

Lima: Planning Implementation Challenges for a Fragmented City

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“To design is human, to implement, divine,”

Jerold S. Kayden

Abstract

In Lima, the main urban problems have been well identified for decades, and there is a fair degree of consensus as what should be done to address them. There is a range of ideas and proposals, and in recent years new voices have appeared to introduce those ideas into the city's agenda. However, there is not much discussion regarding how to take these ideas from the concept to reality.

In that context, this thesis highlights the importance of linking implementation strategies to the formulation processes of urban plans and projects, abandoning the idea of implementation as a separate operation (Kayden, 2014). In Lima, because of its complex and fragmented institutional context, the need for thinking on implementation makes itself evident.

This thesis studies the case of Costa Verde, Lima's disputed waterfront, under the premise that it is a clear sample of Lima's complexities and its difficulties in coordinating the interests of its many actors and institutions at implementing plans and projects. Furthermore, it explores the underlying factors of Costa Verde's implementation failures and successes and the ways in which they can be extrapolated to the metropolitan level.

Keywords: Lima, Perú; Costa Verde; institutional fragmentation; urban plans; implementation

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1. Introduction

Background

After three decades of unplanned demographic and economic growth in Lima -which have resulted in significant urban issues such as increasing informal settlements in the peripheries, increasing crime rates and an almost collapsed transportation system- new voices appear to be emerging. Driven by the need for solutions and organized through the use of social media, they are forcing slight changes in the political discourses, ideas and proposals. The last Mayoral elections (2018) demonstrated this. Some of the candidates, including the current Mayor, Jorge Muñoz (2019), proposed to review and approve many of the proposals within the Comprehensive Metropolitan Plan -released by the last Mayor, Susan Villarán, in 2014. (Municipalidad Metropolitana de Lima, 2014)

On the assumption that this will occur, it is appropriate to think about what is needed to ensure its adequate implementation. Lima's problems have been largely studied and there is more or less consensus among planning experts and emerging student and social organizations on what these problems are and how they should be addressed. But, not much has been said about the challenges of implementing those proposals, which will be the focus of this thesis.

Research questions

What can Lima learn from Costa Verde's planning implementation failures and successes?

- What went wrong, and what were the underlying reasons?
- What went right, and what were the primary factors of success?
- How can Costa Verde's 'lessons learned' be extrapolated to the metropolitan scale?

Methodology

This research project is based on a qualitative methods research design, which consists in the collection and analysis of secondary data sources and primary data sources as follows:

Secondary data sources

Secondary sources are divided in two major topics: (1) planning implementation literature, that for the sake of this thesis has been categorized according to three planning approaches: rational, communicative and incremental planning. (2) Lima's planning sources, which include official documents and reports related to metropolitan masterplans and plans for Lima's waterfront between 1947 and 2014. It additionally includes newspaper and social media articles written by actors involved in Lima's planning processes, the candidates' government plans for 2018 elections (regional, provincial and district-level), and conferences and forums which provide up to date perspectives on the debate about planning in Lima.

Primary data sources

The only primary data source for this thesis is an semi-structured and open-ended interview conducted with the Peruvian architect Rodolfo Castillo¹, who was the Director of Local Planning at the Metropolitan Planning Institute of Lima (IMP) between 1991-1996 and the General Coordinator of several comprehensive plans for the city (Metropolitan Lima 1991, Callao Province 1995, districts of Miraflores 1996 and Surco 1996) and for its waterfront (Master Plan for Costa Verde 1995).

2. Literature Review

Planning Implementation Theories

¹ Architect Castillo also holds a master's degree in Urban and Regional Planning from Universidad Nacional de Ingeniería in Perú and a masters' degree in Environmental Development from Universidad Católica de Chile.

When we think about planning implementation from a city perspective, we should consider two major approaches. The rational (or traditional) approach which focuses on government administration and the communicative (or contemporary) approach which refers to governance as a more inclusive concept, which acknowledges a wide range of participants in decision making processes: politicians and bureaucrats, corporate capital and civil society (Friedmann, 2000).

Rational approach

The rational approach is based on positivist epistemology (Innes and Booher, 2018). It relies on objective, measurable data to inform logical and systematic decision-making processes. It is centered on the technical, legal, economic and administrative aspects and involves procedures such as plan reviews, adapting planning proposals to budgets and timeframes, establishing normative measures and lobbying for higher level laws that support the proposals and financial tools to determine how they will be funded (UN, 2014).

Communicative approach

The communicative approach, on the other hand, is based on phenomenology, a more grounded form of knowledge that uses interpretive, qualitative data (Innes and Booher, 2018). It deals with meaning, beliefs and intentions. Its purpose is to understand political and social relations among different actors. Some of the communicative implementation processes include: community engagement or public participation through accessible language, appropriation of plans and proposals by the public, open governance, inter-institutional agreements, and vertical and horizontal alignment of planning documents and projects.

Neglected during most of the 20th century, communicative approaches are increasingly gaining legitimacy across many disciplines through more collective and collaborative activities. I believe both

approaches should be thought of as complementary rather than mutually exclusive. Therefore, I acknowledge and value the contributions of this trend to the balance of planning and policy fields, long dominated by rational bureaucratic processes. The communicative approach allows getting more citizens involved and contributing to the decision-making process instead of just being spectators. This could lead plans and projects into a more democratic implementation processes. Decisions based on information created, edited, validated and/or legitimated by those potentially affected by them (Coleman et al., 2009) promise to take our cities into more inclusive and efficient development paths.

This ideal however, entails a world of complexities. Participation in planning implementation, and by extension in decision-making, implies a series of challenges. Actors and institutions involved will have to share power, deal with conflicting values, interests and motivations. Diversity of skills and expertise levels (Goodchild, 2007) and the disparities regarding access to information (Schrock, 2016) could put at risk the effective implementation of any policy, plan or project.

These implementation challenges are aggravated in fragmented cities like Lima, as this thesis will illustrate. Their poor institutional environments, multiple levels of government and unclear or superimposed rules take the discussion beyond the convenience of traditional or communicative approaches to implement planning decisions, since they 'isolate (those decisions) from implementation' anyway (Rizvi, 2014).

3. Lima's Planning System

Institutional Context

Lima is the Capital and the largest city of Perú, housing near one third (circa 10 million) of its population (circa 30 million) (INEI, 2015). It is at the same time the capital of the region and the province of the same name and it is the seat of the three main national authorities (the congress, the presidency and the judiciary power). Lima is located at the central west coast of the country, bounded by the provinces of Cañete, to the south; Canta and Huarochirí, to the East; Huaral, to the north; and the Pacific Ocean and the Constitutional Province of Callao to the West.

Callao is a peculiar territorial entity managed by both a regional and a provincial government within the same boundaries; the difference lying on their attributions². Callao houses approximately 1 million people (INEI, 2015) and two of the most important economic infrastructures of the country: the sea port and the international airport.

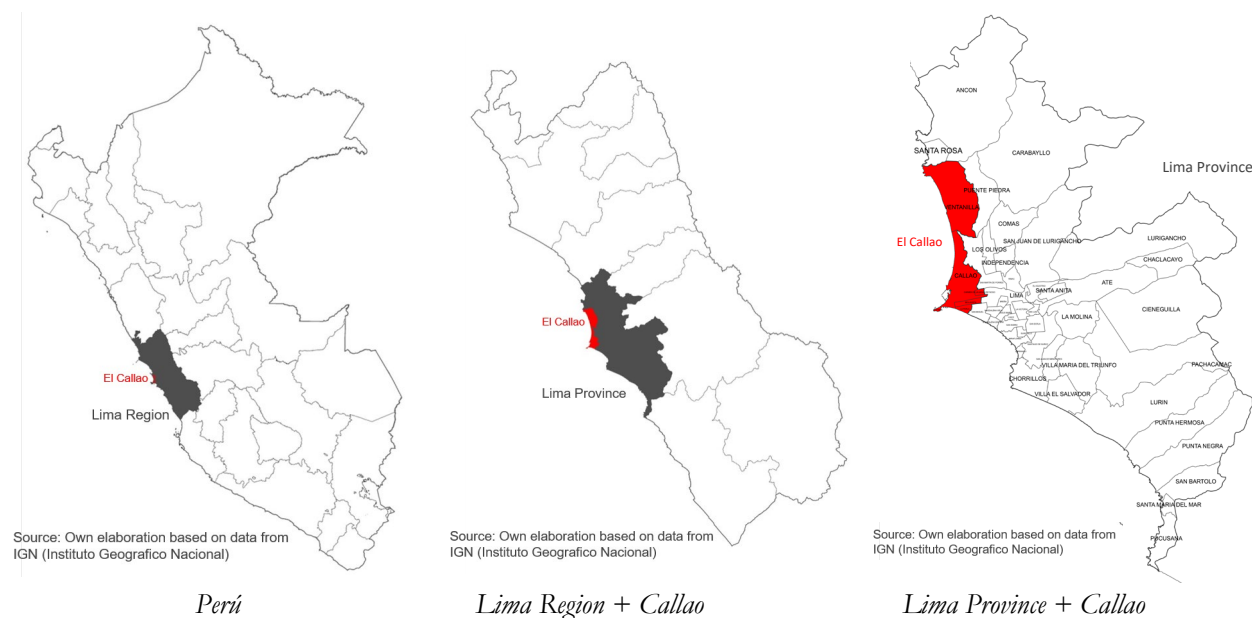


Figure 1 Territorial Boundaries

² Unlike Callao Province, for instance, Callao Region handles budget directed to education, health and housing sectors - in coordination with its respective ministries (Congreso de La República, 2002).

