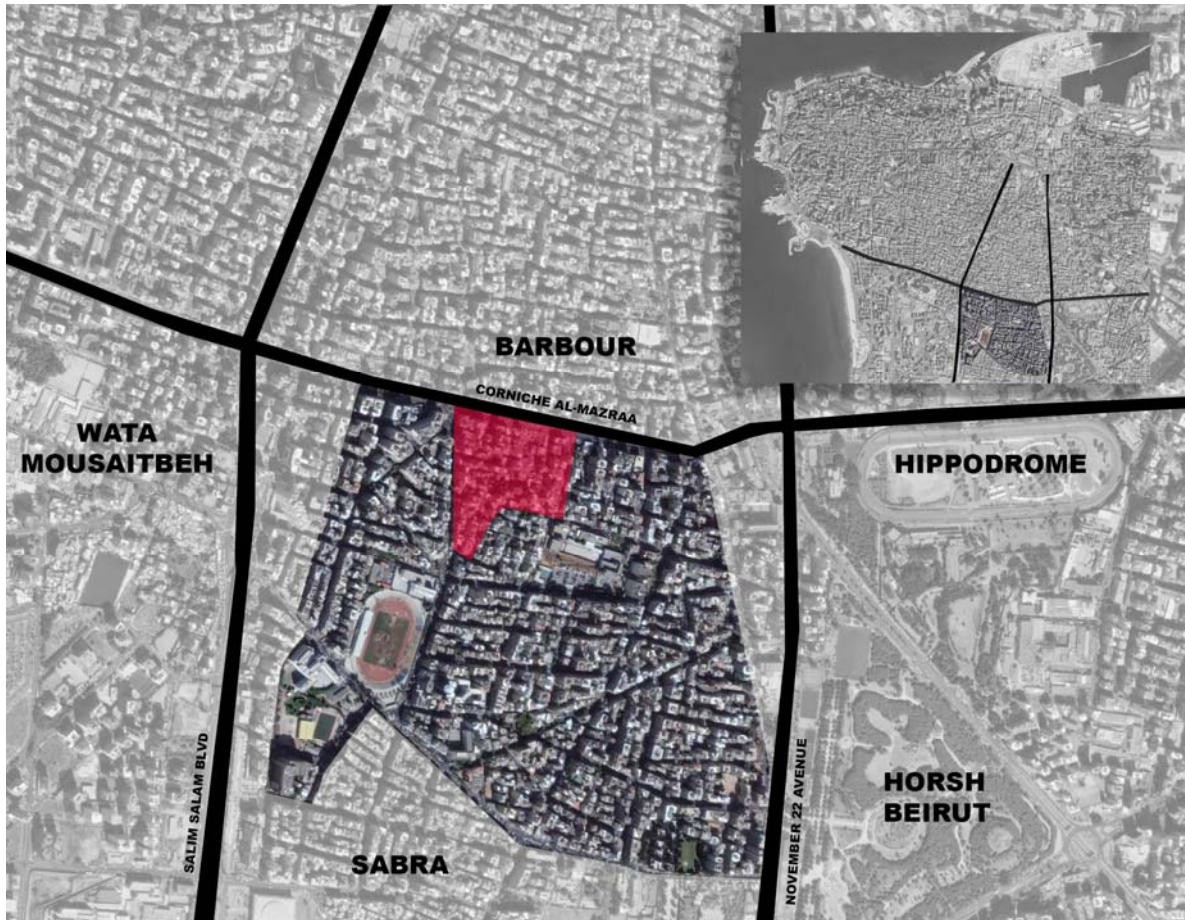


Figure 1: Location of Tariq Jdideh (Highlighted) and al-Tamlis (Red) In Beirut

Al-Tamlis, a neighborhood on the northern edge of Tariq el Jdideh District abutting Corniche al Mazraa, has an infamous reputation in the popular memory of Beiruti citizens throughout its history. Its name, literally translates as “the inability to see clearly”, evokes a sense of its built fabric: A tight cluster of buildings pierced through by narrow and dimly-lit alleyways. Al-Tamlis was formed sometime in the early 30’s period: A sparsely populated agrarian region typical of the southern suburbs of the city such as its surrounding of al-Mazraa, al-Amliyeh, Kaskas, and Mar Elias. In the early years of independence, migrations

of Lebanese Shiites from the South and Beqaa as well as the exodus of Palestinians refugees to al-Tamlis added to the sectarian and cultural mosaic of the neighborhood. During the 60's, the entire district of Tariq-Jdideh underwent a massive Urban Renewal process following the Beirut Masterplan of 1955 designed by Ecochard. However, al-Tamlis was a distinct case because a road that was designed to cut through its fabric was suspended. Consequently, al-Tamlis was physically insulated from its surrounding for the next decades.



Figure 2: The unimplemented 1955 road (Red) cutting through al-Tamlis neighborhood (Light Red), *Source: DGU, 1964*

It was during the Lebanese Civil War that al-Tamlis garnered its unique image: As a result of its particular geo-strategic location commanding Corniche-al-Mazraa, it became commonly known as ‘the Stronghold’ (Al-Qal’aa) of the Sunni-dominated militia groups of

Al-Murabitun and the PLO. Al-Tamlis's particular geographical determinants and historical social dynamics set it on an intractable course of anti-development in the aftermath years leading to its popular stigmatization as a harbor for the impoverished, an asylum for outcasts and fugitives, a safe haven for armed militia groups, and a bird's nest of security agents and spies.

Today, al-Tamlis still displays the symptoms of underdevelopment: Ragged and dilapidated houses pierced by occasional newly-built high-rises, worn-out infrastructure of roads and pavements – most of which are too narrow for vehicular traffic, an almost complete absence of public utilities such as domestic water supply, electricity, and sanitation, and extreme poverty constituency of low to extremely-low income locals and ethnic minority migrant workers. Moreover, a closer scrutiny of al-Tamlis reveals a covert political struggle. Today, al-Tamlis is a mixed religious enclave, composed almost entirely and equally of Sunnis and Shiites. However, the Sunni residents are constantly alarmed of a foreboding change as they feel they have lost their main financial buttressing of the Future Movement and have been left exposed to their main adversary. Meanwhile, Shiite prominent figures and businessmen are scrambling for real-estate investment in the neighborhood. Sunni residents are wary of covert agendas of their impending displacement and decry that the “Stronghold is being breached!” Thus, a new round of war between the two religious groups is well underway: A proxy-warfare of real-estate speculation and development that threatens not only to gentrify al-Tamlis and reshuffle its social constituent, but more importantly, that takes a sectarian taint to be perceived as a “strategic conquest in times of peace” as noted an interviewee resident. Notwithstanding, the Sunnis have chosen to delegate their resistance to

Beirut Municipality (whose mayor is a Sunni) to find a settlement for the development direction of their neighborhood.



Figure 4: Al-Tamlis Main Street



Figure 3: Al-Tamlis Staircase

C. Research Question and Objectives

As a real-estate magnet bordering the vibrant economic artery of Corniche-al-Mazraa, al-Tamlis is considered highly susceptible to change and soon to undergo major market-driven privately-led redevelopment that threatens to severely alter its physical form, disaggregate its social constituent and fuel sectarian anti-sentiment and turmoil, and eradicate its distinct identity in the collective memory of the city. Beirut Municipality is assumed here to have intervened as a planning agency to manage the development of al-Tamlis and plan a vision, strategy, and road-map to stimulate and direct the development of the neighborhood.

Assuming the role of a public planner, my investigation on Al-Tamlis focused on three main themes: Historic narratives and socio-political situations and challenges in an area which is a source of political instability, the neighborhood's built environment – particularly of accessibility and mobility, land use, building conditions, public spaces, greening and

infrastructure, and the neighborhood's susceptibility to change. By summarizing these findings in one comprehensive synthesis map, my work proceeded with an intervention. The basic premise of the proposal was the following:

How can Urban Renewal be revised under the auspices of Sustainable Development to guide the redevelopment al-Tamlis?

By highlighting the area's strengths and opportunities as well as its challenges and weaknesses, a diagnosis was used to devise a vision and a set of goals (on both local and district scale) that aim to improve the neighborhood and its surroundings. Envisioned to be a model of a sustainable neighborhood, the plan designs an inclusive economic redevelopment strategy whose target is to reconcile the three poles of sustainability by capturing the economic potentials of al-Tamlis to rehabilitate and reconstruct its fabric in a more socially-inclusive and environmentally-friendly way. The redevelopment scheme is a multi-scalar one: (a) on a general level, it conceives of a comprehensive governance vision and a self-financing framework for the entire neighborhood, in addition to a proposed timeframe for project implementation. (b) On a more micro level, the plan establishes focused and distinct action areas within the neighborhood, each with its own tailored urban planning interventions, guidelines, and financing mechanisms. The proposal concludes with a masterplan and perspectives of al-Tamlis 2030.

D. Research Significance

The outcome of the redevelopment plan, in its proposal to demolish large swaths of decrepit buildings, re-parcelization, and reconstruction of most of Al-Tamlis urban structure, evokes a renaissance of Urban Renewal policies applied in the mid-twentieth century in the US and Europe as well as the 60's and 70's period in Lebanon. Thus, in an attempt to critically reflect on the proposed masterplan, the literature review chooses to delve into a re-evaluation of the mechanisms of Urban Renewal. Such a critical reappraisal of Urban Renewal has the potential of unraveling historical specificities that lead to the formulation of its policies and highlighting its contributions to the processes of reconstruction of post-WWII cities in the West, fathoming the criticisms of its legacy of destruction, displacement and social injustice, and assessing its applicability in the age of sustainable development to surmount contemporary urban challenges.

Al-Tamlis may very well be a unique case-study on the merits of physical renewal on both the local and international scale. First, it is a unique situation where a planned Urban Renewal project in the 60's was interrupted and the area, in contrast to its surroundings, became straddled between prospective demolition and laissez-faire practices eventually leading to an urban transcript of dissociation and stigmatization. As a result, the research on al-Tamlis has the potential of understanding to what extent the halting of renewal in the neighborhood was a culprit of al-Tamlis's own perpetual stagnation and hence underpinning the importance of renewal of the city fabric on urban vitality and development. Second, in light of the exigencies of sustainable development, the research can contribute to an understanding of how Urban Renewal policies can be assessed, adapted to the needs of the present, and reinstated as guidelines for neighborhood redevelopment. Such a revised

policy for a ‘Sustainable’ Urban Renewal may serve as a paradigm and contribute to the achievement of the Sustainable Development Goals (SDGs) of the Urban Agenda targeted by cities of the 21st century.

E. Methodology And Methods: From Workshop To Thesis

1. Research Methodology

The research methodology adopted in this thesis aims at elaborating and substantiating the urban planning workshop outcome with a theoretical and methodological framework. It also aims at systematizing the urban planning process followed in the studio not only in the case of redevelopment of precarious housing in Beirut but also run-down urban fabric in general. It establishes to re-appraise a practice that had been long dismissed from the catalogs of good urban practice in light of new challenges in our cities. The research methodology builds on literature review of books and journal articles, empirical data, personal observations, residents’ anecdotes, interviews with professionals, theoretical concepts and texts, as well as visionary projections of possibilities and their critical analysis (see Appendix I)

The types of research conducted for data gathering are library research and field research. In both cases, various research methods are used so that the data collected is cross-checked, confirmed, and reinforced. In this thesis, library research goes beyond the investigation conducted for the urban planning workshop to incorporate an in-depth literature review which establishes the theoretical and methodological frameworks and assessments of the thesis research. Accordingly, the library research carried out investigates the Urban Renewal’s history, its contributions to post-war construction and development, its benefits

and successes, as well as its failures and shortcomings. Critical lessons are to be deducted from its defects and from case studies of successful international examples of Urban Renewal projects in order to improve performance in contemporary city planning contexts in general and in the context of Beirut in particular. The field research part is mainly based on the research done during the urban planning workshop studio. It was initiated with a preliminary reconnaissance of the entire district of Tariq-Jdideh to inform that strengths, weaknesses, opportunities and threats on a district scale. These observations are then intertwined with a similar exercise performed on the neighborhood scale of al-Tamlis. An in-depth array of research and profiling of al-Tamlis's political history, socio-economic, and built environment leading to a perceptive and comprehensive understanding of the social, economic, cultural, physical, and institutional dynamics that have impacted both its urban and social form. The primary method used for gathering data consists of both engaged and non-participant observation through relevant techniques such as recording notes, sketching, photographing, mapping, interviews with locals and professionals, in addition to secondary methods such as newspaper articles and texts.

2. Thesis Structure and Content

The thesis body consists of four main chapters: The first chapter introduced the thesis topic, research content and methodology, and its significance and contribution to the literature. The second chapter attends to a literature review on the subject of Urban Renewal, its criticisms, contributions, case-studies in contemporary sustainable renewal initiatives, and culminates in identifying a framework for assessment for 'Sustainable Urban Renewal' projects. The third and fourth chapters deliver the case-study of al-Tamlis that was conducted

in the Urban Planning Workshop studio and conclude by presenting the Al-Tamlis Masterplan as proposed by the workshop. The final chapter is dedicated to a reflection and thorough review of the outcome of the Planning Workshop in light of the frameworks for assessment of Sustainable Urban Renewal. It concludes by a set of recommendations to improve on the ‘Sustainability’ of the al-Tamlis Urban Renewal proposal.

CHAPTER II

RETHINKING URBAN RENEWAL IN THE CONTEXT OF THE 21ST CENTURY CITY: TOWARDS AN ASSESSMENT FRAMEWORK

This chapter sets to critically investigate the history of Urban Renewal practice from the 1950s until now. It seeks to highlight 1) its accomplishments in urban redevelopment of mid-century cities, 2) its late-century shortcomings and criticisms, as well as 3) its potential for reincarnation under the auspices of ‘sustainability’ in contemporary contexts. The chapter concludes with three successful case studies that illustrate the new approach to Urban Renewal and extracts a framework for assessing and improving on the proposed al-Tamlis master plan.

Urban Renewal projects throughout the last century have demonstrated a rich diversity in scales of intervention (district, neighborhood, street...), urban locations (core, peri-center, and suburban) and programs (business, residential, mixed). Due to the intricacies of each combination in a renewal project, the scope of the revision of Urban Renewal will focus squarely on peri-central residential neighborhoods¹ which correspond to the case-study at hand.

¹ Clarence Perry (1929) defines the neighborhood as a component of a town and defines its size based upon a five minute walking radius. The radius is measured from the center, and the center holds the cultural uses such as a school. A five-minute walking distance is approximately 160 acres. In the 1920's the centers and anchors of neighborhoods were the schools. More recently, the quarter-mile walking radius has been expanded to a half mile with the addition of a transit hub (American Association of Planners)

A. Urban Renewal in the Age of Modernism: From Slum Clearance and Social Housing to Market-Led Speculation

The term ‘Urban Renewal’ is largely attributed to the US federal program for urban redevelopment (Title I of the Housing Act of 1949). The new act stipulated federal subsidies and grants to be provided by the central government for the purpose of “slum clearance and urban redevelopment” of blighted areas of cities. Consequently, cities were given agency and power to cleanse their deteriorating building stock and finance the construction of new projects in hopes of achieving a much needed physical, economic, and social revitalization of their post-WWII urban fabrics. Although Title I started off a housing act to redevelop the deteriorating housing stock in the city cores, reverse suburban flight, and provide affordable and decent living conditions for residents, the later amendments of 1954, 1959, and 1961 permitted an ever-increasing amount of federal money to be invested for commercial purposes. *Hence, a program that was initiated to help the poor, soon metamorphosed into a tool for enterprise*, and following, many clearance areas, as noted by Anderson (1964), were selected not according to their precarious condition, but because they offered the best sites for real-estate speculation. By the early 70’s, Urban Renewal policies lost public support and became synonymous with bulldozing, intensive bureaucracy, regimented and banal landscapes, displacement of the poor, and dubious economic dividends, and became a justification by conservatives to undermine the powers of centralized governments.

As mentioned above, urban renewal legislation (Title I Act) and its amendments aimed at improving the built environments of cities; however the US Congress had left loopholes for commercial profiteering. Multiple interest groups rallied behind the passage of Title I Act with different perspectives:

- **Central-city businesses** perceived it as a means to restore diminishing downtown property values, city councils needed it as a tool to increase the revenues of property taxes and reversing suburban flight,
- **Social leaders and humanitarian groups** vowed that it would help clear urban slums and provide the poor with better living conditions, and
- **Middle-class activists** believed the scheme would furnish city residents with an increased stock of decent and affordable housing in central locations (Teaford, 2000).

The inclusiveness of the Urban Renewal program was its particular weakness: Having ambiguous goals, controversial applications, and undeliverable expectations for all, it was destined to fall prey to criticism.

B. Post-Modernist Attacks on Urban Renewal

By the 1960's, urban reformers and social activists began to voice their discontent with Urban Renewal claiming that Title I had become a program that “caters for the interests of the wealthy on behalf of the marginalized segments of city dwellers” (Teaford, 2000). Concomitantly, the lackluster of Urban Renewal policies came under fire from its disappointed proponents as federal policies proved not to be one ‘easy-fix’ for the ailments of the city: Some projects were outright economic failures, entire historic and working-class neighborhoods were irreversibly destroyed, and ubiquitous large vacant tracts of lands stood as a testimony for extensive delays that plagued implementation.

It wasn't too long until Modernist urban renewal came under attack by a discontented Post-Modernist movement – of members as diverse which Jane Jacobs, William

Whyte, and Martin Anderson. The latter, from a conservative agenda, stressed renewal's erroneous practice of attacking personal liberties by planning projects that are "very costly, mired with delays, and incapable of matching private enterprise's efficiency, practicality, and rapidity (Anderson, 1964). Indeed the chronic time lag in renewal programs was a result of the cumbersome process and bureaucratic complexity entailed. For example, in 1966 the National Commission on Urban Problems in the US reported that the typical urban renewal project took an average between ten and thirteen years to deliver (Weicher, 1972). Moreover, some projects, such as Minneapolis's Gateway Redevelopment project (Brandt, 2008; Nathanson, 2015; Callaghan, 2015) (Figure 5) and South-West Washington DC redevelopment project (Figure 6) faced financial and implementation catastrophes failing to deliver on schedule, to resuscitate the 'urban life' as their glittering billboards promised, and to attract new investment tracts in their vicinities (Teaford, 2000)



Figure 5: Minneapolis's Gateway Renewal Project in 1960's, *Source: Minnesota Historical Society*



Figure 6: South-West Washington DC Redevelopment, *Source: WordPress.com*

Jane Jacobs, from a communitarian perspective, dreaded renewal's proclivity of creating dreadful urban landscapes of "lifeless towers and plaza moonscapes" and dissolution urban communities. Jacobs, who had been struggling to safeguard her neighborhood Greenwich Village, with its brownstones, small apartments, and intricate urban community, against the encroachment of luxurious high-rise projects and the indiscriminate bulldozing of highway constructions. In her most influential book, *The Life and Death of Great American Cities* (1961), Jacobs embarked on a full-scale attack on the modern planning dogmas prevalent at the time. She described Robert Moses's new constructions as an endless banal rows of ugly apartment towers, unappealing to residents and their needs, and oblivious to the surrounding neighborhoods and street patterns (Figure 7). She thought Urban Renewal is not simply ineffective but outright dangerous: "It used cruel means to achieve abhorrent ends" (Jacobs, 1961). She lamented the erosion of tightly-knit neighborhood communities and their networks of relationships so crucial for livelihoods and survival, the very foundations of a functional and vibrant city life, under the cataclysmic practices of greedy developers. According to her, the city consisted of organic and living entities that needed to be observed and attended to. Reductionist large-scale schemes armed with massive federal subsidies cannot whimsically create vitality in the city; but, nurturing existing communities through small-scale interventions and upgrades targeting to remedy specific problems while preserving the delicate social fabric of the city can (Figure 8).



Figure 7: Stuyvesant Town, New York, a large residential redevelopment project pioneered by Robert Moses, *Source: NY Magazine*



Figure 8: Jane Jacobs campaigns grass roots movements to preserve Penn Station from Demolition in 1963, *Source: The Guardian*

Urban Renewal was described as “not a war on poverty, but a war on the poor” (Mollenkopf, 1983). Studies have shown that a mere one-half percent (0.5%) of all federal expenditures for Urban Renewal between 1949 and 1964 was spent on relocation of families and individuals (Gans, 1966). Also, another study conducted in 1961 of renewal projects in 41 US cities showed that “60 percent of the dispossessed tenants were merely relocated in other slums; and in big cities, the proportion is even higher” (ibid.) Gans (1966) proceeds to argue that since ‘standard’ housing within average means was almost unattainable, even scarce and unavailable in most cities, new slums were created by pushing relocatees into areas and buildings which then became overcrowded and rapidly deteriorated. Hartman (1964) concludes that on the whole relocation has made a “disappointingly small contribution to the attainment of a decent house in a suitable living environment for every American family”. He stresses that not only the achievements on this part had been limited, but they have been accompanied by rampant increases in housing costs.

The disenchantment with rehousing is most evident in the Urban Renewal case of Boston's West End (Figure 9), the most publicized outcry of local residents against such a program. Although this neighborhood housed a closely-knit Italian community in an aged-old tenement houses, Boston's West End happened to border the city's central business district with large rental gaps and opportunities for speculative investment. Consequently, it was ear-marked for demolition, and in its place were to rise 2400 high-rent apartments in soaring towers (Teaford 2000; McQuade, 1966). Very few of the dispossessed local residents could afford to move into these new apartments. In his study of Boston's West End, Chester Hartman (1964) concluded that 41 percent of the West Enders lived in good housing in what was coined a 'slum' (meaning much of it should not have been torn down). He also concluded that the relocation came at a heavy toll on residents as median rents rose from \$41 to \$71 per month after the move (Hartman cited in Gans, 1966).



Figure 9: Boston's West End: Before and After Urban Renewal, *Source: WordPress.com*

By the early 70's, Urban Renewal policies lost public support and became synonymous with bulldozing, intensive bureaucracy, regimented and banal landscapes, displacement of the poor, and dubious economic dividends, and became a justification by conservatives to undermine the powers of centralized governments.

The lessons of this section are summarized in figure 10 below.

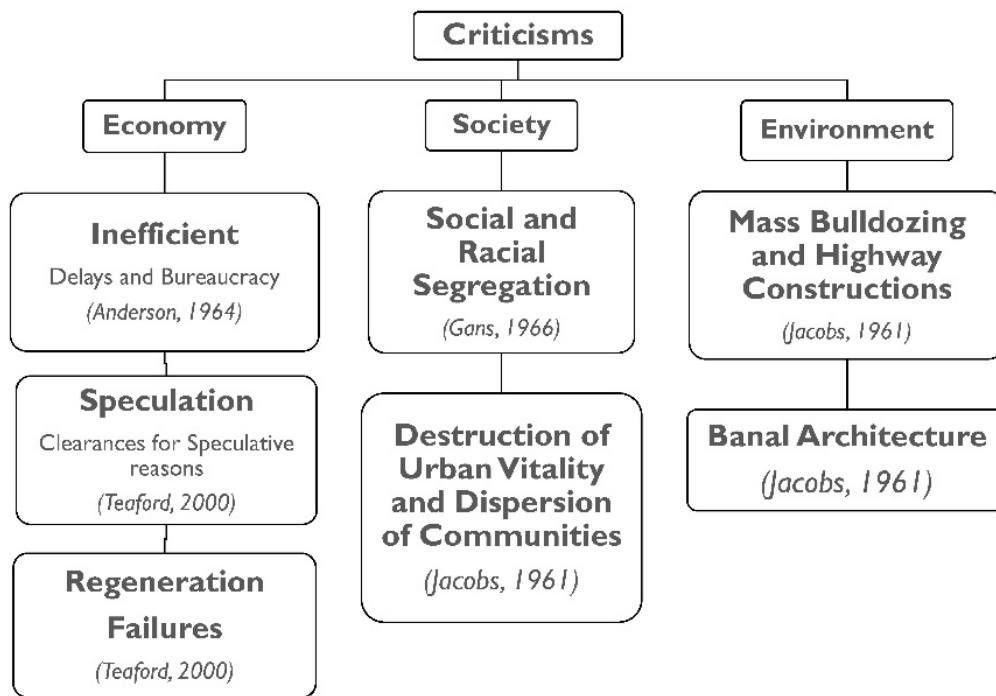


Figure 10: Criticisms of Urban Renewal Summarized

C. The Failure Legacy of Modernist Urban Renewal: Contributions to Planning Theory and Lessons Learned

A recent line of researchers have shown keen interest in rethinking Urban Renewal in the context of 21st century cities that are struggling with the increasing woes of globalization, economic decline, slum proliferation, decentralization, post-war reconstruction, and environmental catastrophes. They argue that a reinvestigation of the largely perceived legacy of failure of Urban Renewal may shed light on its positive contributions to the discipline of planning, particularly in the provision of affordable housing, economic revitalization of city centers, densification, retrofitting the built stock of cities for efficient climate performance, restructuring sustainable transportation systems, landscaping implants, and reversal of suburban flight.

According to Zipp (2012), Urban Renewal needs to be re-understood as the product of ideas and policies whose origins date back to the late nineteenth and early twentieth century transformations which unfolded in “roots and routes” culminating in what he termed as the “ethics of city building”: A set of visionary *and* pragmatic set of ideas that harnessed avant-garde modernism, in architecture and planning, to reverse the woes of urban decline and suburbanization under the auspices of postwar social-democratic values. Zipp (2012) argues that after World War II, social reformers looked to restore the urban order through a fundamental reconstruction of the social and built form of vast realms of human activity: Housing, work, entertainment, consumption and commerce. Its policies in what is known as the Progressive Era and the New Deal, offered a social and political response to the mayhem of European and American cities of the ‘Gilded’ Age inundated by problems of industrialization, pollution, extreme poverty, mass migrations and overcrowding, deplorable

housing conditions, and total war (Zipp, 2012). Thus, in order to critically assess the contributions of Urban Renewal to modern planning theory, it is crucial to understand them from a historical, comparative, and comprehensive perspective. Only through such a critical lens can the virtues of Urban Renewal be appraised. This segment chooses to serve that purpose by advancing the contributions of renewal in terms of 1) commitment to social housing in inner-cities; 2) public benefit and eminent domain; and 3) local participation in urban renewal process

1. Modernism and the Commitment to Social Housing in Inner-Cities

For most of the nineteenth century, the prevalent Liberal economic order assumed that housing provision was the prerogative of the private market. But after decades of failure to reduce the proliferation of slums, reformers began to conclude that more government intervention is needed.² By the 1920's, and building on existing European social politics and deep culture of successful government interventionism – most notably French, Dutch and German experiments in state-built social housing projects pioneered by Bruno Taut (Figure 11), Marcel Breuer, J.P.P. Oud, and Ernst May (Figure 12), reformers in the US and real estate speculators began to see publicly-led slum clearance and reconstruction projects as the natural way forward. American architects and planners soon followed suit, and in tandem embraced slum removal as an opportunity to achieve a more rational and ordered landscapes (Zipp, 2010). Their efforts were premised on the idea that ridding the poor from his

² Zipp (2012) cited Edith Elmer Wood *Slums and Blighted Areas in the United States* (Washington, DC, Government Planning Office, 1935) and Daniel Rogers *Atlantic Crossings: Social Politics in a Progressive Age* (Cambridge, MA, Harvard University Press, 1998).

underprivileged condition was to be done first by extricating him from his ‘inhuman’ living condition. Zipp (2012) describes public housers as idealists and true pioneers: “In cities across the country (US), [...] housing reformers seized the initiative and got to work on an extensive campaign of housing construction at the fringes and centers of the city. [...] their commitment to low-income housing [...] prodded them to choose in-town sites whenever it was fiscally feasible.” Zipp explains that Modernism became more than just a style; it was a social and economic program, the built environment of social democracy: “a mélange of capitalist industrial efficiency and socialist ideology” with housing at the epicenter. Properly designed and equipped housing, was believed, had the potency to provide “a benevolent infrastructure in which the poor could learn to extricate themselves not only from the slums but from the habits the slums perpetuated.”



Figure 11: Britz Housing Development by Bruno Taut, Berlin, 1928, *Source: Pinterest*



Figure 12: Siedlung Zickzackhausen by Ernst May, Frankfurt, 1926, *Source: Pinterest*

Housing became central on postwar urban agenda for social reform in the US, inspired by European urbanist faith: Modern Architecture, and the belief in the restorative effects of sun, wind, and light, and open space prevailed, in concomitance with the faith in the new industrial ‘socialist’ materials of concrete, steel, and glass. These new values not only promised to rid the city of its inherited traditions of urban blight, but also promised a

“social revolution without bloodshed, a realization of class-less society through ever-advancing technology and the careful application of the social wisdom needed to harness it” (Zipp, 2012). This overarching pairing of aesthetic and socialist philosophy combined functionalism with standardization which would directly influence what was to be built in the years of Urban Renewal.

2. *Eminent Domain and Public Benefit*

Groberg (1965) clearly defines Slum Clearance and Social Housing both as schemes conceived for the common good of society. This legal understanding of public use, in his words, justifies the appropriation of eminent domain for urban redevelopment despite that fact that the property might eventually end up in private ownership. He quotes Philip Nichols’s *The Law of Eminent Domain*³ on the public use to bolster his claims: “Anything that tends to enlarge the resources, increase the industrial advantages and promote the productive power of any considerable number of the inhabitants of a section a state, or which leads to the growth of towns and creation of new resources for the employment of capital prosperity of the whole community and, giving the constitution a broad and comprehensive interpretation, constitutes a public use.” Under this view, it has been held that the scope of eminent domain has been made as broad as the powers under the police and tax provisions of the constitution.” Thus, Groberg (1965) makes a compelling case against conservatives - and their antagonisms against the ‘undemocratic’ government violation of private property and liberties - in view of legislations and courts that eminent domain is authorized on behalf

³ Philip Nichols, *The Law of Eminent Domain* (Sackman & Van Brunt, 3rd ed, 1963)

of the commons to build both public infrastructures. He adds, in their operations to generate a greater “public benefit”, public legislators should impel the individual to acquiesce [...] by giving him full indemnification for the injuries he/she sustained on behalf of the fulfillment of the welfare of all.

In his treatise *The Changing Economic Function of the Central City (1959)*, Vernon explains how “structural obsolescence” took grip of Post-WWII cities in the US, and how these served as a precursor for the passage of Title I act of 1949. According to Vernon, three major transformations led to the decline of the city: (a) Suburban flight of middle-class residents to seek larger and more luxurious housing, (b) The abandonment of industrial sectors and their seeking larger and cheaper rural lands that can host the new technologies in manufacturing techniques and material handling. And so, an outward movement of jobs was on forebode. (c) Public preferences for automobile modes of transport instead of mass-transit, and the inadequacy of inner-city vehicular infrastructure. These transformations happened in concomitance with financial and business corporations’ gravitational pull to the center seeking financial and strategic rewards (see O’Sullivan, 2010). And so, downtown retailers, bankers, corporations, realtors, and other businessmen with interests in the economic vitality and health of the city coalesced together to coerce government intervention. Indeed, these socio-economic forces obliged city governments into their market-mediatory role. Their aim was to try “to keep downtown property profitable in competition with booming suburbs [...] and to preserve the commercial urban vitality of the center by increasing employment” (Zipp and Carriere, 2012; Gans, 1966) through a large welfare program of Rehousing. Such large-scale welfare programs were to be financed both by federal funds but also largely by tapping into increased downtown real-estate tax returns. In that matter, and although not primarily

residential, Philadelphia's Society Hill redevelopment (Figures 13-14) was one highly-acclaimed case. Combining demolition with selective conservation, the renewal project preserved the 18th century buildings while clearing the rodent-infested Dock Street Market. Developers built three glass towers with luxury apartments overlooking the Delaware River. During its first 10 years, Society Hill attracted \$180 million in investments and tax receipts soared as middle-class residents moved in. Garvin (1996) reported that before renewal, the area generated \$454,000 in property taxes; by 1974, it was garnering as much as \$2.74 million.

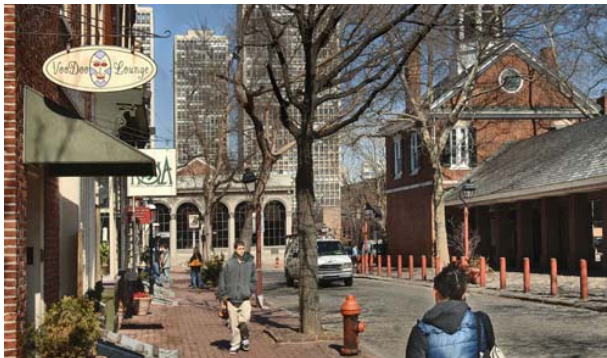


Figure 14: and the Conservation Area in Society Hill,
Source: American Planning Association



Figure 13: The Three Modernist Towers of Society Hill by I.M.Peï, Source: Pinterest

3. *Local Participation in the Urban Renewal Process*

In *The Roots and Routes of Urban Renewal (2012)*, Samuel Zipp posits we do not hastily accept the salient judgment that Urban Renewal was simply a method of turning public power over to big government and the interests of their political cronies. He argues instead for a *nuanced understanding* of renewal as resulting from the contingencies of power-plays and the complexity of involvement and struggle between different stakeholders with competing powers, claims and interests. Public participation was indeed present, though in

an institutionalized form. The most ardent argument for appraising Urban Renewal for its participatory conduits came from Robert Groberg. In his essay (1965), Groberg sheds light on how Renewal was a local program due to the fact that: “State legislated laws to give cities the governmental power for Urban Renewal [...] Local renewal agencies, organized by elected city councils, had the *sole prerogative* to approve projects [...] Local government is the body that approves federal-backed expenditures [...] and Local citizens were participating in the Urban Renewal process, as required by *law*, and citizens everywhere were so doing.” He continues to confirm that the programs depended completely on active local political support, through the established system of representative government. Furthermore, he stresses how the federal government “cannot select a project area, cannot prepare a plan, cannot acquire property, cannot demolish dilapidated structures, and cannot sell the land or install public improvement projects” (ibid.). And yet, these are the critical steps in any Urban Renewal project. Lessons from the appraisal of Urban Renewal are summarized below.

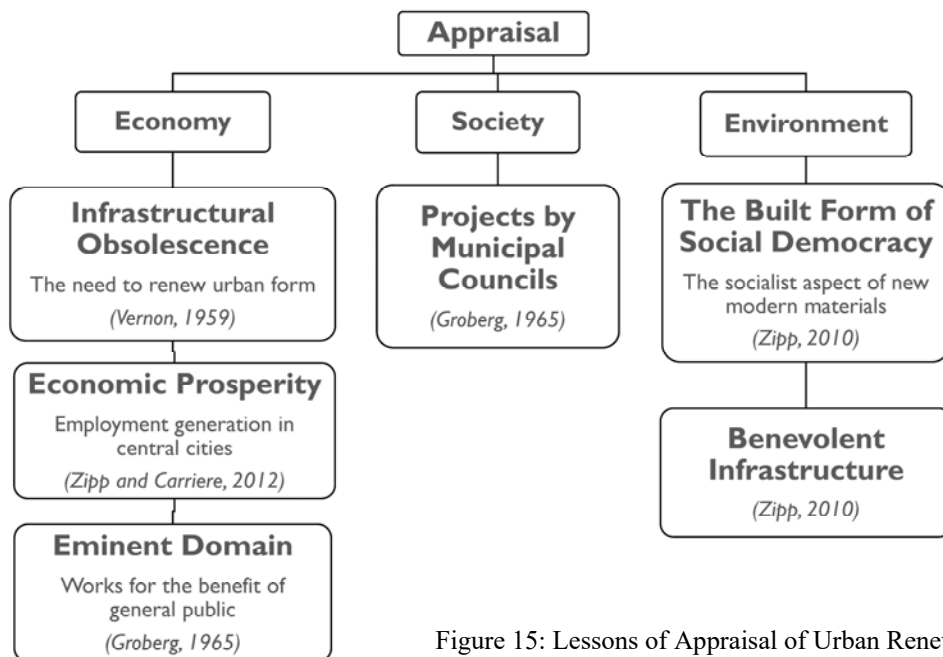


Figure 15: Lessons of Appraisal of Urban Renewal

D. From Urban Renewal to ‘Sustainable Urban Renewal’: An Agenda for the 21st Century

1. Defining Terminologies and Scope

a. Justifying the term ‘Sustainable Urban Renewal’

From the 1980’s onwards, there has been responses in urban planning theory and practice to the perceived failures of the Urban Renewal project. The most notable of these reactionary movements in planning are known as Urban Revitalization, Urban Regeneration, and Urban Rehabilitation. Throughout my research, I have noticed that the three terms have been used indiscriminately and interchangeably in the literature with the terms ‘renewal’ and ‘redevelopment.’ So I believe that it is vital to first disentangle and demystify the confusion between these terms and justify the selection of ‘Sustainable Urban Renewal’ as a headline for a revisionary agenda.

A synthesis of an encyclopedic⁴ research of the term Urban Renewal yields the following common definition: “A government-sponsored program designed to clear, redesign, and rebuild or restore dilapidated or no longer functional urban areas often in accordance with comprehensive plans.” Furthermore, the US Housing and Urban Development (HUD) defines Urban Renewal as a “program of land redevelopment in cities often where there is urban decay. It involves the relocation of business, the demolition of structures, and the relocation of people under the rule of eminent domain as a legal instrument to take private property for city-initiated development projects. Accordingly, Urban Renewal

⁴ Dictionaries review include Merriam-Webster, Random House Dictionary, The New Dictionary of Cultural Literacy and Collins English Dictionary

is explicitly defined by the ‘triad’ of 1) publicly-led project that uses expropriation 2) demolition and redesign and 3) a comprehensive plan.

On the other hand, the postmodern period saw the emergence of a succession of different movements (Revitalization, Regeneration, and Rehabilitation) that sought to rectify the process of urban renewal. It is worthy to note that according to my research not a single dictionary recognizes an official definition of these terms, and so a literature review is necessary to elucidate their meanings. First of all, the HUD defines urban development as a generic keyword that involves the “process of construction, expansion, and management of urban areas” (i.e. any form of urban renewal is a subset of urban redevelopment). Urban Rehabilitation has also been clearly articulated. The word ‘rehabilitation’ is defined as “to restore to a good condition, operation, or management”⁵ and Urban Rehabilitation is identified as the “process of restoring, repairing, and maintenance of buildings (usually of heritage value) and infrastructure for efficient urban operations”.

The terms Urban Revitalization and Urban Regeneration deserve closer scrutiny. Their ubiquitous understanding is that they seek to “catalyze positive social and economic change in Urban Renewal programs” (Grodach and Ehrenfeucht, 2016). In their book *Urban Regeneration: A Handbook (2008)*, Roberts and Sykes profess that “there is no single prescribed definition or form of urban regeneration practice and no single authoritative source of information on urban regeneration” (Chapter 1). They continue to emphasize the virtual absence of “quality literature” regarding the whole of the organization of the regeneration process. They contend that little material is available that combines coverage of

⁵ Random House Dictionary

all the fundamental topics that regeneration entails such as the social, economic, physical, and environmental dimensions of the redevelopment process beyond a wide but “fragmented” array of fashionable⁶ topics. Grodach and Ehrenfeucht (2016) make an attempt to formalize Urban Revitalization. They explain that although it seeks to achieve a balanced development agenda, revitalization is a “broad and malleable term imbued with politically charged meanings that media, government, community groups, and academics alike employ in different ways for different ends” (p. 6). However, they do attest that calls for healthy sustainable environments and social inclusion are central to the revitalization discourse. And although it has no strategic manifesto or defined set of guidelines, according to the authors, revitalization (and semantically regeneration) centers around six main dimensions: Human capital, socio-cultural equity, built environment, place attractiveness, economic competitiveness, and environmental sustainability.

According to what was presented, I decided to select ‘Sustainable Urban Renewal’ as a thematic title for the reform agenda of Urban Renewal for the following reasons:

- The formalization of ‘Urban Renewal’ in the English dictionary in comparison to the irresolute definitions and multiplicity of the reactionary alternatives.
- The importance of emphasizing the term ‘Sustainable’ as a reference to the specificity of the contemporary planning period and trajectories
- Identifying the term with its explicit association to a historic and theoretical revision of the legacy of Urban Renewal

⁶ Such as partnership, tackling social exclusion, promoting flagship projects, and urban greening according to the authors.

- Stressing the three essential factors of Urban Renewal (State-led, Demolition, Masterplan) as integral components of the revision agenda⁷

2. *Defining ‘Sustainable Urban Renewal’ of Neighborhoods*

On the dawn of the 21st century, and as a result of the now globally ratified issue of climate change, a new impetus for innovation is challenging cities. Dubbed as the 6th wave of industrialism⁸, this new paradigm is predicated on notions of sustainability, resource efficiency, whole-system design, and renewable energy⁹. As climate change is predicted to have catastrophic and even detrimental effects on our ecosystem and hence our built environment, it is up to our city agents – planners, architects, engineers, environmentalists, policy-makers, politicians, stakeholders and citizens - to employ their ingenuity to respond (Calthorpe, 2009). Hence, the main challenge of contemporary urban societies is the one of sustainable urban development.

Urban Renewal and Sustainable Development are inextricably linked and their importance is being increasingly recognized (Zheng et al, 2014). As Urban Renewal is the

⁷ That will also be identified as critical elements in the case-study in the next chapter

⁸ In Hargroves and Smith’s book *The Natural Advantage of Nations: Business Opportunities, Innovations, and Governance in the 21st Century*, the authors posit that our era is undergoing a new transition in production. They theorized a set of six chains of innovation waves since the industrial revolution. Starting from the 1st wave in 1785 in which horses and carriages were introduced in transportation and “new industries began to develop along rivers and canals using water power”, to the 2nd wave of railways and steam power, 3rd wave where “electricity and the internal combustion engine saw electric tramways built”, to the 4th wave of petrochemicals, electronics and aviation innovations, and finally the 5th wave of that corresponds to the development of digital networks, biotechnologies, and software information technologies. Hargroves and Smith postulate that the 6th wave, coinciding with the end of cheap oil, introduces a complete re-orientation of the production methods of society to more efficient and comprehensive paradigms. “It is the beginning of an era of resource productivity and investment in a new series of sustainability technologies related to renewables”. Examples of innovations include industrial ecology, renewable energy production, cradle to cradle thinking, green nanotechnology, biomimicry etc....

