

Achieving Sustainable Development on the Croatian Waterfront . . . Challenges and Opportunities

By

Bozho J. D. Deranja

B.S., Finance, 2000

University of Southern California

Submitted to the Department of Urban Studies and Planning in Partial Fulfillment of the Requirements for the
Degree of Master of Science in Real Estate Development

at the

Massachusetts Institute of Technology

September, 2008

©2008 Bozho J. D. Deranja

All rights reserved

The author hereby grants to MIT permission to reproduce and to distribute publicly paper and electronic copies of
this thesis document in whole or in part in any medium now known or hereafter created.

Signature of Author _____
Department of Urban Studies and Planning
July 31, 2008

Certified by _____
Dennis Frenchman
Leventhal Professor of Urban Design and Planning

Accepted by _____
Brian A. Ciochetti
Chairman, Interdepartmental Degree Program in
Real Estate Development

Achieving Sustainable Development on the Croatian Waterfront . . . Challenges and Opportunities

by

Bozho Deranja

Submitted to the Department of Urban Studies and Planning
on July 31, 2008 in Partial Fulfillment of the
Requirements for the Degree of Master of Science in
Real Estate Development

Abstract

Croatia stands true to its marketing slogan, “the Mediterranean as it once was”, with tiny tiled-roof villages dotting the unspoiled coastline-- but for how long? Since it declared independence from Yugoslavia in 1991, Croatia has been on the rise attracting tourists to its Adriatic coastline and over 1000 islands, reaching its prewar tourism numbers when it led the market as the top destination for European vacationers. Investors, speculators and developers have all followed suit, attempting to take advantage of the beautiful coastline and growing market. However, developers have had minimal success navigating through the overly restrictive planning and permitting bureaucracy. In the meanwhile, two to four story apartment hotels have sprung up like wild fire (legally and illegally) and are dominating the coastal accommodations and threatening the natural landscape.

As most of the Mediterranean coastlines are 70% developed, Croatia maintains only 15% of its coast developed; creating a strong comparative advantage that must be preserved and strategically utilized. The current system does not have a vision of how to accomplish this.

An analysis of the sustainability of the coastal development process in Croatia was conducted beginning with an intense review of available literature, followed by a series of personal interviews with key figures in the market. The seven coastal counties of Croatia were visited during the interview process where developers, architects, city and state officials, business consultants, lawyers, academics and investors shared their knowledge about the opportunities and challenges of this exciting market.

Economic drivers, land use policy, design, financing, infrastructure capacity and operations were all reviewed as key elements of the development process. An analysis of these elements produced a final recommendation establishing a vision for the Croatian coast and an Adriatic Coastal Planning Policy to carry out that vision for generations to come.

Thesis Advisor: Dennis Frenchman
Title: Leventhal Professor of Urban Design and Planning

Acknowledgements

This thesis would not have been possible without the guidance of my advisors, the support of my family and friends, and the vast amounts of information collected in the personal interviews.

My advisors, Dennis Frenchman and David Geltner, provided a wealth of knowledge and helped me channel my efforts and explore my passions. I would like to thank all business professionals, city and state officials and academics who took the time to meet with me and share their insight into this stimulating market. I would like to especially thank Sean Simms, David Timmons, Eulogio Bordas, Guy Perry, Eugene Soric, Fabio Jelacic, Vida Ferlin, Nevenka Cavlek, Mato Bartoluci, Ratko Cimerman, Ljubimir Miscevic, Rafaela Kovacevic-Pasalic, Danijel Katicin, Mario Seric, Marco Julia-Eggert, Stanislav Pavlin, Kristian Sustar, Gorana Banic, Tonci Vlahovic, Jelena Paljetak, Ruzica Simic, Ido Kapner and Keith Gurnee for their thought provoking interviews.

I would like to thank my parents for their constant support and encouragement, my brothers and sisters for their helpful advise and inspiration, my extended family in Croatia for their open homes and open hearts, and my friends for their understanding and comic relief.

The Center for Real Estate at MIT has provided me with this wonderful opportunity to study a topic that I love. I hope to continue in life with the same passion that I have developed in my time at MIT.

Table of Contents

1.0 Introduction.....	8
1.1 Purpose.....	9
1.2 Methodology.....	10
2.0 Croatia in general.....	12
2.1 Short History.....	12
2.2 Coastal Landscape	12
Geographic.....	13
Climate - Weather.....	14
National parks	14
Nature Parks.....	15
World Heritage Sites.....	16
Access	18
2.3 Croatia Today.....	18
Economic Climate.....	18
Tourism.....	19
Business	19
2.4 Governmental Process.....	20
Government.....	20
Government Transparency.....	21
Centralization v. decentralization	22
Privatization	22
Accession to European Union.....	23
3.0 The Development Process.....	25
3.1 Purchasing Property	25
3.2 Land Registry and The Cadastre Project.....	26

3.3 Land Use Policy	27
Site Selection	30
Coastal Protective Belt.....	30
Time Requirements.....	30
Uses.....	31
Bureaucratic Roadblock or Preservation Strategy?.....	32
3.4 Availability of State and Local Staff.....	32
3.5 Public Involvement	33
3.6 Building Permits	34
3.7 Availability of Professionals in Croatian Real Estate	35
Planners.....	36
Engineers.....	36
Architects	36
Construction Firms.....	36
3.8 Financing.....	37
Property Investments	37
Incentive for Success Program.....	38
Privatization and Public - Private Development	38
Banking.....	39
Financial Sustainability.....	39
4.0 Key Features of Croatian Design.....	41
4.1 Architecture.....	41
Clustered Orientation	42
Mixed-Use.....	43
Integration into the Natural Setting.....	44
4.2 Materials	46

Stone Walls and Walkways.....	46
Stonemasons	48
Tile and Stone Roofs.....	49
4.3 Cultural Heritage.....	50
4.4 Green Building.....	51
4.5 Current Supply	52
5.0 Striving for a Year Round Tourism Economy	55
5.1 Expanding the Seasonal Market.....	55
5.2 Tourism Development Themes.....	56
Ecotourism and Adventure Tourism	57
Cultural	57
Thematic	57
Religious	58
Aquatic	58
Sport.....	58
Agro & Gastro-tourism	59
Spa & Wellness.....	60
Corporate.....	60
6.0 Operations.....	61
7.0 Infrastructure for Development.....	64
7.1 Services.....	64
Waste	64
Water.....	65
Electricity / Power.....	65
Natural Gas	66
7.2 Transport System	67