Area	Population
Peru	29,381
Lima Region	9,485
Lima Province	8,575
Callao	995

Table 1 Demographic chart

Elected Authorities:
1 Regional mayor (Callao)
2 Provincial mayors (Lima and Callao)
49 District mayors: (Lima: 43, Callao: 6)

Table 2 Elected authorities

Lima and Callao together constitute a conurbation known as Metropolitan Lima or The City of Lima, comprised by forty-nine districts (43 in Lima and 6 in Callao). Overall, Metropolitan Lima's power is distributed among **52 elected authorities; 03 at a Metropolitan scale**: the metropolitan mayor of Lima (with both regional and provincial-level attributions), the regional governor of Callao and the provincial mayor of Callao plus **49 elected mayors at the district (local) scale**.

This fragmentation makes of Lima a rather hard-to manage territory, since the metropolitan mayor's competencies are contested and conflicting with those from the national government and the forty-three Lima's districts. There is also a need of coordination/negotiation between the authorities of Lima and Callao, as they are both parts of a single urban tissue. This situation complicates the planning and implementation processes of the city, especially for cross-boundary matters such as transportation and mobility.

Additionally, Lima's annual budget (\$5,000M) is rather low for a capital city of 9 million people. It is a similar budget to Callao's which has a population of only 1 million. According to the Peruvian Tourism Chamber, it has one of the lowest budgets relative to other Capitals in South America with even smaller populations (i.e., Bogotá: \$12,000 M / 8M People; Quito \$6,800 M / 1.6M People; Santiago de Chile \$10,000 M / 5.1 M People). (*America Noticias, 2018*)

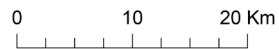
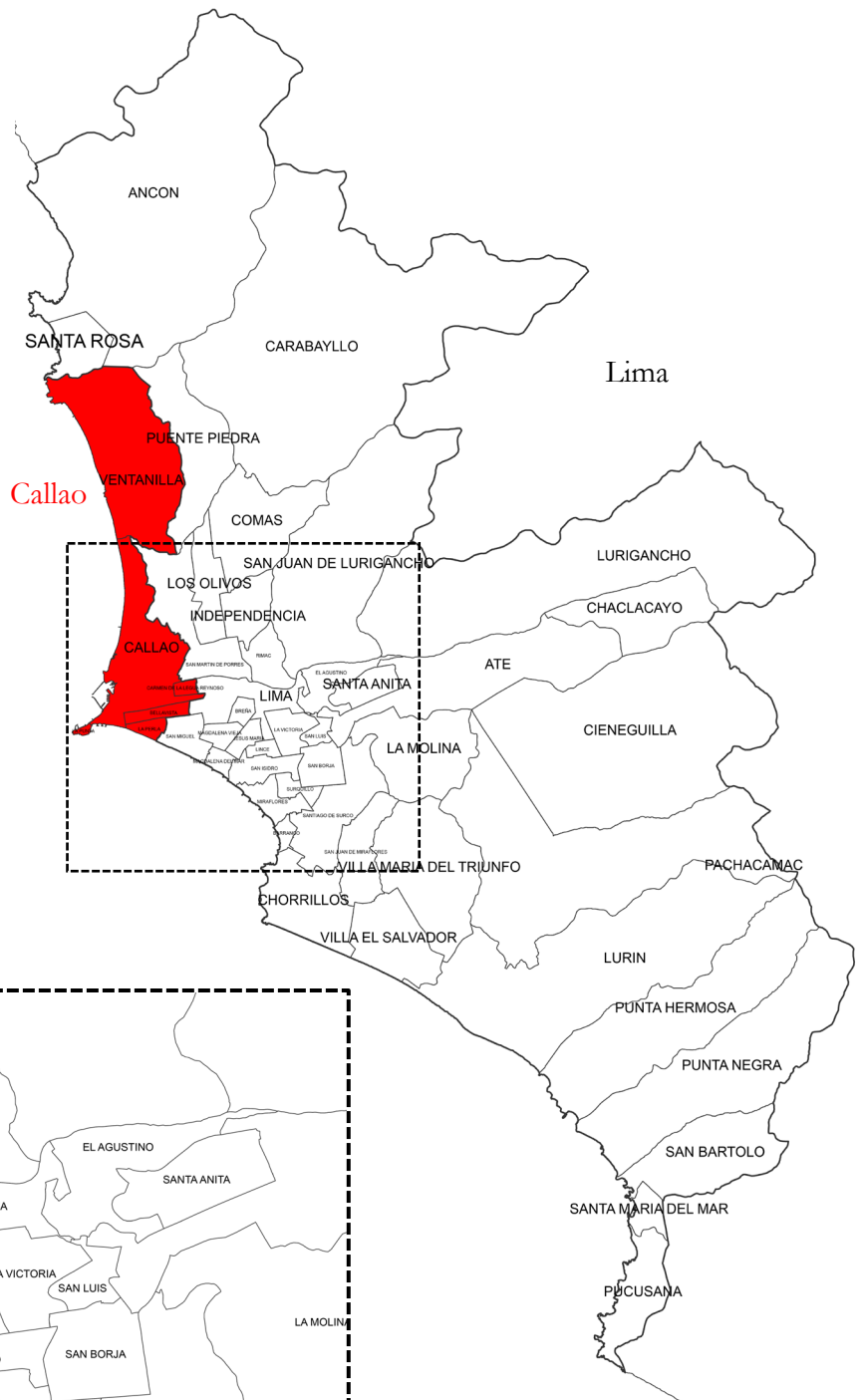


Figure 2 Lima and Callao's District Boundaries

Source: Own elaboration based on data from IGN (Instituto Geografico Nacional)

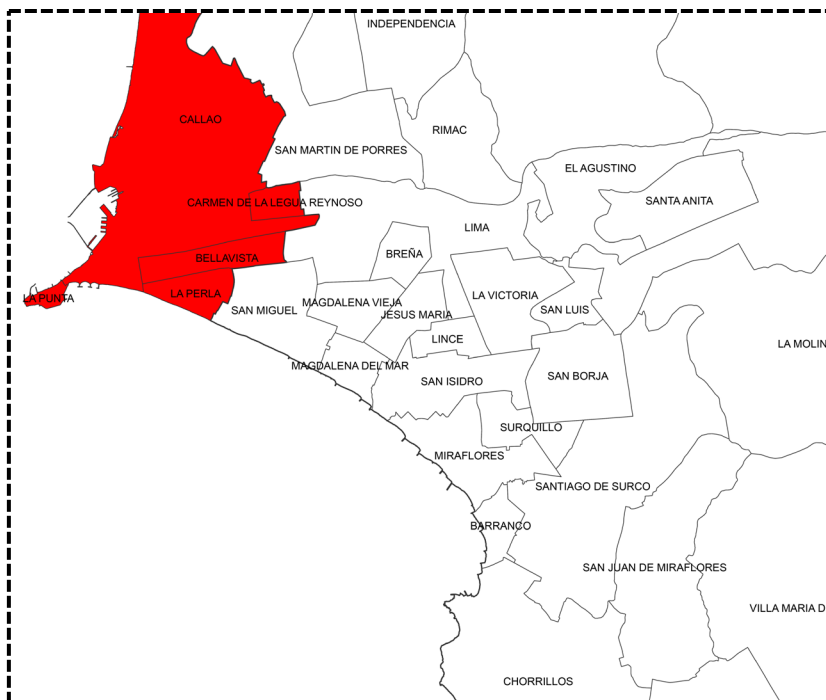


Figure 3 Central Districts Zoom

Evolution of Planning in Lima

Different conscious efforts to organize the occupation of land can be found early in Lima's history. Since the pre-hispanic irrigation channels that allowed transforming Lima's arid conditions into a livable valley, a series of specific planning ideas, instruments and techniques have helped construct what we know today as Metropolitan Lima. As an introduction to the last planning document, PLAM 2014-2035, architect Javier Sota Nadal recounts some of these features. Between 1535 and the early 20th century, the Spanish model of 'grid and plaza' prevailed and first introduced the concept of 'private property.' During the 1900's the 'first expansion plan' for the city allowed the coordinated development of urban infrastructure works. The 1920's introduced 'American and European concepts such as building heights regulations' and the understanding of 'housing matters (costs and access)' as an urban problem. The 1930's brought technical instruments such as 'cadaster, census and urban growth evolution mapping' (Municipalidad Metropolitana de Lima, 2014), constituting what we can understand today as urban diagnostics. It was not until 1940's that planning was institutionalized in Peru. The creation of the first planning institution in the country, ONPU³ in 1946, promoted by the architect and Deputy Fernando Belaunde⁴ gave birth to the first comprehensive planning efforts in Lima (Ortiz, 2017).

³ Oficina Nacional de Planeamiento y Urbanismo

⁴ Fernando Belaúnde was the president of Peru in the periods 1963–1968 and 1980–1985.