⁹ The Brundtland Report, 1987

process of using resources to rebuild the abandoned and derelict built environment, 'Sustainable' urban renewal is known to aim at achieving so by improving the economic, social, and ecological aspects of the practice through a combination of reconstruction, renovation, and rehabilitation (Friedman, 2015). To date, no strategic manifesto or set of guidelines exist to steer Sustainable Urban Renewal (Lee and Chan, 2008). However, an integrated policy can assist urban renewal by clearly defining environmental and social objectives without compromising economic development in the long term. It can alleviate the problems of urban decay as well as enhance socio-economic conditions of residents and can provide valuable opportunities to achieve sustainable development if applied conscientiously (Lee and Chan, 2008). On a more intimate scale, research on sustainable renewal of neighborhoods has often been completely ignored (Blum, 2007; Hurley and Horne, 2006). Because land development and building construction often take place at a neighborhood level, neighborhoods are at the frontline of sustainable urban development (Sharifi and Murayama, 2013). Being the main components of cities, if neighborhoods are not sustainable, cities cannot realize Sustainability either (Choguill, 2008).

The main challenges hampering sustainable neighborhood renewal are regulatory fragmentations and broken linkages between the various considerations affecting Sustainable Urban Renewal (Zhiyong et al., 2017). These conflicts are also exacerbated by the lack of overall strategies and guidelines for 'good' practice as well as the limited applicability of urban sustainability assessment tools, indices, and indicators especially in the context of cities in the developing world. The result is an urban planning industry shackled by a series of contradictory or piece-meal development policies that stifle economic opportunities,

higher public expenses, and exacerbate problems of built stock dereliction and/or community deprivation (Zhiyong et al., 2017).

3. Urban Renewal and the Conflicts of Sustainability

In theory, Sustainability is primarily concerned with reconciling the three poles governing any development: Economy, Social Equity, and Environment (both natural and man-made). In practice, however, the mostly conflicting interests of business groups, environmentalists, and community advocates coupled with fiscal, professional, and political constraints limit the prospects of achieving such a delicate balance. Notwithstanding, in his seminal work, Campbell (1996) contends that the discipline of urban planning and design is endowed with the strategic position at the epicenter of these conflicts. He posits that planning has the potential to play a leading role as a mediator between contending interest groups in their “battle” over to grow the economy, to distribute this growth fairly, and to preserve the integrity and resourcefulness of environment.

Campbell defines the industry of planning as having three main priorities: Economic development, social justice, and environment conservation. These goals simplistically form the three vertices of a triangle, whose center of gravity conceptually symbolizes sustainable practice – i.e. the perfect balance which means holistically harmonizing the three goals of growth, preservation, and equality (Figure 16). The binary of two poles produces a distinct type of conflict, a set of paradoxical conundrums that each development project needs to address in order to achieve sustainability.



Figure 16: The Triangle of conflicting goals for planning and the three associated conflicts according to Campbell (1996)

- The Property Conflict

The first conflict concerns the commodification of land under capitalism as private property and its repercussions on society (displacement, erasure, transformations...). The contradictory set of claims for socio-economic development sometimes elicits government intervention to ensure the efficient and beneficial use of the same property for all parties. State interventionism is crucial to counteract market inadequacies (externalities, breakdowns, coordination, monopolies...) and develop policies, regulations and laws that can recreate a modicum channel for the redistribution of wealth (zoning, housing shortage, welfare, income disparities...) (Harvey, 1985 ; 1991). However, in their study of renewal, Davis and Whinston (1961) conclude that state-led renewal is not needed if coordination and redevelopment between stakeholders take place voluntarily.

- The Resource Conflict

In its quest for securing growth and returns, business consistently exploits natural resources for the economy's production, transportation, and consumption. Paradoxically, as these resources are finite, businesses require regulation to safeguard those resources and the capacity of the ecology to reproduce itself for present and future demands. This is known as the Resource Conflict. According to Campbell, this conflict is most evident in the physical boundary and size between city (economic utility) and natural environment (ecological utility) which is most evident in cities' constant endeavor to limit their growth and ensure compactness and natural landscape integrity (Hack, 2012).

- The Development Conflict

The development issue is the most elusive: It lies between the poles of environment and social justice. It questions the modalities in which society chooses to manage resources as it strives to increase social equity while conserving a sustained relationship with the environment. It belies the decision that has to be made whether to preserve the integrity of nature or to fulfill Man's aspiration for social welfare, prosperity, and progress and how the benefits of these are distributed among society's members.

E. Case Studies in 'Sustainable Urban Renewal' of Neighborhoods: Learning Lessons

Campbell's triangle has many implications. It shows both the type of conflicts created between contradictory poles, but it also shows the potentials of complementarities of interests that can be harnessed in between. Conflicts are unavoidable; they require planners to find compromises in their policies and decision-making. It impels planners to act as

mediators in between advocates of interests at each pole, be they environmentalists, labor and social activists, or businessmen. Although daunting a role, planners can be especially creative in building coalitions between these separate groups by employing their procedural, cunning, and diplomatic skills to become central players in the battle over sustainability.

This section will attempt to showcase situations of planning meditations between stakeholders at each pole. Due to the specificity of each situation, three case-studies will be presented, each of which is exemplary of one type of conflict. Kogarah Town Hall will demonstrate a resource conflict situation, Vesterbro a property case, and finally Vallbona will highlight how society can overcome the conflicts of development versus preservation.

1. The Resource Conflict: Kogarah Town Square

One example of a resource conflict is the Kogarah Town Square project in Sydney (Figures 17-18-19). What was initially an underused lot in an inner-city location surrounded by poorly performing businesses but conveniently adjacent to the main train station, underwent a redevelopment scheme following the principles of New Urbanism: Pedestrian, Green, and Transit-Oriented design. Upon its completion in 2002, the site became a “thriving mixed-use development consisting of 194 residences replete with offices, retail spaces, community spaces including a public library and town square. Passive design strategies were incorporated into the new buildings such as optimum orientations, light shelves and shading devices, and low impact materials as well as active energy systems such as Photovoltaic cells, grey water recycling, and low-flow faucets. Newman et. al (2009) explain that in comparison to a conventional development, Kogarah Town Square saves 42% on water consumption and 385 tons of greenhouse gases in addition to incalculable savings on carbon emissions from

increased reliance on pedestrian and public transportation means. Transient-Oriented Developments (TOD's) can also be built as public-private partnerships (PPP's) because there is shared value for the agency running the transit system with the increased value of real-estate that a transit station creates. One example of such a project was in Chatswood, Sydney, where air-rights were sold to a developer in return for the construction of a train station precinct along with a mixed-use residential area (Newman et al., 2009, p. 121). PPP's are one way that city governments can intervene to spur investment in green infrastructure and projects that have a double return of improving environmental performance and energy-efficiency while also creating opportunities for employment and economic growth.

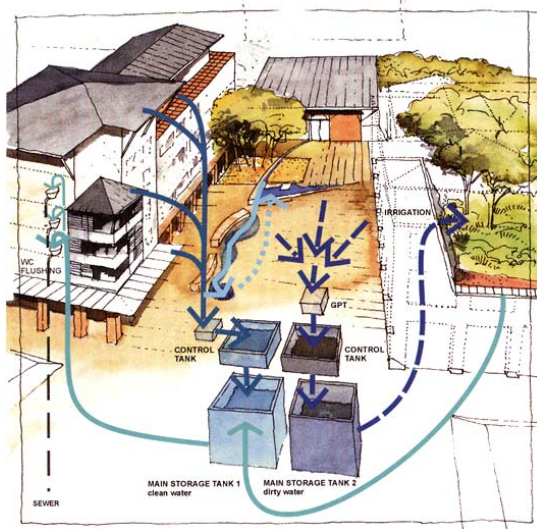


Figure 18: Kogarah Town Square: Stormwater Collection and Reuse System, *Source: Olsson, Associates Architects*



Figure 17: Kogarah Town Square Energy-Efficient Building, *Source: Olsson Associates Architects*



Figure 19: Kogarah Town Square Pedestrian-Oriented Development Plan, *Source: Olsson & Associates Architects*

Lessons of the Resource Conflict:

Physical / Environmental

- Revising Zoning and Regulations to favor:
 - Dense and compact form (balance between open and built spaces)
 - Mixity of land uses
 - Passive design strategies (orientation, envelope...)

Economy

- Financial incentives to employ green ‘active’ systems (PV, SWH...)

2. *'Soft' Gentrification: Vesterbro and the Property Conflict of Renewal*

This case-study illustrates the outcomes of the publicly-instigated and supported Urban Renewal of Copenhagen's Inner Vesterbro district. Apart from physically upgrading the decaying buildings, the municipality's aim was to include the inhabitants in the urban renewal process and, seemingly, to prevent the dislocation of people from the neighborhood. Although the socially-inclusive plan did manage to appease gentrification on the short run, on the longer run, evidence is consistently showing that middle-class inhabitants are now replacing the high concentration of socioeconomically vulnerable people that characterized Vesterbro before the urban renewal. This process is exemplary of the inevitability of relocation of lower-strata inhabitants and geographical unevenness even as state and market forces contrive strategies to ensure social justice and equality in redevelopment.

a. The Pre-Renewal State of Vesterbro

Vesterbro, literally translates as 'Western Bridge', is a centrally-located district abutting the western side of the old town of Copenhagen. From its onset, Vesterbro was speculatively developed in the 19th century as rental housing for an emerging class of migrant worker to the city. However, the economic boom of the 60's encouraged the well-off residents to flee its squalid flats for the suburbs. Since that time, Vesterbro has always been popularly recognized as being among the poorest areas of Copenhagen and particularly and increasingly associated with urban decay and a high proportion of marginalized social groups. By the 1980's, the building stock of Inner Vesterbro was not only among the most archaic in Copenhagen, but also had the poorest standard of basic amenities (majority has no central heating, no toilet/bath...) (Figure 20). Furthermore, the population of Inner Vesterbro

was characterized by much higher rates of unemployment, delinquency, and receipt of social security than the rest of the city (Figure 21). Blemished as a problematic, the district repelled any favor for private redevelopment. This increased the district's spiraling underdevelopment becoming known just before the eve of its renewal as the center of the drug trade, partially-related sex trade, and all the accompanying tarnished reputation of misery, decay, and degeneracy.

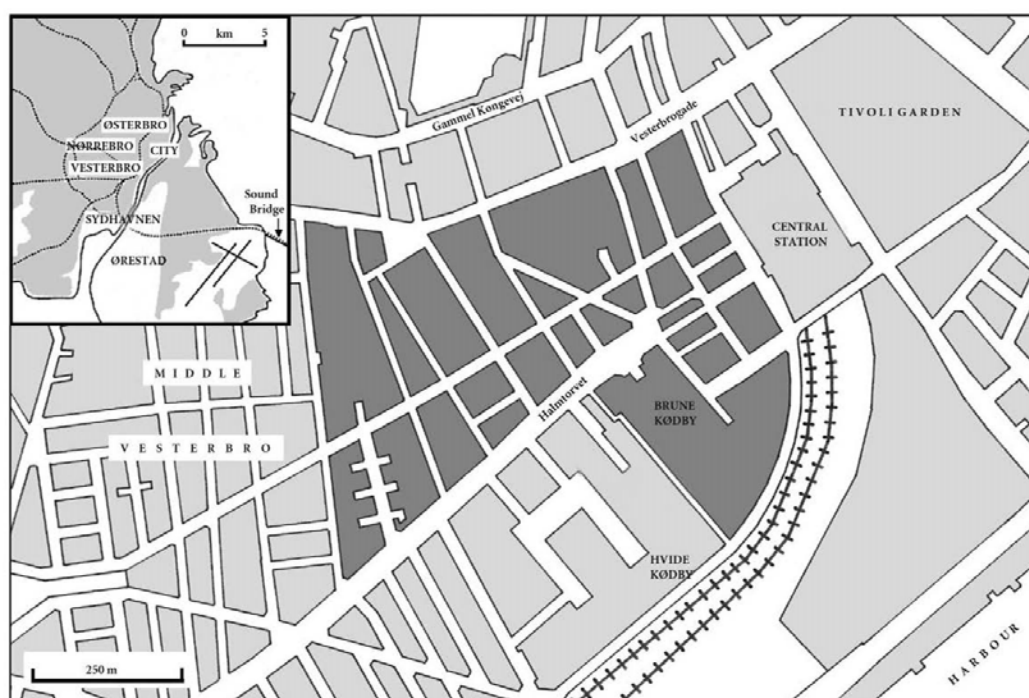


Figure 20: The Inner Vesterbro Area, Source: Larsen and Hansen, 2008

	Inner Vesterbro	Vesterbro	Copenhagen
Inhabitants, 1989 (number)	6 118	34 428	467 850
Unemployed, 1989 (percentage)	c.20 ^a	18.2	12.2
Social security, 1990 (percentage)	c.24 ^b	23.1	16.1
Foreign citizens, 1989 (percentage)	19.4	15.4	7.2

^a 1985.

^b 1987.

Figure 21: Socio-Cultural Characteristics of Pre-Renewal Inner Vesterbro, 1989/1990, Source: Copenhagen Statistical Office (1989/1990)

b. A Socially-Conscientious Renewal Program

By the early 1990's, Denmark underwent a major political shift in attempt to counteract economic stagnation. The country began a massive wave of liberalization of public assets in hopes of kick-starting economic growth in the creativity and innovation sectors (Hansen et al., 2001). In terms of urban politics, central government adopted a proactive politics of putting Copenhagen on the map of 'global cities' and relinquishing its historic traditions in restricting investment and curbing growth. Thus, Copenhagen's council switched from an agenda based on redistribution to one of development wherein for instance, global capital was encouraged to commodify spaces, private enterprise included in decision-making, and public sector embraced entrepreneurial forms of organization and management. In such a manner, Copenhagen started targeting what Richard Florida (2002) called the 'creative classes by reorienting its policies towards the service market, in a race for global competitiveness.

Dubbed as "the most substantial Urban Renewal project in Copenhagen in the 1990's"¹⁰, but adhering to its long legacy of social consciousness and politics, the city council opted for a renewal program for Vesterbro but with a "social dimension" (Larsen and Hansen, 2008). It aimed to appease the adverse effects of market-led redevelopment by aiming at a policy of "social uplift"¹¹. First, the renewal was not to demolish large swaths of the district but to adopt a general strategy of physical upgrade. Second, the renewal was to be planned

¹⁰ Copenhagen Municipality (1990) *Københavns Borgerrepræsentations Forhandlinger, Vol. 151*. Copenhagen: Schultz.

¹¹ København and SBS (1991) *Fornyelse Indre Vesterbro, Vol. 1*. Byfornyelsesselskabet København and SBS-Byfornyelse, Copenhagen.

and implemented for two to four blocks per year by priority. Third, an urban renewal center was installed to involve the inhabitants in the planning of the project. Finally, attempts at setting rent-control schemes on newly renovated flats were made to limit speculation and control induced dislodging. However, it was a vehemently contended issue between conservatives and social-democratic officials.

c. A Case of 'Gentle' Gentrification

15 years after the renewal process began, Vesterbro became a radically transformed district (Figure 23): The old tenement houses stand with facelifted facades, modernized interiors with convenient services, solar paneling and greening elements adorning its roofs and open spaces. Moreover, the ambiguously-framed 'social uplift' strategy achieved a 'classic' (Clark et al., 2007) middle-class gentrification result: Vesterbro is now a district of hip and second-hand shops, ethnic greengrocers, fashion design outlets, exclusive showrooms, and chic pubs and bars. In contrast to a pre-renewal rate of 20% unemployment, by 2005, joblessness was reduced to 5% of Vesterbro's population. In addition, the share of long education rose 15.1% (Surpassing Copenhagen's average rate) and employees' salaries increased by 11.2% (Figure 22). Finally, even though the renewal act stipulated for gradual rent increases over a period of 10 years to smoothen transition to the new market values, rents in 2005 in Vesterbro ended up by 2005 increasing by approximately 50% due to exorbitant renovation costs.

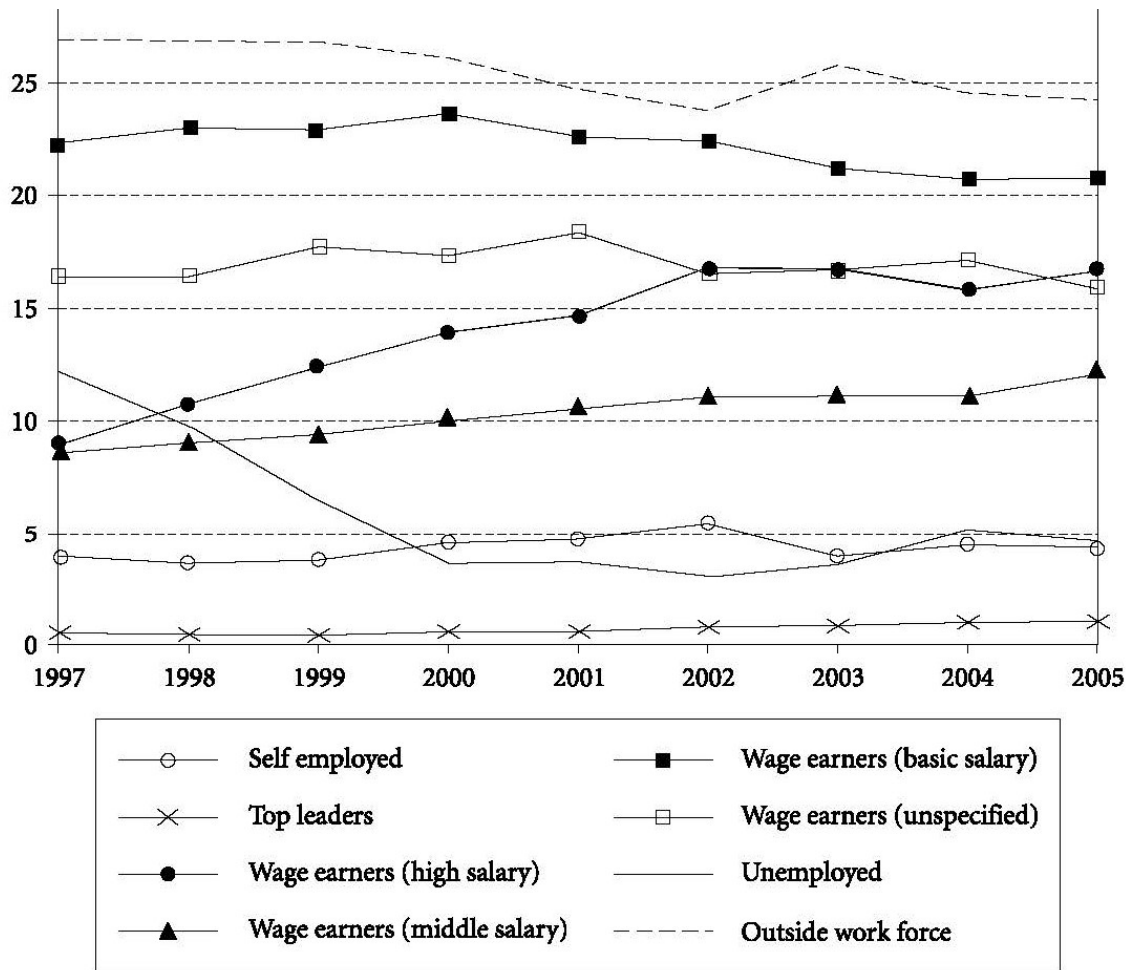


Figure 22: Socio-Economic Changes in Inner Vesterbro 1997-2005, *Source: Larsen and Hansen, 2008*



Figure 23: Vesterbro after Renewal, *Source: shopwindows.com*

Vesterbro was theorized by Larsen and Hansen (2008) as a ‘gentle’ gentrification: In the short term, rent rebates and inclusion strategies have enabled pre-renewal inhabitants to stay in the area. But on the longer term, “stealthy” market mechanisms were able to penetrate private rental flats and co-operative housing flats (based on democratic common ownership of properties) and increase rental and share prices. Criticisms of the municipal council were voiced in argument that it could have enacted better market-deflecting mechanisms such as rent-ceilings, established contact committees to coordinate social work in the district, and mostly initiated an ‘employment committee’ to address employability and better income for residents. Notwithstanding these arguments, the local gentrification of Vesterbro is ineluctable and typical of general housing transformations in the revanchist city (Smith, 1996) of the post-Fordism era. It is a process that has come to emphasize the ‘economically sustainable’ at best (or ‘worthy’ low-income groups at worst) in a process of urban reshuffling the commodified space into its most profitable uses. Thus as Copenhagen seeks to integrate into the global creativity industry (Hansen et al., 2001), the resulting social costs, geographic polarization, as well as gentrification are “inherently conflict-ridden” processes, even in the most peaceful Nordic periphery of Europe, where creative destruction is commonly perceived as being the “most gentle and democratic kind” (Clark et al., 2007).

Lessons of the Property Conflict:

Economy

- Project ownership by town council

Society

- Interdisciplinary project team
- Community involvement in all stages of conception and implementation (planning, management, maintenance, promotion)
- Gentrification cannot be averted, but dampened through:
 - Inclusionary Zoning (15% affordable housing in new developments)
 - Short-term rent controls
 - Mixity of ownership patterns
 - Social mobility opportunities (training for new employment)

3. Solving the Development Conflict: The Case of Vallbona Neighborhood

Xavier Gabarrell et al (2011) sought to theorize the approach for the sustainable redevelopment of neighborhoods through their work on the redevelopment project of Vallbona, a neighborhood in Barcelona. Their aim is two-fold: First, to apply a methodology of eco-design on future neighborhoods; and second, to detect and underscore the most relevant practical opportunities and constraints typical of such a process.

a. The Case of Vallbona

Vallbona is located in the northern part of Barcelona. It occupies an area of 32.6 hectares and comprises mainly a mix of dilapidated structures and agricultural land stranded between natural and artificial barriers (Besos River, roads, highways, and railways). Influenced by housing shortage in the city, as well as a general ‘Barcelonian’ predilection for sustainability (especially in water management, greenhouse gas emissions, energy efficiency,

landscaping...), Vallbona will undergo a rigorous sustainable redevelopment. For this purpose, a public agency for the development of urbanism and infrastructures in the Metropolitan Area of Barcelona formed an interdisciplinary work group. This group was aided by a team of researchers from the Institute of Environmental Science and Technology at UAB. The team's work was constrained due to time limits specified by SRA¹² policies. To streamline the process, the team devised a methodology similar to the eco-design of products but on a broader neighborhood scale (see Appendix II). The working steps can be summarized as follows:

- I. Formulation of the working group under the auspices of the Metropolitan Area of Barcelona
- II. General charrette sessions to discuss goals, strategies, and visions
- III. Environmental, social, and financial analysis and diagnoses of strengths and weaknesses
- IV. General sessions about the fundamentals of sustainable neighborhoods and thematic sessions on topics such as :
 - i. Mobility and Transportation
 - ii. Energy and Networks
 - iii. Green and Agricultural Areas
 - iv. Water and Wastes
 - v. Social aspects and Public Spaces
- V. Setting of realistic goals as per the diagnosis
- VI. Design of strategic actions for each topic each with different options (Economic viability and Cost-Benefit analysis for each option)

¹² Vallbona was classified as a Strategic Residential Area (SRA) to expediently solve regional housing shortages (Generalitat Catalunya, 2007)

- VII. Setting of environmental indicators for prognosis
- VIII. Planning proposal formulated
- IX. City council evaluation
- X. Public hearing and Debate with residents
- XI. Revision and initial approval of the planning proposal

Xavier Gabarrell et al. (2011) posited that “the planning of a sustainable neighborhood does not necessarily mean that the eventual neighborhood will actually be sustainable”. In acknowledgement of constraints and limitations, the authors set a realistic tone about what can be achievable; however, they also stressed the importance of establishing monitoring and control mechanisms to ensure goals are met after commissioning and operational hurdles, errors, and inefficiencies are overcome.

b. Determinant Factors and Results

Because a universal model for sustainable design does not yet exist, the working team devised a set of ‘determining factors’ categorized into six groups: Territorial, financial, technical/methodological, political, legal, and sociocultural. Each factor will be elaborated on in the following sections, describing its characteristics, constraints or opportunities, and recommendations if any, and accordingly assessed in the relative chart (Appendix III).

- Territorial Factors

Urban form is defined as the spatial configuration of fixed elements including spatial pattern of land uses, their densities, in addition spatial design of transport and communication infrastructures (Anderson, 1996). Sustainability can better be envisioned in compact rather

than dispersed settlement (Jenks et al., 2008) because of advantages in terms of proximities, transport, and open spaces for vegetation, and energy and distribution efficiencies. Dense neighborhoods can contribute to a sense of community and render services more tenable because of economies of scale. Also, greater compactness means better local management of utilities (water and water) according to Jenks. On the other hand, too dense neighborhoods can backlash in their inability for passive lighting, cooling, and space design. In terms of resources, self-sufficiency can be achieved by the efficient management of water, wind, insulation, solar radiation, agricultural and landscaping etc.... Planning should determine the availability of these natural resources and their proper use in order to meet as much as possible local neighborhood demand. In the case of Vallbona, water through the river corridor, insulation, solar radiation for photovoltaic and thermal energy systems (Figures 24-25), and agricultural areas for food production are readily available to reduce external dependencies. By minimizing the amount of resource consumption, coupled with maximizing the use of local resources, the neighborhood is planned to increase its resilience and diminish its ecological footprint. The neighborhood will house a total of 2,120 dwellings with a floor-to-area ratio of 0.7 and a population density of 15,000 inhabitants / sq.km.

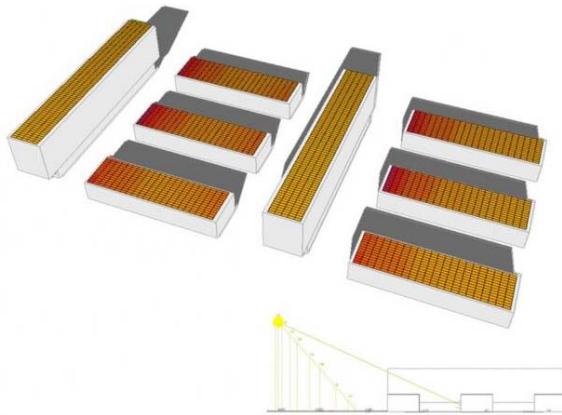


Figure 25: Solar radiation and natural lighting studies in Vallbona, *Source: arquitecturaysostenibilidad.com*

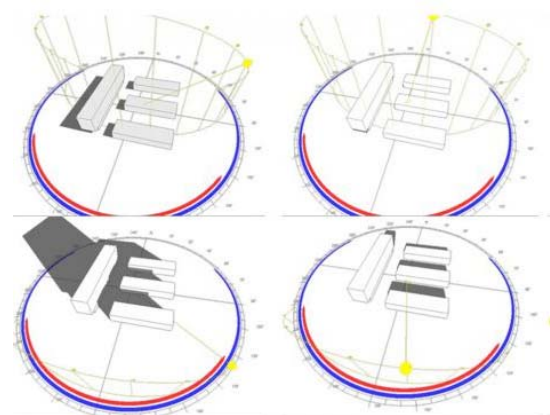


Figure 24: Photovoltaic systems study in Vallbona, *Source: arquitecturaysostenibilidad.com*

- Financial Factors

Financial criteria are almost always a limiting factor for innovative sustainable strategies as financial sources are almost always constrained and all decisions usually are circumscribed within a Cost-Benefit analysis (Rudlin and Falk, 1999). The problem of sustainability financing is that positive social and environmental externalities of an investment are not well captured by the prices calculation in a market economy. These include the wide benefits of urban agriculture, rainwater harvesting, pedestrian streets and the like. Also, phasing is a common complication. Even though phasing is beneficial in the management of budgeting, in relation with sustainable practice, the success and feasibility of many high-efficiency systems relies on the economy in scale of occupants. This would provoke losses to the operator since the private developer has to cover these massive upfront costs. To overcome these issues, in Vallbona, the problems of financing were surmounted due to the fact that a large tract of the neighborhood was owned by the town council and a

public agency, capable of committing large upfront costs, was in charge of financing the project.

- Technical / Methodological Factors

An interdisciplinary and synergetic team, whose knowledge and expertise spans a wide range of topics and their practices, constraints, existing conditions, and specifications, is an integral part of any sustainable development. Such a team should have access to environmental data and indicators in order to design achievable numerical goals. The design plan conceived by the team should be aware of time lags between planning and execution; this issue can seriously undermine operational efficiencies in the future. Moreover, life-cycle assessments of strategies should be attended to. This is a recurrent problem in business as usual models where policies tend to be assessed based on their short-time financial returns. However, sustainability entails that decisions be dominated by complete life-cycle spending and return calculation. Indeed, the Vallbona team exploited the synergies between them. For example, the inclusion of politicians and administrators in their decision-making processes circumvented any reluctance or refusal of public agencies to commit to some audacious, expensive, but rewarding strategies. Notwithstanding, consensus was sometimes unattainable either because of dearth of environmental data or future accountability. Finally, the design team made rigorous calculation in life-cycle costing and financial returns of numerous energy efficiency and generation systems and made design decisions based on future more stringent standards.

- Political Factors

There is a salient tendency among local governments to demonstrate support and promote sustainable neighborhood development. The city of Barcelona in particular has wide experience on implementing pioneering, environmentally friendly strategies such as district heating, waste-water recycling, and rainwater harvesting. Nonetheless, public agencies' enthusiasm is almost always coupled with recalcitrance or hesitance. This is due to a lack of practical experience in implementing 'risky', controversial, but innovative solutions. Also, the nature of political affairs directs officials to seek limited time horizon investments and narrow interest group perspectives (Berke, 2008). It is thus necessary to cultivate political leadership to take initiative and adopt much needed changes in our cities of the future. Luckily, current global policies are increasingly targeting sustainable development trajectories. Examples include the World Bank's strategy on the urban environment and UN-Habitat's New Urban Agenda. These policies and programs can serve as guides, support, and case-studies to reference to or even replicate by local town councils. Moreover, international donor agencies are increasingly mandating sustainability targets as conditions for financing.

- Legal and Regulatory Factors

Town planning is commonly subject to building codes, zoning regulations, and municipal ordinances, and even to regulations at metropolitan and national levels. Since sustainable development is relatively a new field, and since urban regulatory determinants evolve and adapt at a slow pace, archaic or outdated regulations may often hinder or limit the range of innovation possibilities that aim towards designing sustainable neighborhoods (X Gabarrell, 2011). Given the case of Vallbona was originally designed to solve housing

shortages, it was particularly difficult to install a rich mix of uses because 90% of the project area was required for housing units. Accordingly, such a segregated land use program causes a surge in the need to commute and reduces the economic performance of the neighborhood and the creation of employment (Calthorpe, 2009). Also, some regulations created impasses against efficiency directives. For instance, dis-incentivizing car reliance by reducing car parks was counteracted by the compulsory minimum parking laws. Likewise, there was an impossibility of building a local compost plant due to that fact the Waste Management Authority does not support decentralized plants.

- Socio-Cultural Factors

The trajectory of society towards more environmentally friendly attitudes might allow a decrease in resource consumption and wastes and emissions in cities (Calthorpe, 2009). For that purpose, common and shared spaces (squares, parking lots, laundries...) offer a lot of virtues, not only by optimizing on financial and environmental costs, but also by creating a sense of community membership, belonging, and shared identity. Furthermore, community involvement is seen as a “vitally important factor for planning and achievement of sustainable neighborhoods (Rudlin and Falk, 1999). With participation residents are actively involved in the development process which will guarantee a better community engagement and management and by extension better maintained physical environment, greater public spirit, and more financial and material savings (X Gabarrell, 2011). Likewise, on a district scale, seamless physical connectivity of a neighborhood with its surroundings ensure flows of people, permeability, and enhanced mobility, security, and integration (Newman et al, 2009). One major challenge, such as the case in Vallbona, is that its

neighboring areas are disreputable for low-income, high unemployment, and high crime rates. The remedy of such an issue is beyond the scope of a limited neighborhood intervention. Another common deterrent is that good communal relationships are hard to forge with a newly-admitted group of residents, such as the case in gentrified areas, and sometimes strategies for social interactions are welcomed to different extends by residents (X Gabarrell, 2011).

c. Vallbona Eco-Neighborhood Masterplan

From X. Gabarell's (2011) point of view, although the design compromised immensely on its initial sustainability targets (because of regulatory, political, and financial, physical constraints), it nevertheless produced a satisfactory result. For Vallbona's masterplan incorporates many strategic actions that make it a higher performing neighborhood relative to other segments of the city. The fundamentals of design were a holistic approach, considering life-cycle assessments and costs, reduction in energy and material inputs by the use of local resources (water, solar energy, and solid waste management), the reduction of waste outputs, and the conservation of some existent agricultural activity. Eventually, the proposal (see Appendix IV) was a compact high-density urban design with energy-efficiency and passive design criteria for housing, green open spaces, pedestrian links and public transportation with few offices and commercial activity. Special emphasis was given to community through self-promotion campaigns, a community center, public spaces, and construction, management, and maintenance through local cooperatives.

Lessons of the Development Conflict

Physical / Environmental

- Revising Regulations to favor dense and compact form (balance between open and built spaces)
- Life-cycle Assessments and Cost-Benefit analysis for energy-efficient measures
- Training in environmental and energy-efficient practices

Society

- Interdisciplinary project team
- Community involvement in all stages of conception and implementation (planning, management, maintenance, promotion)

F. Towards an Assessment Framework for ‘Sustainable Urban Renewal’

1. The Reform of Urban Renewal

In light of current rampant urban challenges, a comprehensive and careful recycling and restudy of the legacies of Urban Renewal have become imminent. The solution, stated Gans (1966) is not to repeal Urban Renewal – as Jacobs and her cohorts had done - but to carefully re-evaluate its shortcomings and devise strategies to transform it from a program of slum clearance into a program of urban vitality and reform. As Grigsby (1966) further explained, Urban Renewal, in its widespread recognition that cities need to be renewed, disregarded the appreciation of the complexity of economic, social, and environmental forces that accompany the apparently ‘simple’ endeavor of demolishing the old and replacing it with the new and glitzy. This is why a reform of Urban Renewal must return to its initial objectives but reconfigure its policies to be more inclusive and sustainable (i.e. to reconcile economic,

social, and physical needs). Weaver (1965) contends that a revival of Urban Renewal must primarily set an objective to get as much economic impact as possible and upgrade the physical environment and living conditions of inhabitants, while occasioning the least amount of social costs and displacements. Gans (1966) even suggests the introduction of employment as a primary factor in renewal projects: “The building of new towns would have to be coordinated with measures aimed at attracting private industry to employ the prospective residents, at creating job opportunities, and at offering intensive training for the unskilled after they have been hired.” Also, both authors, explain that Urban Renewal projects cannot be realistically expected to solve socio-economic problems of the city due to their limited scope and application. These projects can at best contrive a compromise between the three tiers of development – the economic, social, and environmental - each according to its own particularities and situations (Campbell, 1996).

2. Sustainable Urban Renewal: A Framework for Planning and Assessment

No strategic manifesto has yet emerged to define and theorize the practice of Sustainable Urban Renewal in general (Zheng et al, 2014; Zhiyong, 2017), let alone neighborhood development in particular. The available literature on neighborhood assessment is limited to technical indicators and criteria, most prominently from rating systems such as LEED, BREEAM and the link. These systems disregard the intricate processes underpinning the practice of planning and also lack criteria concerning the socio-political and economic hindrances. It is thus the object of this section to create a set of guidelines, a matrix for assessment, to guide and assess the sustainability of future Urban Renewal projects. I will develop this framework through synthesizing my research by

reconciling the criticisms with the conveniences of Urban Renewal under the auspices of sustainable development ideals and conflicts.

a. The Economic Framework

Cities are economic engines; their ability to furnish growth and prosperity for all is precipitated upon their ability to be centers of production, innovation, and mostly employment. This is mostly true today in the context of globalized cities that are vying to emancipate their creative potential and attract foreign investments and business (Florida, 2002). In their constant tendency to progress, cities' need for "creative destruction" impels structural transformations that will eventually lead to gains and losses in their human geographies. It is here that the State, as the sole guarantor of wealth distribution should intervene both to ensure favorable conditions for the success of the projects and to minimize the uneven effects and disparities of market-led redevelopment. Thus, on the political-economic level of Urban Renewal, several points must be heeded:

In terms of project management:

- Assessment: Blighted areas should be earmarked for renewal according to assessment studies based on physical, socio-economic, and environmental criteria. Such studies can regulate against the abuse of the law of eminent domain. Also, renewal areas should be limited to the scale of single neighborhoods.
- Feasibility: Visions and strategies of renewal should primarily seek to strengthen the economic base of cities. They are to be financially feasible based on elaborate and long-term cost-benefit, return-on-investment, and life-cycle analyses. Any renewal project

must include an employment generator chapter that ensures job opportunities that can to some extent anchor locals in place, reduce displacements, as well as provide financial stimuli and sustainability for the project.

- Schedule: Urban Renewal projects should abide by a rigorous execution schedule as a binding contract that administers penalties for delays. Financial liabilities on delays ensure proper delivery, efficiency, and rapidity.

In terms of Planning Instruments

- Urban Renewal projects are to be state-led and managed as a step to democratically counteract and curb political interests and clientelism as well as to mediate between parties with conflicting backgrounds, ideologies, and interests. Projects will follow a Public-Private Partnership (PPP) model based on public financing and ownership and private bidding, operation and management. This can be achieved through Article 22 in the Lebanese Planning law (69/1983) which stipulates the creation of a Public Agency to expropriate, re-parcel, and redevelop a site under study. Also, Articles 19-41 in Decree 2866 (Public-Private Partnership Law, 1959) furnishes guidelines on the investment cooperation schemes possible between the private and public sectors. Unrestrained competition should be mandated on the private sector's participation process through published public offers, tender biddings, and selection criteria.
- Special regulations, zoning exemptions, and tax abatements should be granted for the planning and design to allow for innovative solutions for fiscal, social, or environmental problems. For that purpose, Articles 7-8 of the Planning Law (69/1983) may be

implemented that allow for an area to be rezoned, new laws need to be decreed to allow for special regulations such as transfer of development rights (TDR) and tax abatements.

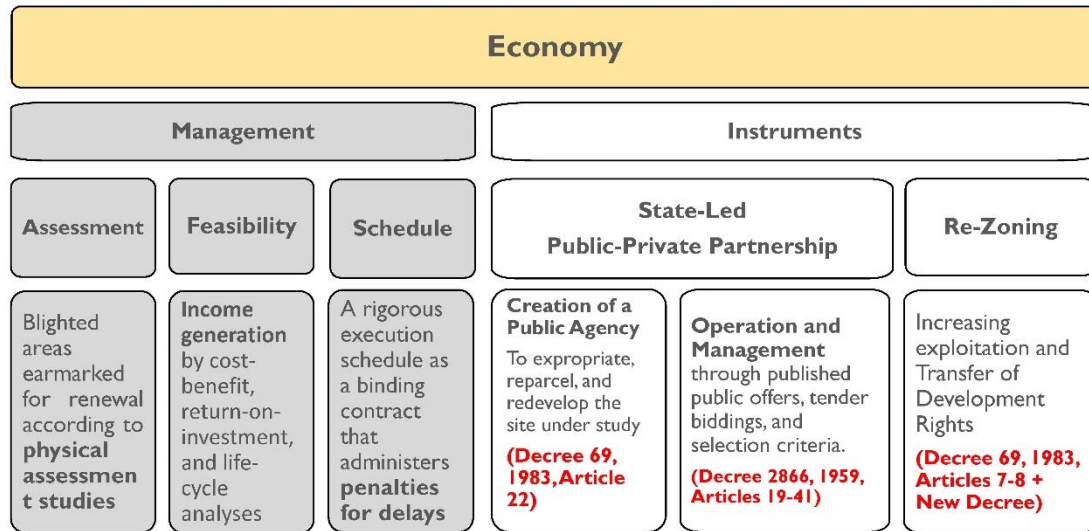


Figure 26: Summary of the Economic Framework: In Red: Lebanese urban planning laws

b. The Social Framework

Democracy is sanctioned by the Constitution. It is a firm conviction that democratic institutions and public participation are the safety valves for effective governance and social justice to be maintained. The core of a vigorous democratic system is an active, responsible, and informed community. Therefore, to sway any Urban Renewal project from ceding to totalitarianist tendencies and elitist interests, public participation and engagement should be mandated on all levels of decision-making. This is a vital condition to assert that not only tightly-knit communities, their relationships and survival are preserved, but also that resources are being efficiently distributed and compensations justly forwarded to the parties adversely affected. The criticisms of Jane Jacobs inextricably relate to this issue: For by participation, communities are given the chance of ownership to safeguard the execution and

operation of the project. On the other hand, class and ethnic segregation can be limited and the inevitable gentrification processes dampened. Thus, the criteria for ensuring democratic governance and social justice of an Urban Renewal project can be summarized as follows:

In terms of Management:

- Interdisciplinary: An interdisciplinary team (public officials, planners, architects, environmentalists, community representatives...) must be created under the leadership of a public agency that will schedule charrettes and planning sessions leading to the creation of a consensual proposal for the renewal of the area. Working teams should include representatives from the existing communities. The outcomes of charrettes and all decisions should be propagated through regular public meetings with the population of the area under study.
- Community: Urban Renewal projects should include community representation boards and provisions such as community centers, services, and training and education on maintenance and upkeep, new job skills, and sustainable practices. Projects must enforce the creation of a community board with the responsibility of managing the affairs and upkeep of the redeveloped area after commissioning.
- Mixity of Tenancy: Newly developed housing units need to provide a mix of council-owned and privately-owned rentals as well as apartments for private ownership.

In terms of Planning Instruments

- Local: Applications for Urban Renewal should be solicited solely by a local agency (municipalities, councils...). This can be done by soliciting articles 10-11 of the Lebanese Planning Law (69/1983) that give the municipality the ability to propose redevelopment

proposals and masterplans for approval from the Directorate General of Urban Planning (DGUP).

- **Inclusion:** Inclusionary zoning measures (10-15% affordable housing) should be enforced on any reconstruction plan to reduce dislodging for ‘worthy’ low-income residents as much as possible and fight against spatial class segregation. Rents and resale prices should be controlled for a specified short-time phase (15 years). For this end, new decrees have to be issued.
- Relocation and alternative decent housing provision should be a prime concern of the renewal policies. This can be implemented either by the construction of public housing elsewhere in the city, or through adequate indemnifications paid for residents. The Lebanese Planning Law (69/1983) establishes this tool in its Article 19.