Roads	67
Sea.....	68
Rail.....	69
Air Travel.....	70
8.0 Recommendations – Forming Initiatives and Policies.....	71
8.1 Need for an Adriatic Coastal Planning Policy	71
8.2 Precedents	72
Adriatic Project – Projects of the Southern and Upper Adriatic 1967 – 1972	72
California Coastal Commission: A Parallel Model.....	74
8.3 Establishing an Adriatic Coastal Planning Policy.....	76
8.4 Recommendations for the Private Sector – Developers and Investors	79
8.5 Recommendations for the Public Sector – Local and State Government, Policy Makers	79
9.0 Conclusion	82
Appendix A.....	83
Appendix B	85
Appendix C	87
Appendix D.....	88
Appendix E	89
Appendix F.....	90
Appendix G.....	91
Appendix H.....	92
Appendix I	93
Appendix J	94
Appendix K.....	95
Appendix L	96
Works Cited	97

1.0 Introduction

The Republic of Croatia is a prime candidate for coastal development with beautiful beaches, over 1,000 islands, Mediterranean climate and rich culture. After declaring independence from Yugoslavia in the early 1990's and claiming victory in the war that ensued, Croatia has been on a fast track to economic recovery. This governmental and economic reform is supported by the country's recent application to becoming a member of the European Union. Tourism continues to lead the country's GDP and is on the rise at over 6% per year, quickly approaching its pre-war tourism numbers.

The past marketing campaign for the Republic of Croatia described Croatia as "A small country for a great holiday". Croatia is small indeed, with only 4.5 million inhabitants, this Central European and Mediterranean country covers a total of 56,542 square kilometers. Located on the Adriatic, across from Italy, this small Mediterranean country possesses 31,067 square kilometers of territorial waters, with 5,835 kilometers of coastline and 1,185 islands. As only 15% of the coast is developed, the natural qualities and historic towns of the Croatian coast prove to be the driving force of tourism, and by extension, the driving force of the entire economy. Without preserving the natural integrity of the Croatian coast and strategically planning for its eminent development, Croatia could be at risk of losing its most valuable natural resource and economic asset.

In its most recent marketing campaign, the Republic of Croatia has positioned itself as "The Mediterranean as it once was". This campaign highlights the natural beauty of the Croatian coast, its authentic cities and towns, and its rich historical and cultural heritage. Today's Croatian coast is comparable to Italy's beautiful Amalfi coast or the French Riviera of the early 1900's, with tiny tiled-roof villages dotting the unspoiled coastline. The disconnect, between this campaign and the newer built environment, is that current building practices do not embrace the theme of country's own marketing position. Spatial planning is proven to be more regulative than prescriptive. Green field developments arise in locations where the owners or investors have the most political power, rather than in areas of highest and best use. With this type of regulation, two to four story concrete apartment buildings have proliferated as the favorite typology of small developers, municipalities, or even the government, since they easily meets the standards of outdated urban regulations. (Blazevic, Sevsek, et al. 2004 p.14). Unfortunately, the design of these uniform buildings are developed using standard site patterns that have no relationship to Croatia's traditional cities and towns and are detracting from its cultural heritage. They

represent the “Mediterranean as it never was – or never should be”. What makes matters worse is that many of these projects have been built illegally, a widespread practice along the Croatian coast. These building types, both legal and illegal, create a haphazard environment that often piggybacks on the existing infrastructure and strays from ideals of good planning. If left uncontrolled, this type of development will threaten the natural integrity of the shore and the timeless tile-roofed towns that are beautifully clustered along its coastline.

To counteract this building and threat to the Croatian coast, zoning regulations have been passed making coastal development more regulated and green field development nearly impossible. This type of regulation stifles investment, encourages corruption and slows the economy. However, the slow development can be seen as a good thing for the virgin coastline, as Croatian development has remained in a relatively idle state despite the global pressures to expand. This method of governmental control has successfully maintained the natural environment of the coast from overdevelopment for the meanwhile, but has done so in a manner that will inevitably collapse as the economic pressures and opportunities continue to increase.

Resort development consultants agree that Croatia is highly suited to be a high-end resort destination, capable of attaining year round business while remaining true to the natural beauty of the Adriatic Coastline. However, high quality large-scale developers and hotel flags have had minimal success navigating through the development and bureaucratic process.

1.1 Purpose

This thesis analyzes development issues along the Croatian coast to find a way forward that will encourage high quality building while preserving the coast’s natural and cultural assets for future generations. The thesis tackles this challenge in two segments: The first segment reviews the claim that there are vast opportunities for development along the Croatian waterfront. Economic research and marketing studies, along with industry interviews will supply the information necessary to assert or deny this claim. The second segment of the thesis identifies the key challenges facing coastal development in Croatia. The issues focused on will relate to large-scale coastal development projects and the various entitlement, design, construction and financing risks associated with them. Once these risks are identified, the avenues to overcome such risks are explored and recommendations are made for shaping development of the coast in the future.

How will this young country evolve from a flailing post-communism democracy to the high-end tourist destination that it strives to be? Many key ingredients for sustainable development of the Croatian waterfront are in place and the potential opportunities are endless, but an overall vision of the coast must be created to harness the future development in a calculated fashion. The effects of the built environment touch almost every aspect of life. With this in mind, it is essential to create a vision that encompasses overall strategy on environmental protection, infrastructure and building practices, while also addressing design concepts, financing issues, employment and social interaction. Each component of this vision must be analyzed individually and on an interrelated basis.

1.2 Methodology

In order to gain a thorough understanding of a foreign real estate market it was necessary to completely immerse myself in the world of Croatian real estate development. The research began with literature review, followed by telephonic interviews, personal interviews, attendance at an international tourism conference and completed with intensive on site investigations.

As an initial step, the literature review was comprised of reviewing all available data on Croatian real estate, Mediterranean coastal issues and general information regarding the political, social and economic climate of Croatia. This literature review provided the solid foundation for my further research.

During the literature review, I found that much of the specific information that I was searching for was not publicly available in print. At that point, I began reaching out to both the professional and academic worlds in Croatia to obtain personal accounts on these specific issues. I found the world of coastal development in Croatia to be a small one, where many figures had worked with one another or had heard of them or their reputation. By extending myself to establish relationships, a flood gate of information was opened and the feasibility of conducting such a study was confirmed. I was able to meet with planners, architects, developers, lawyers, engineers, consultants, investors, local and state government officials and numerous academics—each with their varied viewpoints on the challenges and opportunities for developing along the Croatian coast.