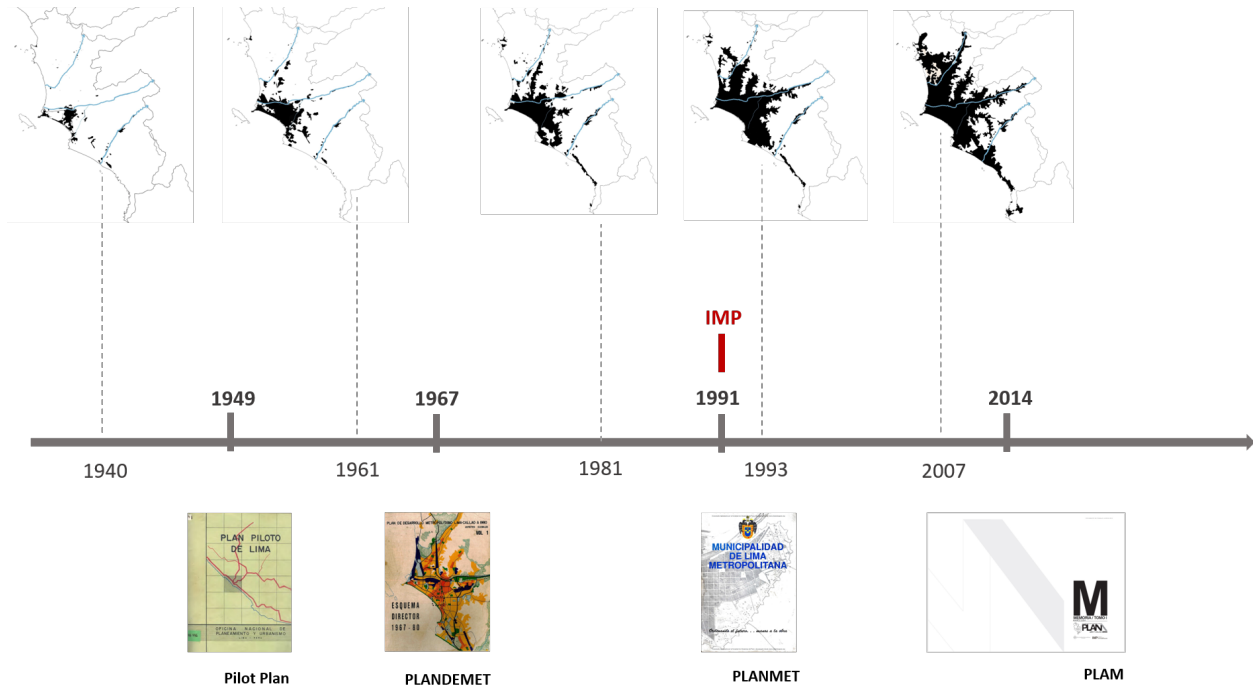


Figure 4 Lima's Urban Evolution and Urban Planning Timeline. Source: Adaptation from *Municipalidad Metropolitana de Lima*, 2014

Pilot Plan 1949

Lima's Pilot Plan was the first comprehensive plan for Lima. Elaborated by ONPU in 1949 it was the first stage of what later evolved into the Regulatory Plan of Lima (1956). These efforts were led by the architect Luis Dorich in association with the New York-based firm Town Planning Associates of Josep Lluís Sert and Paul Lester Wiener (Kahatt, 2016). It was conceived under the rational approach, primarily concerned with physical, functional and urban design features with the purpose of creating a 'city model' (Castillo, 2013). One of its major contributions is the introduction of fundamental instruments such as zoning, urban growth boundaries and transportation schemes (Castillo, 2013). The plan presents two major gaps in that it 'fails to address the immigration problems' and it does not take into account in its analysis the city's main waterbodies: 'the rivers and the Pacific Ocean.' (Ortiz, 2017)

PLANDEMET 1967-1980

Probably one of the most thorough master plans up to date, the Plan de Desarrollo Metropolitano Lima-Callao 1967-1980 or PLANDEMET was also elaborated by ONPU. Yet, for the first time it included the participation of the Metropolitan Municipality of Lima (MML), during the administration of Mayor Luis Bedoya Reyes (Castillo, 2013). This can be understood as one of the first decentralizing efforts in the country -although the official decentralization process came later, starting in the 1980's. This plan was also framed within rational principles, as it was mostly concerned with 'normative and technical instruments' (Castillo, 2013). However one of its great contributions is the introduction of a regional planning perspective through which it proposed 'integrating its many urban and suburban areas'(Kahatt, 2016) and 'assumed the prominent urban expansion' within its planning goals' (Oviedo, 2011a). PLANDEMET was politically supported and its implementation was effectively launched (Kahatt, 2016) but its strategies were surpassed by the massive immigration in Lima's outskirts during the 90s (Oviedo, 2011a).

PLANMET 1991

The last approved (and still current) comprehensive plan for Lima was the Plan de Desarrollo Metropolitano Lima-Callao 1990-2010 or PLANMET. It was formulated in its entirety by MML and approved in 1989 during Mayor Jorge Del Castillo's tenure (Castillo, 2013). PLANMET was conceived under a communicative planning approach as it was 'the first planning effort in Lima to incorporate citizen participatory activities' (Municipalidad de Lima, 2014). It is also the first plan to introduce management instruments such as 'pre-investment studies' -as a requirement for the projects proposed- and the 'inclusion of private financing of public works'⁵. In terms of its physical proposals, it

⁵ Interview with architect Rodolfo Castillo, 2019

established a ‘conceptual system of five metropolitan ring roads’ as a means to decenter traffic from existing infrastructure. However, it did not provide the technical and normative instruments to implement it (Oviedo, 2011b).

An important institutional contribution of this plan is the creation of IMP -the Metropolitan Planning Institute- in 1991. IMP was intended to operationalize PLANMET’s proposals and to monitor and to ensure that its outcomes were adequate to future eventualities in the implementation process. According to Castillo, PLANMET and the creation of IMP initiated a fertile, but short period of permanent urban planning in Lima between 1991-1996, enabling the elaboration of the comprehensive plans for Callao (Plan Director para el Callao 1995-2010), and for the districts of Miraflores (Plan Urbano Distrital de Miraflores 1996-2010) and Surco (Plan Urbano Distrital de Surco 1996-2010). After PLANMET no other plan has been officially approved and Both IMP and PLANMET are still current⁶. Yet, the former has become a debilitated institution and the latter’s proposals seem obsolete, after almost thirty years without any update.

PLAM 2014-2035

In 2014 the last effort to guide the development of Lima was released by Mayor Villarán’s administration. The Plan de Desarrollo Metropolitano Lima-Callo 2014-2035 or PLAM was a thorough plan, conceived under sustainable development principles. It proposes institutional reforms such as the establishment of a special regime for Lima; one more adequate to a capital city, assigning more resources and competencies. It also promotes inter-institutional agreements. In terms of physical planning, it updates land use zoning and regulations, and identifies a large number of strategic programs and specific projects. According to authors, all the proposals contained in PLAM are based

⁶ In 2013 during Susana Villarán’s administration PLANMET was declared current until the approval of a new comprehensive plan for Lima.

on the following principles: ‘fairness, inclusion, creativity, sustainability, planning, resilience, compactness, integration, polycentricism, and competitiveness’ (Municipalidad Metropolitana de Lima, 2014). Despite this, and mostly due to political reasons, the plan has not yet been approved. According to Castillo, the current administration led by Mayor Jorge Muñoz has expressed its intentions to resume, update and revise the PLAM, but there have not been any concrete actions in that direction yet.

4. Costa Verde: The Elusive Plan for Lima’s Waterfront

Costa Verde is comprised of the space between the ocean and a 70 meter-tall cliff along Lima’s central littoral. The 22 km waterfront runs along six districts within Lima’s jurisdiction (Chorrillos, Barranco, Miraflores, San Isidro, Magdalena del Mar and San Miguel) and two districts within Callao’s (La Perla and La Punta). It is an artificial space created by reclaiming land to the sea and since its construction, many efforts have been undertaken to keep connecting the upper city to the coast. Costa Verde is considered one of the greatest public recreation spaces of the metropolitan area. However, its attractive location and great potential for development have made Costa Verde one of the most coveted spaces among different actors and institutions. Four master plans and one implementing institution (APCV)⁷ have been created to take advantage of this space for the ‘benefit of all the citizens,’ yet none of these efforts has been able to fully define what that means. Meanwhile, several authorities at different levels have been disputing competencies and power over the waterfront, resulting in a tangle of regulations and in the superposition of proposals for its physical development.

⁷ Authority of the Costa Verde Project

This situation has transformed Costa Verde into a small-scale mirror of Lima's own institutional complexities.