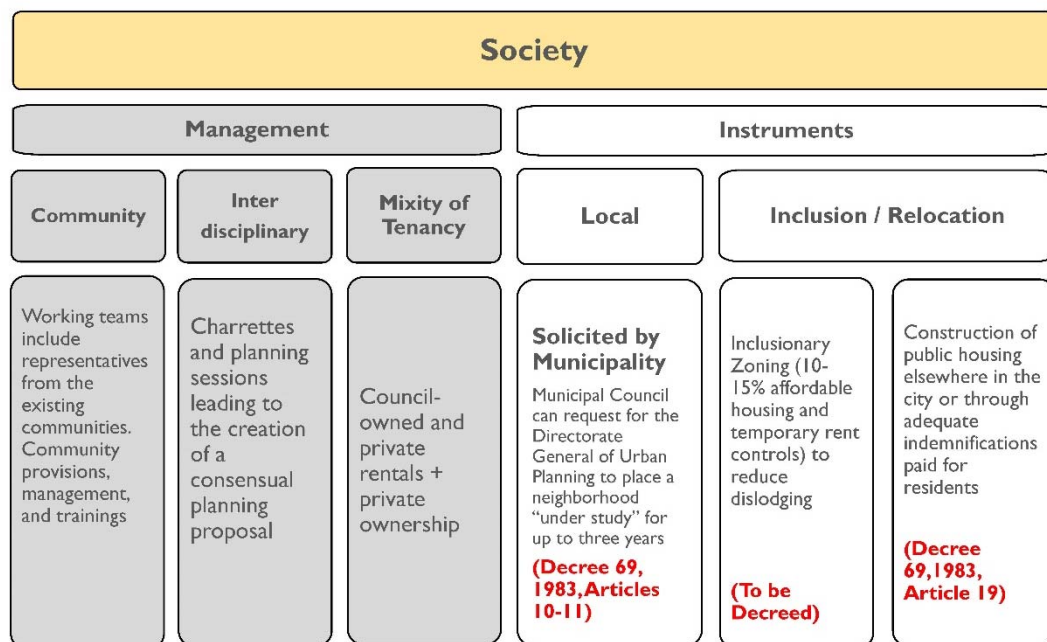


Figure 27: Summary of the Social Framework. In Red: Lebanese urban planning laws

c. The Physical/Environmental Framework

Urban form is the physical manifestation of the political and socio-economic dynamics of a city. Jacobs (1961) warned of the possible unintended consequences of large-scale meddling with the built environment. She contended that urban vitality cannot be simply summoned in the aftermath of such cataclysmic practices and the imposition of utopic design models. In effect, it is true: Cities' forms should be respected, not bulldozed. That being said, we also should not forget the importance of a well-designed, functional, and aesthetic, and environmentally-efficient built environment in its power to effect unfavorably or positively on the psyche, demeanor, and habits of residents as documented in the literature. Designers should exhume their self-confidence and faith in rationality and reform. Renewal has to function in a focused diagnostic and surgical manner, its' destructive nature limited to where it would reap substantial economic, social, and environmental benefits exceeding their equivalence in preservation. Any intervention should adhere to sustainability in its three poles and seek to align their sometimes contradictory natures. The points guiding physical intervention is summarized as follows:

In terms of Management:

- Selectivity: Demolition acts in Urban Renewal projects should be selective, warranted, and limited to the dilapidated, substandard, and inefficient built stock. Also, rehabilitation, physical upgrade, and retrofit programs of existing buildings that demonstrate historic or environmental value should accompany renewal projects when applicable

- Mixity: Urban Renewal proposals should strive to achieve a mixity in land use and spatial design. This can be done by implementing new zoning plans.
- Integration: Renewal projects should allow for a seamless physical integration with their surroundings.
- Training: Trainings in environmental efficiency measures and techniques should accompany all renewal plans.

In terms of Planning Instruments:

- Transit: Urban Renewal design layout should commit to dis-incentivize automobile by encouraging pedestrian activity, cycling, and reliance on public transport options.
- Landscaping: Any Urban Renewal plan must refurnish the study area with a delicate balance of landscaped and agricultural areas, as well as open and public spaces.
- Efficiency: Newly-constructed edifices should demonstrate high environmental performance and criteria in terms of density, compactness, orientation, passive design, energy-efficiency measures, and energy-production from non-renewables. These measures should be incorporated following a cost-benefit study that heeds keeping upfront costs as low as possible. Amendment to Lebanese Building Law (646/2004) should be decreed to enforce passive design and energy efficiency measures.
- Green Infrastructure: Urban Renewal projects must allow provision (whenever feasible) of green infrastructure and services (district heating and cooling, waste-water recycling, solid-waste management plan, green street lighting, Storm water harvesting, local materials...) to reduce as much as possible the ecological footprint of the neighborhood.

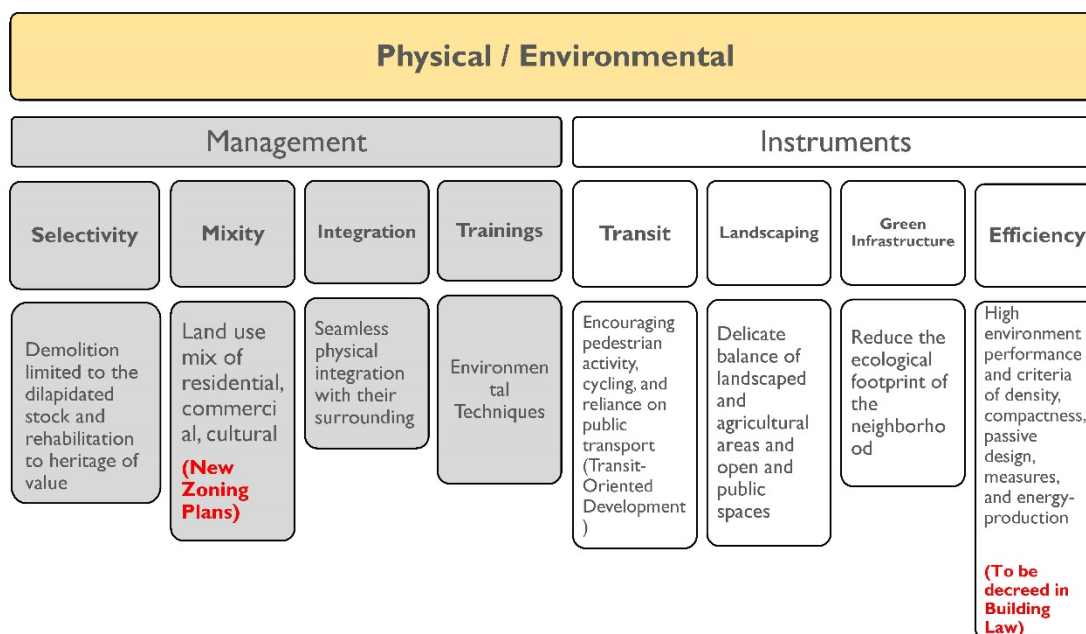


Figure 28: Summary of the Physical/Environmental Framework. In Red: Lebanese urban planning laws

d. Sustainable Urban Renewal Framework

The Sustainable Urban Renewal is based on a tripartite system, each of which defines the approach to resolve the conflicts of each tier of the sustainable development triangle (Figure 29). It is a model of Public-Private Partnership that ensures financing and ownership be the sole prerogatives of state agencies, but operation and management be relinquished to market forces. The model strives to ensure representation of all involved stakeholders and the inclusion of previous tenants in its plans, either through zoning measures of management of their relocation. Finally, in terms of the environment, the framework abides by the principles of New Urbanism and Green Building Design (Calthorpe, 2009) (Figure 30)

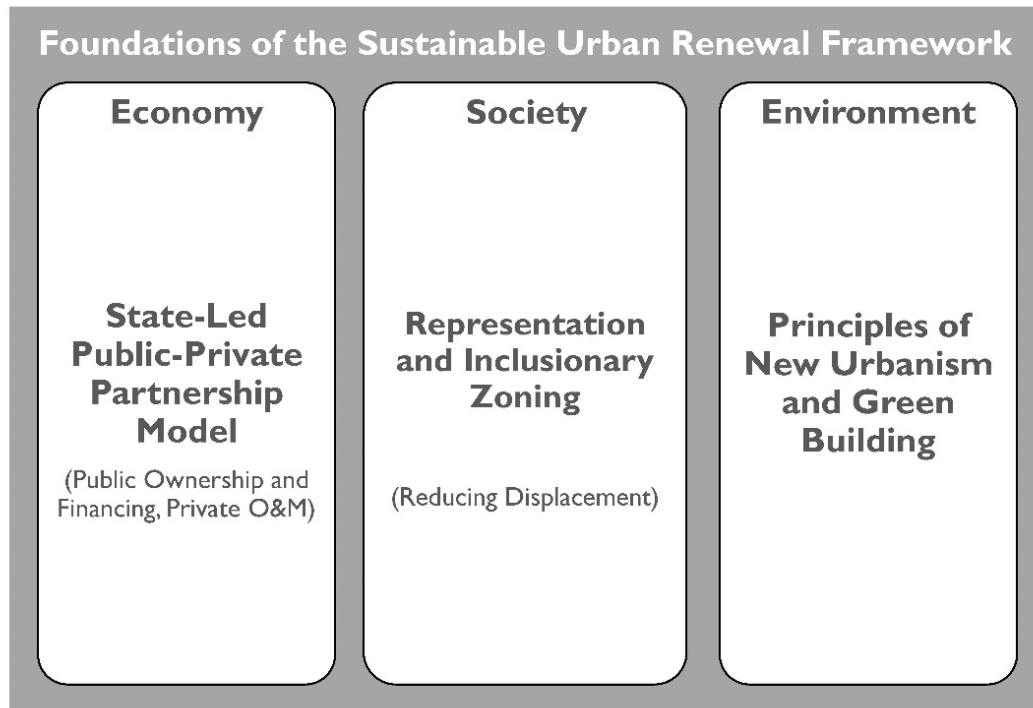


Figure 29: Foundations of the Sustainable Urban Renewal Framework

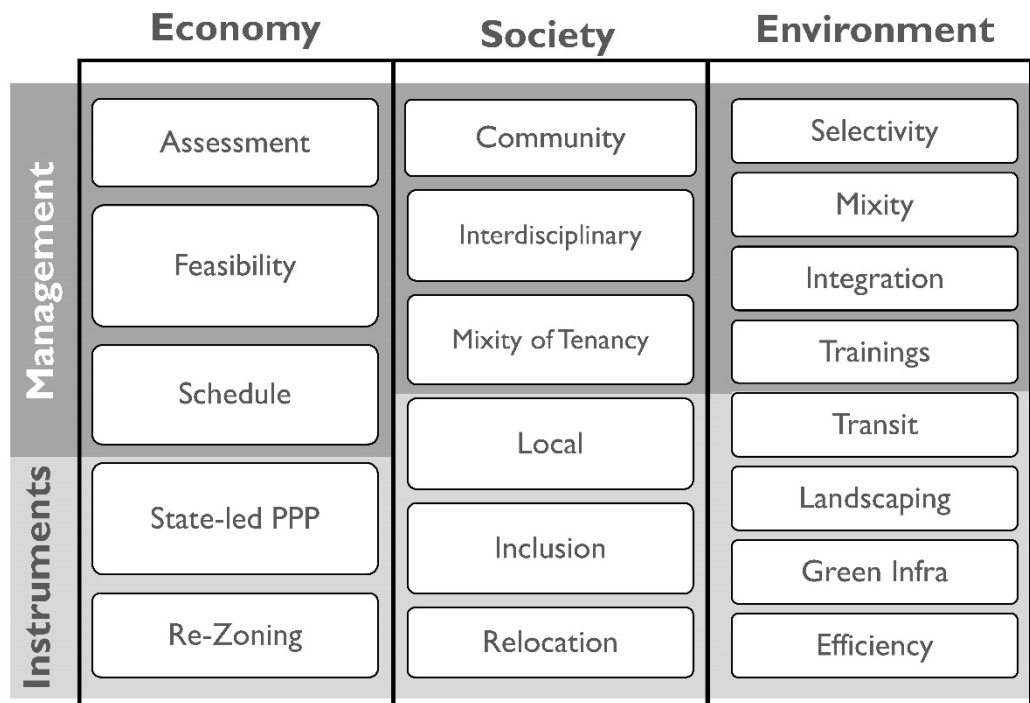


Figure 30: The Sustainable Urban Renewal Framework

G. Conclusion

In conclusion, this chapter, in its exhaustive but critical and comprehensive review of the legacies of Urban Renewal policies of the mid-twentieth century, sought to decipher the unravel the controversies, misunderstandings, shortcomings, as well as the contributions of these policies to the formation of planning theories and urban forms as we know them today. Moreover, it has also sought to rethink Urban Renewal in the context of the urban challenges that inundate our contemporary cities, most notable the need for sustainable development and resiliency. It is hoped that with such a profound re-appreciation of the benefits of Urban Renewal, coupled with reforms to address its criticisms, may pave the way forward for urban planning practitioners and theorists to recycle renewal from the “dust-bin” of planning history. The revision of Urban Renewal does not claim to be the single – or finest - paradigm of sound planning practice, nor an elixir that can solely the remedy all social, economic, and environmental ailments straddling our cities. The revision only seeks, through and informed and critical summoning of historical experiences of the planning industry, to widen the spectrum of the instruments furnished for 21st century urban planners and designers. For it is only with a diversity of methodologies and tools that planners can choose the best mechanism to tackle the impediments and challenges that threaten the prosperous development of our cities.

CHAPTER III

AL-TAMLIS: FROM STRONGHOLD TO A CONTESTED NEIGHBORHOOD¹³

A. Introduction

1. *Preface*

Al-Tamlis, a neighborhood on the northern edge of Tariq el Jdideh District, has secured an infamous reputation in the popular memory of Beiruti citizens throughout much of its history. Its name, literally translates as “the inability to see clearly”, evokes a sense of its built fabric: A tight cluster of buildings pierced through by narrow and dimly-lit alleyways. Al-Tamlis was formed sometime in the early 30’s period, and the stories of its creation are myriad. The most likely narrative recounts that the early settlers of this area were displaced denizens of the old walled city of Beirut – to what constituted then the urban

¹³ Section of the final report submitted by author in partial fulfillment of UPRL-661: Urban Planning Workshop entitled *Mobility and Neighborhood Planning* in Tariq Jdideh, December 2016, American University of Beirut. The report content was edited to the size of a thesis chapter.

periphery of the city - as a result of the *grand travaux* that the French authorities initiated. This narrative could be validated by the documented existence of a neighborhood in the old town owning the exact name (www.yabeyrouth.com). In any case, al-Tamlis in its early years was no distinct feature: A sparsely populated region with a rural agrarian economy typical of its surrounding areas of al-Mazraa, al-Amliyah, Kaskas, and Mar Elias. In the early years of independence, but mostly throughout the Lebanese civil war, al-Tamlis developed a unique identity that distinguished it from its surrounding: It became commonly known as ‘the Stronghold’. As will be elaborated later, geographical determinants and historical social dynamics set al-Tamlis on a course of anti-development that led to its stigmatization as a harbor for the impoverished, an asylum for outcasts and fugitives, a safe haven for armed militia groups, and a birds nest of security agents and spies. Today, al-Tamlis still displays the symptoms of underdevelopment: Ragged and dilapidated houses pierced by occasional newly-built high-rises, worn-out infrastructure of roads and pavements – most of which is too narrow for vehicular traffic, an almost complete absence of public utilities such as domestic water supply, electricity, and sanitation, extreme poverty, economic stagnation, and political tension and sectarian hostilities. To compound matters further, the area is currently a real-estate magnet as it borders a vibrant economic artery of the city (Corniche al Mazraa) and having a road that was planned by Ecochard to cleave through its fabric connecting the Corniche to Tariq el Jdideh. As such, al-Tamlis is soon to undergo major urban renewal that threatens to disaggregate its social constituent and eradicate its distinct identity in the collective memory of Beirut.



Figure 32: View of al-Tamlis, *Source: Author, 2016*



Figure 31 View of al-Tamlis, *Source: Author, 2016*

2. Research and Data Collection Methodology

Having such a distinctive character, al-Tamlis captured our interest, and so we embarked on a thorough investigation of the neighborhood, deciphering its history and unearthing its current socio-political, economic, and infrastructural challenges in hopes to devise an urban revitalization strategy and a set of policies that can guide its much belated urban development. Access to credible information and data was challenging to say the least, especially socio-economic statistics. So, field work was our main source: We conducted a thorough documentation of the entire building stock (Appendix V), held seven interviews with residents (Abou Mohammad Sabra, Ahmad Rammal, Bouchra Sabra, Emm-Ali Khalil, Mahasen Olwiya...), interviewed Mr. Ziad Itani (journalist, author of ‘Allah Hariri Tariq Jdideh series of articles), and cross-referenced the information with historic maps of Beirut to validate their content.

B. Al-Tamlis: A Socio-Political Narrative

1. The Migration

In the 3rd decade of the twentieth century, Beirut was on development frenzy: As a seat of the newly established French mandate over the region and a boosted merchant economy based on trade through its newly expanded port with the Syrian hinterland, Beirut was undergoing major urbanization. Part of its urban planning scheme for the city, the French protectorate continued an urban renewal project of the old intra-muros city, a project that was already initiated by the bygone Ottoman rule but left incomplete severely scarring the old city fabric. This vast reconstruction project led to the displacement of a large fraction of Beirut's inner-wall residents and forced the segment with meager financial means to relocate to the outskirts of the city. By then, the newly formed districts of Tariq el Jdideh, al-Mazraa, al-Barbir, Mar Elias, Wata-el-Msaytbeh were attractive nodes for rural migrants to the city seeking work opportunities as well as for Beirut's younger generation expanding outwards to more affordable locations. For rural migrants and Beirutis alike al-Mazraa, at a walking distance from the city center, was reminiscent of a village life: A pastoral landscape of agricultural land to be cultivated for livelihood, dotted by sparsely located residences. On the west of the historic road that connects Beirut to Sidon was the sandy hill commonly referred to as 'Tallet Zreik'. This natural topographic feature formed the southern limit of al-Mazraa area and was on which the district of Tariq el Jdideh – 'the new road' – was constructed in those decades. In 1933, al Maqassed foundation purchased a land on the northern slopes of the hill and built an orphanage and later a college. These institutions and their services served as attraction nodes for new-comers and Beirutis to relocate, predominately families from the Sunni sect of Islam expanding southward from the peri-center areas of Beirut. Through the

years of national independence, the area of al-Mazraa and Tariq Jdideh witnessed steady urbanization as a result of new roads that were formed linking these areas to the districts of Beirut and the newly constructed tramway line connecting those districts to the commercial center of the city. These public works coincided with a steady but gradual densification in the late 40's following the mass exodus of Palestinians after the Nakba of 1948 but mostly the migration of rural families from southern Lebanon. These families who came mostly from the villages near the newly formalized Lebanon-Palestine borderline that cut-off their trade with the Palestinian and Syrian towns - exacerbated by the ensuing hostilities of Zionist occupation of Palestine, were farmers. They found in al-Mazraa, in its then agrarian landscape and proximity to the city, a fertile soil for settlement. These migrants, who mostly belonged to the Shiite sect of Islam, enriched the socio-religious mosaic of al-Tamlis.

2. The Enclave

The Beirut map of 1936 (Figure 36) shows the first traits of what is to become al-Tamlis: A Trifurcated road that led to a cluster of houses built along the lower slopes of Tallet Zreik. We do not know for certain at which date the name al-Tamlis was given to this particular neighborhood or for what reason. However, the pattern of its densification is evident through the subsequent historic maps of 1940 and 1945 in which agricultural roads weaved the houses together to form an organic network. The next decade would prove instrumental in the formation of al-Tamlis as we know it today. Following the first master plan for Beirut put forward by Ecochard in 1954, Tariq Jdideh was formalized under the regulations of Zone 4. Also, Saeb Salam Avenue was constructed (1955) to complete the southern ring road around the city and the entire surrounding areas were planned with road

networks of highways and inner service roads that were built simultaneously throughout the second half of the decade. This masterplan had severe consequence on the geography of al-Tamlis and formed the framework of its (de)evolution in the years to come. Saeb Salam Avenue cut off al-Tamlis from its natural extension to the north with the districts of Barbour, Amliyeh, al-Noueiri resulting in a distinctive neighborhood sandwiched between the avenue to its north and the Zreik hill to its south. Moreover, Ecochard envisioned a road that punctured through the neighborhood linking the avenue to al-Maqassed complex and further to the center of Tariq Jdideh. This road, the only case of its kind in Tariq Jdideh, was never implemented for reasons obscure to us. Nonetheless, a plausible hypothesis could be, judging from the Beirut map of 1959, that the steep topography of Zreik hill hindered the construction of this particular road. The series of infrastructural developments around al-Tamlis in the 50's, the only publicly-led projects to ever take place, and the incompleteness of the planned road (and the concomitant reorganization of the territory) inadvertently resulted in its physical isolation from its surroundings, froze its morphology, and forged a social enclave that will set the stage for a unique geopolitical position in the history of Beirut in the later second half of the 20th century.

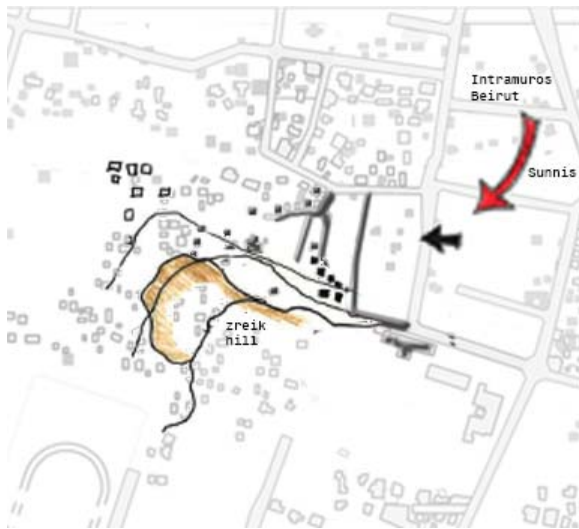


Figure 36: Al-Tamlis in 1936, Source: IFPO

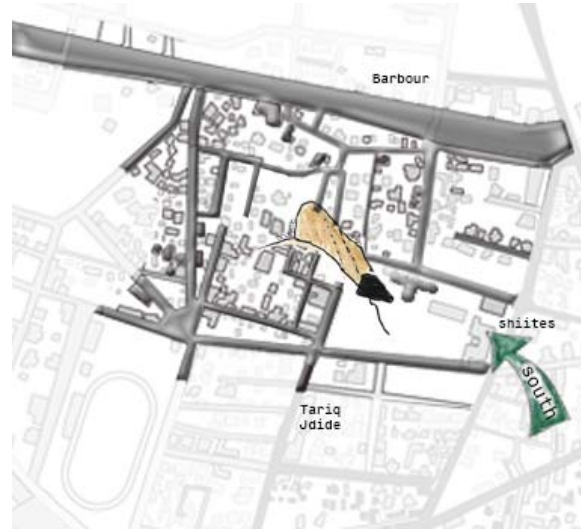


Figure 33: Al-Tamlis in 1940, Source: IFPO



Figure 34: Al-Tamlis in 1959, Source: DGU

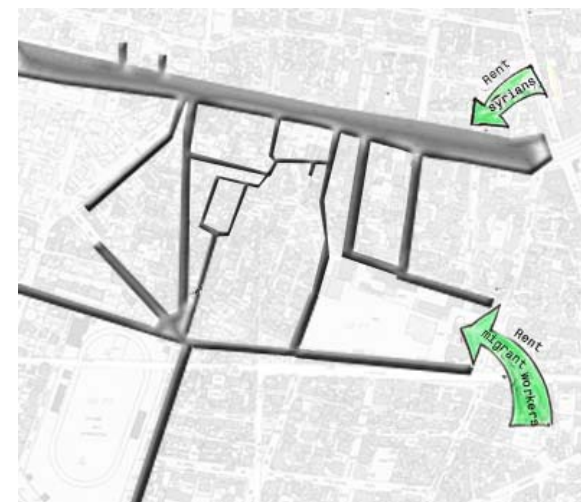


Figure 35: Al-Tamlis in 2004, Source: DGU

3. The Stronghold

As the first two decades of independence saw the morphological formation of al-Tamlis, the following decades of the Lebanese civil war will bestow upon the neighborhood a new political role. In 1957, the Movement of Independent Nasserites – or what was later referred to as Al-Murabitoun, the movement’s military wing – was formed by the late Ibrahim Koleilat (popularly known as Abou Chaker) and had its headquarters located in close

proximity to al-Tamlis. The Murabitoun, which espoused the secular and pan-Arabism ideals of Jamal Abdel Nasser's Egypt, was an attraction to the residents of Tariq Jdideh in general, and al-Tamlis in particular. The party's political goals were to preserve the Arab character of Lebanon and in the long term establish a socialist regime in the country. Being radically opposed to the Christian-Maronite-dominated political order, the Murabitoun, whose leader was a notable Sunni Muslim who was born, lived, and studied in the district's schools of Maqassed and Beirut Arab University, gained staunch supporters in Tariq Jdideh. Also, the party's socialist agenda was a magnet for the working classes, farmers, and the disenfranchised which were the majority of the Beiruti Muslim population at the time. The relationship of al-Tamlis and the Murabitoun was mutually beneficial. On one hand, the fact that the entire residents of the neighborhood were Muslims and belonged to the working classes inspired most of them to support the party and even some of them to join its ranks. Moreover, the multi-confessional character of the movement reflected the values of coexistence and tolerance that were shared among the inhabitants of al-Tamlis. On the other



Figure 38 Al-Murabitoun Banner, *Source: al-tawhid.org*

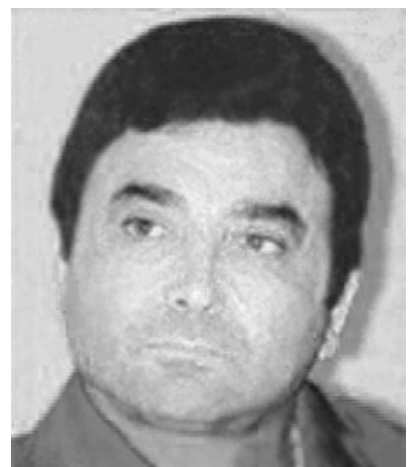


Figure 37 Ibrahim Koleilat, *Source: Fanoos*

hand, al-Tamlis's prime geopolitical location captured the party's interest: An insular settlement of closely-knit houses that is easily defensible and that was in close proximity to Corniche al-Mazraa – a vital commercial and infrastructural artery of the city- that offered the party strategic military advantage. This geopolitical leverage was first evident during the months-long civil strife of 1958. It also proved its valor once again during the infamous 1982 Israeli invasion of Beirut when till this day residents of the area still proudly recall that al-Tamlis was impregnable throughout the months of aggression. During the first years of civil war, al-Tamlis offered the Murabitoun a strategic command of Corniche-al-Mazraa to be officially labeled as the 'Stronghold of Tariq Jdideh' and played an instrumental role in securing the district against any 'breach' from militias in the neighboring areas. It is also noteworthy that the Palestinian Liberation Organization (PLO) had a military foothold in the neighborhood alongside its ally until its expulsion from Beirut in the summer of 1982. The demise of al-Tamlis's notoriety came with the events of February 6, 1984, when the Murabitoun lost battles against the insurgency of the alliance led primarily by Amal Movement (whose leader a Shiite warlord Nabih Berri) and the Progressive Socialist Party (led by a Druze feudal-lord Walid Jumblat). The Murabitoun was later dissolved and Abou Chaker forced into asylum. In one interview, a Tamlis man lamented that the dissolution of the Murabitoun by Shiite and Druze factions disentangled the atmosphere of religious tolerance and sparked an environment of mutual-wariness between the residents of al-Tamlis. "This unfortunate event would plant the seed of internal-conflicts to come" explained the man.

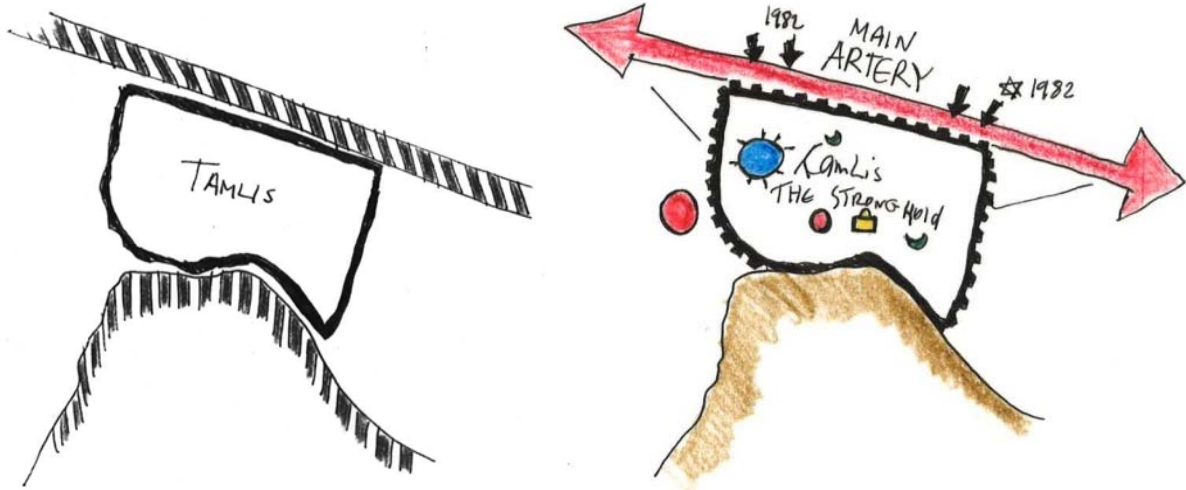


Figure 39: Al-Tamlis, a Geo-Political Strategic Position

In 1991, a new politician rose to prominence. Harnessing the support of the residents of Tariq Jdideh mainly through initiating public projects such as the Jammal School and the Beirut Municipal Stadium rehabilitation project, the late Prime Minister Rafiq Hariri commanded the allegiance of the Beirut Sunnis who saw in him a chance for their reinstatement as a major political power. Contrarily to the rest of Tariq Jdideh, and although his party the Future Movement had a locale in the area, Mr. Hariri did not approach al-Tamlis with any development projects. Consequently, al-Tamlis's virtues as a solid fortified cluster became a recipe for its stagnation. Its social and built fabric was left to the woes of deterioration. This is why, at the turn of the century, a new social dynamic was well underway: Residents who were property owners and could afford the means were leaving the neighborhood to seek housing in the more affordable suburbs – mainly in the towns of Aramoun, Bchamoun, Doha, Naimeh and the like – and renting their units to a new wave of low-income migrants from the Beqaa and the South, African and East Asian migrant workers,

and more recently Syrian refugees. This influx of new-comers added to the ethnic diversity in al-Tamlis and contributed further to its stigmatization.



Figure 41: Future Movement Supporters in TJ,
Source: WordPress



Figure 40: May 7, 2008 Fault Line in Mazraa,
Source: Getty Images

After the assassination of Rafiq Hariri in 2005, the divide between Sunnis and Shiites became paramount. Tariq Jdideh was established as the stronghold of the Sunnis as intermittent clashes and hostilities erupted around the city and its southern suburbs in the following years. However, it was on May 7, 2008 that the divorce was consecrated when the violent clashes between Sunni Future Movement (pro-government) and Shiites' Amal Movement and Hezbollah (opposition) took to the streets of Beirut. Corniche al-Mazraa became to the most pronounced fault line and al-Tamlis re-established its legacy as the frontier due its location at the entrance of Tariq Jdideh overlooking the division line and the Shiite-dominated district of Barbour. Although a temporary event, the clashes of May 7 had an enduring effect on al-Tamlis further aggravating its socio-economic conditions. It is precisely this feeling of alienation that formed a breeding ground to al-Taqwa Movement, an incipient right-wing Sunni political player in Tariq Jdideh, whose radical views on Political

Islam coupled with its philanthropy, filled in the voids left by the fracture of the Future Movement and attracted fervent supporters mainly from the younger generations of al-Tamlis. The ‘brotherhood’, which launched itself from the nearby Abdel Nasser Mosque, conceives of themselves as social reformers who, in conformance with Lebanese laws, work to spread orthodox Islamic values and practices.

4. *The Breach*

A closer scrutiny of al-Tamlis nowadays reveals a covert political struggle. Today, al-Tamlis is a mixed religious enclave, composed almost entirely and equally of Sunnis and Shiites. However, the Sunni residents are constantly alarmed of a foreboding change. The decay and fracturing of the Future Movement has left an indelible mark on the neighborhood. The Sunnis feel they have lost their main financial buttressing and have been left exposed to their main adversary. Meanwhile, Shiite prominent figures and businessmen, most notably the inheritors of Grand Ayatollah Mohammad Hussein Fadlallah (the late Shiite scholar who was coined the ‘spiritual mentor’ of Hezbollah), own three relatively large properties abutting Corniche-al-Mazraa, have bought two adjacent parcels, and are allegedly trying to buy the last two from the Kabriti family (Sunnis) to consolidate their ownership of the block in aim to build a shopping mall. Other accounts testify on how Chahine family – a Shiite family purportedly having close ties with Hezbollah – has bought a large empty lot in the heart of al-Tamlis, acquired a small one from a Sunni owner, and is currently in the process of buying two adjacent corner lots in the prospect of constructing a residential building. The Sunnis are wary of these developments: “The fortress is being breached” whispers one resident from the area as he sips his coffee in the ‘safe’ confines of al-Hares alleyway. Residents fear that the

Shiite developers have a covert agenda of ‘breeding out’ the Sunnis (according to an interview). Thus, a new round of war between the two religious groups is well underway: A proxy-warfare of real-estate speculation and development that threatens not only to gentrify al-Tamlis and reshuffle its social constituent, but more importantly, that takes a sectarian taint to be perceived as a “strategic conquest in times of peace” exclaimed one local Sunni resident. The Sunnis fear that their power is significantly withering, in an area with such a significant historic importance and political reverberations, and their anti-Shiite sentiment is being fueled accordingly. It is enough to wander around the narrow alleyways and cramped buildings of al-Tamlis to detect the mounting sectarian tensions – motorcycle driving recklessly by one another, political banners hung on walls, young people congregating shouting slogans - that have become routine neighborhood scenes. Notwithstanding, the Sunnis are not completely powerless and are attempting to counteract their eventful displacement. They have delegated their resistance to Beirut Municipality (whose mayor is a Sunni) who has been in the process of negotiating a deal in the last few months with the Fadlallah family to acquire their parcels and build a much-needed underground parking space and a park to serve the district. The planned road of 1954, as well as the interest of Sunni property owners to redevelop their lots, is currently on hold awaiting the outcome of these deliberations. In an informal manner, a display of belligerency of Future Movement devotees can be spotted around an intersection close to the ‘demarcation line’ of Corniche-al-Mazraa. Supporters keep regular presence at al-Tamlis café strategically located in that zone, as well as in nearby convenience store and a local pedestrian market. Residents have reported that this intersection remains routinely “patrolled” by young men around the clock - especially in the night hours – as a precautionary measure against possible “attacks from the other side”.

Numerous pictures of Saad Hariri – Rafiq Hariri’s son and successor – dot the landscape of al-Tamlis, most markedly on the Corniche front and in the al-Tamlis central ‘square’.



Figure 43: Saad Hariri Picture at al-Tamlis Gate



Figure 42: Al-Taqwa Banner on al-Tamlis Road

In a parallel scene, al-Taqwa Movement, a group of devout religious Muslims, born and bred locally, own two important footholds in al-Tamlis: One locale holds the party’s offices and a parking lot for its dedicated fleet of ambulances, and the second is the ‘Liwa’ Sports Club’ hosted in one of the floors of a residential building. Al-Taqwa is but one of multiple orthodox religious groups that have gained ascendancy as a political alternative movement to Hariri in dire attempt to lure frustrated groups of Sunni residents especially youngsters.

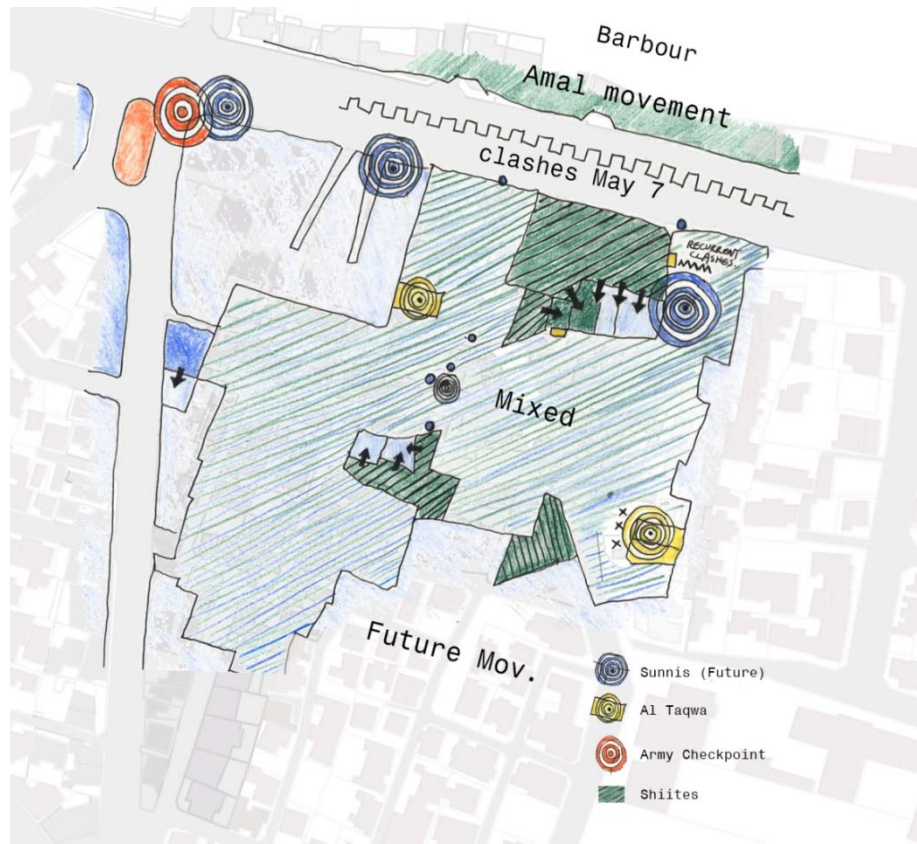


Figure 44: al-Tamlis Socio-Political Map

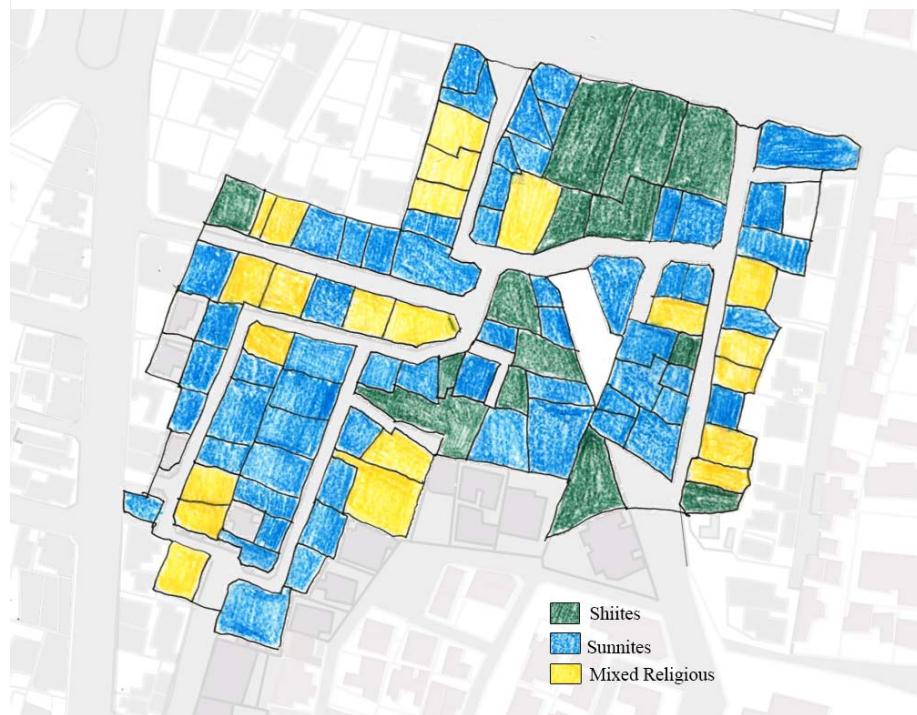


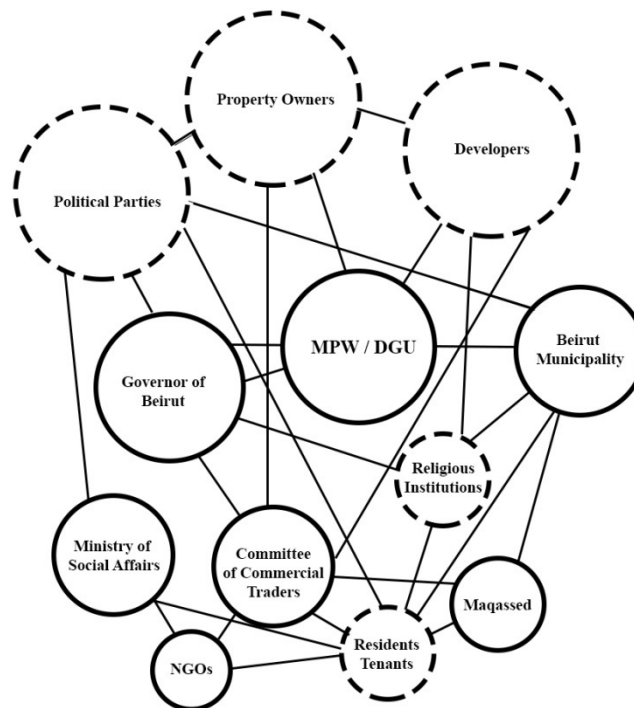
Figure 45: Al-Tamlis Sectarian Ownership Map

5. Stakeholders

a. Stakeholder Analysis

Public Sector	Private Sector	Civil Society
Ministry of Interior / Beirut Municipality Council of Development and Reconstruction Ministry of Public Works / Directorate General of Urbanism (DGU) Ministry of Social Affairs / Public Institution for Housing Governor of Beirut	Project Developers Property Owners (Fadlallah, Chehabeddine, Mirza, Sabra, Jammal, Kabriti, Huwas...) Maqassed Foundation Committee of Retailers of Corniche-al-Mazraa Political Actors (Amal, Hezbollah, Future Movement, Taqwa...) Real-Estate Consultants Architects / Urban Planners	Dar-el-Fatwa Higher Council of Shiite Islam Non-Governmental Organizations (Nahnoo...) Residents of al-Tamlis

b. Stakeholder Power Analysis



C. Urban Condition

1. Delineating Al-Tamlis

In order to launch an investigation into the socio-economic conditions of al-Tamlis, it was a prerequisite to delineate the geographical boundaries of the neighborhood. We noted repetitive references to al-Tamlis Street, a narrow vehicular road that connects Corniche al-Mazraa to Maqassed complex as the eastern bound of the neighborhood, and a common indication of Abou Chaker Street as the western edge. Corniche al-Mazraa is a clear-cut northern borderline. The Southern edge is the most elusive as there was an absence of an imposing road as cramped houses clamber Taleit Zreik to physically connect with Em-Zakour and blur the extremities of both. However, in interviews with residents, we were able to conclude that the buildings that can be accessed from the core of the al-Tamlis are perceived as its southernmost boundary. We concluded that al-Tamlis is a physically bounded enclave that is porous both to its North and to its West. It has two main gates on opposite sides of al-Tamlis road (that pierces through the neighborhood) and four ancillary entrances that are mostly pedestrian but also service the residents' vehicular mobility (Figure 47).