I scheduled my arrival in Croatia to coincide with the opening day of the University of Zagreb School of Economics and Business' Fourth International Conference entitled, "An Enterprise Odyssey: Tourism - Governance and Entrepreneurship". With tourism being a lead driver of the Croatian economy, and with

the vast majority of tourism occurring on the coast, this conference was very pertinent to my research. Topics of Economics, Education, Finance, Information Technology, Management, Marketing and Tourism were all addressed in various academic papers presented and in roundtable discussions. This conference opened many doors to academics at several University of Zagreb departments, each with expertise on specific topics of my research.

Following the conference, I traveled from the Southern city of Dubrovnik to the coastal cities of Split, Zadar, Umag and Rovinj, the islands of Pag, Pasman and Brac and finally to the capital city of Zagreb. Each city brought new interviews, new site inspections and new perspectives on the sustainability of development of the Croatian waterfront. Meetings were held in each of these locations with either: business professionals, academics, or government officials, and sometimes a combination of these figures.

Information collected during this research has created a framework for my analysis of the underlying issues of coastal development in Croatia and its sustainability in the future.

2.0 Croatia in general

2.1 Short History

The history of the Croatian people is long and colored, beginning as the Croats reached the Adriatic sea, from the North, in the second quarter of the seventh century. Then, in two tribes, the Croats were governed as a Northern and Southern Croatian principality. The Principality reached its height as Prince Tomislav united the tribes and became king in 925. (Macan and Sentija 1992)

Throughout history, Croatia would be part of a constant struggle for power in the region. The next few centuries saw Croatia's alliances with the Byzantine Empire, with Hungary, the Austro-Hungarian empire, and as Croatia entered the 20th century, it found itself as either a state or kingdom unified with the Southern Slavic nations as Yugoslavia. (Macan and Sentija 1992)

The end of the cold war brought with it the end of Communist Yugoslavia. Holding its first democratic elections, Croatia introduced a multi-party system and implemented economic and political reforms. Croatia and Slovenia seceded from Yugoslavia and Croatia declared independence on June 25, 1991. This led to a war between Croatia and the Yugoslav People's Army which was assisted by Serbian forces. Croatia was recognized by Europe in 1992 and the war was halted by a UN cease-fire. By 1995 Croatia restored sovereignty in most of its territories. In its secession from the Former Yugoslavia, Croatia would be entitled to 23% of the total financial assets of the former republic. (PWC Report 2006 p.2)

Evidence of Croatia's war of independence from Yugoslavia is no longer visible in most areas. The war halted the economy of Croatia for the early half of the 1990's, but Croatia has been quick to rebound physically, economically and socially. Once one of the most popular tourist destination for Europeans in the mid 1980's, Croatia is reemerging onto the world scene as tourism numbers are near their pre-war peak.

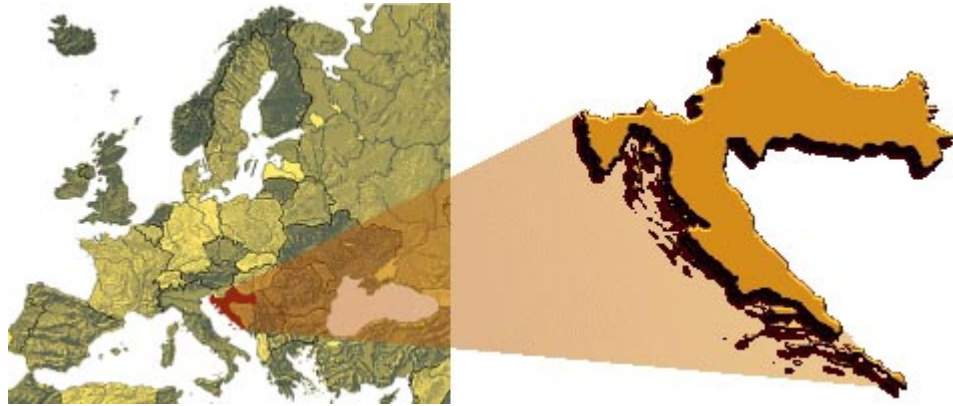
2.2 Coastal Landscape

In the following section, physical characteristics of Croatia will be addressed. The geographic qualities will be presented highlighting the characteristics of the coastal region. The Mediterranean climate of the region will be analyzed and broken down by season. Significant areas such as National Parks, Nature

Parks and World Heritage Sites will be reviewed. Transportation to Croatia and within Croatia will also be introduced.

Geographic

Figure 1: Map of Croatia and Region



Source: www.images.google.com

The country of Croatia is composed of 21 counties, of which seven are along the Adriatic coast. The seven coastal counties, Istria, Primorje-Gorski Kotar, Lika – Senj, Zadar, Sibenik – Knin, Spit-Dalmatia, Dubrovnik-Neretva are the focus of this study.

Croatia sits along the Adriatic Sea across from Italy, at the intersection between the Mediterranean and Central Europe. In the heart of Central Europe, this geographic location provides for a dramatic landscape and even more interesting culture. Croatia shares borders with Slovenia (668 km) and Hungary (356 km) to the North, and Serbia (318 km), Bosnia and Herzegovina (1,110 km) to the East and Montenegro (23 km) to the South. To the West, Croatia's entire coastline mirrors the Italian coastal "boot" across the Adriatic. A population of 4.5 million people inhabit 56,542 square kilometers of Croatian terrain, most of which live in the capital city of Zagreb and along the coastal counties of the Adriatic. The territory of Croatia extends into the Mediterranean as its Adriatic Coast contains 31,067 square meters of territorial waters.

The Adriatic coast of Croatia is one of its most interesting and prized assets, and is the focus of this thesis. Possessing 5,835 km of coastline and 1,185 islands, this rich landscape of coves, rock formations and natural beauty serves as Croatia's biggest attraction. The 1,185 islands account for 4,057 km of the total coastline (1778 km on the mainland). The coast holds 362 towns and villages (226 on land, 136 on

inhabited islands). Of the 21 counties of Croatia, seven are situated on its coast. Within these seven counties (coast and hinterland), 2483 towns and village house approximately 1,427,000 people. With only 15% of its coast developed, Croatia holds a comparative advantage over the rest of the Mediterranean. For this same reason, investors are anxiously awaiting the opportunity to build. Regulations have been put in place to safeguard this natural resource. However, a strategic plan to sustainably develop the coast has been called for but has not been enacted.