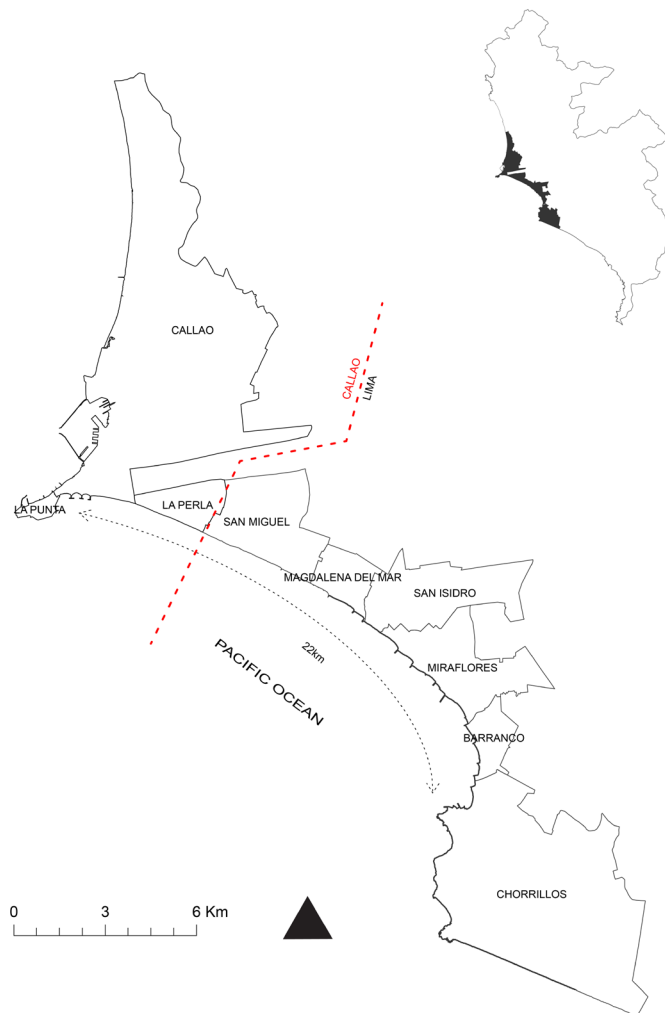


Figure 5 Costa Verde Map. Source: Own elaboration base don data from IGN

Institutional context

APCV – Autoridad del Proyecto Costa Verde

APCV is an autonomous planning authority for the Project Costa Verde, created in 1995 as an output of the Master Plan for Costa Verde 1995-2010 (Castillo, 2013). It is dependent on the Metropolitan Municipality of Lima (MML), which presides over its board, comprised of a representation of seven institutions. One representative from MML, one representative from each of

the six coastal district municipalities within Lima (Chorrillos, Barranco, Miraflores, San Isidro, Magdalena and San Miguel) and one representative from INVERMET (The Metropolitan Investment Fund) a subsidiary of MML.

Callao Region, Callao Province and Callao's two coastal districts (La Perla and La Punta) do not have a seat within APCV as it is a Lima-based entity. However, there are some voices proposing the inclusion of these institutions into the board, which would lead to a more balanced authority; more representative of the spatial reality of Costa Verde.

The APCV was intended to be the champion of a single, comprehensive vision for Lima's waterfront in accordance with the existing Master Plan 1995-2010 through plan updating, regulatory and monitoring activities. According to Castillo⁸, however, this intent has been unsuccessful due to a combination of factors. First, in a decentralizing effort, the law⁹ with which it was created was the same law that conferred on the district municipalities the ownership of the public land on the waterfront within their jurisdictions, which was previously own by Metropolitan Lima. This led to an overlapping of interests and projects among the different actors and irregularities related to permits and concessions. Second, for the ten years since its creation, its technical functions were not institutionalized. Thus, it was only a periodical meetings board, without any practical competencies. Third, it has never given effective power and resources to plan and implement the proposed interventions.

⁸Interview with architect Rodolfo Castillo, 2019

⁹ Ley N° 26306

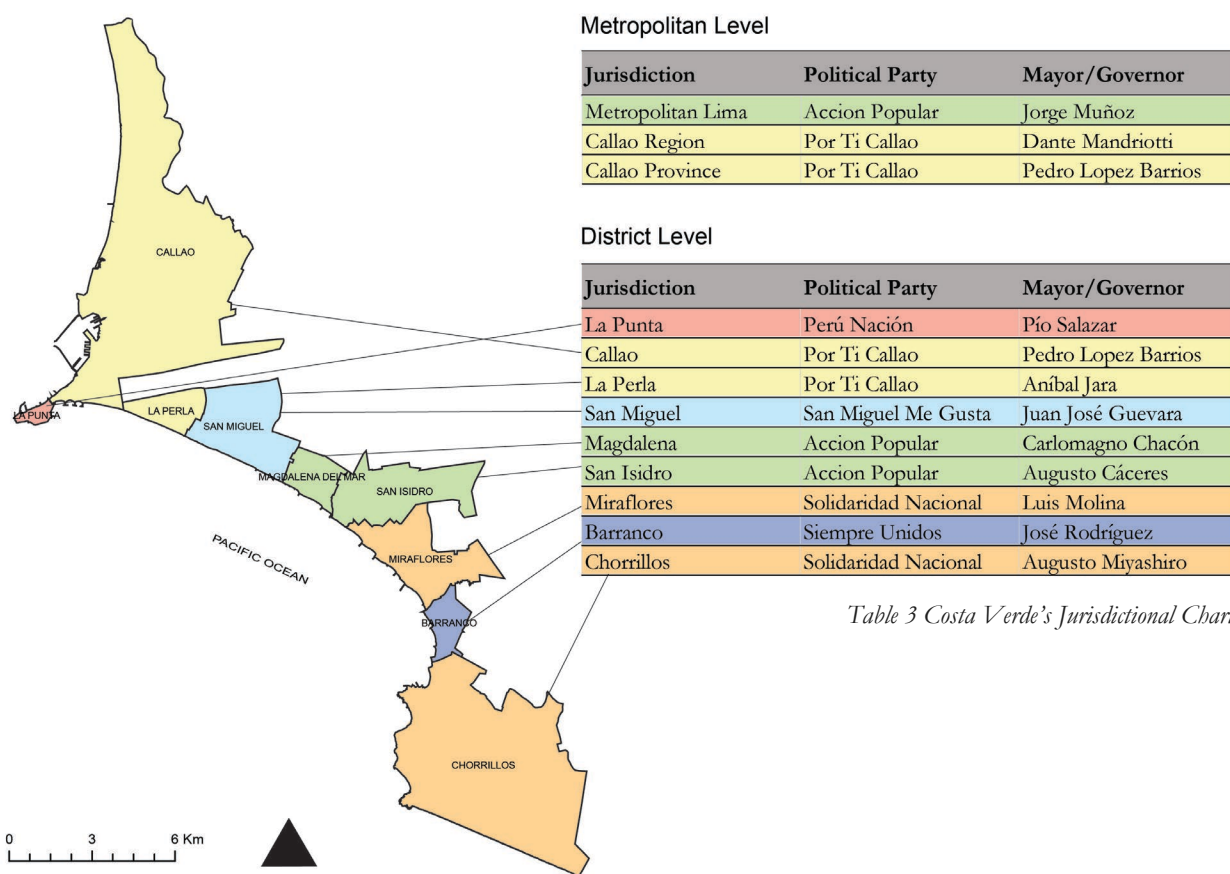


Table 3 Costa Verde's Jurisdictional Chart

Fig 6 Costa Verde's Jurisdictional Map. Source: Own elaboration based on data from IGN

Plans and Interventions in Costa Verde

The history of interventions in this area goes back to the 19th century, when the first points of access to sea level were developed in the southern districts of Chorrillos and Barranco (APCV and IMP, 1995), including stairs and even a funicular and hydraulic funicular. The access ended up in 'los baños' -wooden roofed platforms that allowed people to enjoy the waters of the Pacific. Starting in the 1920's a series of infrastructure works were developed between Chorrillos and Miraflores, allowing

the creation of the first beaches of Lima's littoral. These works were developed primarily by municipal authorities and one private club 'Regatas Lima', and included breakwaters, shore protection structures and new pedestrian access to the beaches (APCV and IMP, 1995).

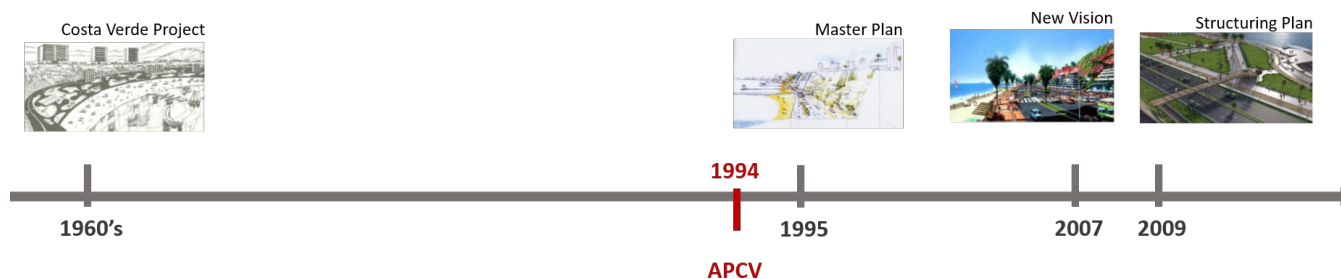


Figure 9 Costa Verde's Urban Planning Timeline Source: Own elaboration

Costa Verde Project (1960's)

Starting in the 1960's, the national government became interested in developing an integrated metropolitan public recreation space along the coastline, investing in road infrastructure and some tourist and sport modules along it. The idea was proposed and promoted by the then sub-mayor of Lima, architect Ernesto Aramburú Menchaca (APCV and IMP, n.d.). It consisted of using excavation fill from the construction of a major expressway, 'Paseo de la República Avenue,' as earth fill to reclaim lands from the ocean and build a 22km high-speed road linking Lima and Callao (from Chorrillos to La Punta), part of which (only 15km have been completed) we know today as 'The Beach Circuit' or 'Costa Verde Avenue'. The works on the expressway and the earth filling in Costa Verde began in 1966. The first stretch of roadway was built during the 1970's, linking the three southern-most districts (Chorrillos, Barranco and Miraflores). Later, during 1980's another segment was added, integrating Lima's northern coastal districts (San Isidro, Magadela and San Miguel) completing 'The Beach

Circuit'. During those decades all the interventions on the coastal area were considered parts of a single effort known as the Costa Verde Project, which in 1982 was declared by the national government as a project of 'public necessity and utility' (APCV and IMP, 1995).