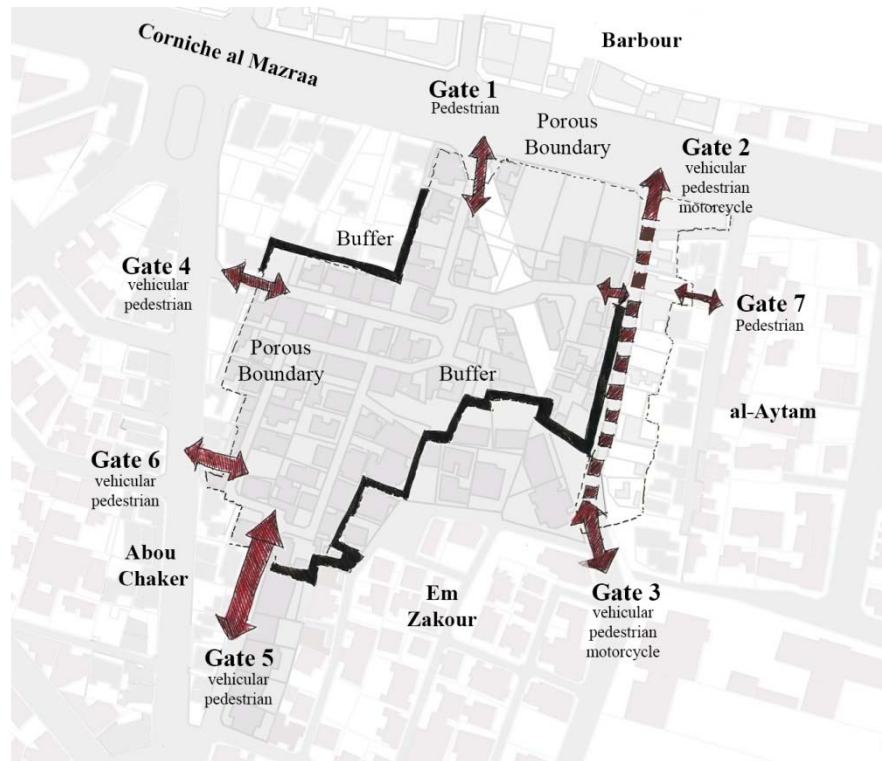


Figure 46: al-Tamlis: The Stronghold's Walls and Gates

2. Land use and Mobility

“Whoever enters al-Tamlis feels that he has abruptly passed from a city to what seems like a crowded village that is socially isolated and survives on economic subsistence” (Al-Akhbar, 2007). This isolation is omnipresent: al-Tamlis front on the vibrant commercial strip of Corniche al-Mazraa is almost completely underdeveloped especially in comparison with its northern counterpart where a bustling ‘assortment’ of electric appliances shops – so peculiar to Barbir, banks, car repair and parts, a pharmacy, a restaurant, and an outlet store crowd the ground floors of buildings (Figure 49). Further, al-Tamlis’s underdeveloped infrastructure, an organic network of tertiary roads and pedestrian walkways and staircases, coupled with its historic dissection from its surrounding, solidified its economic stagnation.

The result: A ‘dormitory’ neighborhood with meager economic activity – save for a few shops and cafe. Retail stores in the direct vicinity supply al-Tamlis with primary daily goods and services: Corniche-al-Mazraa and Abou Chaker Street are home to convenience and grocery stores, bakeries, butcheries, and pharmacies that supply the neighborhood with daily goods, while Afif el Tibeh and Sabra Streets are destinations for shopping of consumer goods such as outlet stores, electronics, and furniture etc... Also, there are different needs for mobility outside the neighborhood: Most children living ‘intra-muros’ are enrolled in the nearby Jammal School on Abou Chaker Roundabout, and residents mainly chose to pray in Omar Abdel Aziz Mosque near Maqassed complex. Neighborhood dwellers resort to the Maqassed hospital for its relatively affordable healthcare services. For leisure, children usually remain in the confines of the neighborhood whereas adolescents and men choose to exercise or play football in the Municipal stadium or Horsh Beirut. Lastly, workers who commute daily to work make good use of the public transportation lines which cross Corniche-al-Mazraa to most destinations around the city (Figure 48).

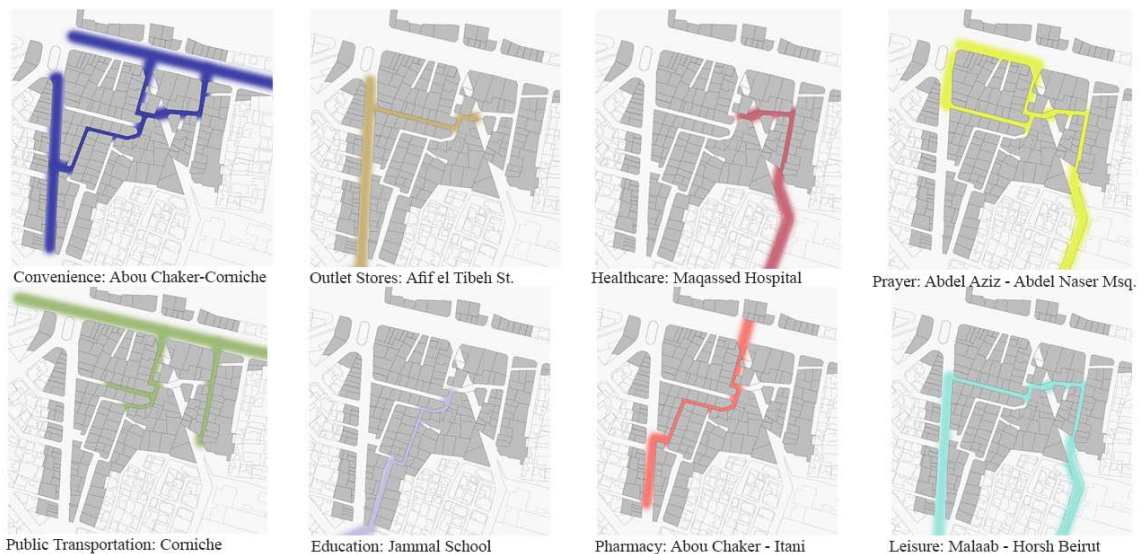


Figure 47: Mobility to the Exterior of al-Tamlis



Figure 48: Al-Tamlis Commercial Land use Plan

3. Accessibility

a. Vehicular Activity

A hierarchy of road types exists in al-Tamlis. The most frequently used road is a transit hub commonly referred to as al-Tamlis road which is a narrow tertiary pathway, running in one direction only (but used in both ways indiscriminately) connecting Corniche-al-Mazraa to al Maqassed Complex and further on to the very heart of Tariq Jdideh. Traffic

jams are a recurrent sight as cars clog in lines to pass through. Another commonly-used road is a small corner one on its south-western end. Drivers use it to bypass incessant congestion halfway along Abou Chaker Street. A ‘secondary’ road, whose form a direct descendant of previous agricultural paths, is a narrow winding path that laterally crosses the neighborhood. Because of its tightness, this road is mainly frequented by motorcycles but also serves local residents’ vehicles. The rest of the roads are local ones that feature little to no traffic at all (save for local residents).

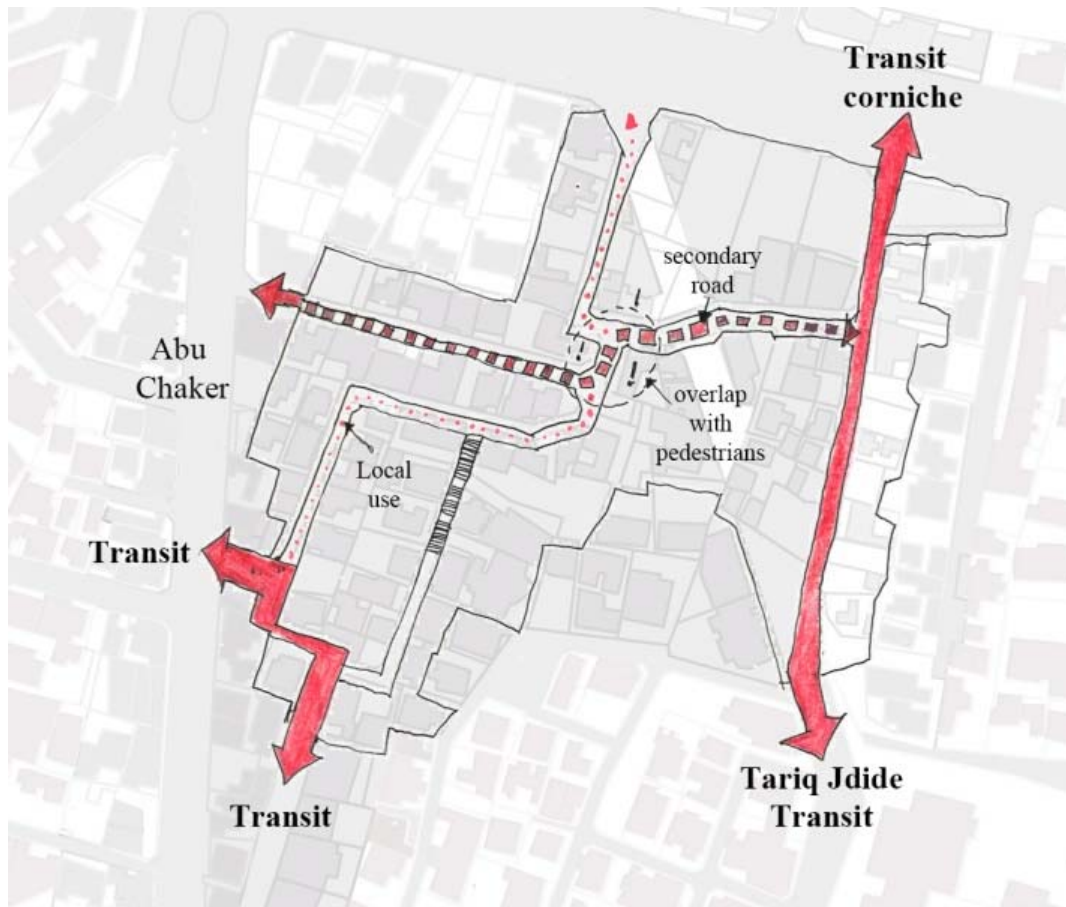


Figure 49: al-Tamlis Vehicular Activity



Figure 51: al-Tamlis Congested Transit Road



Figure 50: A Local Narrow Road

b. Pedestrian Activity

Pedestrian activity is paramount in al-Tamlis. Having services and stores abundant in the proximity of the area, and due to the fact that a good proportion of residents do not own vehicles, dwellers travel on foot more often than not: They make use of their convenient location in the vicinity of a major public transportation network, but also use their connections to the rest of the Tariq Jdideh, whether the transit road, the road that connect to Abou Chaker, or the famous pedestrian staircase, the only connection that defies the height difference of Zreik Hill, and stitches the neighborhood to its southern boundaries. The map below displays the main rituals according to which residents make use of those paths



Figure 52: Al-Tamlis Transit Road (Left), Al-Tamlis Central Square (Center) and Main Staircase (Right)

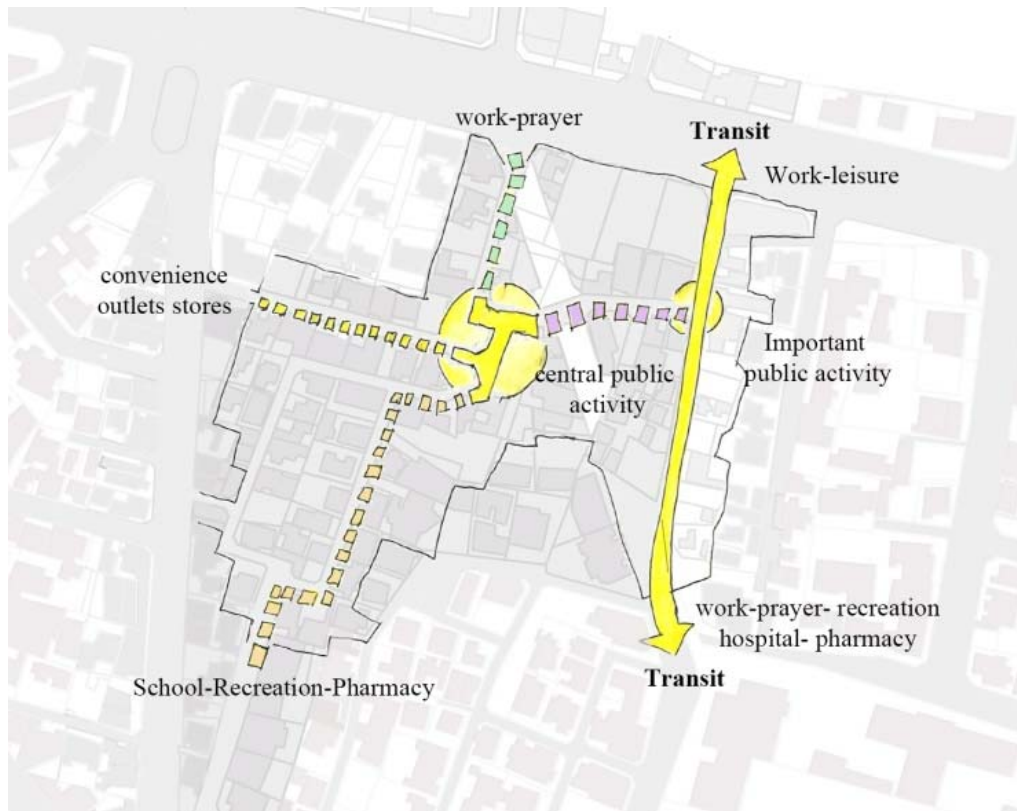


Figure 53: al-Tamlis Pedestrian Activity

c. Parking Spaces

Although it is difficult to obtain a precise figure of car ownership, through our observations and interviews, we deduced that there is a relatively low proportion of car ownership in the area. What this means is that there is ample parking space in al-Tamlis. First and foremost, the neighborhood demand is supplied by the public parking lot that is operated by the Fadlallah family, in which residents park their cars overnight in exchange for a 50\$ subscription fee. Second, most post-1992 buildings have dedicated pilots floor parking spaces, and few of them even have basement parking. The rest of the neighborhood's demand for parking is met either by on-street parking (which further reduces the right of way of the

narrow streets), an adjacent public parking lot (Haroun Parking), or by simply mass parking in empty lots and open spaces (The order of parking is managed according to which neighbor leaves earlier)



Figure 54: Al-Tamlis Parking Map



Figure 56: On-Street Parking



Figure 55: Open Space Managed Parking

d. Public Spaces

Due its isolated status, largely immune from daily vehicular traffic, public activity flourishes in the neighborhood in a myriad of ways and locations. First, a few open and neglected private lots have been appropriated by children in the area and have been converted into mini-football fields and gathering spaces, especially at after-school hours of the day. Public activity also is manifest in the two main nodes of commercial activity: The first is on the al-Tamlis road, a public hangout, where youngsters showcase their political support for Future Movement (7), and the second is at the heart of al-Tamlis, an S-shaped road curve (3) where the main local convenience store is located. Al-Tamlis staircase (8) is a bustling scene in the afternoon as it hosts a stampede of children leaving school, some of which wait for their parents to pick them up. At dusk, some road sides, street corners, or even the expropriated road section become platforms for older men who set up tables to play cards, discuss politics, and drink coffee and smoke narguile. Special festivities, such as fireworks on Ramadan, take place in the large open space in the center of al-Tamlis.

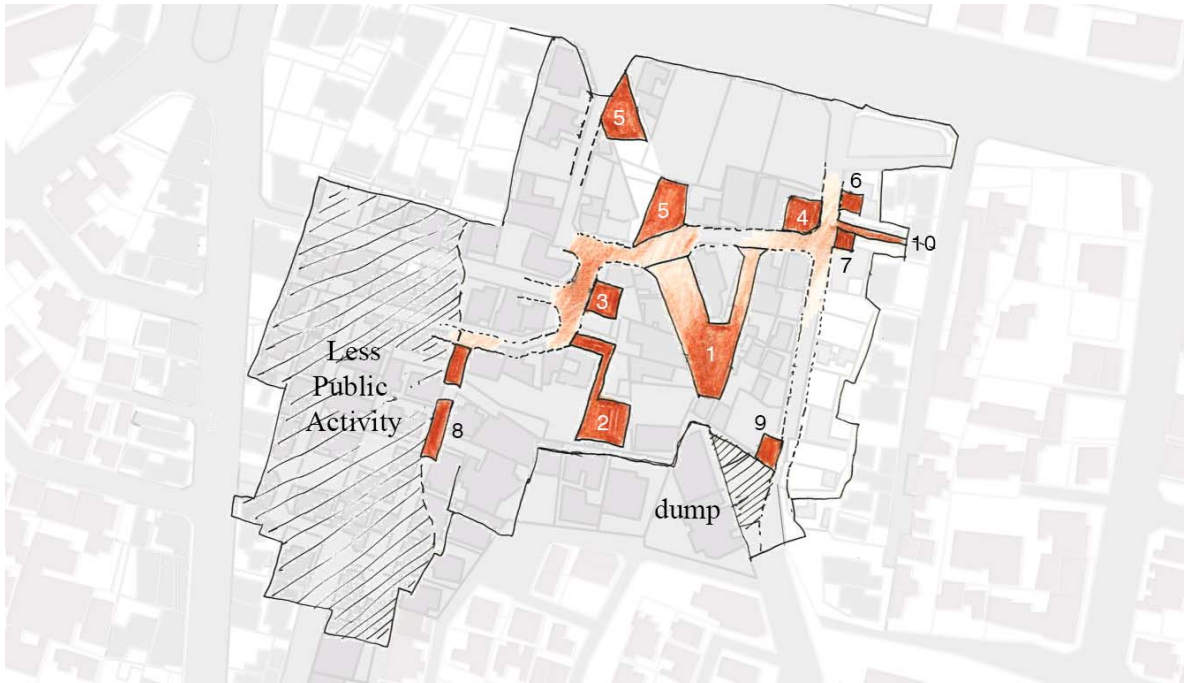


Figure 57: Al-Tamlis public activity map: 1. Al-Tamlis Community Square | 2. Al-Hares Community Square | 3. Central Square/ Hangout space | 4. Local Convenience Store | 5. Kids Playground | 6. Local Café | 7. Local Hangout for Men | 8. Students Gathering on Stairs | 9. Workers gathering | 10. Public Souk



Figure 58: Upper Left: Al-Tamlis Central Square (3) | Upper Right: Local convenience store (4) | Lower Left: Al-Hares community square where one resident manages a small hen house (1) | Lower Right: Kids playground in an appropriated private lot (5)

e. Infrastructure Rupture



Figure 60: Division between al-Tamlis and Al-Aytam's dynamic Economy: A Physical difference due to buildings with no access

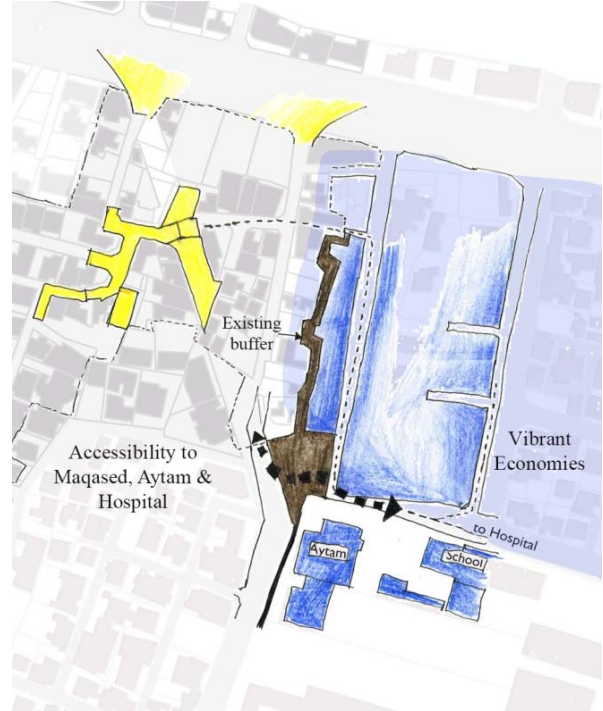


Figure 59: Division between Two Similar Neighborhoods: Al-Tamlis and Em-Zakkour: A difference in topography and absence of stairs

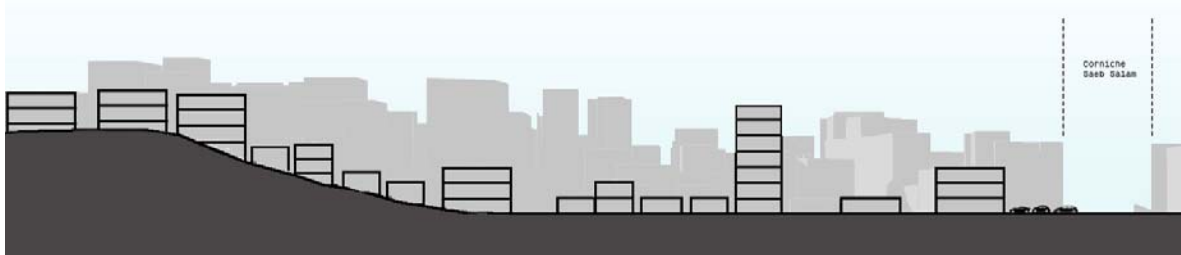


Figure 61: Section through al-Tamlis Showing Tallet Zreik on its South

As we have seen previously, it was precisely its dichotomy from its surrounding that led al-Tamlis into slow path of degeneration. In this section, we highlight the three main buffers: The first is the division wall between al-Tamlis and its southern adjacent area of Em-Zakour. Though both neighborhoods display same characteristics of built form (old dilapidated and vacant houses), house the same class of low to extremely-low social classes (the same families in some cases) and have similar religious and political affiliations, because of height different of Tallet Zreik, no connection exists between them. We noted a couple of staircases that reach the southern tip of al-Tamlis but fail to stitch the two neighborhoods together. Second, on the eastern edge, a topographical and physical barrier prohibits al-Tamlis's residents from easily accessing al-Aytam neighborhood that has dynamic economic and social activity.

D. Socio-Economic Profile

1. A 'State' of Poverty, Economic Dependency, and Social Hardships

In the neighborhood there is an overwhelming sense of unemployment: Groups of men loiter on the street sides while others ride their motorbikes in frenzy. Notwithstanding, many residents do have jobs: Its older inhabitants work a variety of low-wage trades, most notably as handymen, plumbers, electricians, painters, and water distributors. Its younger generations, mostly uneducated or school dropouts, either find employment in petty local trades such as Narguile delivery, domestic gas refill etc..., or low-wage labor such as security guards, valet parking, housekeeping, construction, taxi drivers and waiters. Others are army or internal security conscripts. Furthermore, we have been told that a large constituent is involved in high-earning but illicit activities such as drug trafficking, arms dealing, and

clandestine jobs. This economic survey conveys how al-Tamlis, though socially introverted, is economically dependent on Tariq Jdideh in specific and Beirut in general for its survival. This topic will be discussed in detail in the Accessibility and Mobility section of this report.



Figure 62: Economic Practices in al-Tamlis

In an article featured in Al-Akhbar Newspaper in 2007, the author portrays al-Tamlis blatantly: “Poverty lives here: A community in extreme poverty, its residents marginalized with no one to inquire about their ordeals or to provide relief.” He continues “here is where poverty hits the stone and the populace, where the eyes of governments and

organizations are blind shut!” Due to the daunting and timely process of gathering empirical socio-economic information, we have chosen in this section to resort to a more qualitative depiction of the social conditions in al-Tamlis, using anecdotal evidence, in hopes that such a narrative can highlight the dreadful living conditions that the residents of the neighborhood face.



Figure 63: Housing Conditions in al-Tamlis



Figure 65: Makeshift Tenements on the Planned Road



Figure 64: Makeshift Tenements on a Private Lot

2. *A Real-Estate Magnet*

a. The Built Fabric

حي «الطمليس» في الطريق الجديدة: مبان ترتفع تخفي الشمس عن بيوت بحجم العلب

In an article featured on an online newspaper ‘Al-Murabit’ (a media outlet of the Murabitoun), al-Tamlis is described as “small village where recently-erected buildings almost block the sunrays from reaching it and almost conceal its vestiges and buildings of two or three floors”. Entitled “al-Tamlis Neighborhood in Tariq Jdideh: Buildings Rise to Eclipse the Sunlight off Tin-Can Houses”, the article succinctly reports on the building conditions in al-Tamlis: “Quasi-Homes that are deteriorated and inhabitable feared to be awaiting a similar fate to the one of Sabra building in the neighborhood center, a building that collapsed back in 2007.” Indeed, Abou Mohammad Sabra, a previous tenant whose entire family of 15 members lived in the floors of Sabra building alongside neighbors from Mirza

family, recounts the tale: “My neighbor, who lived in the last floor of the building and a close relative to the owner, was renovating his apartment. He demolished few walls, erected new ones, and built a steel canopy to seal his roof from rainwater. In a matter of months, diverted storm water seeped through the building walls, weakened the building structure, and eventually led to the catastrophe. In a blink of a second, I was able to alert my family to evacuate the building, but my daughter hardly made it. A concrete monolith fell on her hand and cut few of her fingers. Thank God for his mercy. No relief agency, NGO, or government ever provided aid. I now live in an apartment next-door to my previous residence, and I pay four-fold the rent I used to before.”

The article continues to illustrate another building that is grappling with a similar fate: “A few feet from Sabra Building is the al-Hares Building, located right at the entrance of what is known as al-Hares alley; a building of three floors dwelled by five families. You don’t need expertise to figure its derelict condition since its wooden façade is deteriorated and few stones have fallen from its roof onto its entrance, stairwell, and even its interior.”



Figure 66: Run-down dilapidated blocks of housing (few historic) are a ubiquitous feature in the scenery of al-Tamlis

b. Susceptibility to Change

The surveys of the building stocks in and around al-Tamlis performed in the earlier stage provide enough evidence of a neighborhood that is underdeveloped, run-down and on an impending course of change. We thus decided to delve deeper and highlight where redevelopment is most likely to occur. Although al-Tamlis is popularly referred to as a ‘slum’, we uncovered a fact that, unlike the informal settlements in Sabra and Ouzai, the vast majority of building units were built on legal parcels, respecting allowable exploitation factors - with few minor cases of violation. Thus, to empirically document the area’s

susceptibility to change, we charted the entire 183 lots that constitute al-Tamlis and some of its neighboring zones. For each lot, we recorded a set of criteria of its building stock, more specifically characteristics that are attractive for real-estate developers and can instigate an investment opportunity. The criteria documented for each lot are the following: Lot number, parcel area, number of buildings on site, existing floor-to-area ratio, building height, current exploitation percentage, number of units or apartments, number of tenants, building condition, building age, building use, land value, and ownership (public or private). After collecting this set of information, we proceeded to filter the lots according to characteristics that normally lure investors. We reached a consensus on the following benchmarks: Building heights that are less than 3 floors, existing total exploitation less than 33%, number of apartments less than 4 units per building, buildings that are at least 60 years old and in a dilapidated state, and lots that are privately owned. This funneling reduced the list into a definite 36 'suspect' lots (Appendix VI) that are most prone to be redeveloped. We graphed these high-susceptibility lots onto a map of al-Tamlis to try to detect which ones form a cluster and provide, if pooled together, the most lucrative return on investment for developers. It is worthy to note, that some of our findings in this map corroborate our field work findings and observations of where transactions and redevelopment activity is most pronounced.



Figure 67: Lots Most Susceptible to Change (Appendix VI)



Figure 68: Cluster of Lots with High Return Potential

c. Development Prospects

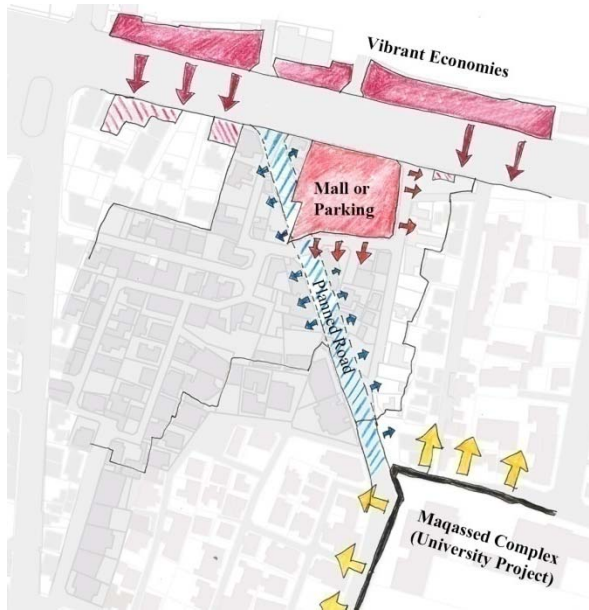


Figure 70: Prospects Map of al-Tamlis



Figure 69: Ecochard's Road of 1954, Source: DGU

Ecochard's 1954 planned road, though delayed by more than half a century, is a harbinger of change in al-Tamlis. If the municipality decides to implement it, it is a definite certainty that al-Tamlis's urban landscape will be reconfigured, social fabric uprooted, and history so peculiar to the area be eradicated. Also, al-Tamlis's Corniche front promises opportunities for development, with possible ripple effects on the neighborhood, benefitting from the vibrant commercial activity on Barbour's Corniche front, a scenario in which Fadlallah's mall is only an episode. On its southern end, a prospective – though delayed – Maqassed University project in the Maqassed Complex offers another “ray of hope for al-Tamlis residents” (Now, 2008), not to mention commercial benefits that may be harnessed by the neighborhood if the Maqassed's introvert character be rethought. Finally, it is worthy

to note that a few weeks after his election as Mayor of Beirut, Mr. Jamal Itani visited al-Tamlis promising its residents that the Municipality plans to facelift their buildings, install street lighting, and support them.



Figure 71: Jamal Itani Visiting al-Tamlis in July 2016, Source: Facebook



Figure 72: Barbour's Corniche Front (Left) and Maqassed Complex (Right)

E. Synthesis

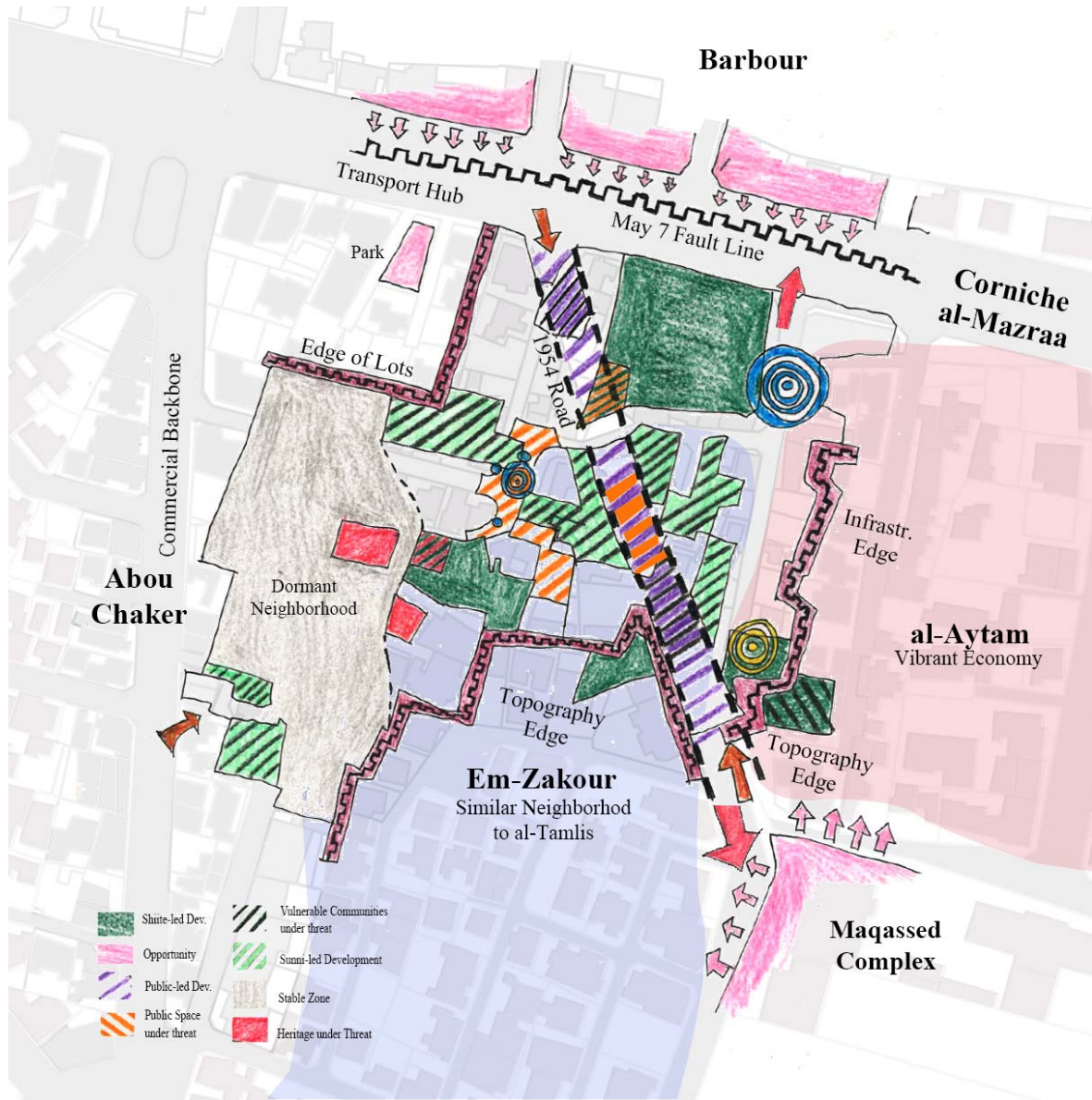


Figure 73: Synthesis Map of al-Tamlis: Developments, Threats, and Opportunities

To conclude this section, we opted to produce a synthesis map to summarize the main key findings of our socio-political, morphological, socio-economic, and mobility analysis of al-Tamlis.

In terms of the built fabric and infrastructure, we record a neighborhood whose building stock is mostly dilapidated or in need for upgrade, which is badly serviced, and which has been in a steady process of infrastructural decay for the last few decades. Three main challenges exist: First, having a large segment of old renters, the neighborhood is a site of a large rental gap which, as a result of its advantageous location, makes it a prime target for lucrative real-estate. Large clusters of old buildings with marginalized group that are highly susceptible for change have been identified. Second, is the infrastructural dichotomy, the historic culprit of the demise of al-Tamlis, between al-Tamlis and its 'sister' uphill neighborhood of Em-Zakour and between al-Tamlis and al-Aytam neighborhood, a stage of intricate socio-economic activity. Thirdly, redevelopment is poised to destroy a sub-neighborhood of historic significance - the only such case in al-Tamlis - which is home to the famous Tamlis Staircase.

In terms of mobility, and accessibility, first, the problem of an existing narrow congested transit road that cannot sustain its vehicular and pedestrian traffic (to and from Tariq Jdideh Proper) is planned to be solved by proposing a 60-year-old planned road. Passing by the heart of al-Tamlis, this road threatens to further compound the problem of speculation and further decimate the neighborhood, gentrify its social component, annihilate its peculiar history, and leave it prey to real-estate speculators. Second, several public spaces with intrinsic meanings and socio-spatial practices of residents are also exposed to the perils of redevelopment.

In regards to the socio-political dimension, it's the neighborhood's attraction as a target of profitable investment that is fueling a proxy-warfare between historically antagonistic religiously-affiliated parties. The Shiites, armed with substantial capital, are crowding out vulnerable communities of Beirut Sunnis. The latter are appealing to the Municipality, the Sunni's administrative arm, to find solutions and alleviate their grievances, while mobilizing their supporters in specific popular gathering points in dire hopes to reaffirm their political power.

Although faced with draconian challenges with respect to its relatively small size, al-Tamlis has several opportunities – the adjacent Maqassed complex, the vibrant economy of Corniche-al-Mazraa, a small neighboring public park - that, if harvested with a proper redevelopment strategy, can provide the seeds for a better future for all involved stakeholders.

CHAPTER IV

AL-TAMLIS: A SUSTAINABLE NEIGHBORHOOD RENEWAL¹⁴

A. Al-Tamlis: Diagnosis and Vision

1. Diagnosis

In light of Tariq Jdideh's general vision and prescription strategies, the synthesis map presented at the conclusion of the evaluation phase provided the base to proceed for the next phase: To design an intervention on al-Tamlis. In order to do so, a 'simplified' diagnosis was drawn. The diagnosis rearranges the highlighted strengths, weakness, opportunities and threats (SWOT) spatially to produce a 'micro-zoning' of al-Tamlis. This approach allowed to reflect on the status of the neighborhood in more detail, not as a homogenous entity as

¹⁴ Section of the final report submitted by author in partial fulfillment of UPRL-661: Urban Planning Workshop entitled *Mobility and Neighborhood Planning* in Tariq Jdideh, December 2016, American University of Beirut. The report content was edited to the size of a thesis chapter.

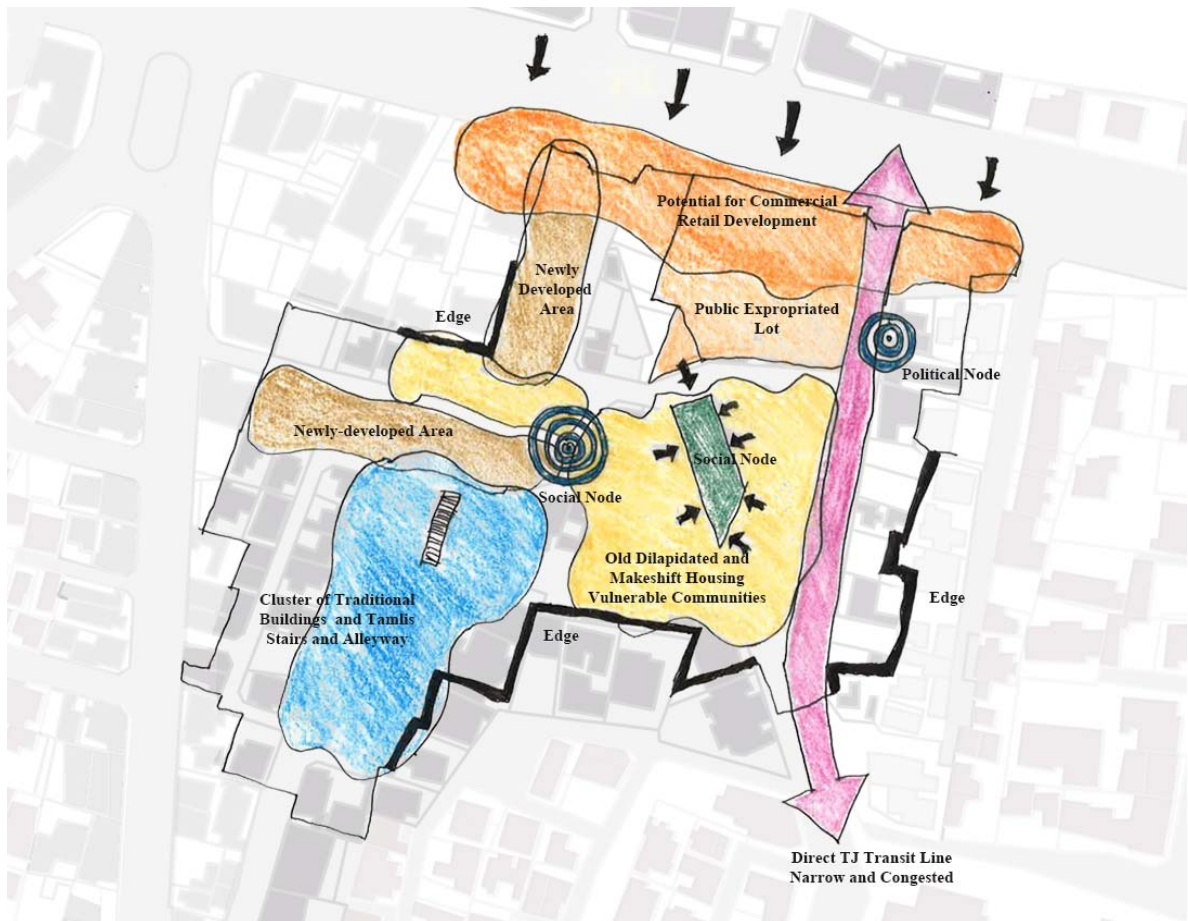
previously thought, but as an amalgamation of heterogeneous areas, each of which has its own character, challenges, and potentials. Thus the generated diagnosis map consists of four distinct zones:

- A major cluster of old, dilapidated housing stock of no heritage value and some scattered makeshift housing elements. Extremely marginalized from inter-religious backgrounds live in this cluster,, the vast majority of them have no means for alternative housing on the event of their impending eviction. This section consists of privately-owned parcels in which both property owners and old renters live together.
- Two clusters of newly-developed buildings (Post-1970). These buildings are mid to high rise and are relatively in good condition. A mix of old renters, new renters, and proprietors live in this cluster
- An area of heritage buildings, mostly in decrepit condition, that are clustered around a pedestrian alleyway, a part of which is the famous Tamlis Staircase. This alleyway is also a site of children public activity and recreation as it is also home for al-Elmiyeh school
- A zone of major economic development potential consists of the linear stretch of lots on the southern side of Corniche-al-Mazraa, most notable of which is the to-be municipally owned group of lots

Interspersed between these 4 local problematic areas, we can identify polarized problems on both district and local scales:

- Political tension locales as a result of the Barbit-Tariq el Jdideh political divide
- Road congestion on the narrow al-Tamlis transit road that connects Corniche-al-Mazraa to Tariq Jdideh Proper and the lack of safe pedestrian walkways

- Scarcity of parking (crowding of internal streets and open spaces by cars)
- The anticipated erasure of the major social gathering spaces in al-Tamlis as a result of real-estate speculation: The central square, the publicly expropriated road section, and al-Hares community square.
- The topographical and infrastructural disjuncture between al-Tamlis and its neighboring areas



2. A Vision for a Sustainable Neighborhood

Based on the aforementioned challenges and threats, and all the preceding historical, social, political, economic, and morphological analyses, I put forward a vision for the future of al-Tamlis: A Model of a Sustainable Neighborhood. To achieve this goal, I will propose a set of integrated strategies for rehabilitation and regeneration that on the three bottom lines: The Economic, Social, and Environmental. It is only through a balanced and holistic approach that al-Tamlis can be set of a trajectory towards becoming a vibrant, inclusive, and environmentally conscious neighborhood. The steering strategy of this vision will be focused in economic revitalization. Thus, my intervention will be labeled as an “Inclusive Economic Development Strategy for al-Tamlis.” The main objectives of this vision are the summarized as follows:

- Propound a comprehensive economic revitalization strategy for al-Tamlis
- Foster for inclusiveness and the preservation of the social fabric
- Conserve and promote the built heritage and sites of special interest
- Promote walkability, access, public spaces, and a healthy urban environment
- Improve landscaping and vegetation layers of the neighborhood

B. Al-Tamlis: A Model of a Sustainable Neighborhood

1. An Urban Renewal Strategy

The strategy devised for al-Tamlis is not a singular one. Rather, it is a multilayered, multispectral, and multi-scalar set of strategies that holistically frame the problematic of the neighborhood and propose a set of solutions in both space and time (Figure 75-76-77). The strategy consists of sub-categories of ‘micro-strategies’, each tackling one of the micro-zones

signified in the diagnosis above, bound together by general set of strategies on the entire neighborhood scale. The four action areas are:

Action Area 1: It encompasses the entire block of the Municipal owned lots bordering Corniche-al-Mazraa. The objective of the intervention in this section, as identified in Tariq Jdideh General Strategies, is to design an entertainment center to initiate an economic regeneration in the neighborhood. This center also should house a 7 floor public parking facility to serve the complex and the entire surrounding areas.