Climate - Weather

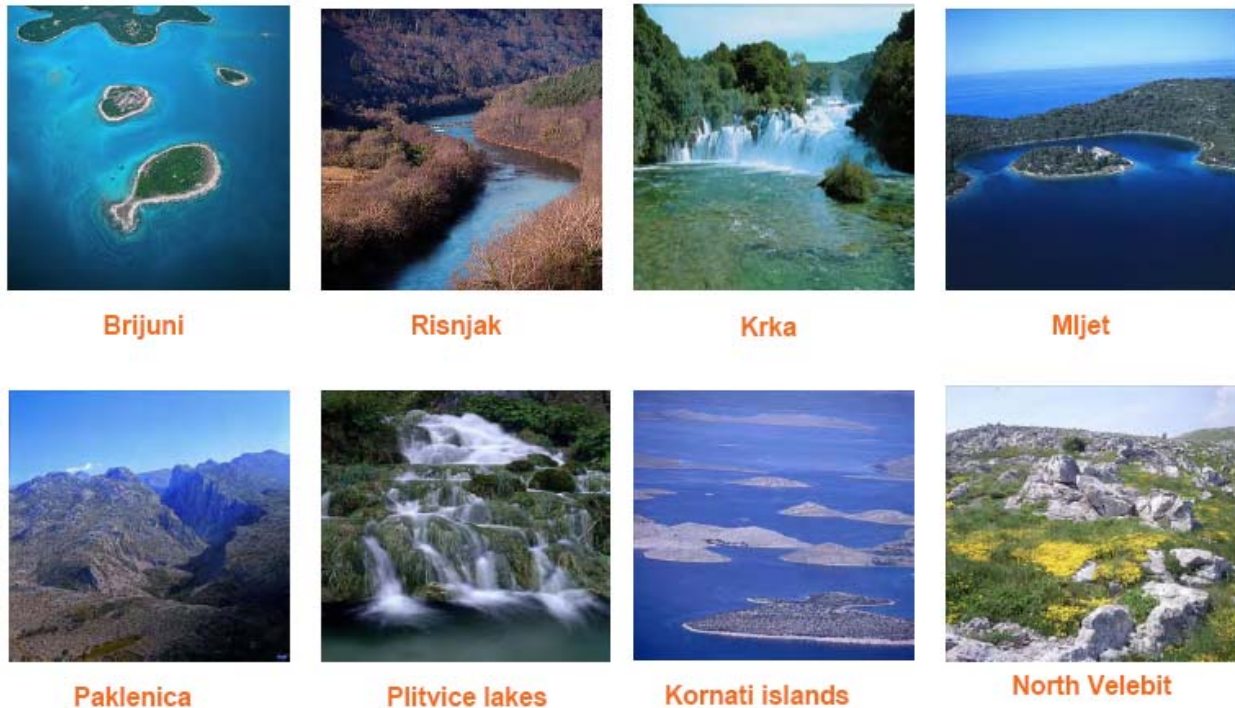
The Adriatic coast of Croatia can be described as having a Mediterranean type of climate with mild winters and warm, sometimes even hot and sunny summers. The coast is backed by the high mountains of the Dinaric Alps - rising up to 1,800 m (Velebit, Biokovo). Winter rainfall in this part of Croatia is quite heavy. The winter weather of Croatia is tainted by a cold and brisk wind known as the Bura. Bura blows cold air from Central and Eastern Europe down to the coast for a few days at a time. This wind is very strong in the North of the Adriatic Sea around the Gulf of Kvarner and North Dalmatia. Bura is a strong factor in the seasonality of the Croatia tourism market. (www.find-croatia.com)

Sun and sea dominate the coast for the summer months. However, summers on this part of Croatian coast are not completely rainless, and the bright and sunny weather is sometimes disturbed by thunderstorms. Sunshine averages in Croatia are from about four hours a day in winter and from ten to twelve hours a day in summer. On average, a mild and agreeable climate dominates the coastal Croatian Spring, Summer and Fall. (www.find-croatia.com)

National parks

The Republic of Croatia has proudly established eight National Parks that preserve natural beauty, safeguard fragile ecosystems and display the wonders of nature for all its visitors. Within these parks, only traditional forms of agriculture, recreational activity and tourism are allowed. The National Parks of Croatia are the Risnjak Forested Mountain, the Kornati Island Group, the Brijuni Archipelago, the Island of Mljet, the Sjeverni Velebit Natural Reserve, the Krka River, the Paklenica Mountains and Canyons and the ever popular Plitvička Jezera (Lakes). These National Parks are described in greater detail in Appendix A. (www.vlada.hr)

Figure 2: National Parks of Croatia



Source: Croatia National Tourist Board 2006 Report

“National Parks are an extensive tract of countryside selected for its natural beauty unique nature and landscape that serve to preserve the natural diversity of rare plants and animals. On the other hand they must provide educational, recreational, scientific, economic and cultural benefits to domestic and foreign visitors, surrounding communities and society in general” (Lisanin 2008 p.1,537).

Nature Parks

With less restrictive preservation requirements than National Parks, ten Nature Parks have been established in Croatia. These large natural sites hold prominent ecological, aesthetic and recreational value and are similarly popular tourist and activity destinations. Within these parks, activities that do not jeopardize its main traits are supported and controlled. The Nature Parks of Biokovo, Kopački rit, Lonjsko polje, Medvednica, Papuk, Telaščica, Učka, Velebit, Vransko jezero and Žumberak - Samoborsko gorje are described in further detail in Appendix B (www.vlada.hr).

World Heritage Sites

“The World Heritage Convention (WHC) requires that nations not only protect, conserve and rehabilitate World Heritage Sites; it also requires that these sites be given a role in the life of the community. The point is not to place these treasures under lock and key but to integrate them safely into the fabric of life. A dilemma exists that underscores the need for balance among the interest of venerable sites, local residents, and future groups of visitors.” Croatia has embraced this philosophy, integrating these dramatic historical sites into the everyday existence life of the local community— from providing active church community activity from WHC cathedrals, to weekly farmers’ markets in WHC site plazas. It is important not to lose this mentality and the culture that it preserves. Croatia must recognize the significance of its culture as part of its identity and part of its economic livelihood moving forward.