Fig 10 Costa Verde before the first major intervention (1910). Source: Lima La Antigua



Fig 11 Present-day view of Costa Verde (Chorrillos). Source: Flickr(Rainbowasi)

Master Plan for Costa Verde 1995-2010

The first and only officially approved ‘master plan’ for this special area was released in 1995 - the Master Plan for Costa Verde 1995-2010 or CV Master Plan. Its comprehensiveness has made of this plan a basic reference for all the later proposals. It was elaborated by IMP through the same team of experts that was responsible for PLANMET 1991-2010 and Callao Province’s Urban Director Plan 1995-2010 (Callao’s Director Llan), led by the architect Rodolfo Castillo. This facilitated the vertical alignment of the proposals in CV’s Master Plan with higher level considerations. In the case of PLANMET, this alignment occurred officially and was documented in the plan; in the case of Callao’s Director Plan, the proposals for Callao’s districts were coordinated yet not included in the document, as they were out of the study area stated in the contract¹⁰.

¹⁰ Interview with architect Rodolfo Castillo, 2019

One of the main outputs of this plan was the creation of APCV, which remains as the official planning authority for Costa Verde, despite the severe institutional and administrative problems we have previously discussed.

The CV Master Plan 1995-2010 promoted the physical and environmental development of Costa Verde and the consolidation of its role -defined in PLANMET as the ‘metropolitan recreational axis’ and as an ‘alternative roadway integration corridor (part of ring road N°5)’ for Lima and Callao. (Municipalidad Metropolitana de Lima, 1992). It was also intended to transform Costa Verde to be a year-round destination instead of only in summer. The plan had a moderate approach with regards to the allowance of private development. It transversally divided the coastal area in three sectors: a sea sector, including new and existing beaches; a flat land sector, comprised of the walkway, the roadway and the potential commercial subdivisions that were allowed on reclaimed land along the coast; and the cliff sector, which also allowed the construction of buildings in specific identified areas along its length (APCV and IMP, 1995). One successful example of this is Larcomar, a commercial space embedded into the cliff at the end of a major avenue; currently one of the most visited places in Perú.

The plan’s proposals include shore-protection and littoral widening measures as well as regulating the rational use of land and sea through five normative zones: touristic zone #1 (ZT-1), touristic zone #2 (ZT-2); public recreation zone (ZRP), services zone (ZS); and landscape zone (ZP). It also proposes the widening of the roadway up to three lanes in each direction and restricted its use for trucks and polluting vehicles (APCV and IMP, 1995). Additionally, it promoted investment in the aquatic area according to the defined specialization of sea uses within the different districts as follows: nautical activities in San Isidro and Callao’s coastal districts (La Punta and La Perla) and tourism, services, and recreational facilities for bathers and surfers in Magdalena, San Miguel, Miraflores, Barranco and Chorrillos (APCV and IMP, 1995).



Fig 12 Section perspective showing proposed configuration from Master Plan 1995-2005.

Source: APCV and IMP, 1995

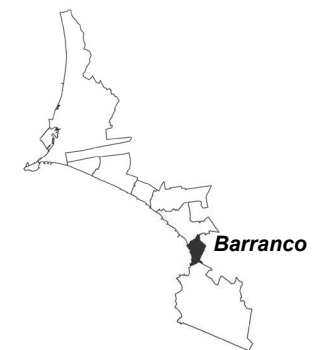


Fig 13 Perspective drawing showing allowed uses in Master Plan 1995-2005. Source: APCV

and IMP, 1995



Fig 14 Aerial view of Larco Mar and Costa Verde (Miraflores). Source: LGDMC

CV's Master Plan included implementation instruments such as special zoning and building codes for both land and sea uses, commercial subdivisions, building construction, environmental protection and land use administration; and a program of prioritized investment projects, categorized in basic infrastructure and business/commercial projects each with its location, timeframe (short-term, mid-term or long-term) and priority level (structural: involving significant changes for Costa Verde; critical: involving essential services or hazard mitigation; and revitalizing: enabling or encouraging activities) and only in a few cases, the financing source -public or private (APCV and IMP, 1995). As a general financing strategy though, the plan prioritized base projects financed by public institutions (primarily INVERMET and EMAPE) and promoted private investment mostly for projects related to services and tourism.

The Master Plan was widely discussed between 1993 and 1995, through forums and meetings with the participation of public officers and professional organizations at first, and the public in

general later in the process¹¹, leading to its approval with a broad consensus over the role of Costa Verde as the ‘great metropolitan recreational space’ (Zubiate, 2007a).

CV’s Master Plan had a series of implementation limitations. According to Castillo the CV Master Plan did not consider the required instruments to strengthen and consolidate APCV. Unlike IMP, APCV was never provided with its own technical office from which to manage and monitor the Master Plan’s investment projects and development actions. Therefore, those functions were assigned to IMP through a technical assistance APCV-IMP agreement up until 2005, date on which the APCV was finally consolidated through municipal ordinance (ten years after its creation) and charged with those functions for the subsequent planning efforts. It did not include project profiles to make use of and manage international aid resources, missing the opportunity especially for projects of environmental recovery, shore protection and littoral widening, which required longer-term sustained investment. Proposals were too broad and lacking technical specialized corroboration or readjustment regarding cartography and topography, geotechnical studies and soil mechanics of the cliff, hydro-oceanography, traffic and transportation, and ownership. Finally, violations of the ‘normative road width’ and of the longitudinal specialization of the littoral segments led to the irregular construction of nautical and commercial facilities incompatible with the established uses.

New Urbanistic Vision 2007

An updating process of the Master Plan 1995 – 2012 began in 2006 during Mayor Casteñeda’s administration. APCV outsourced the elaboration of a new plan -the New Urbanistic Vision 2007- to a team of experts led by the architects Manuel Zubiate and Raúl Florez.

A series of articles between 2007 and 2010 on the blog of the architects’ firm URVIA describes the main ideas and proposals of the New Vision 2007 (Zubiate, 2007a., 2007b. & Zubiate, 2010).

¹¹ Interview with architect Rodolfo Castillo, 2019

According to Zubiarte, the main purpose of the plan was to position Lima as a year round coastal city and to transform it into a 'heterogeneous space for all the Limenian public' (Zubiarte, 2007b). This is a goal completely compatible and aligned with the previous master plan.

The New Vision introduced changes in the transversal organization of land and sea uses and relied on a public-private partnership strategy to support its proposals. It prohibited any development next to the ocean, proposing a pedestrian walkway and bike lane instead. However, it allowed mixed-use developments -assigned through public tenders- between the road and the cliff, at eleven macro-lots distributed along Lima's six coastal districts, occupying 44% of its length and not exceeding a 75% of the cliff's height. The proposed macro-lots are mostly clustered in Magdalena, as 'there are no beaches, but useless landfills of approximately 20 hectares' (Zubiarte, 2007b). Zubiarte argued that these developments would cover approximately 12% to 15% of the 100 hectares of available land and would allow financing 100% of the area and would generate 75% of public uses between roadways and recreational areas. To achieve this, the New Vision proposed to displace the current road a few meters towards the ocean at wide enough spaces that would allow room to fit the macro-lots. It also required to maintain the road width as it was: 2 lanes in each direction, revoking the Master Plan's proposed widening to 3 lanes. Shore-protection and littoral widening features estimated at \$150 Million, were proposed to preserve and expand the land reclaimed from the sea. This was to be financed through mixed-use developments as well.