Action Area 2: This central heart of al-Tamlis in which most of the dilapidated and makeshift housing is located. Here, a public real-estate company is envisioned that is capable of redeveloping the entire area and replacing the run-down houses with new housing units with modern services and facilities.

Action Area 3: This is the main heritage cluster. In this area, a conservation zone is configured, in which a rezoning should be administered by the DGU and ratified by the cabinet of ministers. A Transfer of development rights (TDR) should be considered as a complimentary measure as compensation to property owners. Small arts and crafts industries, as well as special public and community events, can be encouraged in this area.

Action Area 4: This is not a contiguous zone, but a series of disparate parts. In this area, where redevelopment is anticipated, inclusionary zoning regulations should be mandated to provide for a diversity of housing stock to suit all demands.

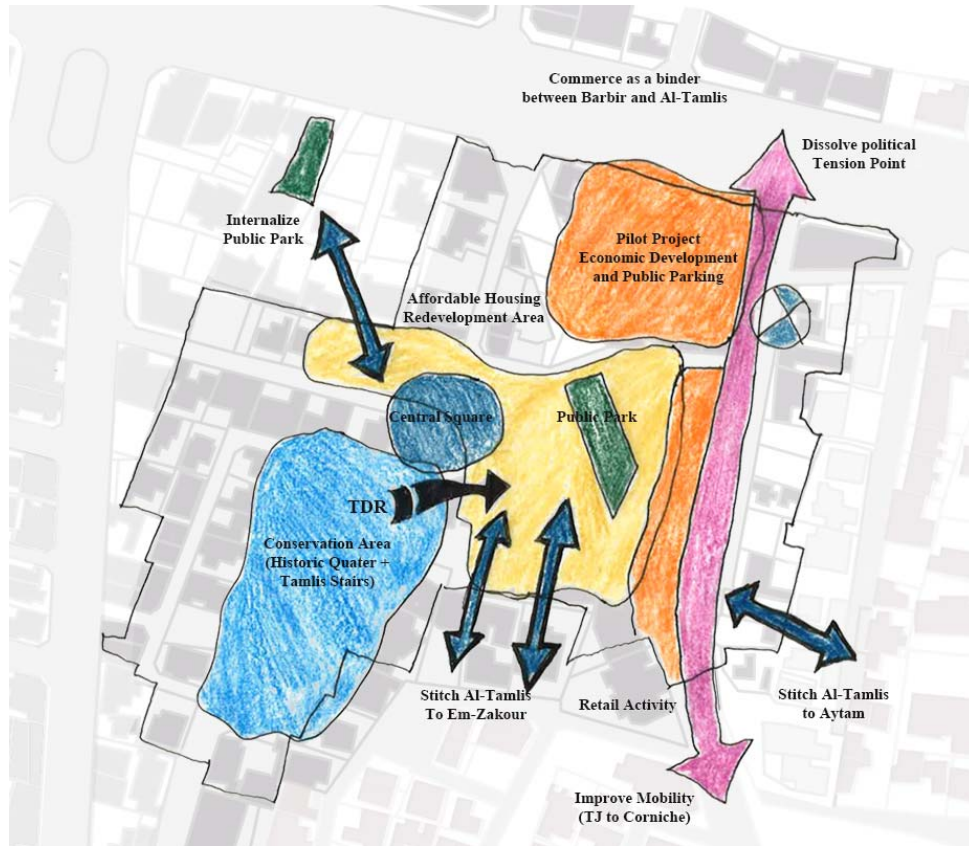


Figure 75: Al-Tamlis General Strategy



Figure 76: Al-Tamlis Strategy: Actions Areas 1,2,3,4 and Expropriation Zones (Black)

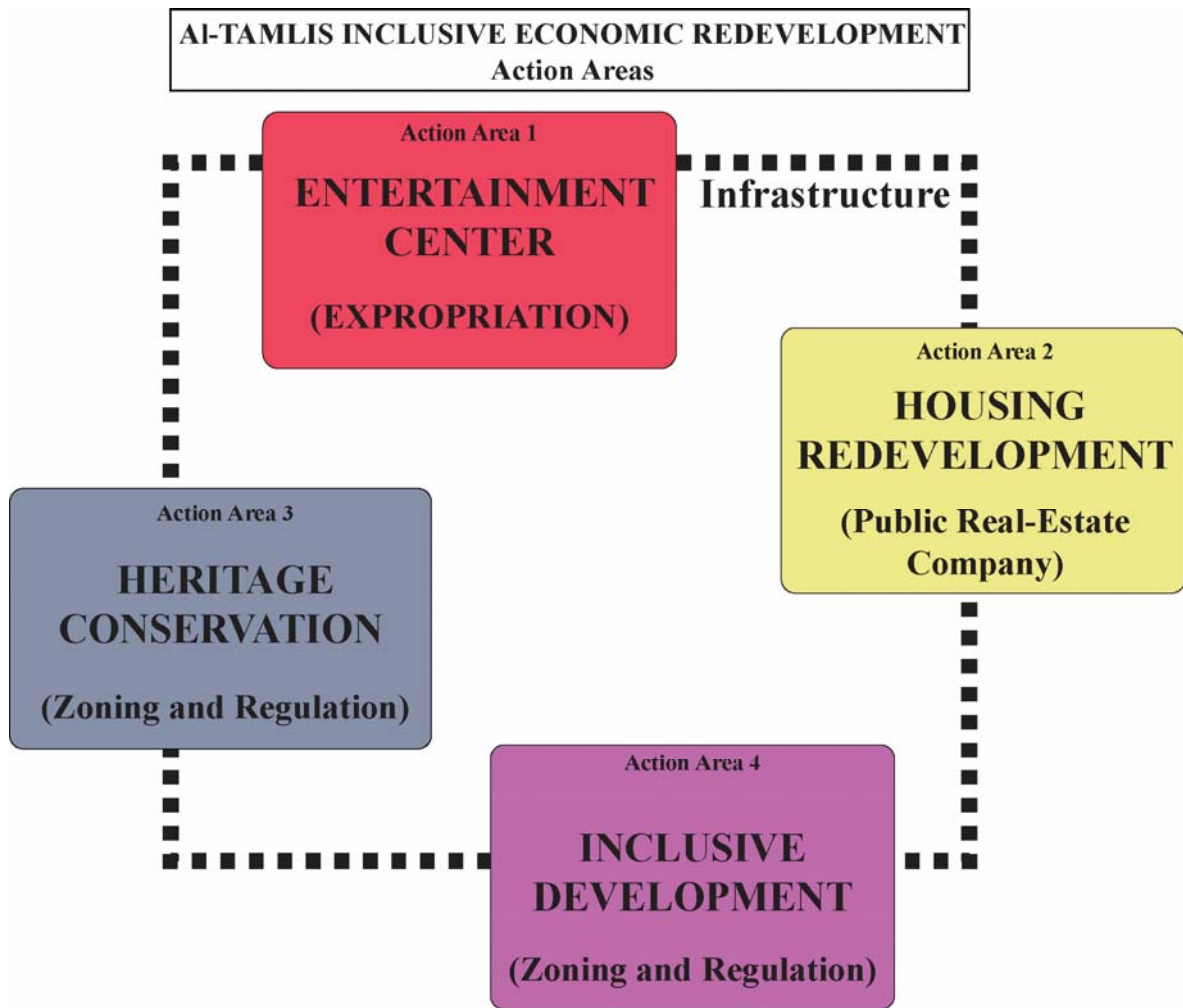


Figure 77: Al-Tamlis Inclusive Economic Redevelopment Actions Areas Diagram

2. General Strategies

A general set of strategies is devised to resolve the issues of mobility and accessibility of the interstitial spaces in between these action areas and between them and the external neighborhoods as well. These measures will ensure the fine weaving of the tapestry of al-Tamlis so as to function seamlessly as a coherent whole. These strategies are detailed below:

a. Expropriation

i. Al-Tamlis Road

Seen from the scale of Tariq Jdideh, al-Tamlis road is a important thoroughfare. It is a transit hub that links Tariq Jdideh proper to Corniche-al-Mazraa. As aforementioned, today this road is a narrow one-lane road that is congested more often than not. To compound the matter further, parallel parking and a few commercial shops situated on that road increase the traffic problem. Furthermore, not only is this road a vital vehicular artery, it also witnesses constant pedestrian activity around the clock, most intensely during morning and night rush hours as residents of Tariq Jdideh walk downhill to the Corniche to access city-wide and regional public transportation networks. Accordingly, widening al-Tamlis road by expropriation of side parcels is a must. The road is envisioned to be a two-way road, similar in width to primary streets in the district, with generous pavement widths lined with trees. This strategy will surely lure retail development along the stretch of the road, something which will boost the local economy and help create a safer and more robust neighborhood. Also, large sidewalks are hoped to encourage pedestrian activity, cycling, and an increased reliance on public transportation in lieu of the private vehicle. Appendix VII reports on the lots and areas as well as the costs associated with this expropriation strategy. As noted, the majority of the segments needed to construct the road are less than 25% of their respective lots. What this means is that the expropriation will incur minimal remuneration for property

owners and thus less fiscal liability for Beirut Municipality, the chief agency responsible for its implementation.



Figure 78: Al-Tamlis Road (Before)



Figure 79: Al-Tamlis Road (After)

ii. Accessibility

Mobility, or its lack of, has been explicitly documented in the previous sections as being the main culprit that lead to the historic demise and later stigmatization of al-Tamlis. This strategy aims to re-establish the connectivity of the neighborhood to its direct surrounding in hopes that breaching the bulwarks of the ‘stronghold’ will improve its transparency, livability, and attractiveness as a destination for residents of Tariq Jdideh in particular and Beirut in general. Two main stitching points are proposed in this section: The first is the connection to the al-Aytam neighborhood to the East. In this case, a complete expropriation of lots number 345 and 359, located to the South-East of al-Tamlis, is proposed. This connection will add to an extant one a little further to the north where a popular pedestrian souk is located. Also, establishing pedestrian walkway will encourage the redevelopment of the dilapidated housing stock on lots number 363, 346, 347, 350, 351, 354, and 357 which were shown earlier to be a cluster that is highly susceptible to change. The second point aim to ‘internalize’ the small public park on Corniche-al-Mazraa by granting Tamlis residents access to use it. This can be achieved through establishing two narrow pedestrian alleyways to connect to it. To do so, the Municipality must expropriate segments of lots number 2740, 3588, 3586, and 3120. The expropriated areas are all less than 25% of the area of their relative lots which make this proposal a cost-efficient measure to improve mobility in the neighborhood.

b. A Livable Neighborhood

In order to buttress the measures being undertaken to enhance mobility and connectedness in al-Tamlis, the infrastructure of the neighborhood must be upgraded. This

strategy is two-fold: The first objective is ‘Place-making’, which is a movement that calls for creating public spaces that promote people’s health, happiness and well-being by capitalizing on local community assets, inspiration, and potential. Under this objective, a complete refurbishment of existing spatial uses will be proposed. The second strategy entails the pedestrianization of the internal streets of al-Tamlis to ensure a seamless and enjoyable use of al-Tamlis’s network of paths and staircases.

i. Place-Making

In the case of al-Tamlis, we have noted earlier the existence of two main public squares that are stages of public activity of all segments of the community. Thus, the intent of this strategy is to enhance the built fabric of each to support a wider and more diverse audience. The first strategy is to widen the Tamlis central square which is where the four roads converge. This is to be done by expropriating part of the lot number 3589 owned by the Mirza-Chehabeddine family to widen and formalize the square. The now large arena can be planted with vegetation and trees and can cater for a wider array of public activity. It also can serve as an amiable meeting point for opposing religious groups to converge and engage in common neighborhood activity. The second square is the community gathering space that today occurs spontaneously on the segment of the 1954 planned road that was already expropriated. The community square, which is already in municipal ownership, lies at the heart of al-Tamlis proper is envisioned to be rehabilitated and converted to a park that features a water pond lined with trees and benches to create a lively shaded atmosphere for public use. Retail shops and cafés can border this park to lure round-the-block activity and income generation opportunities for locals.

ii. Pedestrianization

The second strategy to achieve the goal of a livable neighborhood aims to pedestrianize the entire stretch of narrow roads that encompass al-Tamlis. This strategy, the sole prerogative of Beirut Municipality, is easily applicable since vehicles were already noted earlier to be a rare sign in the district. Prohibiting vehicular access to the internal network of streets. Paving those stretches with cobble stone or concrete pavers, and landscaping the entire paths would encourage more public activity, walking, and cycling in and around the neighborhood. This strategy, along with Place-making has the potential to achieve a wider goal of promoting sustainability by showcasing the benefits and applicability of low-impact developments and practices. Thus, by implementing the complete set of strategies, al-Tamlis's redevelopment will be Beirut's flagship demonstration project of future-oriented neighborhood living and transit-oriented developments (TOD's), neighborhood typologies that hopefully can be emulated in other districts around the city and beyond.



Figure 80: Al-Tamlis Community Square (Before)



Figure 81: Al-Tamlis Community Square (After)



Figure 82: Al-Tamlis Central Square (Before)



Figure 83: Al-Tamlis Central Square (After)

3. Action Area 1: Entertainment Center

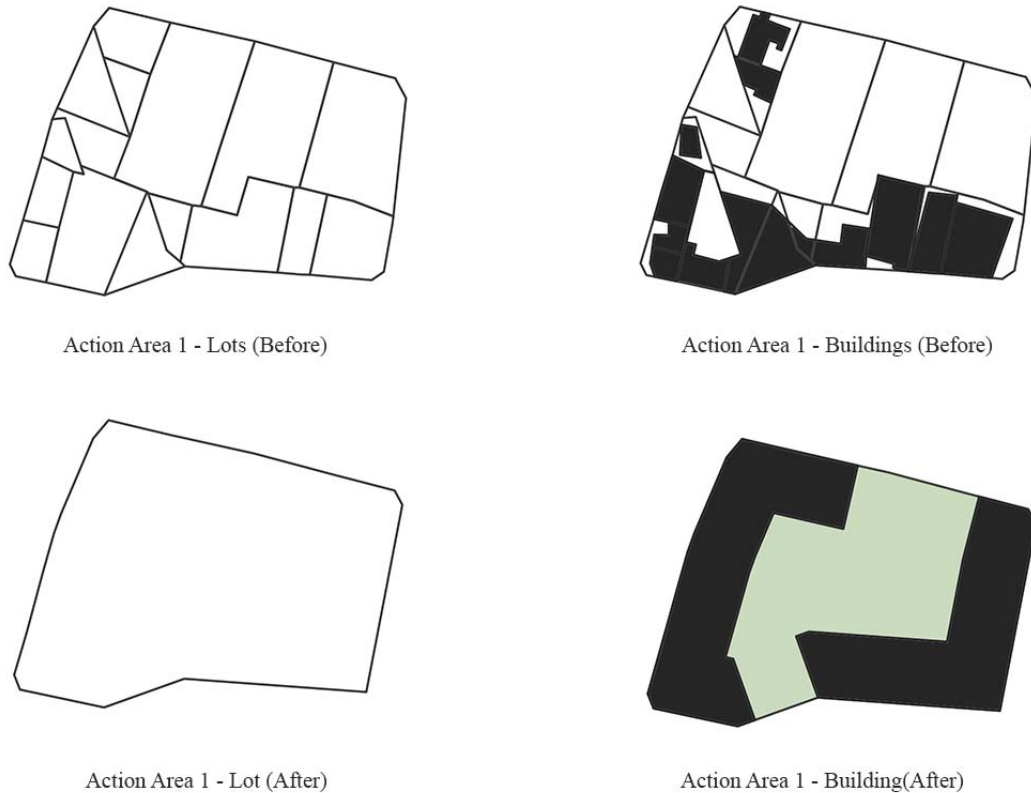


Figure 84: Action Area 1 Development Maps

In the synthesis and diagnosis sections of this report, al-Tamlis’s Corniche front was explicitly identified as an underdeveloped section with promising potential for lucrative development due its position facing a section of Corniche-al-Mazraa that witnesses a vibrant commercial activity (particularly of electronic goods). Moreover, in the socio-political chapter, we documented how this area is a scene of political contestation: Beirut Municipality, a proxy of Sunnis, is currently negotiating the expropriation of the two largest

parcels (535, 536, and 605) from the inheritors of the late Sayyed Mohammad Hussein Fadlallah (the religious spokesperson of Hezbollah). This contest is an exemplary episode of a relentless post-May 7 political tension between Muslim Sunnis and Shiites and their affiliated parties.

My proposal favors the appropriation of the 3 lots by the Municipality. Even more, I propose that it also acquires the remaining lots of the block (530, 532, 533, 742, 727, 670, 645, 650, 651, 181, and 3138) from individual private owners to consolidate them into one large lot of a total of 3,871 square meters. The high development potential coupled with the advantageous location of this parcel will be a vital asset that is poised to boost the entire proposal of redevelopment of al-Tamlis by generating profit to finance the strategies designed for Action Areas 2 and 3.

In the general strategy conducted by all groups on Tariq Jdideh, the need for economic revitalization on the Corniche front was crucial. The program that was proposed was an entertainment center, complete with cinema halls, retail shops, food courts and play rooms. This program will be housed in a 7 story building as permissible by the zoning restrictions of the area. Furthermore, as the lack of parking was highlighted to be paramount in all of Tariq Jdideh, this complex was envisioned also to house a 7 floor public parking facility that can serve not only its parking needs but also the residents' demands at a walking distance away. The parking, which is to charge a reduced hourly, daily, and monthly fare for people, is expected to accommodate about 1,000 vehicles. Its large capacity coupled with its peripheral location will aid in reducing car traffic and congestion not only in and around al-Tamlis but also in Tariq Jdideh as a whole. Strict building regulation should be enforced on the design of the entertainment center. In addition to the exploitation allowances of Zone 4,

the building should align to the plot limits leaving a landscaped central courtyard for unrestricted public access. It is worthy to note that currently this urban block houses a total of 42 apartments in 15 distinct buildings and an estimation of 128 residents. The ownerships and tenancy patterns of these housing units are planned to be relocated to the Housing Development in Action Area 2 and substituted for newly-built apartments (See Appendix VIII).

To launch the project, it is estimated that the Municipality has to secure an initial total investment of 33 million dollars, approximately two thirds of which will be dedicated to land acquisition and one third for project design and construction. The project is planned to be co-financed by the Ministry of Finance (MoF) so as the entertainment center will be a joint-venture between two shareholders: Beirut Municipality and the MoF. The share of the Ministry's profit from the project's remittances from retail rent after a few years will be directed into a special fund under the auspices of the Housing Institute to initiate the works on the Housing Development in Action Area 2. Finally, the entertainment center should employ locals as its workforce of low-skilled labor. This mandate will ensure a basic income for rent and living support for the class of uneducated al-Tamlis residents.

4. Action Area 2: Housing Redevelopment

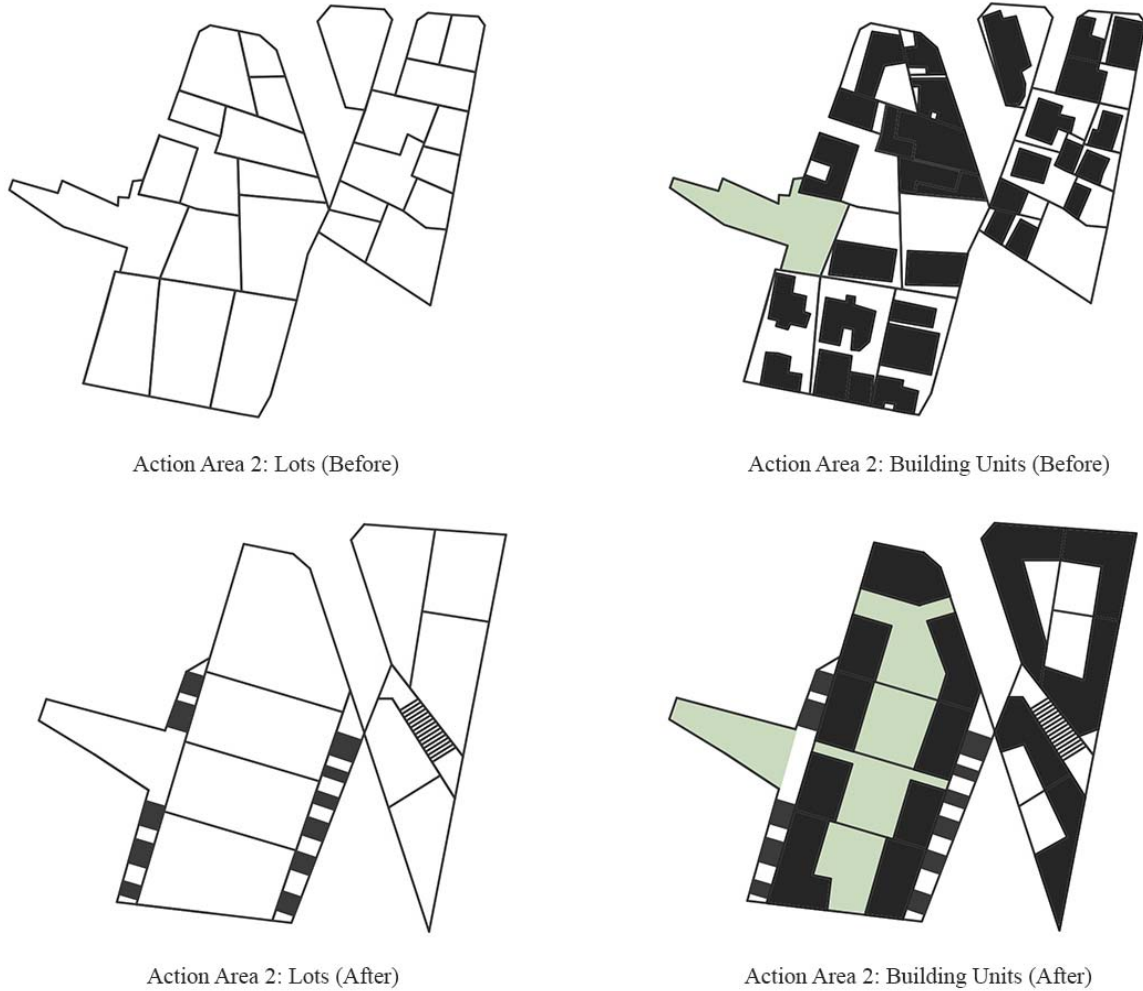


Figure 85: Action Area 2 Development Maps

The analysis section on the built fabric of the al-Tamlis highlights the dilapidated condition of a large constituency of the building stock. However, it also shows that the derelict housing units are largely concentrated in the central section of the neighborhood, a micro-zone that consists entirely of an assortment of old, low-rise, run-down houses and

makeshift housing made of wood, metal, and corrugated roofs. Furthermore, these houses are home to a community that is in extreme poverty and destitution. As a result of this dire condition, a housing strategy is eminent in this section of al-Tamlis. The entire Action Areas 2 and 3 are put under study, thus freezing all real estate transactions and building permits on 25 parcels for a maximum duration of 3 years. The strategy conceives of the establishment of a Public Agency by the DGU (Lebanese Urban Planning Law, 1994) whose shareholders are the owners and tenants of the following lots: 3439, 3440, 3441, 3431, 3433, 3434, 3436, 3437, 3453, 528, 3432, 3428, 3973, 3974, 3430, 252, 258, 232, 233, 540, 541, 543, 537, 538, and 642 (See Appendix IX). The responsibility of this company is to commission a consultancy firm to design a housing project to relocate the residents and also accommodate the 42 apartments from Action Area 1. Also, this zone will need to accommodate the transfer of development rights (TDR) from the adjacent heritage conservation area (Action Area 3, will be discussed later). Consequently, the housing project will have to provide for a total of 168 apartments, 87 of which will be dedicated for re-habitation of existing communities, and the remaining 81 apartments will be owned by the Housing Institute and leased as social rental housing. The average size of apartment is 133 square meters, a housing unit of two bedrooms, and will incur a mortgage cost of 50,000 \$ on the restated owner. The development will respect the zoning regulation of Zone 4, covering a floor-to-area ration of 50% and a total exploitation factor of 3.5. The housing estate design will feature 14 buildings of 7 floors each. All buildings will be constructed in alignment with their respective plot limits so as to allow for interior courtyards to serve as semi-public landscaped cores. Parking spaces will be provided by the public facilities in the basements of the entertainment center. It is worthy to note the importance of establishing a tenant association that will negotiate with the public

agency on the planning of the housing estate, the architectural design aesthetic, the layout of apartments, the allocation of apartments, budget constraints and so on... as part of participatory approach that aims to incorporate the end-users in the conceptual phase to create a future sense of community ownership and engagement. The redevelopment of Action Area 2 offers the potential to re-establish connection with the uphill neighborhood of Em-Zakour. The design will allow for two major staircases that weave the lower to the upper parts. These staircases will be a stage of public activity for residents. A third staircase will ensure the pedestrian blending of al-Tamlis with Al-Aytam neighborhood. Also, the only vegetal area located in lot number 3453 will be preserved and converted into a neighborhood park that connects the project to the abutting heritage zone. The cost of the entire project is set to a figure of 19 million dollars. The financing will be provided by the profits gained from the entertainment center through the Ministry of Finance. The Public Housing Institute will be the owner of almost half the property and the manager of the housing estate. This strategy will ensure a cap on rent values to fight future gentrification of the neighborhood (See Appendix XII).



Figure 86: Architectural Aesthetic of Housing Development, *Source: Fisherman Social Housing, Tyr, Hashim Sarkis Studio*



Figure 88: Al-Hares Square and a narrow staircase that leads to a rear building uphill (Before)



Figure 87: A newly designed staircase that connects al-Tamlis to Em-Zakour through A.A.2 (After)

5. Action Area 3: Heritage Conservation Area

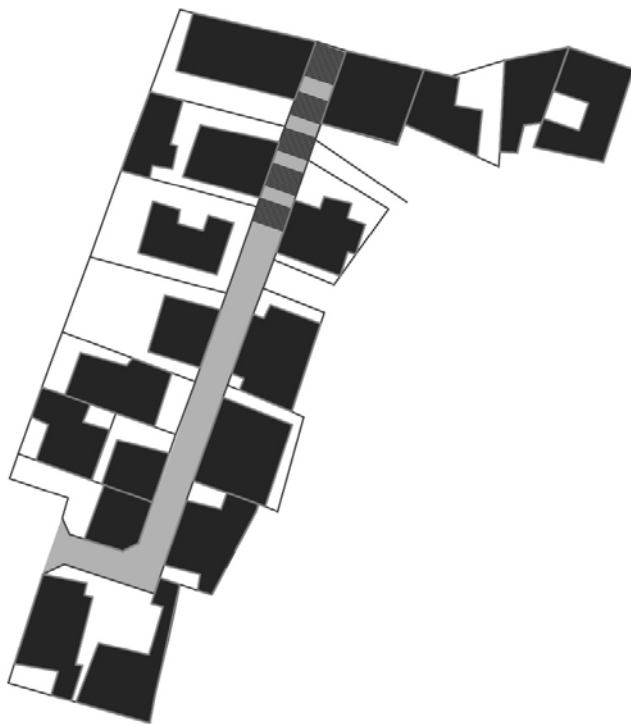


Figure 90: Action Area 3 Strategy Map

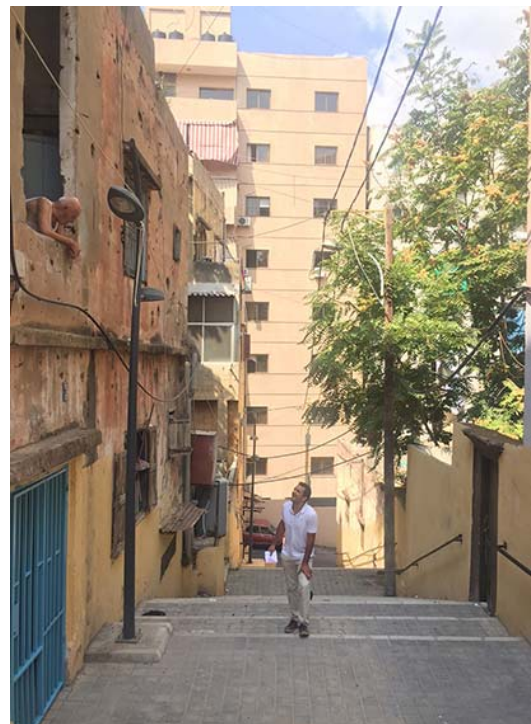


Figure 89: Al-Tamlis Staircase (Author in the picture)

The area known as Tamlis staircase is a popular landmark. Not only does the stair hold a sentimental value in the common memory of residents, but also it is surrounded on its two sides by heritage houses of significant historic value. Although currently in a decrepit state needing much renovation work, these houses are an asset to the neighborhood, a testament of its unique geography and history, and have a cultural and economic potential in the strategy for its economic revitalization. Thus, it is the responsibility of the DGU, after it designates the lots 529, 3451, 3452, 4417, 4418, 4419, 3269, 3295, 3396, 3270, 3271, 3272,

3298, 3296, 2806, and 3456 as a study area, to rezone it as a zone of *non-edificante* to preserve its fabric of 18 houses as an intact cluster of houses of historic significance. Concomitantly, the DGU study should initiate a process of transfer of development rights (TDR) of the buildable 5,000 square meters, along with its ownership patterns, to Action Area 2 (See Appendix X).

Once zoned as a conservation area, two strategies are proposed for its revitalization. The first strategy consists of renovation of its built fabric. For that end, financing can be obtained from the second round of profits incurred from the entertainment center. The financing will be administered by the Ministry of Finance and diverted to the Directorate General of Antiquities (Ministry of Culture). The later agency will run bids for renovation works and supervise the execution according to its standards. On the other hand, the second strategy entails a social development package. Profits from social renting of Action Area 2 will be channeled to the Ministry of Social Affairs (MoSA) to manage and train the local community on craftwork. This strategy of community development aims to remake the Tamlis Staircase area into a cultural attraction node that can host local events and commercial opportunities for residents. The series of events to be hosted will be managed by a community organization composed of community representatives. Finally, the upgrade of the neighborhood will benefit the recreation of students of the local Elmiyeh School located in the alley.



Figure 92: Heritage Building on Tamlis Staircase



Figure 91: Pedestrian Alleyway in Heritage Cluster

6. Action Area 4: Inclusionary Zoning

Action Area 4 is a compilation of six adjacent clusters of lots that display a high susceptibility for change. It is imperative that these sets of lots be regulated primarily in order to fend off the threat of gentrification of al-Tamlis in the future. Therefore, it is proposed that, as an auxiliary measure to the three action areas, the DGU should enforce inclusionary zoning on these parcels. In order to supply an acceptable rate of affordable housing, a study should be conducted to conclude what is the affordable price for low-income groups. Based on this study, developers should supply a 30% affordable housing as a pre-requisite for any building permit to be issued. The DGU, on the other hand, can design incentives for this end ranging from density bonuses, height allowances, tax exemptions, or compensation payments to a special fund to be redirected for construction of public housing in other parts. This strategy should be implemented on the onset of al-Tamlis redevelopment to avert any real-estate speculation that might take place in the early years of implementation (See Appendix XI).

7. Al-Tamlis Masterplan



Figure 93: Al-Tamlis Site Plan, Existing Condition

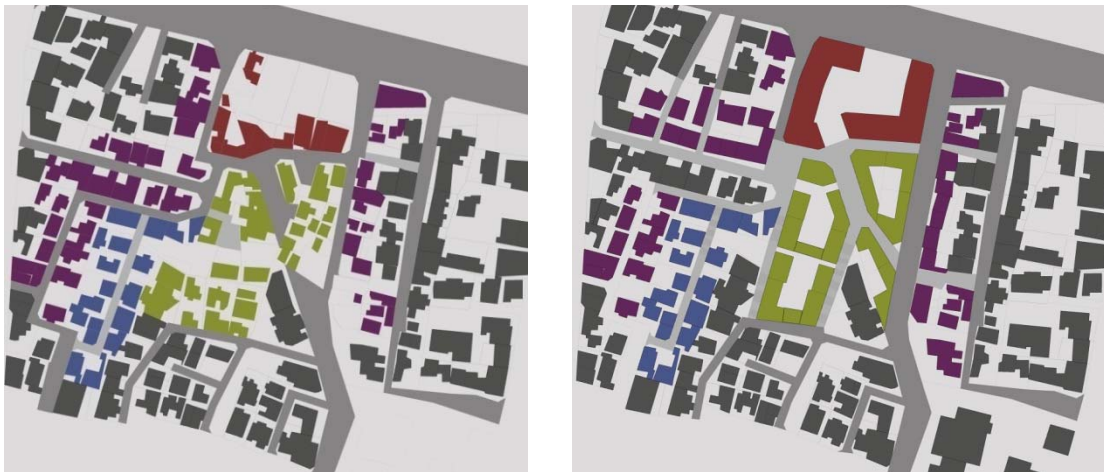


Figure 94: Al-Tamlis Site Plan, (A. A's Before-After) (AA1: Red, AA2: Yellow, AA3: Blue, AA4: Violet)



Figure 95: Al-Tamlis Masterplan

Featured above is al-Tamlis as envisioned by the redevelopment strategy in the next 15 years: A pilot urban redevelopment project that strives to achieve growth through a holistic and integrated approach. As such, the plan hopes to create a balance between economic prosperity, social inclusion, and environmental stewardship in as much as it is possible to realize under a market-oriented capitalist economy. The plan above sums up all the disparate interventions and action areas to a one comprehensive whole: A pedestrian

neighborhood (paths in light grey in Figure 96) of medium-rise blocks of affordable housing. Interspersed between these blocks are public spaces and landscaped areas, some of which are reincarnations of previous squares, while others are new implants. Greenery is multiplied exponentially in the area to improve its environmental quality and reduce its impact. A hybrid network of paths and staircases fasten al-Tamlis firmly to its surroundings and ensure a high level of mobility and accessibility of all its components. In sum, al-Tamlis plan is a paragon of vibrancy, inclusiveness, and amiability. It is important to note that the success of this project is precarious and contingent upon many variables such as the extent of commitment of the public sector and its governing agencies, whether it is the Municipality of Beirut, the DGU, or the various ministries involved in the process, the skillfulness and dexterity in organization, coordination, and setting up the needed institutions, the extent of involvement and ability of the community to organize itself, its representatives and its leadership and its willingness to adopt and safeguard the project, the availability of public funding and the participation of credit institutions for financial support, the political prowess of politicians of untangling complications, the success of the entertainment center which is the financial generator and the backbone of the project's self-finance scheme, and finally the general political and economic situation in the country as a whole. In brief, to secure the successful delivery of the project, the active engagement and amenable attitude of all involved stakeholders is of utmost importance. Finally the planning, governance, and timeline schemes are detailed in Appendices XIII, XIV, and XV.

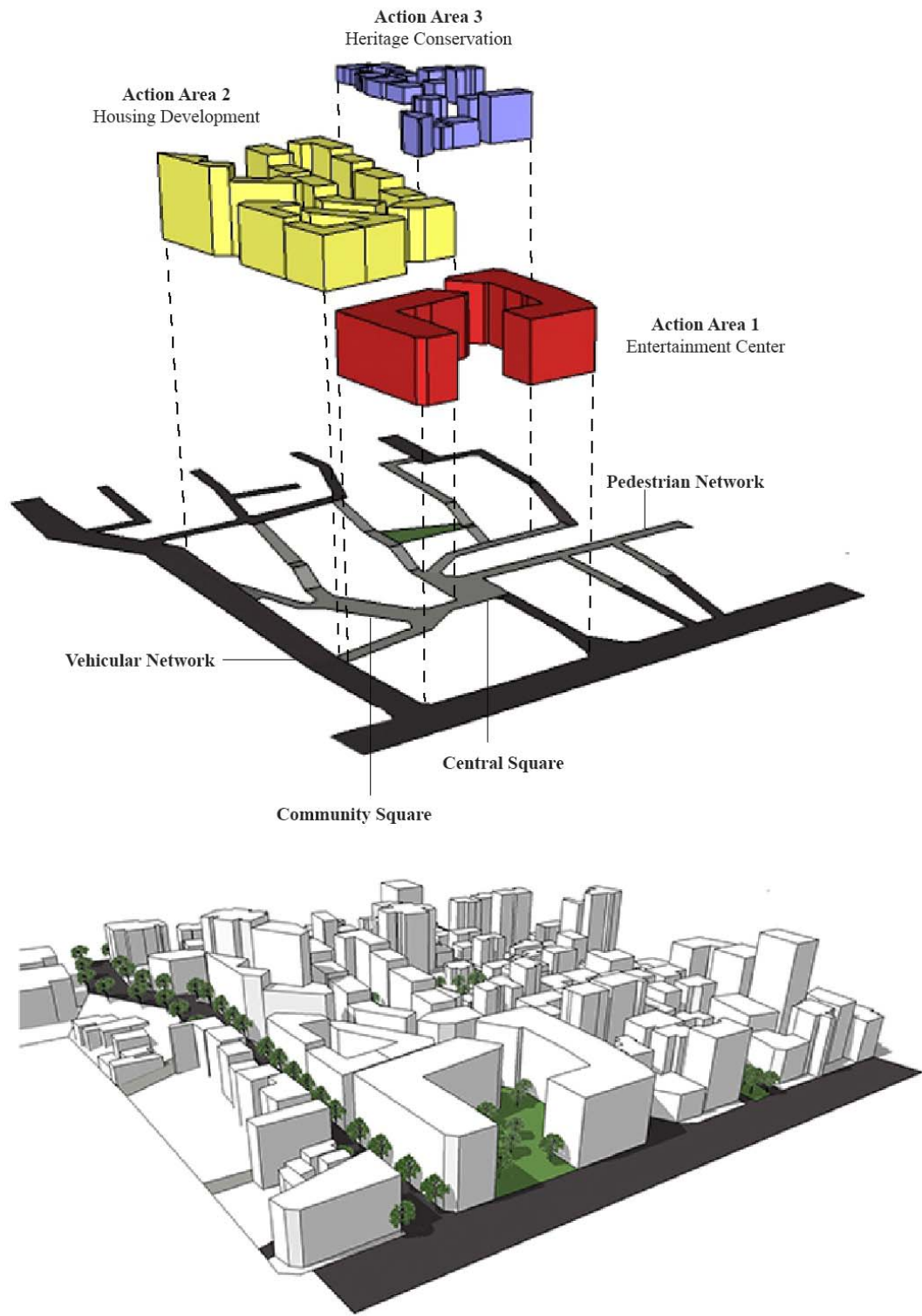


Figure 96: Above: Al-Tamlis Exploded View, Below: Al-Tamlis Birds-Eye View (North-East)



Figure 97: Al-Tamlis Birds-Eye View (South-East)

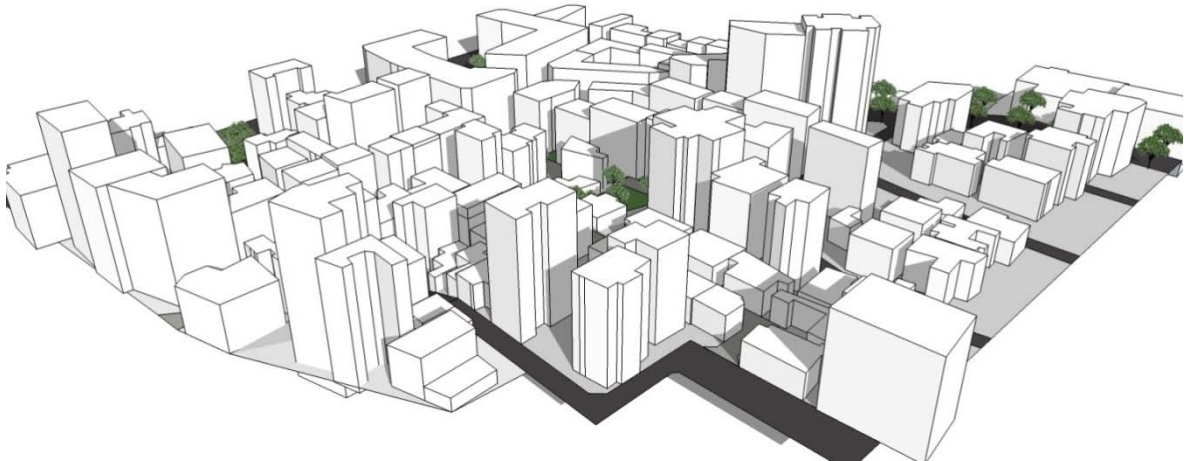


Figure 98: Al-Tamlis Birds-Eye View (South-West)



Figure 100: Inner Road in Al-Tamlis (Before)



Figure 99: Pedestrianized Inner Road in al-Tamlis (After)

CHAPTER V

CRITICAL ASSESSMENT OF THE SUSTAINABLE URBAN RENEWAL PROPOSAL OF AL-TAMLIS

A. Introduction

Advancing a vision for a model sustainable neighborhood through an assortment of major demolition and renovation works, al-Tamlis's redevelopment project resonates well as an example of a Sustainable Urban Renewal. For this reason, this chapter sets to forward a critical reflection on the inclusive economic redevelopment strategy and its masterplan for al-Tamlis. As the literature review presented a theoretical revision of the legacy of successes and failures of Urban Renewal, it concluded by creating a matrix of assessment for Sustainable Urban Renewal projects. Since the discipline of urban planning, particularly in regards to sustainable development, rests primarily on mediations between the conflicting interests of stakeholders and finding compromises, the assessment framework will serve as a checklist for the scale of sustainability achievements and highlights ineluctable repercussions. Consequently, the methodology of this chapter is to apply these guidelines of 'good' practice in renewal to assess the positive aspects of Al-Tamlis masterplan as well as its probable shortcomings or possible failures. The revision will be organized following the assessment framework – and more generally Sustainability poles. Each segment will discuss

in what manner and to what extent al-Tamlis plan is commensurate with Sustainable renewal stipulations and what are the assumptions, limitations, and possible remedies or recommendations that could have been introduced to enhance the sustainability of the proposal.