Figure 3: Croatian World Heritage Sites



Diocletian's Palace - Split



Basilica of Saint Euphrasius - Poreč



The Plitvice Lakes



The historical nucleus of the city of Trogir



The City of Dubrovnik



Cathedral of Saint Jacob - Šibenik

Source: Croatia National Tourist Board 2006 Report

Croatia is home to seven UNESCO World Heritage sites¹ (six of these sites are exhibited in Figure 3). Six of these sites are Cultural Heritage sites and one, the Plivice Lakes National Park, is a Natural Heritage Site. These Cultural Heritage sites and respective dates they were designated as World Heritage Sites are: the Episcopal Complex of the Euphrasian Basilica in the Historic Centre of Porec (1997), the Historic City of Trogir (1997), the Historical Complex of Split with the Palace of Diocletian (1979), the Old City of Dubrovnik (1979), the Stari Grad Plain (2008) and the Cathedral of St. James in Sibenik (2000). The Plitvice Lakes National Park (1979) is the only Natural Heritage Site currently recognized in Croatia. (<http://whc.unesco.org>)

The definitions given to cultural and natural heritage as defined by the UNESCO describe most of Croatia. This is evidenced by the seven World Heritage Sites currently recognized and the fourteen sites which have been submitted on the tentative list. These tentative sites include: Zadar – Episcopal Complex (2005), the Historic-town planning ensemble of Ston with Mail Ston, connecting walls, the Mali Ston Bay nature reserve, Stonsko Polje and the salt pans (2005), Historical-town planning ensemble Tvrda (fort) in Osijek (2005), Varazdin – Historic Nucleus and Old Town (the Castle) (2005), Burg – Castle of Veliki Tabor (2005), Lonjsko Polje Nature Park (2005), Frontiers of the Roman Empire Croatian Limes (2005), Diocletian's Palace and the Historical Nucleus of Split (extension) (2005), Stari Grad Plain (2005), Lubenice (2005), Primosten Vineyards (2007), Hermitage Blaca (2007), City of Motovun (2007) The historic town of Korcula (2007) and the Kornati National Park and Telascica Nature Park (2007). (<http://whc.unesco.org>)

1

For the purpose of this Convention (World Heritage Convention), the following shall be considered as "cultural heritage": monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science; groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science; sites: works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view. For the purposes of this Convention, the following shall be considered as "natural heritage": natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view; geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation; natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty.

Convention Concerning the Protection of the World Cultural and Natural Heritage.

Access

Access to Croatia and within Croatia is well served. The highway system has dramatically improved over the last five years with significant investment into traffic infrastructure. Appendix C provides a general review of the highways, airports, ferry lines, ports and marinas. A more detailed analysis of each transit segment and review of their respective contribution towards sustainable development will be addressed in Chapter 7.2.

2.3 Croatia Today

The current status of Croatia's overall business environment will be described below. A brief analysis of the economic climate will be provided. Tourism, as a driving factor of the economy (and coastal development) is addressed along with general business issues.

Economic Climate

As war broke out in the early nineties in Croatia, the economy halted. The tourism industry, a leading economic driver of Croatia all but ceased, and the GDP fell 40.5% from 1989 to 1993. The end of the war in 1995 helped the recovery of tourism and the economy in general. During this time of recovery, a lack of transparency and the presence of corruption hindered significant economic reform and foreign investment (www.state.gov).

The end of the nineties brought economic turnaround for Croatia as tourism rebounded in 2000. The credit boom of 2002 helped the Croatian economy realize 5.6% expansion led by capital investment in road construction, newly privatized and foreign capitalized banks, and gains by small and medium private enterprises. The growth trends have continued, as GDP growth in 2006 was 4.8%. Even though unemployment is still high, there has been a steady decline over the last few years that continues today. A stable macroeconomic climate has been reflected with low inflation, steady exchange rate and shrinking government deficits. Continued European Union accession talks, which became much more serious since 2005, have also helped stabilize the economy. (www.state.gov)

Even with these improvements, considerable challenges still remain in judicial reform and in seeing an end to the privatization process. This privatization process, which began in the 1990's, has been scheduled for completion for years now. The unsteady course, however, has been characterized by public mistrust as many state-owned companies were transferred to politically well-connected people at below

market prices. Even with the continued privatization of its holdings, “the Croatian State still controls a significant part of the economy, with government spending accounting for as much as 40% of GDP. Some large, state owned industries, such as the country’s shipyards, continue to rely on government subsidies, crowding out investment in education and technology needed to ensure the economy’s long term competitiveness” (www.state.gov).

According to the recent “Economist” report on Croatia, the Croatian economy will continue to grow, it is estimated that there will be an average annual growth rate of 4.6% from 2008 to 2012 (growth from 2003 to 2007 was 4.9%). Real GDP growth in Croatia was 5.7% in 2007, with the inflation rate, in 2007, at 2.9% and the unemployment rate (International Labor Organization method, 2006) at 11.8%. (www.economist.com)

Tourism

As the leading economic driver in Croatia, tourism produces 20% of the country’s total GDP. There is continued growth in this tourism sector as evidenced by a 7.5% increase from 2006 – 2007 with over 11.1 million tourist arrivals in Croatia in 2007 (2007 Statistical Yearbook, 2008). These key economic figures are important to remember as tourism plays an integral role as the economic driver of the coastal economy and of the development of the coast in general. Achieving sustainable development on the coast must go hand in hand with achieving sustainable tourism on the coast. The significance of tourism will be an underlying topic of the remainder of this thesis.

Business

The 2008 Wall Street Journal and American Heritage Foundation report that Croatia ranks 113th out of 157 countries and 37th out of 41 in the region in their index on economic freedom. A report on this low ranking in Croatia’s *Nacional* Magazine shows that business freedom scored low on the index and gives some analysis as to why; “The score of 58.1% is due to non-transparent legal regulations, as well as the fact that there are a required 22 procedures and it takes 255 days to receive the business license, which is significantly higher than the world average. The deadline for opening a company has decreased over the past several years, to its current deadline of 40 days, a little less than the world average. The Government's project, HITRO.HR, considered to be a good project, can take partial credit for this improvement”. (www.nacional.hr)

The government sponsored HITRO program is addressed to meet the needs entrepreneurs and businessmen by fast-tracking and reducing the administration costs of running a business. The Republic of Croatia has recognized the need to increase the effectiveness of state administration business operations in providing these services to citizens and entrepreneurs. They have created a centralized internet portal to increase the level of service quality within the bodies of state administration. Croatia realized that offering this level of information and access is becoming a precondition for increasing the competitiveness of the Croatian economy within the European market. (www.e-croatia.hr)

The HITRO program must be closely monitored as it can prove to be a huge economic generator for the entrepreneurs of Croatia. Establishing this entrepreneurial mindset prior to EU accession is key in allowing Croatians a fair chance for survival in the post-communist era. Without the ability, capital and experience to create small business, Croatians will be threatened by the entrance of more sophisticated, experienced and capital-rich EU National investors. This can force Croatians into the role of support jobs for the foreign investors more familiar with the “new” way of conducting business once admitted into the European Union. If the HITRO program operates as it is designed, it will help prepare Croatians for a smooth entry into a more competitive and global market.