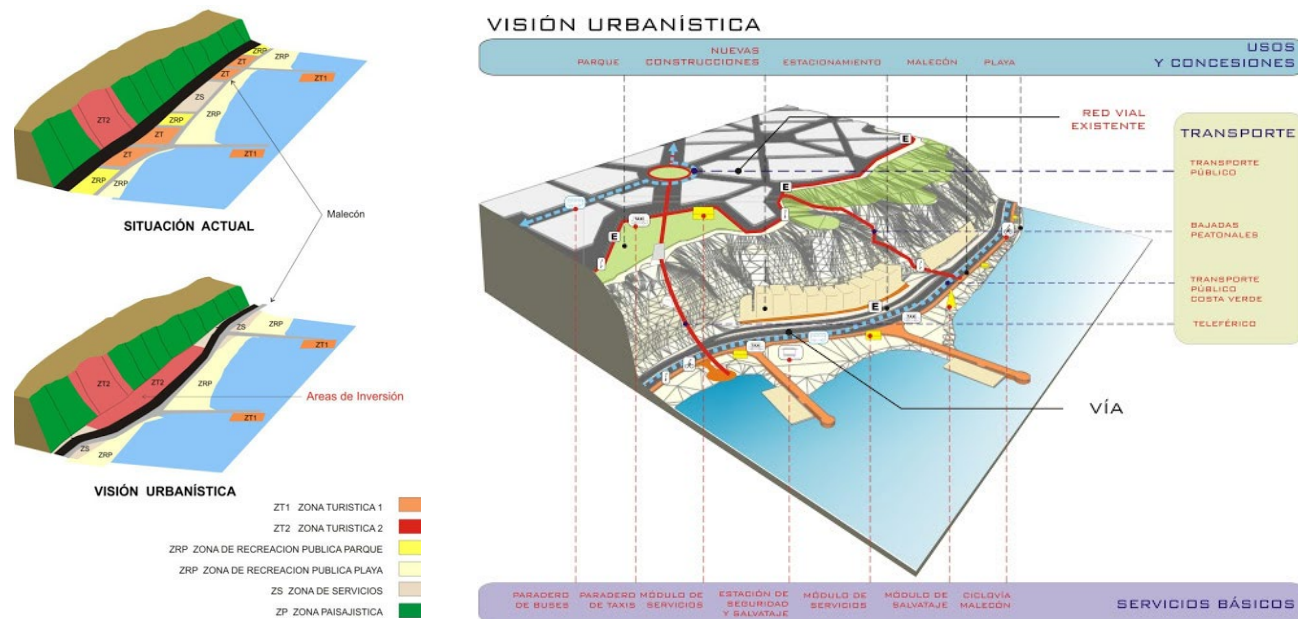


Fig 15 New Vision's Zoning Proposal for Costa Verde. (Top-left: Master Plan 1995's scheme; bottom-left: New Vision's scheme; right: Volumetric scheme of the New Vision). Source: Zubiata, 2007b

There were no face-to-face community engagement processes. Instead, outsourced surveys were conducted with four different stakeholders (Costa Verde's neighbors, Lima's residents, private investors and politicians), based on thirty questions, some of which were related to the introduction of new development. According to Zubiata, these survey exhibits a 90% approval rate (Zubiata, 2010).

The New Vision was unanimously approved by Lima's council and APCV's Board of Directors in 2007 (Zubiata, 2010). According to Castillo¹² the Municipal Ordinance with which it was approved 'irregularly and partially revoked CV's Master Plan 1995-2010 and required APCV to define -in no more than 120 days- new volumetric zoning, land uses and urban and building codes according to the New Vision.' And this ordinance also put on hold any intervention or investment not included in that vision, until the completion of the updating process of the Master Plan (Castillo, 2014).

¹² Interview with architect Rodolfo Castillo, 2019

However, this requirement was not met within the deadline and the New Vision failed to update/replace the Master Plan, even after a second attempt in 2018. Still, CV's Master Plan was already revoked by law, leaving a legal void that persists even to the present.



Fig 16 New Vision's schematic drawing Source: Zubieta, 2007b

Structuring Plan 2009-2025

The last and still current plan 'Plan Estructurador de la Costa Verde 2009-2025' (Structuring Plan), was approved by APCV in 2009, still under Mayor Castañeda's administration. It was designed by the architect Augusto Ortiz de Zevallos. Without the comprehensiveness of the Master Plan -yet aligned to its criteria- it was intended to provide concrete, structuring design guidelines. It was conceived as a short-term and more detailed urban design plan, mostly concerned with road geometry adjustments and the provision of public spaces arranged along a linear park. Like the previous plans, it promotes the role of Costa Verde as the 'great metropolitan park'; unlike the New Vision though, it reaffirms the road widths and the addition of a third lane as established in the Master Plan¹³.

¹³ Interview with architect Rodolfo Castillo, 2019

Most of its proposals were implemented during Mayor Susana Villarán's administration (2010-2014), through the participation of public and private investment. And have enabled the construction of walkways, beach services, bridges and pedestrian accesses, plus the widening of some roads. While some of these works have been completed, others remain incomplete and abandoned due to judicial problems derived from superimposed projects by the next administration. In 2010, during Villarán's administration and with consensus among the district mayors, MML passed a municipal ordinance declaring the 'intangibility of Costa Verde's cliff.' (Castillo, 2013). This decision -aligned with the Structuring Plan- prohibited any kind of construction on the cliff, which contradicts the Master Plan 1995-2010, adding another layer of complexity to the regulatory context of Lima's waterfront. Yet, it ended with a longtime debate about the real estate potential of this space.



Fig 17 Structuring Plans' proposal for a walkway. Source: Castillo, 2014

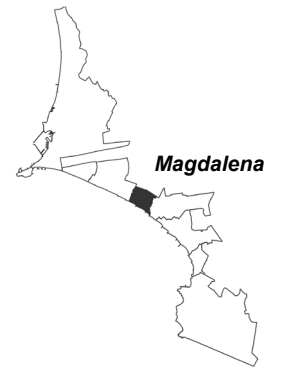


Fig 18 Structuring Plans' proposal for pedestrian access. Source: Castillo, 2014



Fig 19 Structuring Plans' proposal for vehicular access. Source: Castillo, 2014

Political Economy of Costa Verde

Costa Verde is a clear example of the challenges that Lima faces with regards to the design and operation of its planning and implementation systems. Its political economy parallels the levels of complexity and fragmentation of Lima's institutional context. It involves a wide range of stakeholders with different roles, interests and levels of influence on the actions to be undertaken in the coastal area. The relationships among them or the lack thereof have been and will be fundamental for the success or failure of any plans and interventions on Lima's waterfront. We will briefly review each of the actors involved with Costa Verde as an attempt to disentangle their current disposition, interests and potential conflicts or agreements, which could enable or risk the development of Costa Verde.

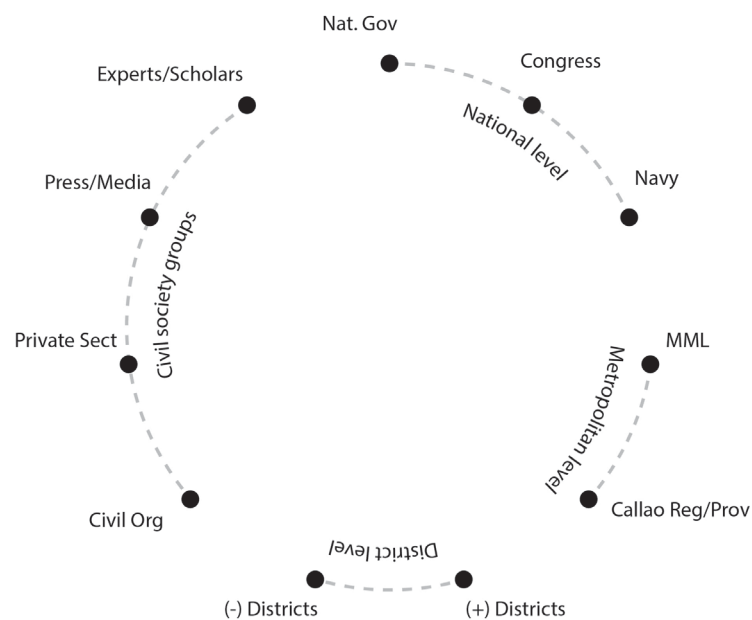


Fig 7 Costa Verde's stakeholders diagram

National-level institutions

The main actors at this level are the national government, presided over by Martín Vizcarra; the national congress, and the Peruvian Navy. While the national government rarely declares on Costa Verde's matters, it is the major source of public investment in the country and thus, has great potential influence over any intervention in that space.

The president has shown great disposition to work in coordination with the metropolitan mayor, yet it is not clear if Costa Verde has been included in his agenda (TV Noticias, 2018).

The congress, on the other hand has the power -through the use of laws- to modify the institutional design of APCV. However, no initiative has been expressed yet in that regard. Rather, few congresspersons have shown or expressed interest in improving the way Costa Verde is intervened in or regulated. This, from a more advocacy-based or even activist approach, includes initiatives such as inter-stakeholder working groups, requesting letters to relevant institutions and public protest for the protection of the sea shore. Some of those initiatives have recently achieved effective outcomes, including the removal of construction debris invading Redondo beach in Miraflores after 15 years of inaction and controlling actions over longtime irregular land occupations by commercial establishments (Costa Verde de Todos, 2018a, 2018b, 2018c). The last mentioned are being undertaken by the Sea Port Captaincy of Callao (DICAPI). This is an institution linked to the Peruvian Navy and is in charge of the control and oversight of any intervention in the aquatic area of Lima and Callao, in addition to search and rescue activities. The Peruvian Navy also develops technical studies of the littoral through DHN, the Department of Hydrography and Navigation.

Metropolitan-level institutions

The main actors governing the metropolitan level are the Metropolitan Municipality of Lima (MML), the Regional Government of Callao, and the Provincial Municipality of Callao. Whereas the

two latter do not participate in the APCV, they constitute very important actors for the development of Costa Verde. As we mentioned in previous chapters both authorities exercise power within the same territorial boundaries with slight differences in their functions but a great difference in budget. It might be relevant to mention that Callao Region has more investment power, due to its large share of port and airport-related incomes. Despite the importance of these institutions for the coastal area, they have not shown much interest in its development. The government plans of both Regional Mayor Dante Mandriotti and the Provincial Mayor Pedro Lopez -which share the exact same content- very lightly refer to Costa Verde; including minor mentions to ‘cleaning activities’ and the ‘economic activation’ of the waterfront (Por Ti Callao, 2018a., 2018b.). Meanwhile, the construction of Costa Verde Callao, a project comprised of a roadway that integrates Lima’s and Callao’s waterfront, has been abandoned at 90% of completion and with severe construction deficiencies. The discontinuation of the project has been related to Odebrecht’s international scandal¹⁴.