B. Assessment of al-Tamlis Proposal: Successes and Shortcomings

1. The Economics of al-Tamlis Proposal

Al-Tamlis inclusive economic redevelopment strategy is envisioned a public-private partnership but which is solicited by Beirut Municipality and managed by the set-up of a public agency (as per the Planning Law, 69/1983). It is exclusively co-financed and owned by the municipality and the Ministry of Finance (Institute of Housing) to curb vested private and political interests and ensure a more democratic governance, and a just and equitable redistribution of economic values created by the project. Also, the earmarking of al-Tamlis as a focused blighted neighborhood in need for renewal was a result of a comprehensive social, economic, and physical assessment report. The report concluded with recommendations that the area's renewal is imminent and government intervention is necessary to counteract the repercussions of a free-market real-estate development.

However, the generator of al-Tamlis renewal plan is its economic strategy. The plan builds on the speculative potential of al-Tamlis's prime frontage on a vibrant thoroughfare Corniche al-Mazraa. The plan envisions a mixed-use highway frontage development in Action Area 1, whose purpose is to generate profits to deploy in the next development phases, as a self-financing scheme. Such a project not only makes the renewal plan financially viable, but also, in combination with retail shops at ground levels, strengthens the economic base of

al-Tamlis neighborhood and provides job opportunities and financial support to anchor locals in place and reduce displacements. Subsequent revenues obtained will be channeled to finance the housing development in Action Area 2 and the restoration works and community training in the historic quarters of Action Area 3. Finally, the proposal mandates innovative planning approaches such as the Transfer of Development Rights (TDR's) between Action Areas 2 and 3 to increase housing supply and conserve patrimonial buildings, in addition to density bonuses, height exemptions, or compensations in Action Area 4 to render affordable housing investments more appealing to developers.

Although it abides by a rigorous implementation schedule and timeline and sanctions public interest by enforcing that all consulting, contractual, and commissioning works follow an openly chartered bidding and selection process, the economic strategy lacks in certain aspects. First and foremost, it is estimated that the plan requires an initial investment of 33 million dollars dedicated for land acquisition and development of the mixed-use highway frontage development. This number is exorbitant and its procurement may not be a priority on the agenda of the municipality. Second, the return on investment (ROI) calculation (See Appendix XII) is rudimentary. A more intricate financial and feasibility report is needed that studies costs and market returns, other investment sources and capital costs, as well as other more lucrative building programs. Nonetheless, as any real-estate investment, any project risks potential financial losses that might jeopardize the execution of the next development phases. Also, the construction of the center may result in the rise of land and rent values in adjacent properties that cannot be realistically counteracted causing possible unintended displacement of neighboring residents or closure of businesses. Finally, the employment opportunities furnished by this project are for unskilled labor and

most probably will not be financially rewarding for existing low-income groups in al-Tamlis – in particular those in extreme poverty – to afford the new social housing apartments.

2. Community Participation and Gentrification

The social constituent of Urban Renewal entails primarily two considerations: public participation in decision-making and counteracting displacement and social segregation. In terms of participation, the al-Tamlis plan explicitly dictates that an interdisciplinary group of consultants (planners, architects, environmentalists, activists...) should be formed as a development team to guide the processes of decision-making and proposal design. Negotiations should conclude with compromises on highly contentious issues such as urban layout, building design, relocation, pricing, and compensation rates. This group must include community representatives and political groups to ensure a transparent democratic governance, the circumvention of political tensions between Shiite and Sunni groups, and to create a future sense of common ownership and belonging to the neighborhood. Nonetheless, in regards to displacement, the planning scheme, when compared to the guidelines of Sustainable Urban Renewal, does not fair too well. For instance, Action Area 2, the largest and most prominent section of housing provision provides alternative apartment units for relocated property owners. However, the financial return exercise estimates a mean cost of 50,000 \$ for one of 87 available 2 bedroom apartment units. Judging by the socio-economic survey of the case-study, this price may be beyond the financial means of the average median income of al-Tamlis resident. Furthermore, the rent rates that will be demanded by the 81 units owned by the Housing Institute will only be afforded by the ‘worthy’ low-income groups at best and do not meet the prospective demand

of existing extremely impoverished families. Even the inclusionary zoning of 10-20% affordable housing provision Action Area 4 cannot meet the finances of the most marginalized groups even when assisted by newly created jobs. To compound matters further, learning by the case-study of Vesterbro in Copenhagen, although rent controls administered by the Housing Institute on its social rental apartment stock will help dampen the dynamics of gentrification, it is inevitable that those will undergo a surge in price in the long run and will ultimately match ongoing market rates. Even the affordable private apartments in Action Area 4 cannot be regulated to maintain their low price on the long term once sold. Thus, the prospects of fighting displacement seem grim: Gentrification is inescapable. But what makes the proposal particularly weak is that no city-wide relocation strategy is devised such as the construction of peripheral social housing or credit facilities to purchase decent apartments in other locations. The consequences of this will be the eventual intensification of existing slums in other parts of the city.

3. Sustainable Urban Form

The building conditions study identified the neighborhood as an amalgamation of four distinct micro-areas: 1) A large mostly vacant block on the Corniche-al-Mazraa, 2) a large central area consisting mostly of run-down low-rises and occasional makeshift housing, 3) an area with a conspicuous heritage buildings, and 4) an interstitial area of apartment buildings. This identification of distinct zones of built fabric allowed the proposal to bespoke specific strategies commensurate with the condition of each sub-area and avert unnecessary mass-scale demolition works. As a result, the al-Tamlis urban renewal program became a composition of selective and warranted demolition of dilapidated buildings, renovation of

specific buildings in relatively good structural condition, and the preservation and physical upgrade of a cluster of houses that demonstrated intrinsic patrimonial and stylistic value. This diversity in approach also beget a rich urban design based on mixity of land uses and building typologies: Residential buildings with mixed apartment floor plans, types, and ownership patterns, retail ground floor activities, commercial buildings, and an array of heritage houses that feature cultural programs and activities.

In regards to accessibility and mobility, connection to the abutting neighborhoods of Em-Zakour and Al-Aytam is restored through the careful design of a network of alleyways and staircases, embedding al-Tamlis firmly within its surroundings. In regards to mobility, despite the design having ample parking spaces, these have been allocated to the borders of al-Tamlis and away from the interior narrow roads. The internal roads in turn have been converted to paved pedestrian paths, and along with the widening of surrounding sidewalks and stairways implementations serve to dis-incentivize automobile circulation and crisscrossing and to encourage pedestrian activity, cycling, and dependence on public transport systems (buses, vans, cabs...) that inundate Corniche-al-Mazraa nearby. Such strategies make al-Tamlis resemble both a Pedestrian and Transit-Oriented Development (POD, TOD). The design also features intense landscaping work. This includes the widening of existing community squares, formalization of existing vegetal patches and parks, and the creation of new gardens either in the public domains or in the semi-private interior courtyards of buildings. This intensified green layer will serve to enhance the air and environmental quality of the neighborhood, reduce its heat island effect, as well as provide shaded areas for outdoor recreation.

On the other hand, what is deficient on the environmental side is the lack of both regulations and incentives to construct buildings with energy-efficient measures. Although building density and intensity proposed is increased multifold, the masterplan does not impose criteria that serve to reduce energy consumption, optimize performance, nor produce energy from renewal resources. Passive design measures include but not limited to requirements for optimum orientation, natural daylighting and shaded openings, the use of recycled construction materials, implementation of passive ventilation techniques, and compulsory landscaping of roofs and unbuilt parts of plots. Active systems can also be encouraged by providing credit facilities. Those include water-saving fixtures, rainwater collection and reuse systems, greywater recycling, led-light bulbs and performance sensors, energy star appliances, and renewable energy production systems such as PV solar panels, Solar Water Heaters (SWH) and wind turbines. The lack of supporting green infrastructure and services also presents a missed opportunity to showcase state-of-the-art sustainability practices. Examples can be neighborhood-scale heating and cooling systems, waste-water recycling, solid waste management, Green Street lighting, rainwater harvesting and collection. These measures of sustainable planning are instrumental in reducing the carbon and ecological footprint and are integral components of any model sustainable neighborhood. Lastly, although the plan features a training program for relocatees and some future tenants on craftwork in the preservation action area, it does not mention the needed training for residents about the environmental efficient measures and techniques that are vital for the neighborhood low-impact performance after buildings have been commissioned.

	Economy	Society	Environment
Management	Assessment	Community	Selectivity
	Feasibility Large Upfront Costs No Feasibility Study	Interdisciplinary	Mixity
	Schedule	Mixity of Tenancy	Integration
	Instruments	State-led PPP	Local
Re-Zoning No Zoning Incentives		Inclusion Increase in Rents (Long term + Surrounding) Unaffordability of New Housing New Low-Income Jobs	Transit
		Relocation No City-wide Relocation Plan	Landscaping
			Green Infra Lack of Green Infra
			Efficiency No Incentives for Green Building

Figure 101: Summary of the Assessment Framework on al-Tamlis masterplan. Black font: Points conforming with the ideals of Sustainable Urban Renewal, Red Font: Shortcomings of the proposal

C. Recommendations

The reflection on the shortcomings of al-Tamlis Masterplan concludes with recommendations on how to improve the sustainability of its proposal based on the guidelines of the Sustainable Urban Renewal of neighborhoods. The recommendations are summarized as follows (Figures 102-103):

	Economy	Society	Environment
Management	Assessment	Community	Selectivity
	Feasibility Public Bonds Creative Hub Tech Zone	Interdisciplinary	Mixity
	Schedule	Mixity of Tenancy	Integration
		Local	Trainings Training in Env. Practices
Instruments	State-led PPP	Inclusion Creation of Skilled Jobs + Training (Creative Industry) New Community Center Short-time Rent Controls	Transit
	Re-Zoning Revising Zoning to increase density	Relocation Comprehensive Relocation Strategy	Landscaping
			Green Infra Lack of Green Infra
			Efficiency Revising Regulations to Encourage Green Building

Figure 102: Summary of the Recommendations for Improvement of Proposal based on the Assessment Framework. Black Font: No recommendations, Red Font: Recommendations for improvement of proposal

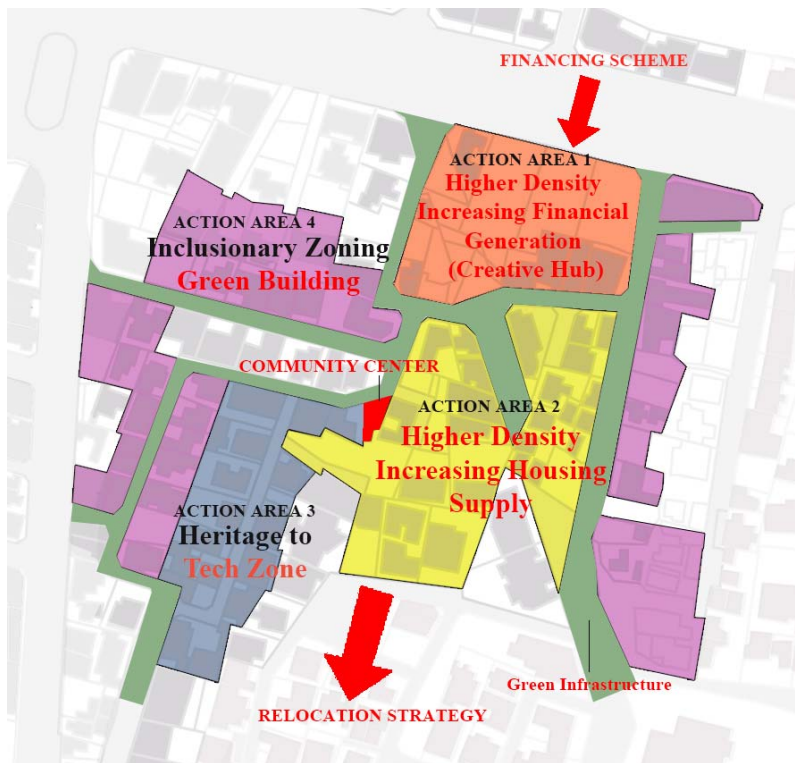


Figure 103: Map showing suggested improvements in Red in each Zone

1. Improving Financial Feasibility

i. Initial Financing Scheme

Since the estimated upfront cost of 33 million dollars (land purchase and design and construction of the project on Action Area 1) may present a financial burden on municipal budget, it is proposed that the Ministry of Finance administer a sale of government bonds. These bonds, payable with interest over a fixed duration which preferably would cover the entire project implementation timeline of 20 years, will help raise enough funds to initiate the first phase of the renewal project.

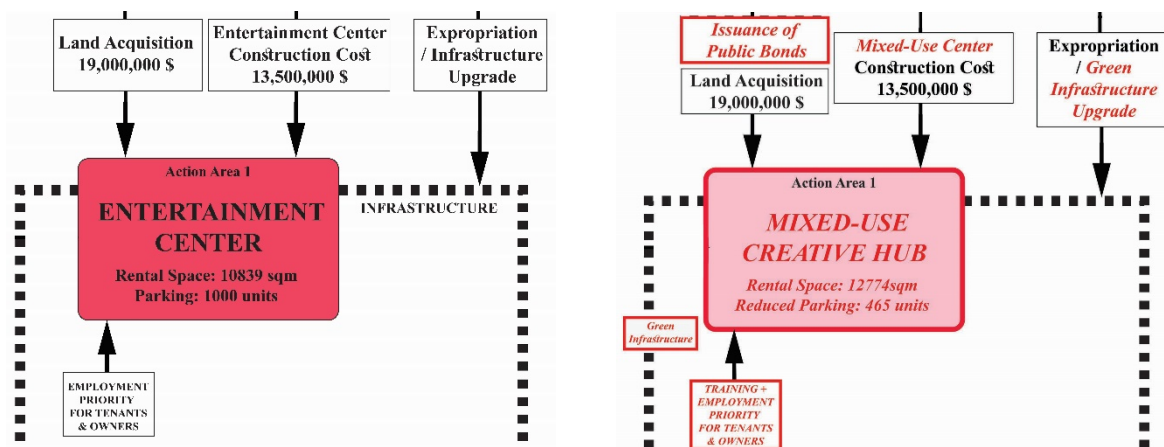


Figure 104: Revised al-Tamlis Financial Feasibility Plan (Before and after) (See Appendix XVII)

ii. From Entertainment Center to a Creative Hub

One major concern about building an entertainment center at the frontage of Corniche al-Mazraa was that the employment opportunities generated exclusively for local relocated tenants are of low-skilled labor. Consequently, it was argued that the remittances of these positions may not be enough to make the newly built apartments or social rentals affordable for the local population. So, in order to slow down the process of gentrification,

another program is proposed: A mixed-use creative hub. This center would have commercial areas on its lower levels and left for individual investors to determine their nature according to the contingencies of Corniche al-Mazraa. Yet, on the center's upper floors will be design, fabrication, maintenance and repair, and innovation functions. Although technology services will attract a sizable population of young urban professionals from external locations; nonetheless, when coupled with vocational training programs for locals in light manufacturing industry and media tools, they will help elevate the aspiring and ambitious young generation in al-Tamlis's social status. Only such a mode of social mobility can help anchor the residents in place and improve their socio-economic prospects. Nonetheless, it is worthy to mention that, in order to secure training for locals, much effort must be done by the Ministry of Social Affairs (MoSA) to aid in the refurbishing of the local school or a local center and to employ professionals to educate and train locals in fabrication methods and techniques. In tune with the establishment of a creative hub, the heritage conservation program in Action Area 3 has to be rethought as well. The previously propounded arts and crafts activities may not be a financial impetus for this zone. Alternatively, this zone can become a commercial area specialized in the sales of technology merchandize and appliances. Since complementary uses exist in the close vicinity (Abed Tahhan Appliances and others), these shops may prove a magnet for investment and profit and can be expected to yield taxes for the upkeep and maintenance of their heritage buildings. Finally, both the mixed-use creative hub and conservation zone should undergo an extensive financial feasibility and return-on-investment (ROI) studies to ensure their market viability and profitability.

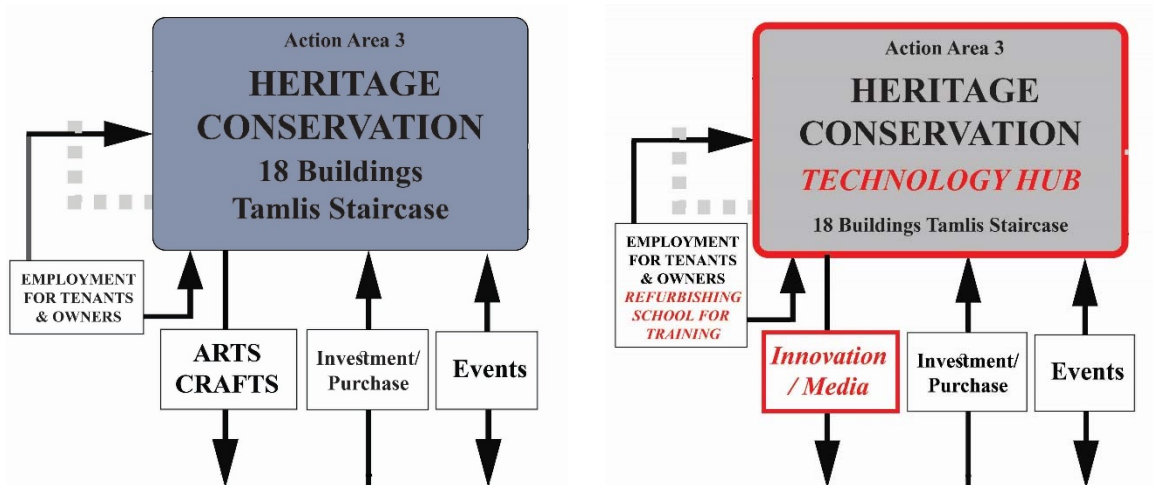


Figure 105: Revised Economic Plan for Action Area 3 (Before and after) (Changes in Red) (See Appendix XVII)

2. Revising Regulations for Innovation

One main policy underpinning the redevelopment process of al-Tamliis masterplan is that it abides by the zoning ordinances and regulations of Zone 4 of Beirut (FAR 50%, Exp. Ratio 3.5). Since the guidelines of Sustainable Urban Renewal encourage innovative strategies to ensure its implementation, one recommendation would be to increase the zoning exploitation ratios of Action Areas 1 and 2 from 3.5 to 4. This change has two major positive repercussions on the economic sustainability of the proposal. First, it furnishes an extra 1,935 square meters of rental space in Action Area 1 that can increase profits to be channeled to finance the housing development of Action Area 2 (Figures 106-107-108).

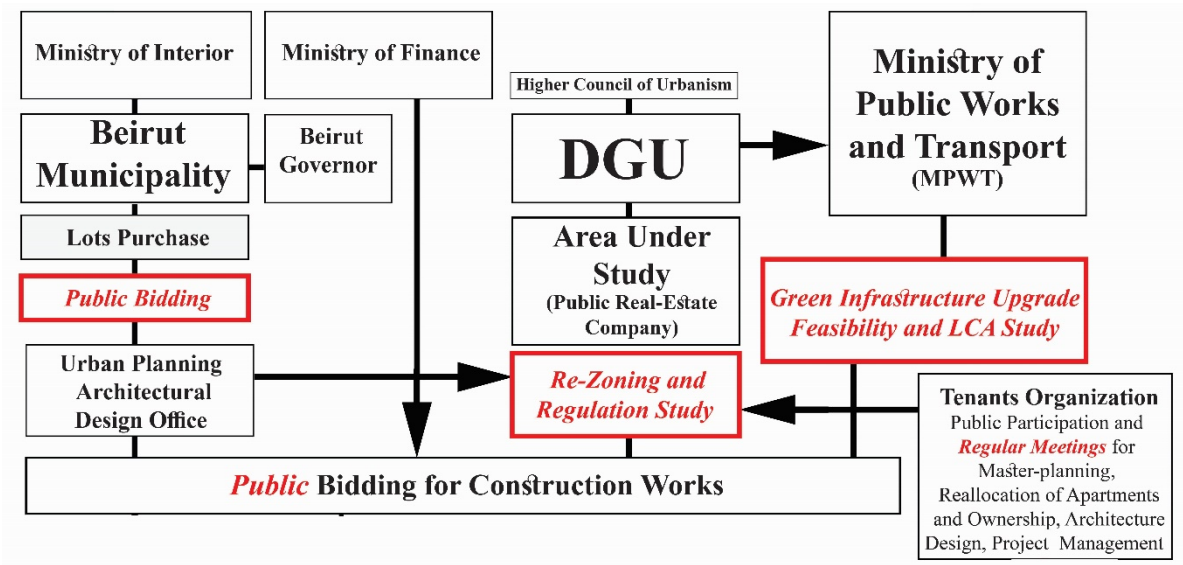


Figure 106: Revised Governance Plan (Additional strategies in Red) (See Appendix XVIII)

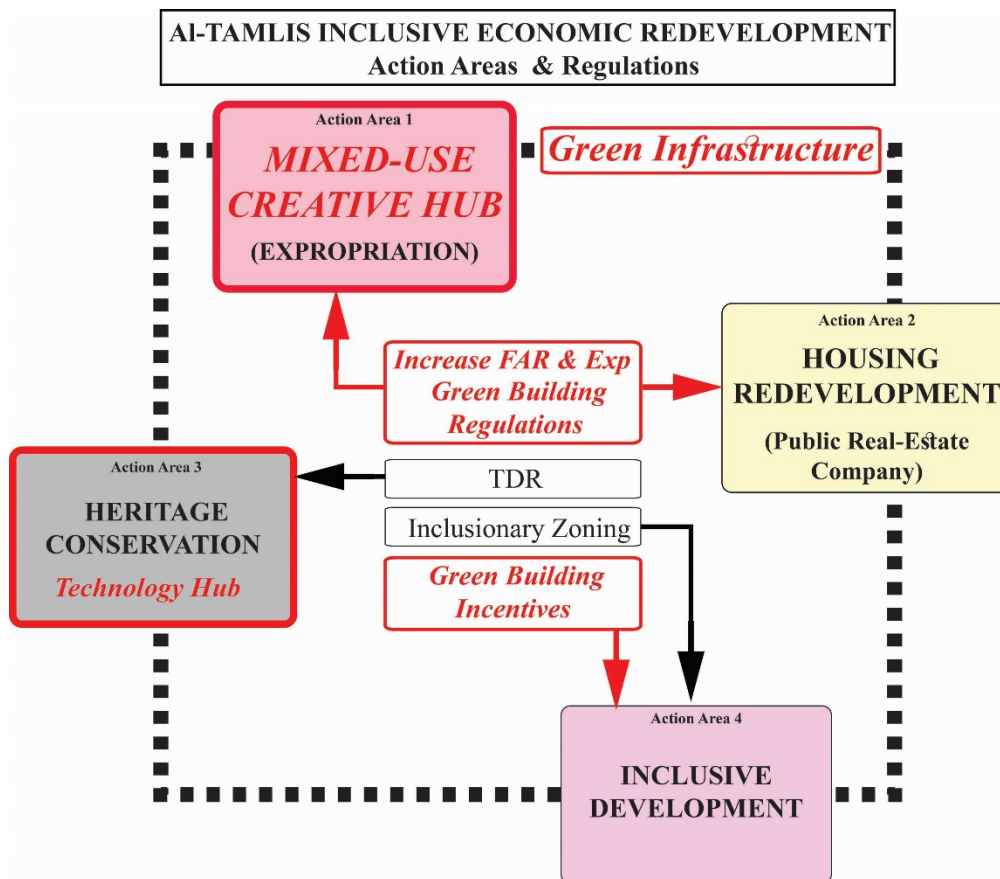


Figure 107: Revised Zoning and Regulations (Changes in Red)

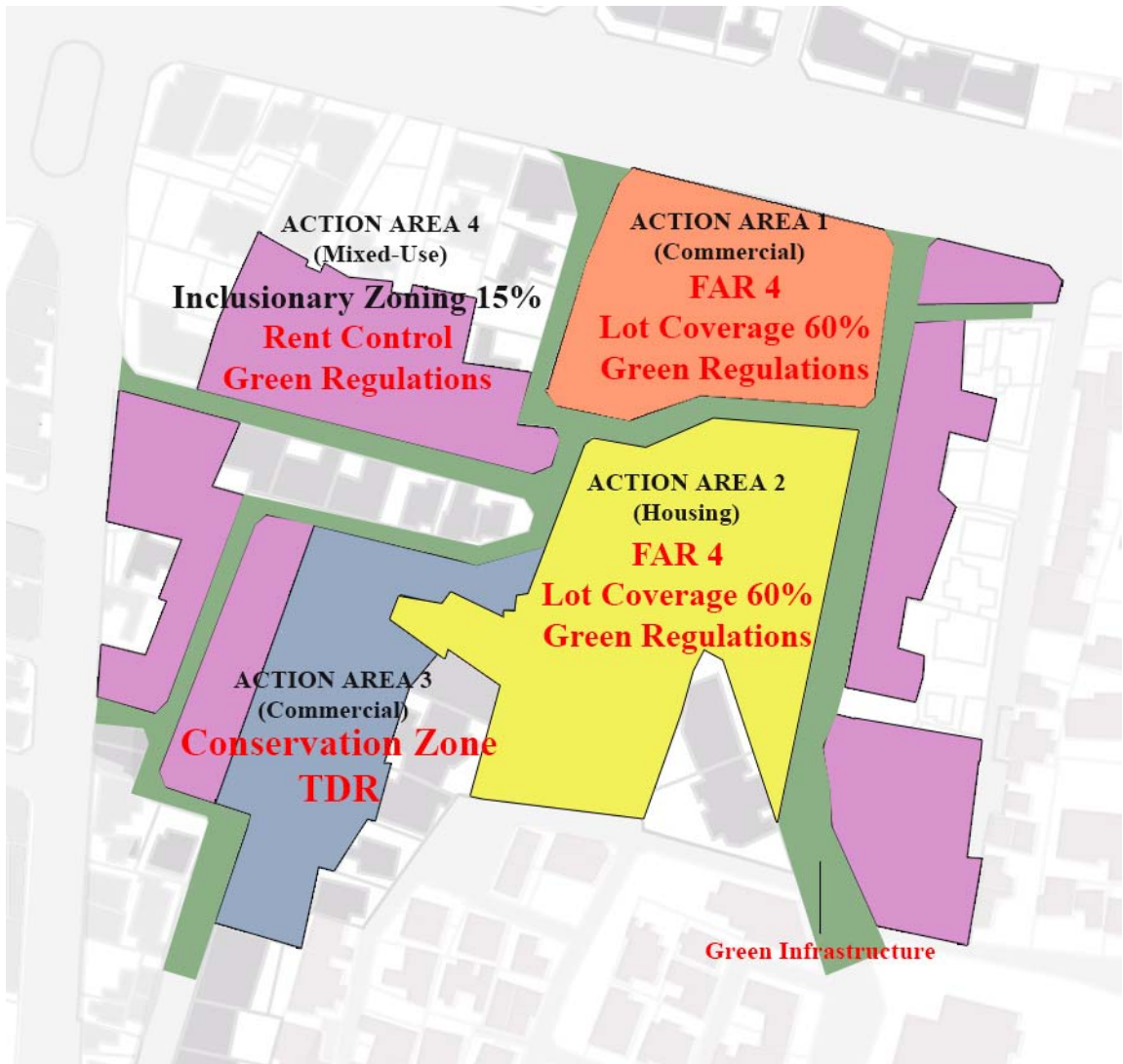


Figure 108: Map showing revised regulations for each zone (Changes in Red)

Second, an increase in FAR allows the construction of an additional residential floor per building in the housing development resulting in an extra 20 rental apartment units to relocate the ‘worthy’ low-income tenants. Moreover, an additional stock of publicly-owned rentals (from 81 to 101 units) helps lower the estimated monthly rent from 500 to 450\$ per month as compared with the initial scheme (see Figures 108-109).

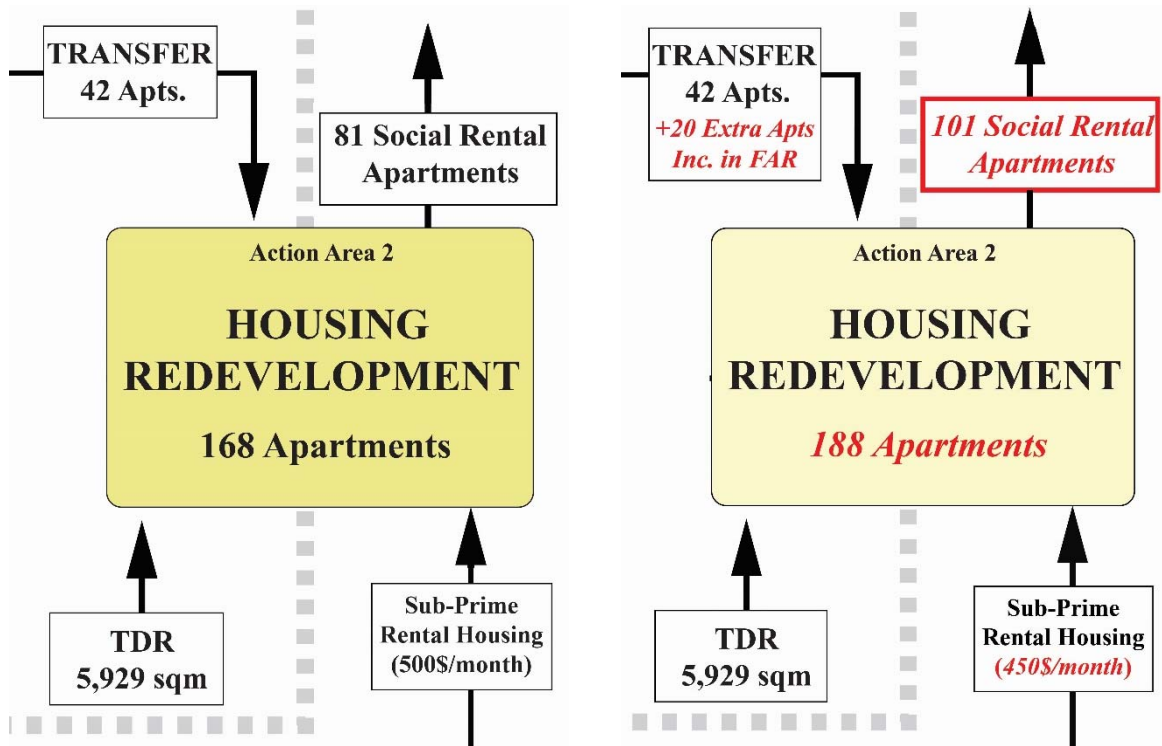


Figure 109: Revised Housing Development Plan in Action Area 2: Increase in Social Rental Apartments (Before and after) (Changes in Red)

3. Comprehensive Relocation Strategy

Another defect in the al-Tamlis masterplan is its disregard for the extremely disenfranchised segments of the al-Tamlis report in the analysis. The plan proposes to indemnify these families on the assumption that they will relocate to better locations. Nonetheless, and acknowledging the fact that these residents generally end up relocating to and intensifying other slums in other locations, it is proposed to establish a Relocation Management Unit. The purpose of this office is to gather information about persons forced to relocate (their vocation, condition, relatives, income and wealth...), find suitable affordable relocation areas, make sure indemnifications are adequate, and offer guidance on work opportunities and so on.

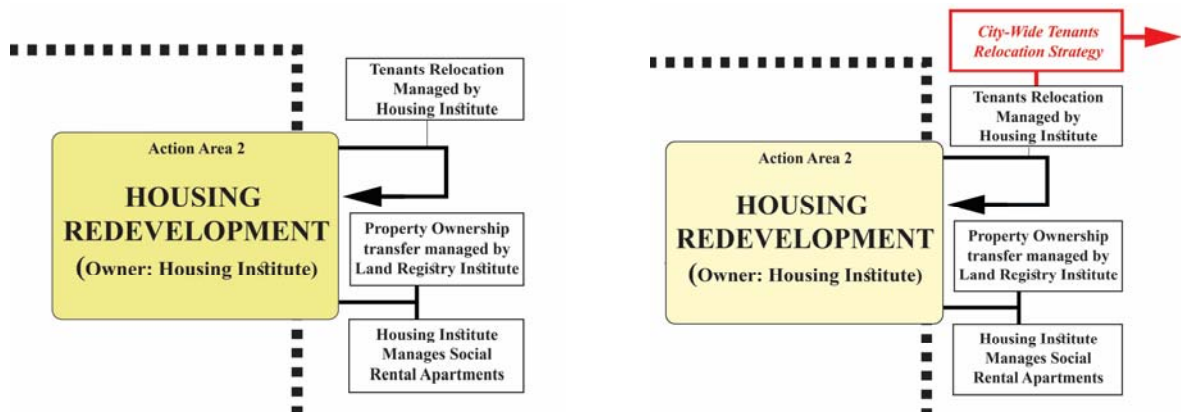


Figure 110: The inclusion of a City-Wide Relocation Strategy (Change in Red)

4. Community Center

In order to improve the vibrancy and cohesion of the new community of al-Tamlis, it is essential that the plan endorses the refurbishment of an existing property and converting it into a community center (Figure 111). This center will be instrumental first in organizing regular meetings with the tenants' organization to relay information about the development of the project. In later phases, this center can be used for training of locals in new vocations, and ultimately serve as a shared space for managing the common affairs of the community as well as building a common shared sense of ownership of the neighborhood.



Figure 111: Candidate building (in white) to house a future community center

5. Green Building and Training

Even though al-Tamlis plan advertises itself as a ‘model sustainable neighborhood’, it does not mandate regulations to construct climate-responsive buildings. A remedy to this shortcoming can be to incorporate passive building design measures as part of the design and construction process of the mixed-use creative hub (A.A.1) and the housing developments (A.A.2). A draft of such regulations have already been forwarded by the Order of Engineers and Architects to be passed as amendment to the 2004 Lebanese Construction Law. These measures mandate specifications of environmental performance of buildings regarding optimum building orientation, envelope insulation and sealing, shading of openings, natural ventilation and daylighting, and usage of specific low-impact, low-embodied energy, or recycled materials, based on the micro-climate conditions of Beirut. The enforcement of such regulations may be buttressed by financial incentives through the national NEEREA loan program to purchase resource-efficient and renewable-energy production systems, appliances, and fittings. These ‘active’ systems include Photovoltaic solar panels, Solar Water Heating units, small wind turbines, Geothermal Heating and Cooling systems, water-collection, recycling, and reuse systems, low-flow faucets, Low-flush toilets, LED light bulbs and so on. The provision of such systems exponentially helps buildings reduce their resource and energy consumption and partially generating their own energy. Coupled with sustainable building regulations, in order to further reduce the neighborhood carbon footprint, it is also vital for the municipality to enforce a demolition and waste management plan in addition to building an integrated green infrastructural system in its redevelopment of the public network of al-Tamlis. For example, a neighborhood rainwater harvesting system and a greywater recycling system should be studied in order to recycle and reuse water for landscaping and

cleaning. Also, the adoption of a solid-waste management plan that enforces the recycling of materials, the creation of compost soil, and reduction of waste discarded. A green lighting network with should be installed that uses PV panels and motion, dimmers, and light sensors. Finally, the applicability of a district-scale cooling or heating system that can reduce energy consumption of individual buildings should be studied.

Lastly, it is important to note that these technical measures are insufficient if not tied with inhabitants' awareness and training campaigns on resource efficiency practices such as the conscientious water usage and lighting, moderate use of heating and cooling appliances, waste recycling techniques, energy metering, landscaping etc.... These trainings are to be administered by the Ministry of Social Affairs as part of their general social development plan in al-Tamlis. The incorporation of building, neighborhood, and practical environmental strategies are integral for the reduction of the carbon footprint and the achievement of a resource-efficient model sustainable neighborhood.

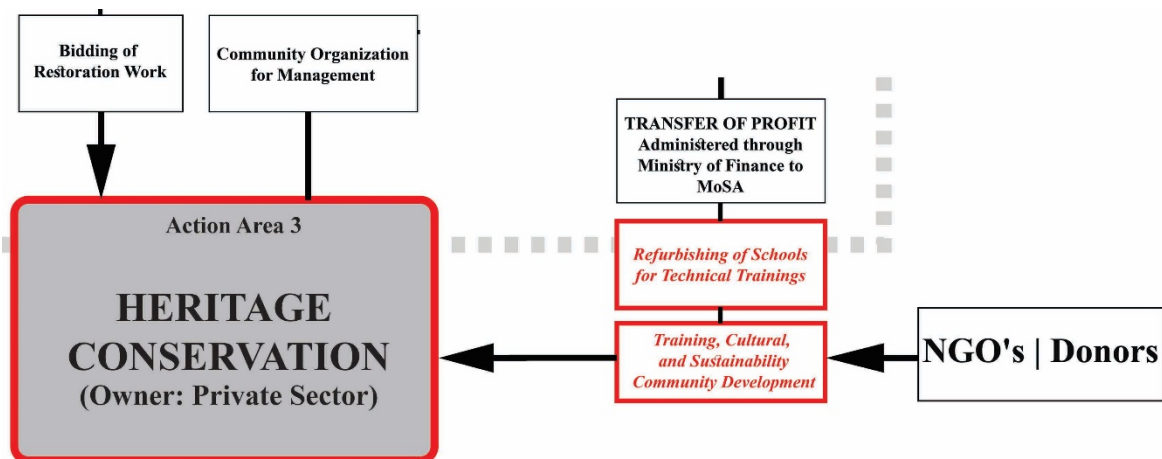


Figure 112: Revised Governance Map showing training provisions for sustainable practices (Changes in Red) (See Appendix XVIII)

D. Revised Masterplan



Figure 113: Al-Tamlis Masterplan Revised (Changes in Red)



Figure 114: North-East Axonometric of Al-Tamlis Revised. In red, the increase in density and enlargement of the Frontage of the Mixed-Use Center

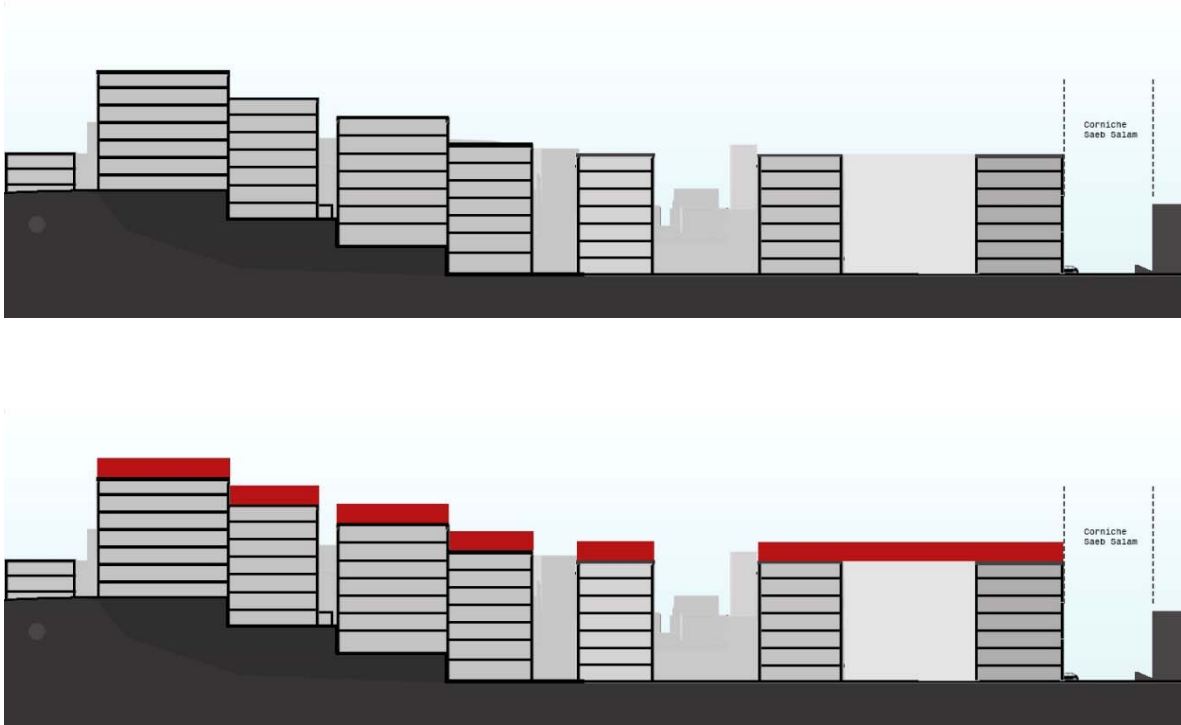


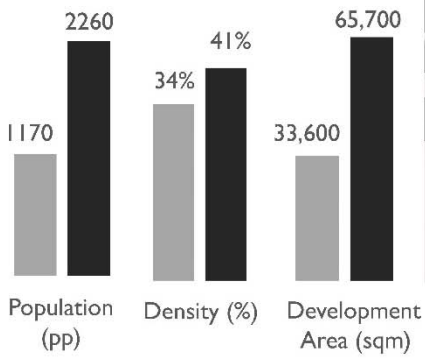
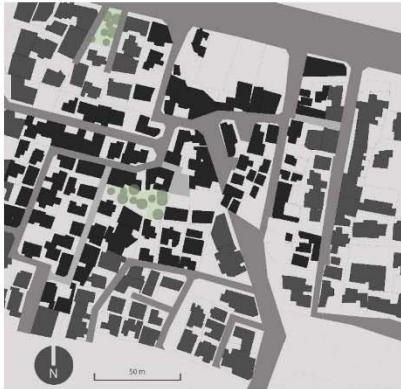
Figure 115: Section Through al-Tamlis Plan Showing the revised increase in building Densities of AA1 and AA2 (Changes in Red)

E. Final Masterplan Achievements

This final section showcases the sustainability achievements of the Urban Renewal of al-Tamlis over the initial (current) condition of the neighborhood. The new masterplan realizes a 90% increase in development area (mostly of mixed retail-residential buildings) and a doubling of the resident population density. It achieves a 90% increase in commercial activity in the neighborhood and an increase in pedestrian and green infrastructure (31%). But perhaps the most promising success is the achievement of a balanced ownership pattern between the public (mostly Housing Institute) and the private in the housing sector. This translates into a balance between privately-owned apartments, publicly-owned rental units, and privately-owned affordable housing units (Figures below).