2.4 Governmental Process

Government

Croatia is a parliamentary democracy, based on a constitution and on welfare, as identified in the Constitution adopted on December 22, 1990. Independence from Yugoslavia was declared June 25, 1991. This sovereign and democratic state is represented by a community of free and equal citizens, which guarantees human rights, equality, and freedom for all its citizens. There are three branches of the Croatian Government, the executive, legislative and judicial. The Executive branch is composed of the president (chief of state), the prime minister (head of government) and cabinet of ministers. The Legislative branch is composed of the unicameral parliament. The judicial system is a three-tiered system. (PWC Report, 2006 p.3)

The current President of Croatia is Stjepan Mesic. As President of the Republic of Croatia, he is the chief of state and represents the Republic of Croatia at home and abroad. The Croatian parliament, or Sabor, is made up of democratically elected representatives whom are in office for four year terms. The Parliament

has legislative authority and also has controlling power over the executive branch. The Croatian Government is responsible to the Croatian Parliament. (PWC Report 2006 p.3)

This young republic has made great strides since it gained independence in the early nineties. However, there are many governmental issues that are hindering the growth of this emerging economy.

Government Transparency

The 2006 report on corruption from Transparency International rates Croatia with a Corruption Perceptions Index score of 3.4 (where 10 is highly clean and 0 is highly corrupt). The 2007 report shows that number increasing (gaining transparency from 3.4 to 4.1). See graph. While this is an improvement, it still shows that Croatia has a long way to go to reach a more favorable and transparent business environment. The low Corruption Perceptions Index rating reflects the frustrations that many developers have with the opaqueness of the current development process.

Figure 4: 2007 Corruptions Perceptions Index

Country	Country Rank	Corruption Perceptions Index
Denmark	1	9.4
UK	12	8.4
Germany	16	7.8
USA	20	7.2
Italy	41	5.2
Greece	56	4.6
Poland	61	4.2
Croatia	64	4.1
Serbia	79	3.4
Montenegro	84	3.3
Russia	143	2.3

CPI Assessment is between 0 (highly corrupt and 10 (highly clean)

Source: www.transparency.org

Denmark leads the world in transparency with a rating of 9.4. Croatia is improving but has a long way to go to pull away from countries like Russia (2.3) and Serbia (3.4) in order to achieve standards set in Germany (7.8) and the UK (8.4).

Centralization v. decentralization

The decentralization of the Croatian government has been conducted in reverse order. Fiscal decentralization is only now occurring after territorial decentralization and the transference of responsibility from areas of higher authority to lower levels. An analysis of this problematic course of action was conducted by Dr. Boris Cota of the University of Zagreb and Darko Liovic of Ernest and Young in their white paper entitled “The Position of Local Self-Governments in Relation with Central Government in the Republic of Croatia in Period Between 1991 and 2007”.

The decentralization commenced with an extensive fragmentation of municipal centers, and therefore 556 units (430 municipalities and 126 towns) were established in the Republic of Croatia, in place of a total of 102 local self-government units that existed in 1991. Such fragmentation did not result in increased state decentralization level, but it rather resulted in significant growth of bureaucratic machinery operating costs, with additional reduction of work efficiency of local self-government. Fiscal decentralization, which didn't follow the spatial fragmentation of local self-government units, was not conducted fast and efficient enough, and it was more of a result of momentary opportunistic activities of governing committees, then that of organized, meaningful and systematically implemented reforms (2008 p. 621).

This analysis sheds some light on many of the troubling bureaucratic issues discussed in this thesis as the lack of accountability, capacity and cooperation challenges the current system. It is no wonder why development is such a drawn out and bureaucratic process in Croatia with this degree of fragmentation in the governing system.

Privatization

Privatization of state owned holdings is of utmost importance to Croatian officials. Deputy Prime Minister Damir Polancec said, “There is no alternative to privatization,” he continues, that adding the sale of state-owned companies will “enhance Croatia's competitiveness” (www.bloomberg.com).

However, the privatization process has been lagging behind scheduled completion dates for years. This much-needed process has been plagued by suspicion of corruption and lack of transparency as marked by the 2007 arrest of three senior officials of the Croatian Privatization fund on corruption charges (www.find-croatia.com).

The need for privatization is of paramount importance for the tourism market. According to the Ministry of Tourism 2003 Strategic Development plan, the hotel industry privatization was scheduled to be finalized by 2004. To date, hotel privatization has not been realized. One of the Croatian Privatization Fund tenders is the real estate portfolio, Club Adriatic, which offers 1,100 rooms in hotels and tourist camps and 2,000 camping sites. Although it is expected to gain its autonomy, the portfolio still remains a government entity (www.hfp.hr).

Business consultant Marco Julia-Eggert, has been involved with numerous privatization tenders and states that “the process is theoretically clear, but practically, it is a total mess” (2008). He has found that numerous tenders have been offered and then revoked by the Privatization Fund, thus infuriating would be investors.

Improvements have been made in the privatization process in the recent past. The encouraging progress identified in the 2007 European Union: Croatia Progress Report along with the establishment of the anti-corruption programme 2006-2008 is evidence of the milestones achieved thus far (Croatia 2007 Progress Report EU 2007).

Accession to European Union

A recent article in “The Economist” sites Croatia's future EU membership as secure and recognizes that Croatia is in the lead of western Balkan countries, stating that Croatia has a “fair wind” towards navigating to EU accession as it leads the pack of the former Yugoslav countries (www.economist.com).

It is important for the Republic of Croatia to achieve a transparent level of business long before accession to the European Union to allow its native inhabitants a chance to establish themselves in the open form of economy rather than immediately opening their borders to the EU and watching their economy, business opportunities and real estate lapped up by eager foreign investors much more keen to the open market and entrepreneurial business environment.