MML, one of the most important actors in Costa Verde’s political environment, integrates and presides over APCV and contains two of the major implementing entities in this space: INVERMET and EMAPE (the Municipal Tolls Enterprise). The metropolitan mayor Jorge Muñoz, highlighted in his Government Plan -when running for the 2018 election- Costa Verde’s ‘environmental, touristic and landscape potential’ and its condition as one of the main roads of the city. The plan also expresses his intentions to improve and develop vertical connections and accesses from the city to the coastal area, through bridges, cable cars and funiculars distributed along the cliff. The need for risk reduction and mitigation measures, regulatory control, provision of services for beach users, and signaling and wayfinding features is stated as well (Acción Popular, 2018a).

¹⁴ In 2014 Brazilian officials uncovered a massive corruption operation by the construction company Odebrecht, consisting of paying bribes to elected officials in exchange for large-scale overbudgeted construction contracts. It involved candidates and presidents from many countries within Latin America. Costa Verde Callao is just one of many infrastructure projects in which bribery has been detected. Former regional governor Félix Moreno has been accused of receiving the bribes and has been recently sentenced to five years in prison for the Corpac Case, a similar operation related to projects for the international airport. His whereabouts are currently unknown.

Lima's local-level institutions

Lima's district municipalities have ownership of Costa Verde's public land within their jurisdictions. Thus, their focus have been primarily on getting revenue from their public assets. We can consider preserving their power and autonomy within their jurisdictions as their main concerns. From the six district mayors of Lima's Costa Verde, two belong to the metropolitan mayor's political party, Acción Popular: Augusto Cáceres for San Isidro and Carlomagno Chacón for Magdalena (Acción Popular, 2018a., 2018b., 2018c.). Two other mayors, Luis Molina for Miraflores and Augusto Miyashiro for Chorrillos belong to the last metropolitan mayor's (Luis Castañeda Lossio) political party (Solidaridad Nacional, 2018a., 2018b). Barranco's mayor José Rodríguez belongs to Siempre Unidos, the same political party as the former Mayor Manuel Velarde¹⁵ (Siempre Unidos, 2018). Finally, Juan José Guevara, mayor of San Miguel belongs to a very local party called San Miguel Me Gusta or 'I like San Miguel' (San Miguel Me Gusta, 2018).

Chorrillos, the southernmost district of Costa Verde, has one of the oldest and more consolidated waterfront stretches. However, its authorities' attitude towards this space has not been clearly stated. The current Mayor's government plan makes only a single, minor reference to Costa Verde; highlighting its 'touristic potential' (Solidaridad Nacional, 2018b). It might also be relevant to mention that Chorrillos is a district associated with corruption issues. Augusto Miyashiro, father and namesake of the current Mayor, led the district for 15 years (1999-2014) and has been recently sentenced to four years in prison for 'irregular negotiations' during his time at office.

Barranco is another traditional coastal district affected by these kinds of problems. It is has the largest number of irregular land concessions and permits given to private establishments within the coastal area. A marina and a series of restaurants in incompatible areas are examples of this. The

¹⁵ Manuel Velarde was the mayor of San Isidro between 2010-2014 and candidate for MML in the 2018 election.

new Mayor José Rodríguez, was also the president of APCV between 2010 and 2014. His government plan gives an idea of his concerns about this space. Its objectives refer to sustainable mobility and access, including the promotion of funiculars and a streetcar. It also emphasizes the importance of both public and private investment to the improvement for funding public spaces and infrastructure projects. The plan proposes detailed strategies for increasing environmental awareness and for reducing and mitigating disaster risks. More importantly, it establishes a clear intention to recover the land that was irregularly occupied (Siempre Unidos, 2018). The way some of these stakeholders perceive each other also sheds some light on their disposition towards improving the waterfront area. According to Costa Verde de Todos -a civil organization for the defense and protection of Costa Verde- Rodríguez has been ‘a long-time champion of Costa Verde’s beaches’ and is the only Mayor who signed the ‘Protection Act’ they released in 2018 (Costa Verde de Todos, 2018d).

Miraflores’s Mayor Luis Molina has been acknowledged by Costa Verde de Todos as well, for his recent disposition to respond and act on a request they directed to his office, which resulted in the removal of great amounts of construction debris that had been invading Redondo beach for more than 15 years (Costa Verde de Todos, 2018c). Mayor Molina’s government plan for the 2018 election includes his priorities for the waterfront area: the reorganization of public spaces along the beach for sports, culture and recreation (performance amphitheatres, skateparks, etc.), the creation of a ‘tsunami alert system’ and the protection of the cliff through the construction of green stepped retaining walls to avoid rockfalls, which can also be used as an evacuation route for disaster emergencies (Solidaridad Nacional, 2018a).

San Isidro, the district with the shortest stretch (0.8 kms) of waterfront across Lima and Callao, might be one of the least interested in Costa Verde’s affairs. The Mayor Augusto Cáceres’s government plan with which he won the 2018 election, may support that hypothesis. No proposal or concerns with regards to Costa Verde are mentioned. There is not much information in the media suggesting

any interest or concern about this space, except for an interview in which he acknowledges previous Mayor -Manuel Velarde- for his ‘forestation works’ in San Isidro’s portion of the waterfront in 2018 (Acción Popular, 2018b).

Magdalena’s Mayor Carlomagno Chacón has recently launched an environmental awareness campaign by actively leading cleaning activities of Magdalena’s beaches. His government plan, however, dedicates a few lines concerning mainly the proposal of new pedestrian accesses and the expansion of the existing sports and recreational areas (Acción Popular, 2018c).

San Miguel’s Mayor Juan José Guevara’s government plan for the 2018 election considers Costa Verde as one of its main ‘commercial axes’, highlights the importance of integrating Lima and Callao through the Costa Verde roadway and its role as a recreational space. It proposes the construction of water breaks to provide residents with safe beaches as well (Me Gusta San Miguel, 2018).

Callao’s local-level institutions

La Punta’s Mayor Pío Salazar highlights -in his government plan- the ‘positive relationship with Callao Region and Province’ (the three institutions belong to the same party: ‘Por Ti Callao’), and mentions two projects for Callao’s Costa Verde that are already in a ‘management process’ and will ‘favorably impact the district of la Punta’: Costanera Avenue and Costa Verde Callao, both being roadway projects linking Lima’s and Callao’s waterfront at two different levels; the cliff and the coastline, respectively (Por Ti Callao. (2018c). The latter, as we mentioned above has been abandoned and presents construction deficiencies.

La Perla's Mayor Aníbal Jara ran the 2018 election as a member of Perú Nación, what makes him the only mayor of Callao's Costa Verde from a different political party. His government plan shows no proposal or concern regarding the coastal area (Perú Nación, 2018).

Citizen organizations mostly comprised of beach users, runners and surfers, are concerned with the protection of Costa Verde's physical space, but fundamentally its status as public space. Costa Verde de Todos is a civil organization that seeks to defend Costa Verde through informing the public, advocating and/or protesting about the different events and interventions taking place in its public spaces both on-site and specially through its Facebook platform. The organization 'was created in 2014 as a way to protest against the widening of the roadway to include a third lane, the same which did not comply with required studies and permits and left several beaches full of construction debris (Costa Verde de Todos, 2018e). As previously discussed, some of their initiatives are beginning to show their potential impacts on the coast by providing visibility to physical problems and irregular interventions or occupancies of the public land.

The Private Sector is and has been an important actor for Costa Verde. As in many other contexts, the private sector is seen as both a strategic partner and an obstacle to achieving the goals stated in different plans. On the one hand, this sector has the investment power -that the city and APCV lack yet require- to implement planning proposals. Its logical eagerness to maximize profit is seen by many actors as a threat to the 'public interest'. A perception often warranted by the different violations to the land and water use regulations along Costa Verde in last decades, that have been previously explained.

Other important actors of the civil society are the *press*, with its power to make visible the occurrences within the coastal area, and the *professional and academic* organizations and individuals that for many years have been formulating, socializing, reviewing, discussing and contending -with little exposure- a range of proposals for the enhancement of such a coveted area as Costa Verde.

The complementary relationship between the potential of the first and the needs of the second suggests the perhaps obvious -but not often emphasized- possibility for creating collaborative networks of actors. Which could be a starting point to understand and deal with the complexities of such a fragmented socio-political environment as Costa Verde's.