Existing

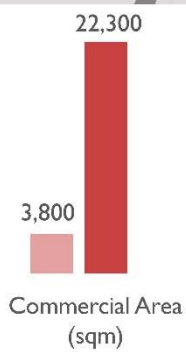
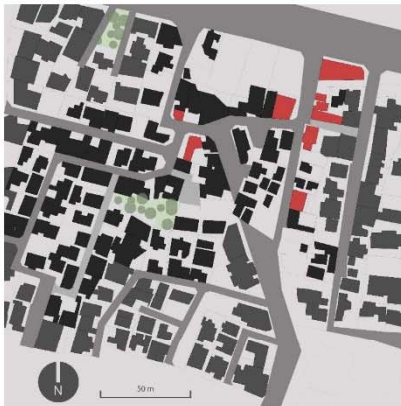
90% Increase in Development Area



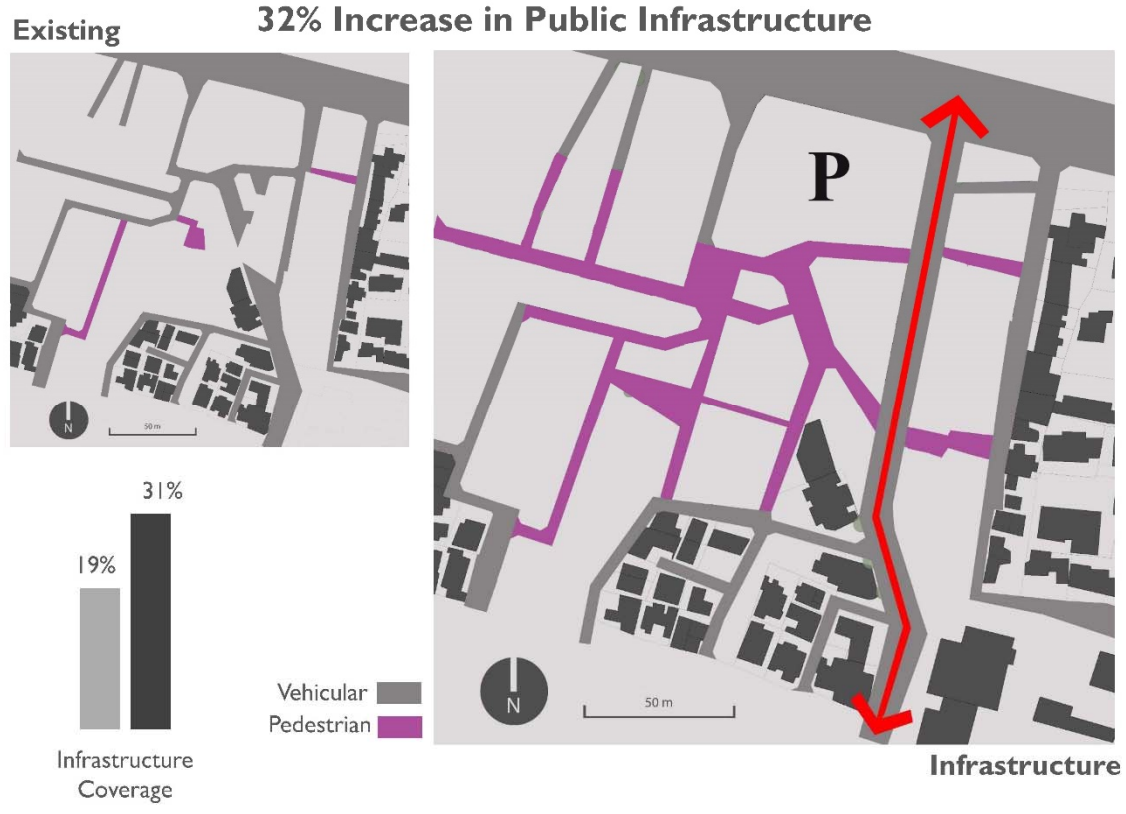
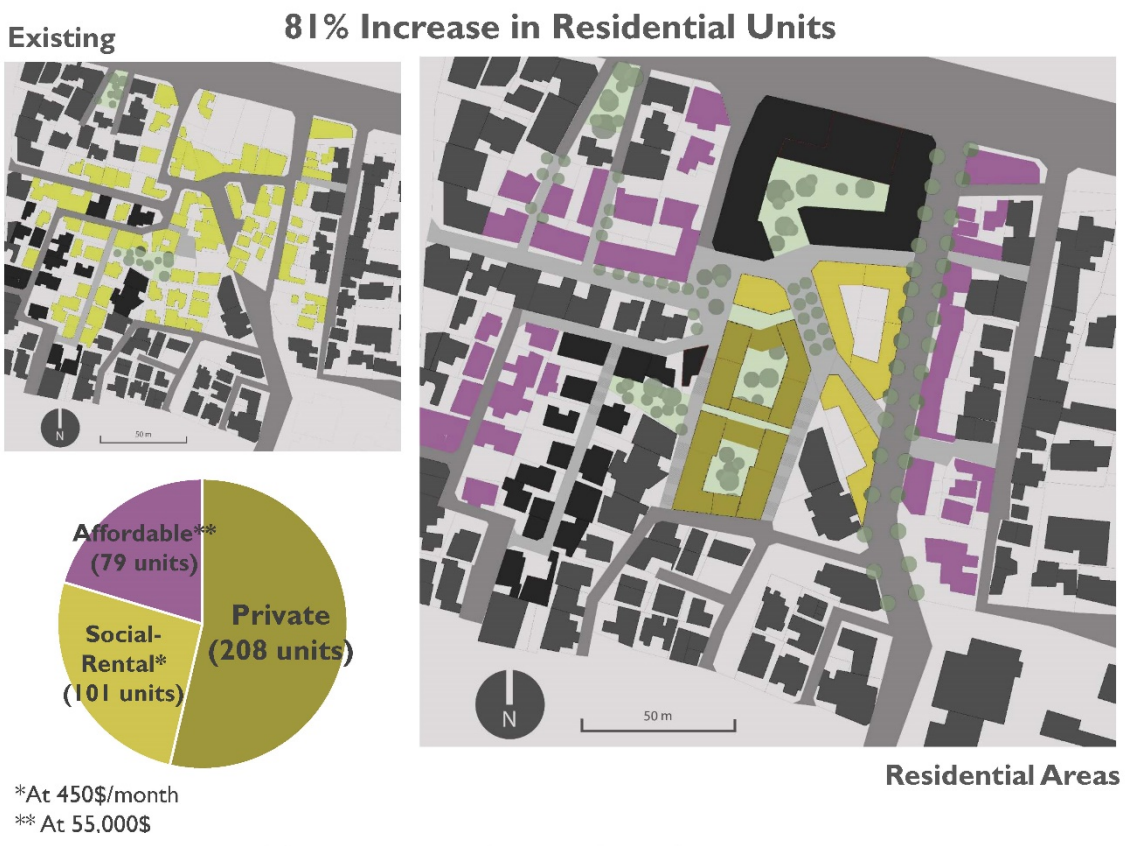
Mass Plan

Existing

450% Increase in Commercial Areas



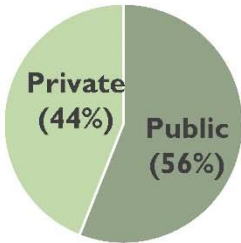
Commercial GFs



Existing



475% Increase in Landscaping

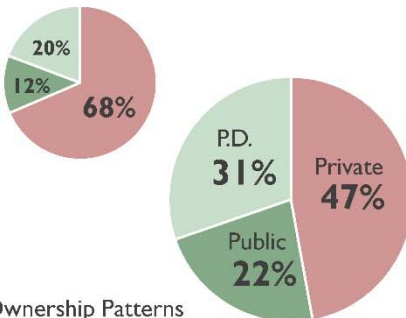


Vegetation Composition

Tree-Lining

Landscaping

65% Increase in Public Ownership



Ownership Patterns



Ownership Map

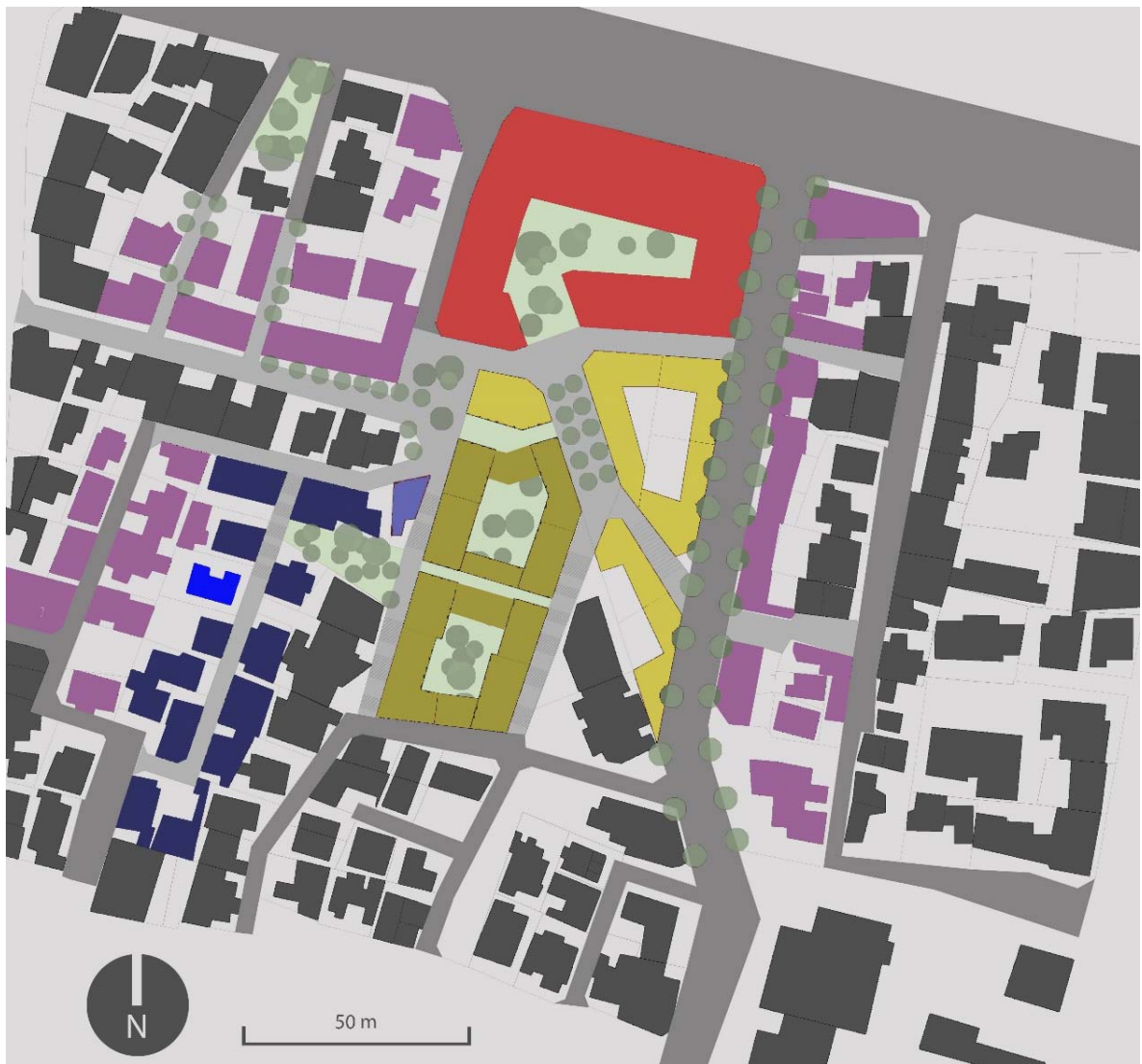


Figure 116: Al-Tamlis Final Land use Plan

Legend

- Council-Owned / PPP Commercial Use
- Council-Owned Rental Units / Mixed-use
- Privately Owned Apartments
- Community Center
- Conservation Buildings / Privately-Owned Commercial Use
- Existing Private School
- Mixed-Use Residential / Inclusionary Zoning (15%)
- Surrounding Buildings



Figure 117: Sectional Axonometric of the Final Proposal showing its Sustainability Strategies

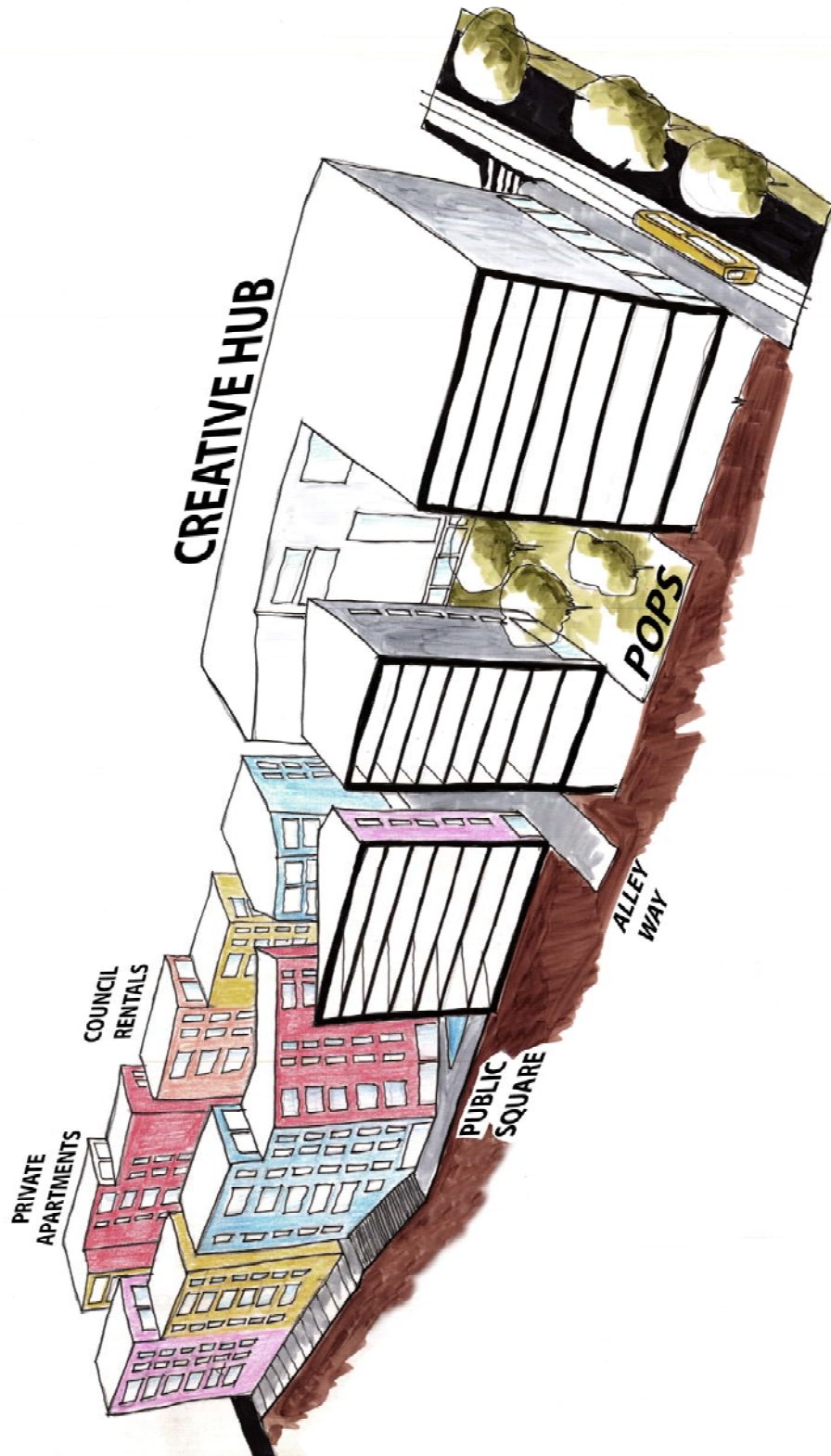


Figure 118: Sectional Axonometric of the Final Proposal showing the Mixity of Ownerships and Styles

CHAPTER VI

CONCLUSION

A. Summary and Position

Planning and designing sustainable neighborhoods is not a simple task. There is no single path to achieve urban sustainability, since different neighborhoods in different locations will lead to different results. Although sustainable neighborhoods are the backbone of eco-friendly cities (Engel-Yan et al, 2005), there is no consensus on what sustainable development should consist of or look like, not even on how it should be achieved (Xavier Gabarrell et al., 2011). According to Campbell (1996), the exigencies of practice limits planners to serve the narrow interests of their clients, authorities, and their financial budgets. Costly compromises are often done on such basis in total disregard for the opportunities provided by local context and site-specific characteristics (territory, finances, society, and legal frameworks) and existing conditions (buildings, infrastructure, and vegetation).

It is from this backdrop that this thesis embarked: It sought to rethink the legacy of Urban Renewal practice of the 50's and 60's after it was shelved off by Jane Jacobs and other like-minded advocacy planners. It set to re-evaluate the contributions of Urban Renewal to the discipline of urban planning and reconsider its policies in the context of 21st century cities struggling to align their growth aspirations with sustainable development goals. Since Sustainable Urban Renewal is yet an elusive practice with no strategic manifesto, the literature sought to establish a framework to guide decision-making and design of Sustainable neighborhood redevelopment.

In the course of my investigation, I chose to ‘walk the thin line’ between the domains of urban planning and urban design, to harness the capacities of both fields to establish a more nuanced reflection over the processes of Urban Renewal. Furthermore, it is worthy to note that, in the course of this work, I have refrained from delving into the classical academic discourse of positioning myself in favor or against a certain model or ideal of Sustainable redevelopment practice. Instead, what I sought to establish was one road-map, in the contemporary struggle for sustainable urban development, that bases its principles on the recent literary debate on the rethinking of Urban Renewal as a tool in planning. In so doing, al-Tamlis proved to be an ideal case-study to test the agenda of the new paradigm of Sustainable Urban Renewal: First, al-Tamlis was shown to be a transitory area that awaits an imminent market-led redevelopment that will eradicate it entirely. Second, al-Tamlis does not identify as a ‘neighborhood’ in the classic sense of having a specific population that shares a common history, identity, and belonging that is worth preservation. Accordingly, its renewal presented itself as a unique opportunity to serve as a laboratory to test the framework for Sustainable Urban Renewal. And so, in this sense, this thesis, instead of establishing a literary argumentation, chose to fill a gap in the literature by presenting Sustainable Urban Renewal, through a framework and a hypothetical case-study, as one model of urban planning that champions state interventionism, in its market-mediatory role, as a cornerstone for achieving Sustainability. In the process, it sought to highlight the complexities, possibilities, and limitations of such a model and spawn a more anchored level of debate onto the applicability and challenges of adopting sustainability in the physical planning of our cities. Furthermore, and ultimately, it sought to enrich and ground the discourse on sustainable

urban development in and through the fields of planning history, theory and practice in a particular neoliberal context of Beirut.

B. Limitations of the Sustainable Urban Renewal Model

Although the Sustainable Urban Renewal framework was produced through a comprehensive synthesis of decades of experiments in renewal projects, and although it is structured to account for the three tiers of sustainable development (Economy, Society, Environment), the model is far from perfection. In my opinion, acknowledging its limitations may pave the way for a more nuanced understanding of the processes of redevelopment and identify fields where more research is needed. Accordingly, some of the limitations of this model of Sustainable Urban Renewal may be the following:

- The lack of planning decrees that enforce the implementation of some of its items such as community involvement and social inclusion, the enactment of special regulations that can enable the profitability or heritage conservation attempts, or building laws that foster efficient building design considerations.
- The framework does little to account for the politics of power in planning. Although it does mandate community representation in all stages of conception and execution, the planning proposal might be skewed to favor the interests of the financial elite. So ultimately, the framework tries to limit clientelism and outright speculation through authorizing more democratic control of the planning process, but unfortunately it cannot eliminate it altogether.

- The framework is limited in its capacity to rehouse all members of the community in the area. It does little to account especially for the lowest-income population if training them for new vocations proves ineffective. Also, indemnifications for this group of residents might prove to be incommensurate with ongoing housing rental rates around the city. Their relocation to other slums might be one insurmountable occasion.
- The vocational training in the technology sector of a possibly uneducated class might be a cumbersome endeavor. Concern over the success of this strategy of upward social mobility is legitimate.
- Although the framework attempts to thwart intense bureaucracy, the complexity of its mandates might still result in execution delays and extended schedules.
- Lastly, new ‘green’ technologies of sustainable architecture might result in higher upfront costs which may jeopardize the initial affordability of large fraction of apartment units.

Accordingly, these shortcomings may present a fertile soil for future research topics on Sustainable Urban Renewal: What mechanisms in renewal governance may curtail unbridled power-plays and clientelism and ensure a more competitive and inclusive atmosphere? What types of upward social mobility programs can be designed to ensure a financial income for residents and reduce displacement? And lastly, how does the initial costs of green architecture affect the financial feasibility of renewal projects?

C. Lessons Learned

Notwithstanding its limitations, the application of this matrix as an assessment tool for Al-Tamlis masterplan yielded numerous lessons about the practice of sustainable neighborhood development in general:

- Renewal of aging building stock and infrastructure to enhance performance and energy efficiency is integral to sustainable urban development.
- Since ideal planning solutions can never be realistically achieved, planners have to find compromises to reach best possible scenarios. This may mean having to acknowledge shortcomings, such as financial and legal constraints, political hindrances, imperfect urban layouts, excessive densities, inefficient technologies, and community displacements and gentrification, as valid and inevitable shortcomings of any redevelopment project seeking Sustainability.
- There is no single portion for sustainable urban planning: Different situations require different tools and yield variegated results. In the case of al-Tamlis, Sustainable Urban Renewal proved the most plausible scenario to leapfrog the neighborhood over decades of neglect and stagnation.
- It should not be understood that renewal is the most promising instrument of sustainable neighborhood planning. This case-study has clearly demonstrated the advantages as well as the limitations of the Sustainable Urban Renewal model. That being said, in his mediatory role, it is up to the planner to choose the best methodology from a wide spectrum of planning tools that promise to conduct a balance between the three tiers of development.

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Maps

Beirut Cadastral Map 1936, *Source*: IFPO

Beirut Cadastral Map 1940, *Source*: IFPO

Beirut Cadastral Map 1959, *Source*: DGU

Beirut Cadastral Map 1966, *Source*: DGU

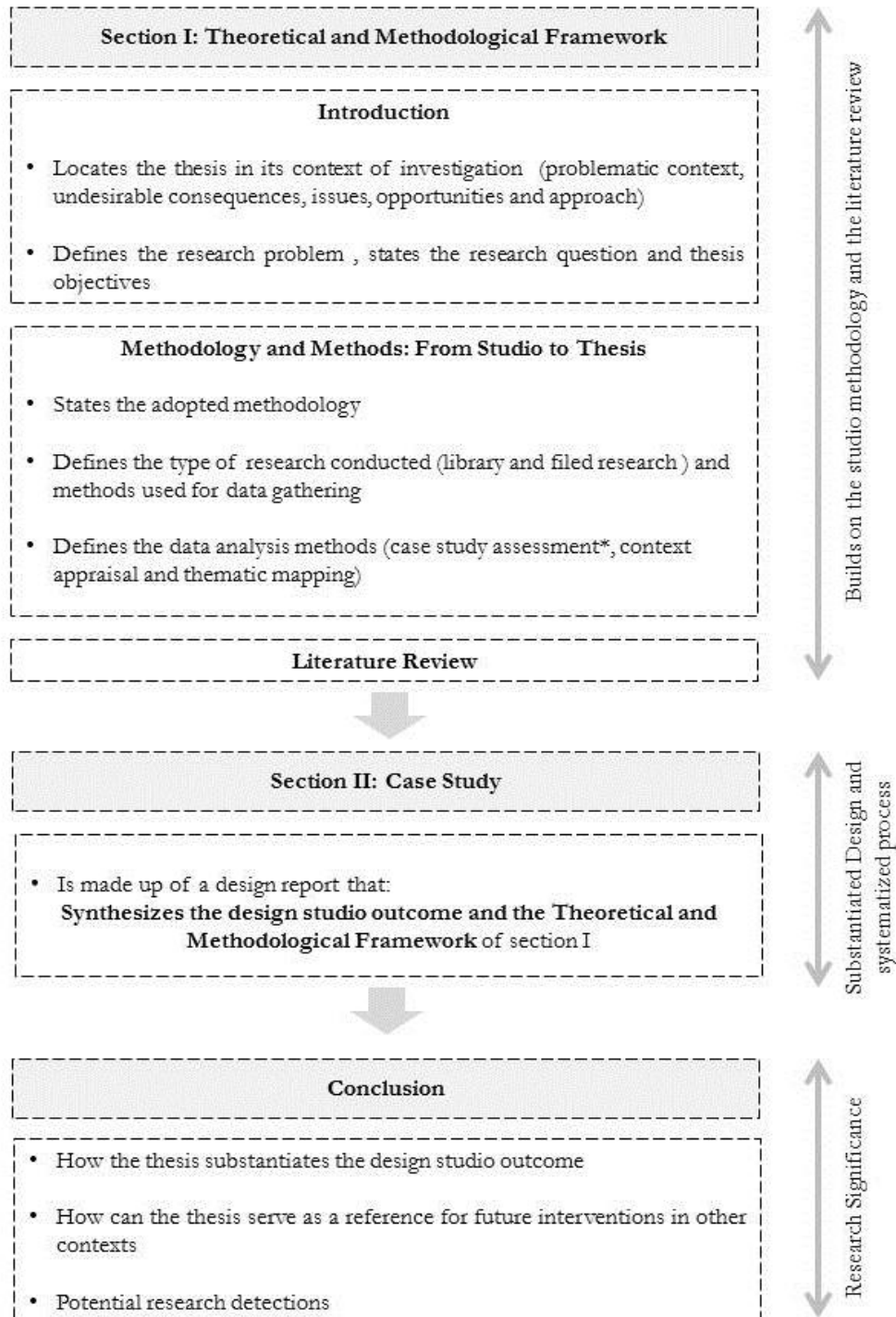
Beirut Cadastral Map 2004, *Source*: DGU

Interviews

Neighborhood residents: Abou Mohammad Sabra, Bouchra Sabra, Ahmad Rammal, Em-Ali Khalil, Mahasen Olwiya and others...

APPENDIX I

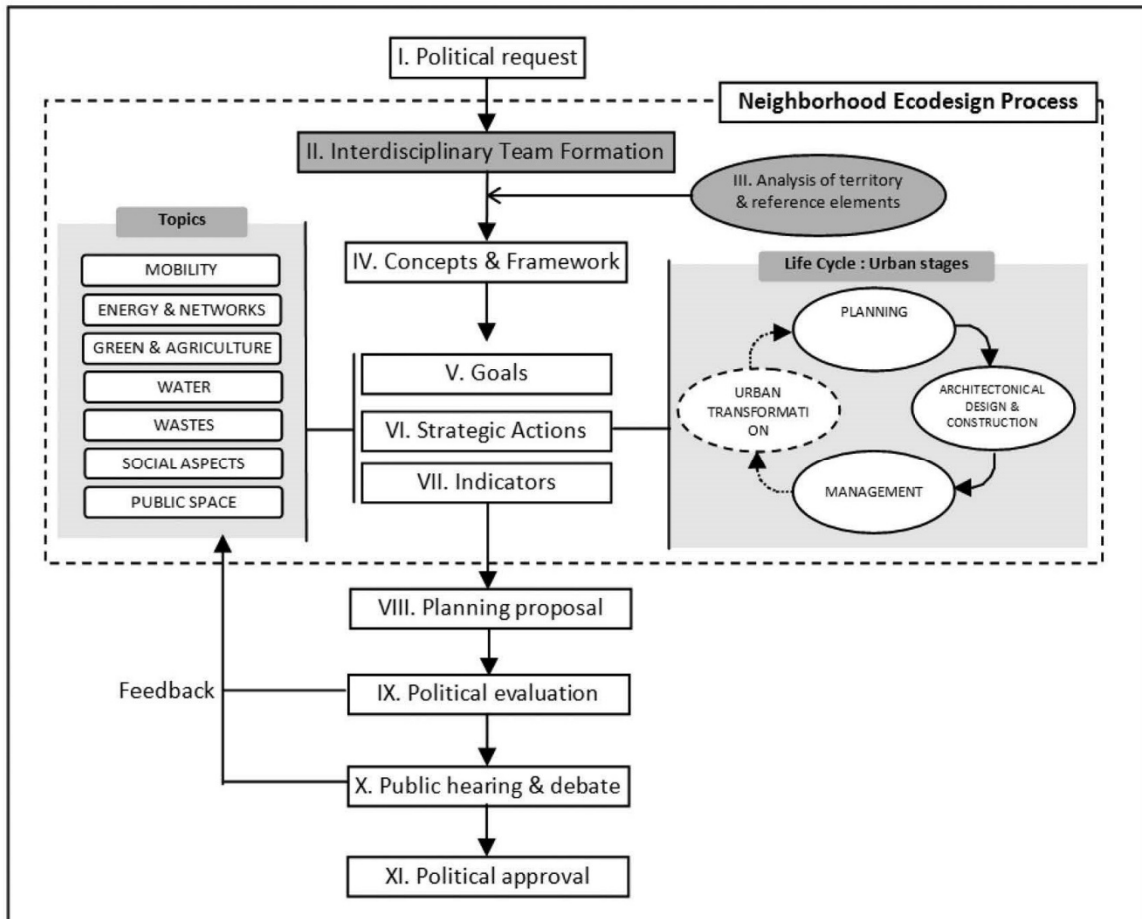
Thesis Structure



APPENDIX II

The Eco-Design and Planning Process for the Neighborhood of Vallbona

(Source: X. Gabarrell, 2011)



APPENDIX III

Determining Factors for the Vallbona Case-Study

(Source: X. Gabarrell, 2011)

Determining factors	Vallbona assessment		
	–	–/+	+
<i>Territorial</i>			
Urban form, urban fabrics, and density			●
Spatial scale of planning		●	
Availability of local resources			●
<i>Financial</i>			
Hierarchy among the sustainability pillars	●		
Environmental externalities	●		
Temporal development		●	
<i>Technical/methodological</i>			
Design-team composition			●
Availability of environmental data for decision making			●
Objective setting		●	
Time lag between planning and operation		●	
Life-cycle approach		●	
<i>Political</i>			
Local government's wish and leadership			●
Current trends in environmental policies			●
<i>Legal</i>			
Regulatory determinants (zoning regulations and legal specifications)	●		
Legal framework to support an integrated manager of the neighbourhood's resources	●		
<i>Sociocultural</i>			
Society's values and evolution		●	
Community-participation processes			●
Social surrounding factors	●		

APPENDIX IV

Vallbona Eco-Neighborhood Masterplan

(Source: X. Gabarrell, 2011)



APPENDIX V

Al-Tamlis Building Stock Survey

Al-Tamlis - Building Stock Survey													
Lot No.	Lot Area (m2)	No. of Bldgs	FAR	Floors	Total Exp	Exp. %	Apartments	Condition	Age	Building Use	Tenants	Land Value (\$)	Ownership
5012	340	1	289	2	578	49	3	Good	1936-1950	Mixed	9	1020000	Private
3026	316	1	1624	7	1624	147	14	Renovation	1951-1975	Mixed	42	948000	Private
3025	307	1	159	6	954	89	12	Renovation	1936-1950	Residential	36	921000	Private
3114	199	1	160	4	640	92	12	Renovation	1936-1950	Residential	36	597000	Private
2154	81	1	81	2	162	57	2	Dilapidated	1936-1950	Commercial	6	243000	Private
2692	245	1	208	5	1040	121	10	Renovation	1951-1975	Residential	30	735000	Private
2690	210	1	178	5	850	121	11	Renovation	1936-1950	Mixed	33	630000	Private
2693	295	1	168	3	504	49	3	Good	1936-1950	Residential	9	885000	Private
3087	375	1	219	9	1971	150	16	Good	2009-2016	Mixed	48	1125000	Private
3606	166	1	131	4	524	90	4	Dilapidated	1936-1950	Mixed	12	498000	Private
3625	89	1	60	3	180	58	3	Dilapidated	1936-1950	Mixed	9	267000	Private
3620	156	1	107	9	963	176	16	Renovation	1951-1975	Mixed	48	468000	Private
4014	75	1	57	3	171	65	3	Renovation	1936-1950	Residential	9	225000	Private
3616	294	1	159	9	1431	139	16	Renovation	1951-1975	Mixed	48	882000	Private
3610	167	1	137	7	959	164	12	Renovation	1951-1975	Mixed	36	501000	Private
4038	124	1	66	4	264	61	4	Dilapidated	1936-1950	Residential	12	372000	Private
4202	138	1	124	8	992	205	14	Good	1976-1990	Mixed	42	414000	Private
2609	137	1	75	5	375	78	5	Renovation	1936-1950	Mixed	15	411000	Private
3605	181	1	132	7	924	146	12	Renovation	1951-1975	Mixed	36	543000	Private
3604	101	1	67	4	268	76	4	Dilapidated	1936-1950	Residential	12	303000	Private
3603	342	1	237	10	2370	198	18	Good	1976-1990	Mixed	54	1026000	Private
3602	256	1	132	7	924	103	12	Good	1951-1975	Mixed	36	768000	Private
3601	184	1	178	7	1246	193	12	Good	1951-1975	Mixed	36	552000	Private
3600	450	1	320	9	2880	183	27	Renovation	1951-1975	Commercial	81	1350000	Private
5482	420	1	236	8	1888	128	16	Renovation	1991-2008	Residential	48	1260000	Private
2816	615	1	357	6	2142	100	12	Renovation	1951-1975	Mixed	36	1845000	Private
3807	341	1	256	5	1280	107	1	Good	1951-1975	Religious	3	1023000	Sumni Waqf
3806	290	1	148	7	1036	102	7	Dilapidated	1951-1975	Mixed	21	870000	Private
3805	196	1	126	7	882	129	7	Good	1951-1975	Mixed	21	588000	Private
1546	282	1	191	4	764	77	4	Renovation	1951-1975	Mixed	12	846000	Private
1148	287	1	244	6	1464	145	12	Renovation	1976-1990	Residential	36	861000	Private
4307	169	1	85	3	255	43	3	Dilapidated	1936-1950	Residential	9	507000	Private
3582	258	1	167	3	501	55	3	Dilapidated	1951-1975	Residential	9	774000	Private
3587	323	1	183	5	915	81	25	Renovation	1951-1975	Mixed	75	969000	Private
3583	391	1	226	9	2034	149	9	Renovation	1991-2008	Mixed	27	1173000	Private
3584	373	1	222	9	1998	153	18	Good	2009-2016	Mixed	54	1119000	Private
3585	238	1	0	0	0	0	0	Good	2009-2016	Mixed	0	714000	Private

Lot No.	Lot Area (m2)	No. of Bldgs	FAR	Floors	Total Exp	Exp. %	Apartments	Condition	Age	Building Use	Tenants	Land Value (\$)	Ownership
1587	352	1	123	3	369	30	3	Dilapidated	1951-1975	Residential	9	1056000	Private
3586	168	1	66	4	264	45	8	Good	1951-1975	Residential	24	504000	Private
3120	231	1	130	3	390	48	3	Dilapidated	1951-1975	Residential	9	693000	Private
2740	274	1	96	6	576	60	6	Dilapidated	1975-1990	Residential	18	822000	Private
1238	242	1	86	5	430	51	10	Renovation	1975-1990	Residential	30	726000	Private
1561	176	1	0	0	0	0	0				0	528000	Public
1572	116	1	0	0	0	0	0				0	348000	Public
1413	230	1	148	5	740	92	8	Dilapidated	1951-1975	Mixed	24	690000	Private
2889	227	1	120	6	720	91	6	Good	1991-2008	Residential	18	681000	Private
1460	190	1	182	3	546	82	6	Good	1991-2008	Residential	18	570000	Private
2812	331	1	183	4	732	63	3	Dilapidated	1936-1950	Mixed	9	993000	Private
525	236	1	110	11	1210	146	11	Good	1991-2008	Residential	33	708000	Private
629	223	1	0	0	0	0	0				0	669000	Private
630	178	1	118	8	944	152	18	Good	1991-2008	Residential	54	534000	Private
279	149	1	0	0	0	0	0				0	447000	Private
3589	377	1	123	1	123	9	1	Dilapidated	1936-1950	Commercial	3	1131000	Private
4312	142	1	90	3	270	54	6	Dilapidated	1936-1950	Residential	18	426000	Private
3588	133	1	111	4	444	95	6	Dilapidated	1936-1950	Residential	18	399000	Private
3587	200	1	130	3	390	56	3	Dilapidated	1936-1950	Residential	9	600000	Private
3590	293	1	170	6	1020	99	12	Good	1991-2008	Residential	36	879000	Private
3591	203	1	92	4	368	52	8	Good	2009-2016	Residential	24	609000	Private
3592	205	1	170	5	850	118	5	Dilapidated	1936-1950	Residential	15	615000	Private
3593	218	1	170	5	850	111	5	Dilapidated	1936-1950	Residential	15	654000	Private
3594	217	1	170	7	1190	157	14	Good	1991-2008	Residential	42	651000	Private
3595	229	1	130	5	650	81	10	Good	1936-1950	Residential	30	687000	Private
3596	259	1	222	4	888	98	8	Dilapidated	1936-1950	Residential	24	777000	Private
3597	161	1	0	0	0	0	0				0	483000	Private
3255	163	1	68	2	136	24	2	Dilapidated	1936-1950	Residential	6	489000	Private
3326	152	1	68	2	136	26	4	Dilapidated	1936-1950	Residential	12	456000	Private
3521	158	1	80	7	560	101	7	Renovation	1950-1975	Residential	21	474000	Private
3256	263	1	157	13	2041	222	26	Good	2009-2016	Residential	78	789000	Private
3257	216	1	76	9	684	90	18	Good	2009-2016	Residential	54	648000	Private
3520	115	1	102	1	102	25	2	Dilapidated	1936-1950	Residential	6	345000	Private
3839	103	1	103	3	309	86	3	Good	1936-1950	Commercial	9	309000	Private
3840	70	1	70	1	70	29	1	Good	1936-1950	Commercial	3	210000	Private
3258	77	1	77	2	154	57	2	Good	1936-1950	Commercial	6	231000	Private
3259	90	1	76	4	304	97	4	Good	1936-1950	Mixed	12	270000	Private
3970	90	1	87	1	87	28	1	Good	1936-1950	Commercial	3	270000	Private

Lot No.	Lot Area (m2)	No. of Bldgs	FAR	Floors	Total Exp	Exp. %	Apartments	Condition	Age	Building Use	Tenants	Land Value (\$)	Ownership
3260	311	2	160	10	1600	147	10	Good	2009-2016	Residential	30	933000	Private
3261	236	1	100	9	900	109	9	Good	1976-1990	Residential	27	708000	Private
4358	85	1	84	4	336	113	4	Dilapidated	1936-1950	Residential	12	255000	Private
3962	83	1	84	4	336	116	4	Dilapidated	1936-1950	Residential	12	249000	Private
3089	264	1	140	4	560	61	8	Good	1976-1990	Residential	24	792000	Private
3969	193	1	155	11	1705	252	22	Good	2009-2016	Residential	66	579000	Private
3150	200	3	111	4	444	63	8	Good	1951-1975	Mixed	24	600000	Private
2691	93	1	45	1	45	14	1	Dilapidated	1936-1950	Residential	3	279000	Private
6160	168	1	98	8	784	133	16	Good	2009-2016	Residential	48	504000	Private
2681	193	1	107	2	214	32	2	Dilapidated	1936-1950	Commercial	6	579000	Private
3266	149	1	83	7	581	111	7	Good	1976-1990	Residential	21	447000	Private
4419	262	1	160	5	800	87	5	Dilapidated	1920-1935	Residential	15	786000	Private
3265	138	1	156	2	312	65	2	Dilapidated	1920-1935	Residential	6	414000	Private
4418	250	2	163	2	326	37	4	Dilapidated	1920-1935	Residential	12	750000	Private
3264	317	1	102	2	204	18	2	Dilapidated	1920-1935	Residential	6	951000	Private
4417	273	1	86	4	344	36	1	Good	1951-1975	Educational	3	819000	Private
3554	155	1	137	9	1233	227	18	Good	2009-2016	Residential	54	465000	Private
3269	260	1	71	3	213	23	4	Dilapidated	1936-1950	Residential	12	780000	Private
3295	174	1	103	4	412	68	3	Dilapidated	1936-1950	Residential	9	522000	Private
3263	189	1	0	0	0	0	0				0	567000	Private
3262	165	1	106	6	636	110	7	Good	1991-2008	Residential	21	495000	Private
3396	118	1	92	6	552	134	7	Good	1991-2008	Residential	21	354000	Private
3270	97	1	56	2	112	33	2	Dilapidated	1920-1936	Residential	6	291000	Private
3271	127	1	60	2	120	27	2	Dilapidated	1920-1936	Residential	6	381000	Private
2365	303	1	170	4	680	64	4	Renovation	1936-1950	Residential	12	909000	Private
2362	316	1	187	7	1309	118	14	Good	1951-1975	Residential	42	948000	Private
2363	349	1	240	6	1440	118	12	Renovation	1951-1975	Residential	36	1047000	Private
2364	283	1	147	6	882	89	10	Renovation	1951-1975	Residential	30	849000	Private
3168	343	1	268	7	1876	156	14	Good	1951-1975	Residential	42	1029000	Private
3272	380	2	244	2	488	37	4	Dilapidated	1936-1950	Residential	12	1140000	Private
3273	187	1	109	2	218	33	2	Dilapidated	1936-1950	Residential	6	561000	Private
3299	212	1	88	8	704	95	14	Renovation	1991-2008	Residential	42	636000	Private
3298	135	1	109	2	218	46	4	Dilapidated	1920-1935	Residential	12	405000	Private
2296	222	1	176	6	1056	136	12	Renovation	1991-2008	Residential	36	666000	Private
3296	282	1	140	2	280	28	4	Dilapidated	1920-1935	Residential	12	846000	Private
3458	465	1	303	7	2121	130	14	Renovation	1976-1990	Residential	42	1395000	Private
2806	158	1	124	2	248	45	2	Dilapidated	1936-1950	Residential	6	474000	Private
3457	231	1	167	5	835	103	10	Good	1991-2008	Residential	30	693000	Private