Rather than delaying the opening of opportunities to Croatians until UN admission, it is clear that programs (as attempted with HITRO) must be put in place to allow Croatian’s a forum in business to encourage the optimism and opportunity that entrepreneurial endeavors afford. Without the programs, many native Croatians will be regulated to labor and support jobs for foreign entrepreneurs with more funding and more small business experience.

After a recent international incident-- the suspension of its protected ecological fishery zone-- EU accession talks for Croatia have resumed. Croatia has addressed over half of the chapters of the Acquis Communautaire. As the date for EU accession is further delayed, Croatian officials must see progress in meeting the criteria set by the EU (Schestauber 2008). Croatia's international presence is increasing as it has been invited to join NATO and has been assigned a seat on the United Nations Security Council. These two recent occurrences aid in establishing Croatia's position as a political power in Central Europe. As the process for full European Union membership moves forward with consistent implementation of reforms, it is expected that positive economic trends throughout Croatia will continue. (Holiday Homes Market Overview: Croatia, 2007)

3.0 The Development Process

The primary steps of the development process are discussed in the following chapter. Information provided below will address the fundamental challenges to investing in development projects along Croatia's coast.

3.1 Purchasing Property

Purchasing property in Croatia is a power granted to Croatian individuals, or to private non-resident individuals who obtain permission from the Ministry of Foreign Affairs. Non-resident individuals are restricted to one property which is limited in size (construction site not to exceed 1,500 square meters) and limited to certain areas (cannot purchase agricultural and forest land). The process, which can take up to a year must receive the approval of the Ministry of Justice for the transaction and there must be a reciprocity agreement in place with the non-resident's home country (i.e. US citizens are able to buy real property in Croatia because Croatians can purchase property in the US - reciprocity). (PWC Report 2006 p.12)

Since 1996, when the property market first opened to foreigners, 3,200 applications for property were submitted (up until 2004). Of these applications, 40% had been approved, 7% were denied and over half have not yet been processed. The number of applicants ranged from about 550 per year during the 1996 to 1999 period to about 1,250 per year from 2000 to 2004. Non-residents who set up a Croatian company are also able to purchase property. This form of purchase is not restricted in size or number of properties. The process to set up a company takes less than a year, it is therefore understandable that many foreign investors have used this method. (Mihaljek 2004)

Foreigners purchasing property can see the value in establishing a Croatian company as a vehicle to enable their transactions. Establishing a company in Croatia is similar to the process in any European Country. The three basic types of entity available under the Company law are 1) Limited Liability Company – d.o.o., 2) Joint Stock Company – d.d. and 3) Partnerships – limited, unlimited and silent (PWC Report 2006 p.16). The type of company correct for any individual investment strategy should be considered with local legal consultation.

Capital gains taxes are only recognized if the property is sold within three years of initial purchase. There is equal treatment of foreign and domestic investors. An additional restriction is that individual units are

not available for sale within tourist zones, the significance of this phenomenon will be discussed in further chapters.

3.2 Land Registry and The Cadastre Project

A main issue facing land development in Croatia is the difficulty in assembling parcels for larger scale projects. This issue is the same in most development markets, but in Croatia this difficulty is magnified by five main factors. These factors include:

1. **Small average lot sizes**-- Small parcel sizes in Croatia create common situations where an individual owner may own a fair amount of land, but the land is usually not physically connected. This creates more of a patchwork of land parcels interspersed among the parcels of other owners.
2. **Several titleholders to an individual parcel**-- This problem stems from the fact that much of the land in Croatia has been passed down through the generations with out proper recording and constant accumulation of additional stakeholders. Many times, the “owner” of the property will come to find that there are additional owners stemming from past generations that also hold a stake to the title. If relations are close among family, the challenge lies in getting all owners to agree on the course of action for the property (buy/sell/lease/build). However, if family is distant and out of communication, the task to achieve sign off from all titleholders may be insurmountable.
3. **Inability to transfer title**-- Having multiple individuals on title to a property limits the ability to transfer the title. If ten individuals hold title to a piece of property, and nine out of ten wish to sell the property, the tenth individual can stop the sale. This problem is only magnified when trying to aggregate multiple properties for a large-scale development.
4. **Antiquated recording**-- Part of the reason why there are often outdated title records is that, until recently, the title recording system has been dramatically out of date. The old-fashioned land registry is a hard copy book system call the cadastre. The outdated system requires about 120 weeks to complete registration of a property. To this day, one is required to finalize transactions with a hard copy stamped by the State Geodetic Administration to be certain one’s transaction is valid. In order to address this fundamental problem, the Republic of Croatia has launched a much-needed program (the Land Registration System Reform) to update and computerize the

cadastre system. The Land Registration System Reform is establishing a new system of real property registration and the real property data base, where all hand-kept land registers will be transcribed into electronic form. This has proven to be an enormous project, as the total number of land registry files in the Republic of Croatia amounts to 4,245,507 for 14,664,043 land plots. As of the end of 2005, 55.06% of the land registries have been transcribed into electronic form. With the completion of this program, the 120-day registration period is anticipated to be dropped down to just five days. This program has been a joint program funded by the Republic of Croatia (6.6 million Euros), the European Union (4.9 million Euros) and the World Bank (26 million Euros). Along with the State Geodetic Administration, the people of Croatia and Croatia's economy will benefit greatly from this advancement to such an expedient, transparent and market-oriented system. These improvements will also inspire increased foreign investment that saw the prior system as a hindrance to progressive development. Currently, information on each parcel can be accessed on the Internet, significantly expediting the time it would have taken in the past to navigate through the title process. This process is bringing Croatia closer to establishing a market-oriented system of real estate. (RH State Geodetic Administration Report 2006)

5. **The lack of title insurance--** The aforementioned land registry system problems can be identified as the reason why there is no title insurance in Croatia. The current backlog of land registration is staggering, but it is making headway. In 2003, there were 314, 243 pending land registry cases, at the end of 2005 that number dropped to 214, 528 (RH State Geodetic Administration Report 2006). A title company would have no way to insure the risk associated with this registry system, further supporting the need to complete this much needed Land Registration System Reform.

3.3 Land Use Policy

The current land use policy in the Republic of Croatia is a tiered structure that is based at the county level (County Spatial Planning Arrangement). From there, the county identifies its municipalities and cities which are further detailed in the Spatial Planning Arrangement for Municipalities or Cities. This municipal or city level focuses in and identifies the more detailed urban areas (General Urban Plan and Urban Plan Arrangement). Within the General Urban Plan, there is identification of areas that require even further clarification in the form of a Detailed Plan Arrangement. Some areas are not required to have a Detailed Plan Arrangement, yet they are required to obtain a Location License (similar in nature,

but requiring a different process). A table characterizing each level of planning is attached as Appendix D.