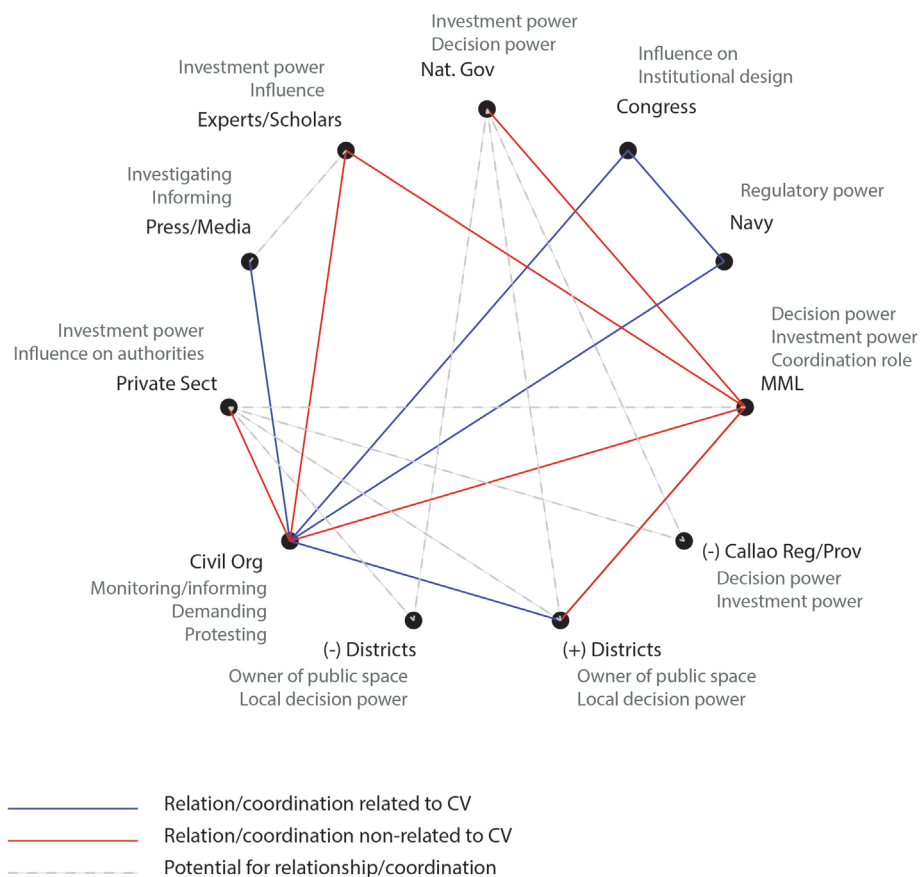


Fig 8 Costa Verde's stakeholders relationships

Discussion

Since its first major intervention during the 1970's, Costa Verde has gone through a range of interrupted planning processes, led by competing powers, interests and ideas. Each of the described plans has contributed new approaches for the intervention of this space. From the boldness of the first vision of the 1960's, through the comprehensive and moderate approach of the Master Plan of 1995, through the market-oriented New Vision of 2007, to the more pragmatic and strategic Structuring Plan of 2009, all of them follow a common goal -at least discursively: transforming Lima's waterfront into a great metropolitan recreational space.

Viewed from a distance, we can say that this goal has been partially accomplished. Indeed, thousands of citizens can enjoy today Costa Verde's beaches, walkways, bikeways and restaurants, especially during the summer months and in specific locations along the coastline. However, Costa Verde is not yet perceived as an integral, quality public space. Interventions there have been made mostly through piecemeal projects, the vertical articulation (upper city-sea level) has not been successfully resolved, the intended horizontal continuity (roads, walkways and bikeways) is interrupted by abandoned infrastructure projects, landfills and commercial spaces built on the right of way or beach areas. The expressway is very often congested and public transit, is non-existent. The poor design of the public realm and the lack of services along many sections of the waterfront makes them inaccessible, unattractive and -by extension- unsafe, especially during at night. Water pollution and construction debris on beach areas are still big problems as well.

Lessons Learned from Costa Verde

These implementation failures and successes have been determined by the disposition of and the relationships between stakeholders as well as by the approaches and strategies undertaken in different administrations. Most common identified factors of success range from political will, timing, strategic approach and community engagement. Failures, on the other hand, have been yielded by a lack of interinstitutional coordination or agreements, a poor institutional design and the lack of continuity of between successive plans.

In general, we can say that having reclaimed land from the ocean, which allowed the creation of beaches, public spaces and the 'beach circuit'(road), has been the greatest success. This was allowed by a bold vision, a strong political will and good timing combined to take advantage of the ongoing construction of the expressway project (Av. Paseo de La República). Also, both physical and institutional contexts were very different from today's. At that time, Lima's six coastal districts were not fully consolidated, and did not own the waterfront portions within today's jurisdictional boundaries. Perú was still a centralized country and thus the decision and resources came from the national government. While the current scheme is more democratic, there is no doubt of the benefit of that earlier context for implementation.

It was also political will which led to the creation of APCV in 1994, in theory a great step forward to implement ongoing plans. In practice however, it failed to fulfill its objectives. The reasons were a poor institutional design (no technical department,) and a great delay (10 years) to initiate its functions.

The zoning regulations established in the Master Plan, which allowed private development, enabled some successful projects such as Larcomar, a commercial center embedded in the cliff, a model that cannot be replicated since the cliff has been declared as a protected area. On the other

hand, the lack of controlling authority power given to APCV plus irregular arrangements between some local municipalities and private investors led to developments that ignored most of the zoning regulations for the sea level areas.

There has also been a major lack of coordination among district municipalities and between them and MML, leading to tension, conflicts and even functional overlaps. Some districts have done works within their portions of the waterfront regardless of APCV. However, some of the more recent successful measures have come from specific interinstitutional arrangements between some district authorities and MML, favoring decisions not necessarily included in the plans or defined by APCV, but nevertheless important for the protection of the waterfront. These decisions were the prohibition of development in the cliff area, the prohibition of debris disposal on the beaches and the placement of protective meshes to prevent rock falls from the cliff – a long time neglected problem which had generated many deaths.

Community involvement has also played an important role. Small, but significant progress has come from the initiative of activists/advocates in defense of the waterfront, forcing the authorities to exercise control over some of the irregularities occurring in the area, i.e., debris removal from a specific beach in Miraflores (another long-time neglected problem) and notifications to the establishments uncompliant with regulations along the aquatic area.

Finally, community engagement and public participation have allowed the confirmation of the role of Costa Verde as a major metropolitan recreational space. What that role implies, however, is still blurry and its definition remains one of the major challenges for future planning processes for Costa Verde.

Challenges and recommendations

For Costa Verde

One of the main challenges for Costa Verde is to get the stakeholders to work together toward the same goal, in a context of high institutional fragmentation. While there is consensus on the role of Costa Verde as a major year-round recreational destination, there is not a clear common idea on what activities represent that role and where they should be located. The plans we described seem to have been regulating land uses for activities that are not yet occurring and that, because of the difficult access to the waterfront, are not likely to naturally occur.

I suggest going back a previous step on the planning process and create a pilot program to generate or promote activity first, and then plan accordingly. The idea is to create a network of stakeholders around that program, each of which has something to contribute and can be benefitted from the process, which will consist on inviting the public to enjoy the waterfront in open space activities on weekends, provide proper access and assess how citizens use the space. Continuous use of Costa Verde, even though through temporary events, will allow people to understand the space and what can they demand from it. And the planning agency could use it as a way to explore different uses of Costa Verde, before assigning areas for permanent infrastructure. This approach could add legitimacy to future planning decisions, as it will allow to plan and regulate for existing (or more likely to occur) uses.

These activities should not be expensive and could be financed by the private sector in exchange of advertising permits. Civil organizations could be in charge of convoking people through social media, and MML could provide access through public transit to the waterfront. For instance the BRT feeder buses decrease their demand in regular routes on weekends, and can be assigned for this program, provided enough public attendance.

This program should not be thought as in opposition with rational planning, but as a complement that can inform those traditional methods.

For Lima

Both Lima and Costa Verde constitute complex and fragmented institutional contexts. No master plan or master plan update been approved in the last twenty years in any of those contexts. Both IMP and APCV were created very close to the date in which the last master plan was elaborated for each context but none of them have been able to fully their intended objectives. This gives us an idea on how important it is to provide planning agencies with strong capabilities. While the creation of such agencies could be ideal for each large-scale project, Lima's scarce resources demand high levels of efficiency. A more pragmatic approach would be concentrate resources in strengthening IMP and consolidate it as a proactive metropolitan planning agency, which could be in charge of spaces such as Costa Verde and other megaprojects for the city, through institutional agreements with the pertinent municipalities. I believe this approach would be more likely to succeed and would provide an integral vision necessary for a metropolis that represents more than its political boundaries.

Another lesson Lima can learn from Costa Verde is that great plans are be more likely to be implemented when harnessing opportunities derived from other plans or events (excavation fill from the expressway construction). In that sense Lima has recently lost an opportunity by not having a master plan to which to link the investment for the upcoming Pan-American games, which have resulted in isolated efforts to host the event. Likewise, the Peruvian Congress has recently approved the creation of a Metropolitan Transportation Authority for Lima-Callao (ATU)¹⁶. This authority

¹⁶ ATU was created by law Ley N° 30900 in 2018. It will be comprised by two members from the Ministry of Transport, one member from the Ministry of Economy and Finance, one member from the Ministry of Housing and Construction

which legally began functions in April 2019, is currently working in a transportation plan for the metropolitan area. Again, Lima's lack of a master plan and of a strong planning agency will not only make more difficult the necessary coordination between land use and transportation goals, but it will most likely lead to a loss of opportunities to link important projects for the city to those established in the transportation plan, which will be funded by the National government.

RECOMMENDATIONS	
Costa Verde	Create a network of stakeholders around a pilot project.
Lima	Consolidate and strengthen existing implementing agencies rather than creating new ones
	Relate implementation and future plans to opportunities derived from other events or planning efforts

Table 4 Recommendations

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and four members proportionately distributed between Lima and Callao, according to their population size (<https://somoscongreso.blogspot.com/2018/12/ley-n-30900-ley-que-crea-la-autoridad.html>)

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