Lot No.	Lot Area (m2)	No. of Bldgs	FAR	Floors	Total Exp	Exp. %	Apartments	Condition	Age	Building Use	Tenants	Land Value (\$)	Ownership
3456	138	1	94	2	188	39	2	Dilapidated	1920-1935	Residential	6	414000	Private
3451	131	1	131	1	131	29	1	Dilapidated	1920-1935	Residential	3	393000	Private
3452	145	1	82	1	82	16	1	Dilapidated	1936-1950	Mixed	3	435000	Private
3453	472	1	0	0	0	0	0				0	1416000	Private
529	92	1	91	3	273	85	3	Good	1936-1950	Residential	9	276000	Private
528	150	1	127	4	508	97	4	Dilapidated	1936-1950	Residential	12	450000	Private
3432	97	1	78	1	78	23	1	Dilapidated	1920-1935	Commercial	3	291000	Private
3428	266	1	106	6	636	68	10	Renovation	1951-1975	Mixed	30	798000	Private
3973	84	1	60	3	180	61	3	Dilapidated	1936-1950	Residential	9	252000	Private
3974	114	1	96	3	288	72	3	Dilapidated	1936-1950	Residential	9	342000	Private
3431	247	1	177	3	531	61	3	Dilapidated	1936-1950	Residential	9	741000	Private
3433	154	1	91	3	273	51	3	Dilapidated	1936-1950	Residential	9	462000	Private
3434	115	1	88	2	176	44	2	Dilapidated	1936-1950	Residential	6	345000	Private
3437	303	1	125	9	1125	106	18	Good	1951-1975	Residential	54	909000	Private
3436	427	1	114	10	1140	76	18	Good	2009-2016	Residential	54	1281000	Private
2458	434	1	239	9	2151	142	18	Good	2009-2016	Residential	54	1302000	Private
2457	630	1	294	9	2646	120	18	Good	1991-2008	Residential	54	1890000	Private
3441	498	1	254	9	2286	131	18	Good	1991-2008	Residential	54	1494000	Private
3440	422	2	254	6	1524	103	28	Good	1991-2008	Residential	84	1266000	Private
3439	277	1	154	3	462	48	6	Dilapidated	1951-1975	Residential	18	831000	Private
533	154	1	120	6	720	134	12	Good	1936-1950	Mixed	36	462000	Private
532	166	1	0	0	0	0	0				0	498000	Public
742	102	1	102	3	306	86	3	Dilapidated	1936-1950	Residential	9	306000	Private
743	61	1	25	1	25	12	1	Dilapidated	1936-1950	Residential	3	183000	Private
181	100	1	72	1	72	21	1	Dilapidated	1936-1950	Residential	3	300000	Private
530	365	1	135	9	1215	95	16	Good	2009-2016	Residential	48	1095000	Private
727	149	1	144	1	144	28	1	Dilapidated	1936-1950	Commercial	3	447000	Private
670	79	1	30	1	30	11	1	Dilapidated	1936-1950	Commercial	3	237000	Private
651	145	1	72	1	72	14	1	Dilapidated	1936-1950	Commercial	3	435000	Private
650	198	1	180	2	360	52	2	Dilapidated	1920-1935	Residential	6	594000	Public
3138	133	1	115	2	230	49	2	Dilapidated	1920-1935	Residential	6	399000	Public
645	248	1	175	2	350	40	2	Dilapidated	1920-1935	Mixed	6	744000	Public
536	636	1	0	0	0	0	0				0	1908000	Public
535	483	1	0	0	0	0	0				0	1449000	Public
605	333	1	0	0	0	0	0				0	999000	Public
3430	303	1	157	4	628	59	4	Dilapidated	1936-1950	Residential	12	909000	Private
642	96	1	64	1	64	19	2	Dilapidated	1936-1950	Residential	6	288000	Private
537	113	1	88	2	176	45	2	Dilapidated	1936-1950	Mixed	6	339000	Private

Lot No.	Lot Area (m2)	No. of Bldgs	FAR	Floors	Total Exp	Exp. %	Apartments	Condition	Age	Building Use	Tenants	Land Value (\$)	Ownership
538	163	1	99	1	99	17	1	Dilapidated	1936-1950	Residential	3	489000	Private
252	206	1	75	2	150	21	2	Dilapidated	1936-1950	Residential	6	618000	Private
233	94	1	51	7	357	109	7	Good	1991-2008	Residential	21	282000	Private
232	94	1	40	1	40	12	1	Dilapidated	1936-1950	Mixed	3	282000	Private
258	176	2	87	2	174	28	2	Dilapidated	1920-1936	Residential	6	528000	Public
540	101	1	31	1	31	9	1	Dilapidated	1936-1950	Mixed	3	303000	Private
541	280	3	200	1	200	20	3	Dilapidated	1920-1936	Mixed	9	840000	Private
543	242	3	130	1	130	15	5	Dilapidated	1920-1936	Residential	15	726000	Public
334	424	1	320	5	1600	108	16	Renovation	1936-1950	Mixed	48	1272000	Private
340	192	2	101	5	505	75	8	Renovation	1936-1950	Mixed	24	576000	Private
370	179	1	67	3	201	32	3	Dilapidated	1936-1950	Mixed	9	537000	Private
367	192	1	112	5	560	83	4	Renovation	1951-1975	Mixed	12	576000	Private
366	180	1	111	7	777	123	7	Good	1991-2008	Mixed	21	540000	Private
336	231	1	130	7	910	113	7	Good	1976-1990	Mixed	21	693000	Private
338	205	1	160	7	1120	156	7	Good	1991-2008	Residential	21	615000	Private
368	175	1	136	3	408	67	3	Good	1951-1975	Residential	9	525000	Private
365	187	1	160	5	800	122	4	Good	1951-1975	Mixed	12	561000	Private
339	137	1	78	2	156	33	2	Dilapidated	1936-1950	Mixed	6	411000	Private
364	434	2	201	8	1608	106	16	Good	1951-1975	Government	48	1302000	Private
341	154	1	73	7	511	95	12	Renovation	1976-1990	Mixed	36	462000	Private
342	137	1	67	2	134	28	4	Renovation	1936-1950	Residential	12	411000	Private
343	128	2	109	4	436	97	4	Renovation	1951-1975	Residential	12	384000	Private
344	218	1	93	9	837	110	18	Renovation	1976-1990	Mixed	54	654000	Private
363	132	1	70	1	70	15	1	Good	1951-1975	Commercial	3	396000	Private
359	141	2	94	2	188	38	2	Good	1951-1975	Commercial	6	423000	Private
345	161	1	0	0	0	0	0				0	483000	Private
346	141	1	30	1	30	6	1	Dilapidated	1920-1936	Residential	3	423000	Private
2726	91	1	0	0	0	0	0	Dilapidated	1920-1936	Residential	0	273000	Private
347	102	2	35	1	35	10	2	Dilapidated	1936-1950	Residential	6	306000	Private
351	133	1	77	1	77	17	2	Dilapidated	1936-1950	Residential	6	399000	Private
350	105	1	53	1	53	14	2	Dilapidated	1936-1950	Residential	6	315000	Private
354	96	1	54	1	54	16	2	Dilapidated	1936-1950	Residential	6	288000	Private
357	125	1	75	2	150	34	2	Dilapidated	1936-1950	Commercial	6	375000	Private
Total	40050	200	22205	766	113135	74	1221				3663	120150000	

APPENDIX VI

Al-Tamlis Building Stock Most Susceptible to Change

Al-Tamlis - Building Stock Most Susceptible to Change													
Lot No.	Lot Area (m2)	No. of Bldgs	FAR	Floors	Total Exp	Exp. %	Apartments	Condition	Age	Building Use	Tenants	Land Value (\$)	Ownership
3589	377	1	123	1	123	9	1	Dilapidated	1936-1950	Commercial	3	1131000	Private
3255	163	1	68	2	136	24	2	Dilapidated	1936-1950	Residential	6	489000	Private
3326	152	1	68	2	136	26	4	Dilapidated	1936-1950	Residential	12	456000	Private
3520	115	1	102	1	102	25	2	Dilapidated	1936-1950	Residential	6	345000	Private
2691	93	1	45	1	45	14	1	Dilapidated	1936-1950	Residential	3	279000	Private
3264	317	1	102	2	204	18	2	Dilapidated	1920-1935	Residential	6	951000	Private
3269	260	1	71	3	213	23	4	Dilapidated	1936-1950	Residential	12	780000	Private
3271	127	1	60	2	120	27	2	Dilapidated	1920-1936	Residential	6	381000	Private
3296	282	1	140	2	280	28	4	Dilapidated	1920-1935	Residential	12	846000	Private
3451	131	1	131	1	131	29	1	Dilapidated	1920-1935	Residential	3	393000	Private
3452	145	1	82	1	82	16	1	Dilapidated	1936-1950	Mixed	3	435000	Private
3432	97	1	78	1	78	23	1	Dilapidated	1920-1935	Commercial	3	291000	Private
743	61	1	25	1	25	12	1	Dilapidated	1936-1950	Residential	3	183000	Private
181	100	1	72	1	72	21	1	Dilapidated	1936-1950	Residential	3	300000	Private
727	149	1	144	1	144	28	1	Dilapidated	1936-1950	Commercial	3	447000	Private
670	79	1	30	1	30	11	1	Dilapidated	1936-1950	Commercial	3	237000	Private
651	145	1	72	1	72	14	1	Dilapidated	1936-1950	Commercial	3	435000	Private
642	96	1	64	1	64	19	2	Dilapidated	1936-1950	Residential	6	288000	Private
538	163	1	99	1	99	17	1	Dilapidated	1936-1950	Residential	3	489000	Private
252	206	1	75	2	150	21	2	Dilapidated	1936-1950	Residential	6	618000	Private
232	94	1	40	1	40	12	1	Dilapidated	1936-1950	Mixed	3	282000	Private
258	176	2	87	2	174	28	2	Dilapidated	1920-1936	Residential	6	528000	Public
540	101	1	31	1	31	9	1	Dilapidated	1936-1950	Mixed	3	303000	Private
541	280	3	200	1	200	20	3	Dilapidated	1920-1936	Mixed	9	840000	Private
543	242	3	130	1	130	15	5	Dilapidated	1920-1936	Residential	15	726000	Public
346	141	1	30	1	30	6	1	Dilapidated	1920-1936	Residential	3	423000	Private
2726	91	1	0	0	0	0	0	Dilapidated	1920-1936	Residential	0	273000	Private
347	102	2	35	1	35	10	2	Dilapidated	1936-1950	Residential	6	306000	Private
351	133	1	77	1	77	17	2	Dilapidated	1936-1950	Residential	6	399000	Private
350	105	1	53	1	53	14	2	Dilapidated	1936-1950	Residential	6	315000	Private
354	96	1	54	1	54	16	2	Dilapidated	1936-1950	Residential	6	288000	Private

APPENDIX VII

Al-Tamlis Redevelopment Strategy: Expropriation of Lots

EXPROPRIATION																
Lot No.	Lot Area (sqm)	No. of Bldgs	FAR	Floors	Total Exp	Exp. %	Apartments	Condition	Age	Building Use	Tenants	Ownership	Area Exprop (sqm)	Exp. %	Policy	
2740	274	1	96	6	576	60	6	Dilapidated	1975-1990	Residential	18	Private	88	32.1		
3589	377	1	123	1	123	9	1	Dilapidated	1936-1950	Commercial	3	Private	115	30.5		
3588	133	1	111	4	444	95	6	Dilapidated	1936-1950	Residential	18	Private	28	21.1		
3587	200	1	130	3	390	56	3	Dilapidated	1936-1950	Residential	9	Private	30	15		
334	424	1	320	5	1600	108	16	Renovation	1936-1950	Mixed	48	Private	46	10.8		
340	192	2	101	5	505	75	8	Renovation	1936-1950	Mixed	24	Private	40	20.8		
336	231	1	130	7	910	113	7	Good	1976-1990	Mixed	21	Private	28	12.1		
338	205	1	160	7	1120	156	7	Good	1991-2008	Residential	21	Private	43	21		
339	137	1	78	2	156	33	2	Dilapidated	1936-1950	Mixed	6	Private	19	13.9		
341	154	1	73	7	511	95	12	Renovation	1976-1990	Mixed	36	Private	23	14.9		
342	137	1	67	2	134	28	4	Renovation	1936-1950	Residential	12	Private	22	16.1		
343	128	2	109	4	436	97	4	Renovation	1951-1975	Residential	12	Private	27	21.1		
344	218	1	93	9	837	110	18	Renovation	1976-1990	Mixed	54	Private	26	11.9		
359	141	2	94	2	188	38	2	Good	1951-1975	Commercial	6	Private	141	100		
345	161	1	0	0	0	0	0				0	Private	161	100		
346	141	1	30	1	30	6	1	Dilapidated	1920-1936	Residential	3	Private	40	28.4		
2726	91	1	0	0	0	0	0	Dilapidated	1920-1936	Residential	0	Private	7	7.7		
Total = 884 m2 Payable = 328 m2 Amount = 1312000 \$																
Total	3344	20	1715	65	7960	63	97									291

APPENDIX VIII

Al-Tamlis Redevelopment Strategy: Entertainment Center Lots (A.A.1)

(A.A.1) ENTERTAINMENT AND PARKING														
Lot No.	Lot Area (sqm)	No. of Bldgs	FAR	Floors	Total Exp	Exp. %	Apartments	Condition	Age	Building Use	Tenants	Ownership	Area Exprop.	Policy
533	154	1	120	6	720	134	12	Good	1936-1950	Mixed	36	Private		
532	166	1	0	0	0	0	0				0	Private		
742	102	1	102	3	306	86	3	Dilapidated	1936-1950	Residential	9	Private		
743	61	1	25	1	25	12	1	Dilapidated	1936-1950	Residential	3	Private		
181	100	1	72	1	72	21	1	Dilapidated	1936-1950	Residential	3	Private		
530	365	1	135	9	1215	95	16	Good	2009-2016	Residential	48	Private	Lot Pooling for 7 Floors	Displaced individuals to be accommodated in A.A.2
727	149	1	144	1	144	28	1	Dilapidated	1936-1950	Commercial	3	Private	Entertainment Center and 6 floors Parking (800 cars)	
670	79	1	30	1	30	11	1	Dilapidated	1936-1950	Commercial	3	Private		
651	145	1	72	1	72	14	1	Dilapidated	1936-1950	Commercial	3	Private		
650	198	1	180	2	360	52	2	Dilapidated	1920-1935	Residential	6	Private		
3138	133	1	115	2	230	49	2	Dilapidated	1920-1935	Residential	6	Private		
645	248	1	175	2	350	40	2	Dilapidated	1920-1935	Mixed	6	Private		
536	636	1	0	0	0	0	0				0	Private		
535	483	1	0	0	0	0	0				0	Private		
605	333	1	0	0	0	0	0				0	Private		
TOTAL	3871	15	1170		3524	Total	42			TOTAL	126		13548.5	sqm

APPENDIX IX

Al-Tamlis Redevelopment Strategy: Housing Development Lots (A.A.2)

(A.A.2) PCOILINE AND DIVISION AREA															
Lot No.	Lot Area (sqm)	No. of Bldgs	FAR	Floors	Total Exp.	Exp. %	Apartments	Condition	Age	Building Use	Tenants	Ownership	Share %	Value (\$)	Policy
3453	472	1	0	0	0	0	0				0	Private	8.3	1851202	
528	150	1	127	4	508	97	4	Dilapidated	1936-1950	Residential	12	Private	2.6	517244	
3432	97	1	78	1	78	23	1	Dilapidated	1920-1935	Commercial	3	Private	1.7	338198	
3428	266	1	106	6	636	68	10	Renovation	1951-1975	Mixed	30	Private	4.7	955018	
3973	84	1	60	3	180	61	3	Dilapidated	1936-1950	Residential	9	Private	1.5	298410	
3974	114	1	96	3	288	72	3	Dilapidated	1936-1950	Residential	9	Private	2	397880	
3451	247	1	177	3	531	61	3	Dilapidated	1936-1950	Residential	9	Private	4.3	855442	
3433	154	1	91	3	273	51	3	Dilapidated	1936-1950	Residential	9	Private	2.7	537138	Area to accommodate 126 individuals (42 Apts) from A.A.3 and allowed TDR
3434	115	1	88	2	176	44	2	Dilapidated	1936-1950	Residential	6	Private	2	397880	
3437	303	1	125	3	375	35	4	Good	1951-1975	Residential	12	Private	5.3	1054382	
3436	427	1	114	3	342	23	4	Good	1951-1975	Residential	12	Private	7.5	1492050	
3441	498	1	254	3	762	44	5	Good	1951-1975	Residential	15	Private	8.8	1750672	
3440	422	2	254	6	1524	103	4	Good	1951-1975	Residential	12	Private	7.4	20461	
3439	277	1	154	3	462	48	6	Dilapidated	1936-1950	Residential	18	Private	4.9	13548.5	
3430	303	1	157	4	628	59	4	Dilapidated	1936-1950	Residential	12	Private	5.3	1054382	
642	96	1	64	1	64	19	2	Dilapidated	1936-1950	Residential	6	Private	1.7	338198	
537	113	1	88	2	176	45	2	Dilapidated	1936-1950	Mixed	6	Private	2	397880	
538	163	1	99	1	99	17	1	Dilapidated	1936-1950	Residential	3	Private	2.9	576926	
252	206	1	75	2	150	21	2	Dilapidated	1936-1950	Residential	6	Private	3.6	716184	
233	94	1	51	7	357	109	7	Good	1991-2008	Residential	21	Private	1.7	338198	
232	94	1	40	1	40	12	1	Dilapidated	1936-1950	Mixed	3	Private	1.7	338198	
258	176	2	87	2	174	28	2	Dilapidated	1920-1936	Residential	6	Public	3.1	616714	
540	101	1	31	1	31	9	1	Dilapidated	1936-1950	Mixed	3	Private	1.8	358092	
541	280	3	200	1	200	20	3	Dilapidated	1920-1936	Mixed	9	Private	4.9	974806	
543	242	3	130	1	130	15	5	Dilapidated	1920-1936	Residential	15	Public	4.3	855442	
TOTAL	5684	31	2746	2.75	8184	Total	82				TOTAL	Total	19279	19854000	

APPENDIX X

Al-Tamlis Redevelopment Strategy: Conservation Area Lots (A.A.3)

(A.A. 3) CONSERVATION AREA														
Lot No.	Lot Area (sqm)	No. of Bldgs	FAR	Floors	Total Exp.	Exp. %	Appts. %	Condition	Age	Building Use	Tenants	Ownership	TDR	Policy
4419	262	1	160	5	800	87	5	Dilapidated	1920-1935	Residential	15	Private	117	
4418	250	2	163	2	326	37	4	Dilapidated	1920-1935	Residential	12	Private	549	
4417	273	1	86	4	344	36	1	Good	1951-1975	Educational	3	Private	611.5	
3269	260	1	71	3	213	23	4	Dilapidated	1936-1950	Residential	12	Private	697	
3295	174	1	103	4	412	68	3	Dilapidated	1936-1950	Residential	9	Private	197	
3396	118	1	92	6	552	134	7	Good	1991-2008	Residential	21	Private	0	
3270	97	1	56	2	112	33	2	Dilapidated	1920-1936	Residential	6	Private	227.5	Transfer of Development Rights to A.A.2
3271	127	1	60	2	120	27	2	Dilapidated	1920-1936	Residential	6	Private	324.5	
3272	380	2	244	2	488	37	4	Dilapidated	1936-1950	Residential	12	Private	842	
3298	135	1	109	2	218	46	4	Dilapidated	1920-1935	Residential	12	Private	254.5	
3296	282	1	140	2	280	28	4	Dilapidated	1920-1935	Residential	12	Private	707	
2806	158	1	124	2	248	45	2	Dilapidated	1936-1950	Residential	6	Private	305	
3456	138	1	94	2	188	39	2	Dilapidated	1920-1935	Residential	6	Private	295	
3451	131	1	131	1	131	29	1	Dilapidated	1920-1935	Residential	3	Private	327.5	
3452	145	1	82	1	82	16	1	Dilapidated	1936-1950	Mixed	3	Private	425.5	
529	92	1	91	3	273	85	3	Good	1936-1950	Residential	9	Private	49	
TOTAL	3396	18	1806		4787		49					TOTAL	5929	scam

APPENDIX XI

Al-Tamlis Redevelopment Strategy: Inclusionary Zoning Lots (A.A.4)

(A.A. 4) AFFORDABLE HOUSING												
Lot No.	Lot Area (sqm)	No. of Bldgs	FAR	Floors	Total Exp	Exp. %	Apartments	Condition	Age	Building Use	Tenants	Ownership
334	424	1	320	5	1600	108	16	Renovation	1936-1950	Mixed	48	Private
340	192	2	101	5	505	75	8	Renovation	1936-1950	Mixed	24	Private
370	179	1	67	3	201	32	3	Dilapidated	1936-1950	Mixed	9	Private
336	231	1	130	7	910	113	7	Good	1976-1990	Mixed	21	Private
338	205	1	160	7	1120	156	7	Good	1991-2008	Residential	21	Private
339	137	1	78	2	156	33	2	Dilapidated	1936-1950	Mixed	6	Private
341	154	1	73	7	511	95	12	Renovation	1976-1990	Mixed	36	Private
342	137	1	67	2	134	28	4	Renovation	1936-1950	Residential	12	Private
343	128	2	109	4	436	97	4	Renovation	1951-1975	Residential	12	Private
344	218	1	93	9	837	110	18	Renovation	1976-1990	Mixed	54	Private
346	141	1	30	1	30	6	1	Dilapidated	1920-1936	Residential	3	Private
2726	91	1	0	0	0	0	0	Dilapidated	1920-1936	Residential	0	Private
347	102	2	35	1	35	10	2	Dilapidated	1936-1950	Residential	6	Private
351	133	1	77	1	77	17	2	Dilapidated	1936-1950	Residential	6	Private
350	105	1	53	1	53	14	2	Dilapidated	1936-1950	Residential	6	Private
354	96	1	54	1	54	16	2	Dilapidated	1936-1950	Residential	6	Private
357	125	1	75	2	150	34	2	Dilapidated	1936-1950	Commercial	6	Private
2812	331	1	183	4	732	63	3	Dilapidated	1936-1950	Mixed	9	Private
525	236	1	110	11	1210	146	11	Good	1991-2008	Residential	33	Private
629	223	1	0	0	0	0	0				0	Private
630	178	1	118	8	944	152	18	Good	1991-2008	Residential	54	Private
279	149	1	0	0	0	0	0				0	Private
3589	377	1	123	1	123	9	1	Dilapidated	1936-1950	Commercial	3	Private
4312	142	1	90	3	270	54	6	Dilapidated	1936-1950	Residential	18	Private
3588	133	1	111	4	444	95	6	Dilapidated	1936-1950	Residential	18	Private
3587	200	1	130	3	390	56	3	Dilapidated	1936-1950	Residential	9	Private
3585	238	1	0	0	0	0	0				0	Private
1587	352	1	123	3	369	30	3	Dilapidated	1951-1975	Residential	9	Private
3586	168	1	66	4	264	45	8	Good	1951-1975	Residential	24	Private
3120	231	1	130	3	390	48	3	Dilapidated	1951-1975	Residential	9	Private
2740	274	1	96	6	576	60	6	Dilapidated	1975-1990	Residential	18	Private
3326	152	1	68	2	136	26	4	Dilapidated	1936-1950	Residential	12	Private
3521	158	1	80	7	560	101	7	Renovation	1950-1975	Residential	21	Private
3520	115	1	102	1	102	25	2	Dilapidated	1936-1950	Residential	6	Private
3839	103	1	103	3	309	86	3	Good	1936-1950	Commercial	9	Private
3840	70	1	70	1	70	29	1	Good	1936-1950	Commercial	3	Private
3258	77	1	77	2	154	57	2	Good	1936-1950	Commercial	6	Private
3266	149	1	83	7	581	111	7	Good	1976-1990	Residential	21	Private
3264	317	1	102	2	204	18	2	Dilapidated	1920-1935	Residential	6	Private
3554	155	1	137	9	1233	227	18	Good	2009-2016	Residential	54	Private
3263	189	1	0	0	0	0	0				0	Private
3262	165	1	106	6	636	110	7	Good	1991-2008	Residential	21	Private
2365	303	1	170	4	680	64	4	Renovation	1936-1950	Residential	12	Private

7983	46	3900	3.5	17186
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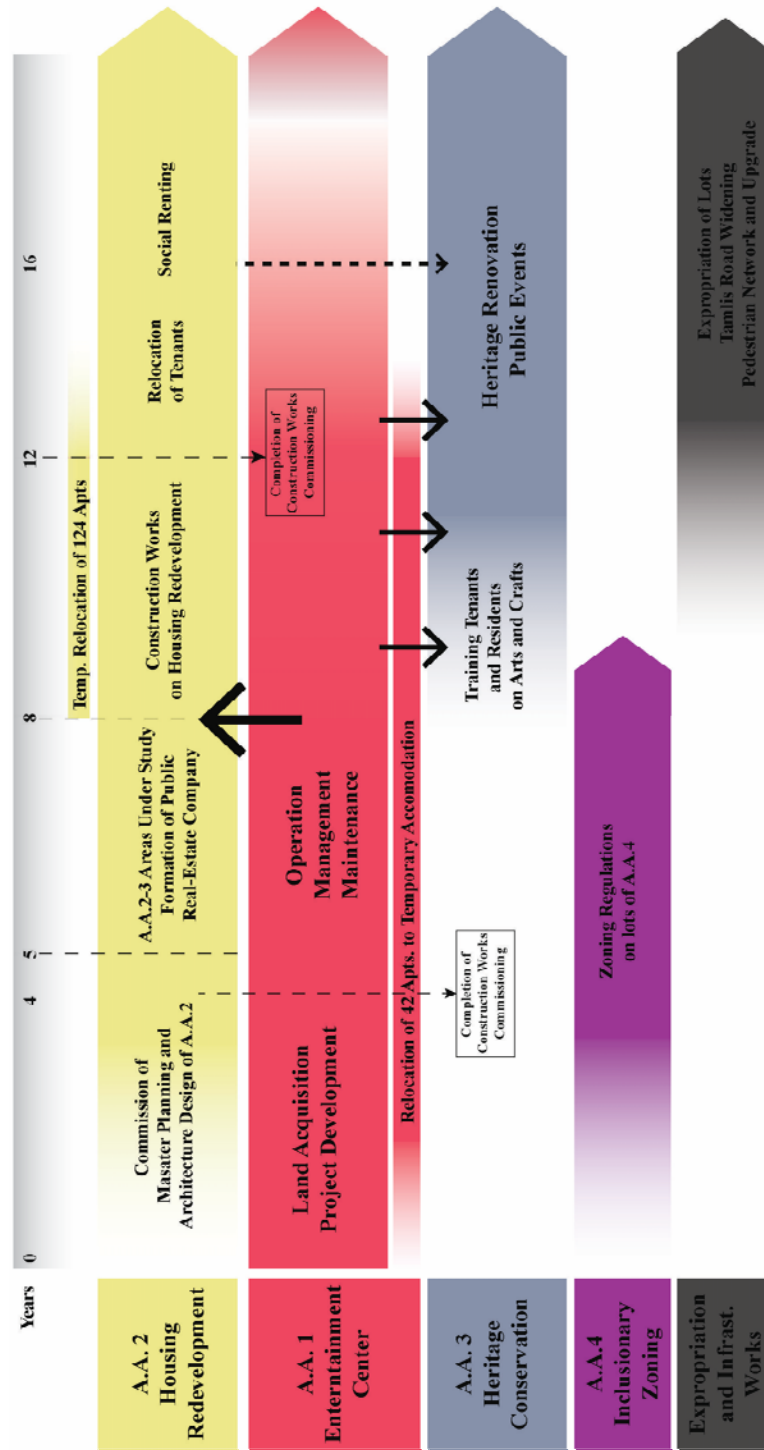
APPENDIX XII

Al-Tamlis Redevelopment Strategy: Schedule of Areas and Costs

Calculation of Areas Costs of Works	Action Area 1 Entertainment		Action Area 2 Housing		Action Area 3 Conservation	Action Area 4 Affordable Housing		Expropriation
	Before	After	Before	After		Before	After	
Total Area	3871		5864		3445	8405		884
Public Property	0	3871	180	1166	430	0	0	0
Private Property	3871	0	5684	4698	3015	8405	8405	884
Percentage of Public Property	0	0	3	20	12	0	0	0
Total No. of Parcels	16	1	25	9	16	45	45	17
FAR	1170	1936	2746	2349	1806	4096	4202.5	
Exploitation	3524	10839	8184	16443	4787	17186	29418	
Transfer of Development	0	0	0	5929	5929	0	0	
					Exp. To A.A.2			
Total Allowable Exploitation	10839	10839	8184	22372	10716	29418	0	
No of Housing Blocks	15	0	31	9	18	46	43	
Exploitation/ Housing Block			264	2485				
Average No of Floors	2.3	7	2.75	7	2.6	3.5	7	
Area Per Floor				355				
Apartments Per Floor				2				
Average Apt. Net Area			100	133				
Total No. of Apts	42	0	82	126	49	217	294	
			Apts. To A.A.2					
Total Apt. Demand (Inc. AA1 and AA3)				124				
Assumption of Displacement (30%)				87				
New Apartment Supply for Sale				39	0	77		
Basement Levels	7			0				
Required Parking Spaces	465			168				
Number of Car Parking	1000							
Average Cost of Apt for residents (\$)				53200				
Total Building Construction Cost (\$)	10841600			15660400				
Total Infrastructure Cost (\$)	2709700			291500				
Total Project Cost (\$)	13551300			19142280				
Total Land Acquisition (\$)	19355000							1312000

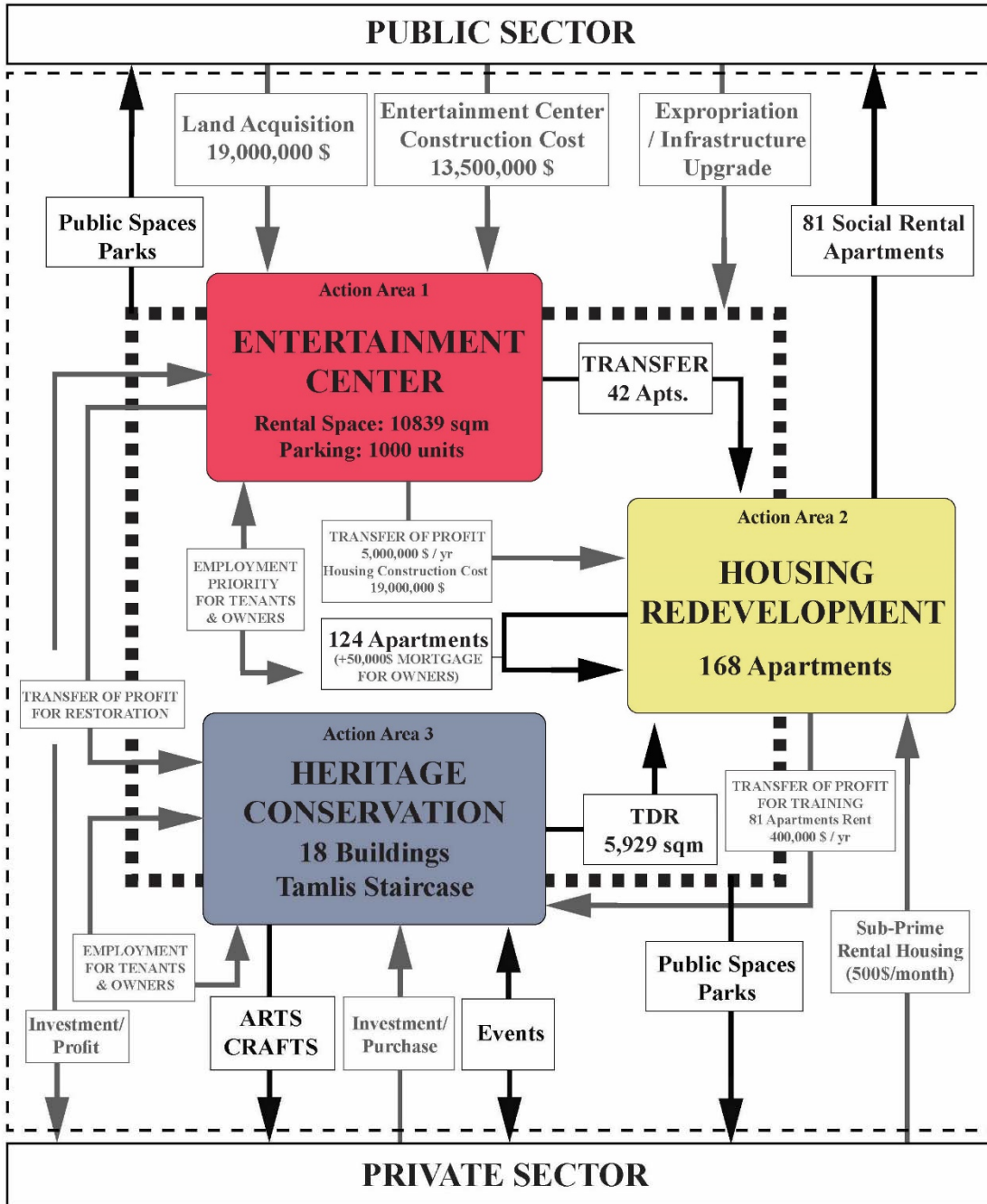
APPENDIX XIII

Al-Tamlis Strategy Timeline of Action Areas 1,2,3,4 and Expropriation



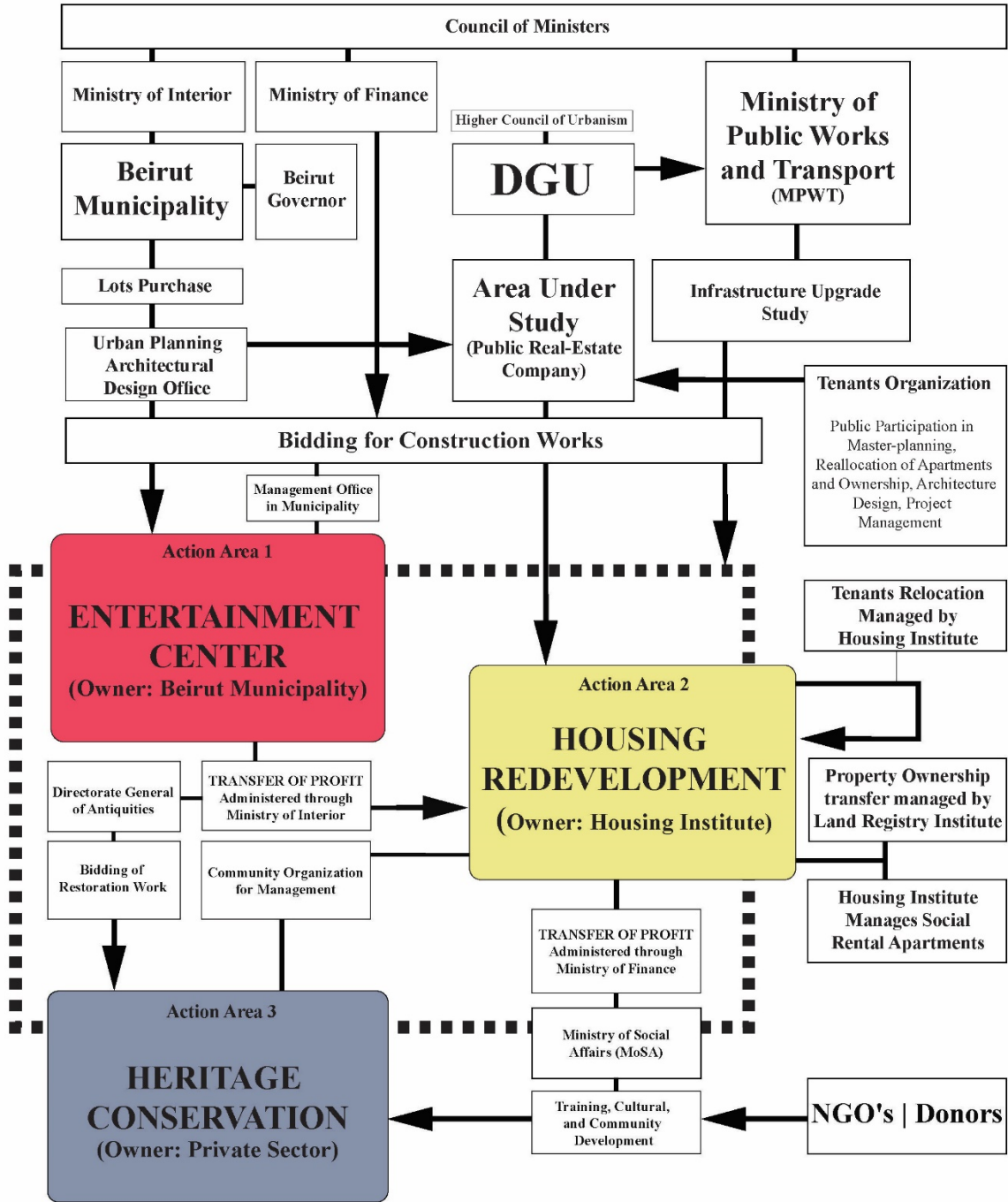
APPENDIX XIV

Al-Tamlis Strategy: Planning Framework



APPENDIX XV

Al-Tamlis Strategy: Governance Framework



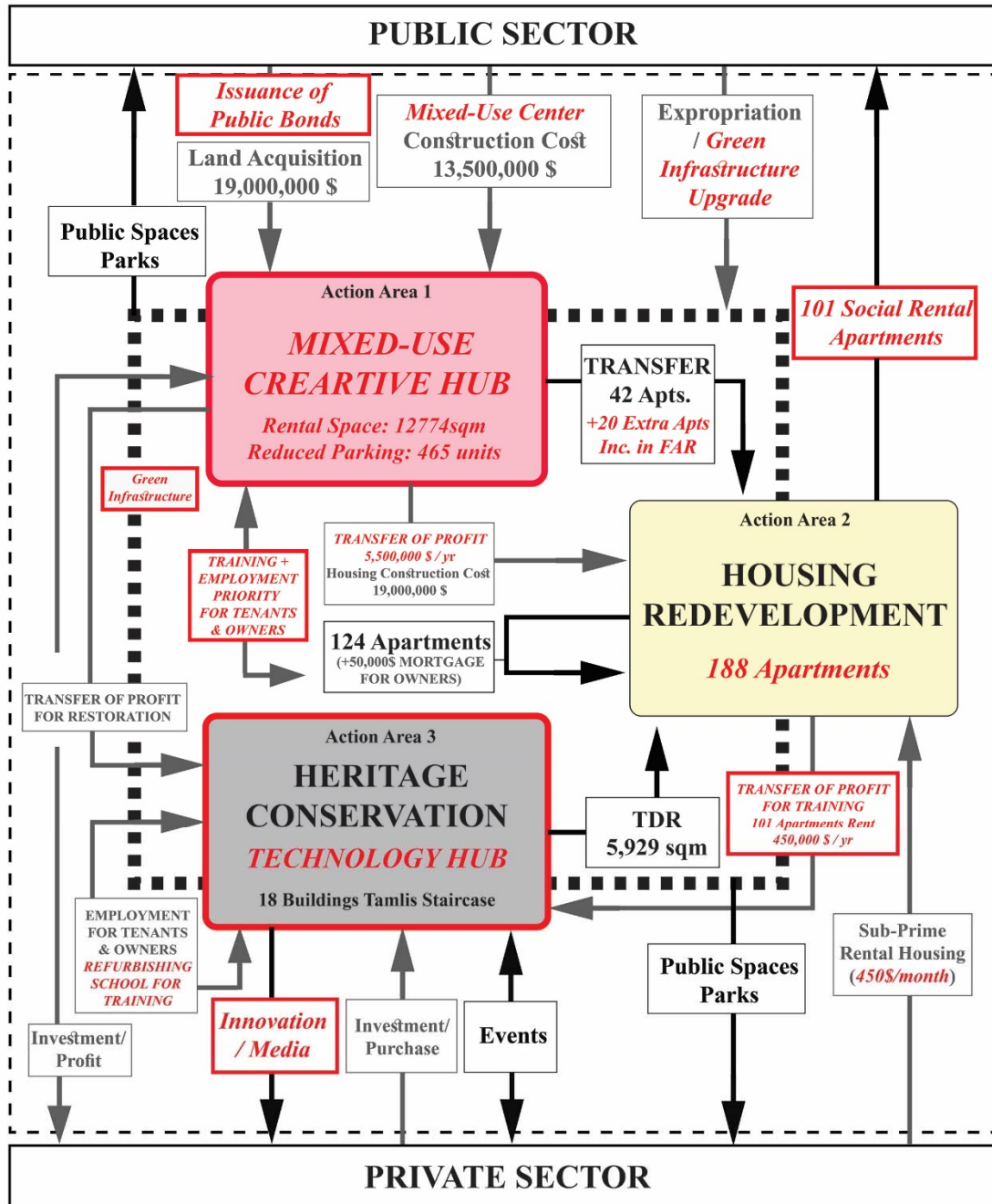
APPENDIX XVI

Al-Tamlis Sustainable Renewal Strategy: Revised Schedule of Areas and Costs (Changes in Red)

Calculation of Areas Costs of Works	Action Area 1 Entertainment		Action Area 2 Housing		Action Area 3 Conservation	Action Area 4 Affordable Housing		Expropriation
	Before	After	Before	After		Before	After	
Total Area	3871		5864		3445	8405		884
Public Property	0	3871	180	1166	430	0	0	0
Private Property	3871	0	5684	4698	3015	8405	8405	884
Percentage of Public Property	0	0	3	20	12	0	0	0
Total No. of Parcels	16	1	25	9	16	45	45	17
FAR	1170	1936	2746	2349	1806	4096	4202.5	
Exploitation	3524	12774	8184	18792	4787	17186	29418	
Transfer of Development	0	0	0	5929	5929	0	0	
					Exp. To A.A.2			
Total Allowable Exploitation	12774	12774	8184	24721	10716	29418	0	
No of Housing Blocks	15	0	31	9	18	46	43	
Exploitation/ Housing Block			264	2088				
Average No of Floors	2.3	7	2.75	8	2.6	3.5	7	
Area Per Floor				261				
Apartments Per Floor				2				
Average Apt. Net Area			100	133				
Total No. of Apts	42	0	82	144	49	217	294	
	Apts. To A.A.2							
Total Apt. Demand (Inc. AA1 and AA3)				144				
Assumption of Displacement (30%)				101				
New Apartment Supply for Sale				43	0		77	
Basement Levels	6			0				
Required Parking Spaces	465			168				
Number of Car Parking	465							
Average Cost of Apt for residents (\$)				53200				
Total Building Construction Cost (\$)	10841600			17304700				
Total Infrastructure Cost (\$)	2322600			291500				
Total Project Cost (\$)	13164200			21115440				
Total Land Acquisition (\$)	19355000						1312000	

APPENDIX XVII

Al-Tamlis Sustainable Renewal: Revised Strategy Map (Changes in Red)



APPENDIX XVIII

Al-Tamlis Sustainable Renewal: Revised Governance Map (Changes in Red)