Establishing these spatial planning arrangements is a tedious and time-consuming process. Making changes to said arrangements to allow for green field development, or making alterations to existing zones, essentially requires recreating the entire system to reflect the new project. However, changes are considered to be an exception to the rule. The regulatory nature of these plans makes them nonflexible. These plans are led by rules and less by discretion. The plans are not meant to be altered, neither by private investors nor by communities, leading to a long and lengthy process to make any alterations. The duration of this process is dependent upon many factors. When will the county be meeting next to review the county spatial planning arrangement? How does the project fit into each level of the planning arrangement? Is there political and local support? How many projects are ahead in queue to be reviewed? Can involved investors wait out the zoning process? These questions could be the same for any project in any locality around the world. However, in Croatia, this is a long, tedious, frustrating and repetitive course of action which requires a great level of patience as projects take *years*, not months to be reviewed. Mario Seric, a business consultant in Split, Croatia, draws from experience working in the United States, Spain and Croatia when he states anecdotally, “What takes months in the United States, takes years in Croatia, that is the way things work here” (2008).

Creating a detailed zoning plan for a proposal is problematic in Croatia. There is far too much detail required while in the planning stages. The detail of the required review coupled with the amount of projects coming into the zoning agencies is making a slow system even slower as projects have been bottlenecking and taking years to process. To further complicate matters, there are disparities among the stages of planning law from State, to County, to municipal requirements. This leaves room for confusion – but also for possible negotiation. Due to the mismatch between different level plans, the need for alterations causes even longer procedures to remedy the situation; further elongating the entire process.

Another problem arises as different officials have conflicting interests as they become involved with projects. An example of this is receiving approval from environmental conservationists in the Ministry of Culture especially in the case of protected areas. A project can have municipal support but the conservationists can still withhold the approval if the project does not meet their standards. A more transparent process can help alleviate this problem of disharmony between government approvals.

From 1991 to 2006, the Law on Building has changed eight times and the Law on Spatial Organization has changed ten times (Randic and Turato 2006). This degree of legal manipulation creates an unsustainable planning process and prohibits any forms of continuity within any project level. The following Figure 4, highlights the changes made to the law over the decade and a half.

Figure 5: Changing Law on Croatian Development (1991-2006)

Law on Changes of the Law on Spatial Planning and Spatial Organization, 16-7-1991

Law on Supplements to the Law on Spatial Planning and Spatial Organization, 19-11-1991

Regulation on the Change of the Law on Spatial Planning and Spatial Organization, 4-8-1992

Regulation on the Change of the Law on Spatial Planning and Spatial Organization, 28-2-1994

Law on Spatial Organization, 15-4-1994

Law on Changes of and Supplements to the Law on Spatial Organization, 12-5-1998

Regulation on the Change of the Law on Changes of and Supplements to the Law on Spatial Organization, 12-4-1999

Law on Changes of and Supplements to the Law on Spatial Organization, 23-6-2000

Law on Changes of and Supplements to the Law on Spatial Organization, 28-3-2002

Law on Changes of and Supplements to the Law on Spatial Organization, 20-7-2004

Law on Changes of and Supplements to the Law on Construction of Objects, 16-7-1991

Law on Building, 26-5-1999

Regulation on the Change of the Law on Building, 7-6-1999

Law on Changes of and Supplement to the Law on Building, 16-7-1999

Law on Changes of and Supplement to the Law on Building, 24-12-2001

Law on the Change of the Law on Building, 25-3-2003

Law on Building, 4-11-2003

Law on changes of and Supplement to the Law on Building, 20-7-2004 (Randic 2006)

Source: Randic and Turato 2006

Site Selection

“The zoning process in Croatia is not sustainable” (Seric 2008). As the country expands, it has created zones, which is justifiable, but this has usually been done in areas where important players have had a stake in the land and have been able to influence zoning officials to deem their land as a Tourism Zone. The resulting tourism zone may provide the best returns for that piece of coastal property, but when the location is established in this haphazard fashion, the area may be remote and not easily accessible from transportation hubs, therefore not the most attractive to tourists. Development taking place in Croatia, especially in the Dalmatian region, is currently taking place far from existing urban areas. In other Mediterranean countries, many tourist areas are extensions of urban areas or are inserted amongst existing urban areas. Only when carefully planned--considering social, economic, infrastructure and natural surroundings--, will site selection be a sustainable process. (Seric 2008)

Coastal Protective Belt

The Coastal Protective Belt established on September 9, 2004 has attempted to address the need for site selection. This area is defined as all coastal area from the water's edge to 1,000 meters inland, and three hundred meters out to sea to be protected area. Within the 1,000-meter area, strict guidelines for urban planning stating what can be constructed in what way were enacted. The basic premise was that no habitable structures are to be erected between the coast and 70 meters (100 meters in some cases) into the mainland. Coastal counties are to incorporate this law into their spatial plans and Urban Planning Arrangement Documents would be required for any developments within the Coastal Protective Belt. The Urban Planning Arrangements would have to be approved by the State Ministry. With the state supervision of this law, physical planning approvals have become very difficult to obtain. One can find many problems with this defensive regulation, but it has successfully maintained the general preservation of the coast for the meanwhile, acting as a pacifier for the time being (Banic 2008). There are other limitations as well; where 1,000 meter set back may be appropriate in some areas, in other places a much greater setback may be required to preserve the natural landscape quality; or less. Principles identifying what is of importance in the landscape need to be established and then an inventory must be undertaken to determine the best setback (or other controls needed) in each area of the coast.

Time Requirements

The time requirements listed by governing entities for planning document reviews are only minimum time limits, not maximums. Time frames described in the planning guidelines provide a sensible framework,

but the time that the planning review process actually takes in practice is much longer and provides no guarantees. (Ferlin 2008). A table highlighting the zoning processes, roles of individuals involved, and minimum time frames, has been established based on interviews with Vida Ferlin, the head Architect for the City of Umag (County of Istria). The table is available upon request from the author. When asked to estimate the minimum processing time for zoning change, she stated that it would be a minimum of two to three years. This may be optimistic as Mario Seric described renovation projects in Southern Dalmatia taking four to five years, and by their nature, renovation projects require less zoning approval (2008). It is to be noted that the minimum times set forth in this report are strictly the minimum requirements as set forth by law, they are not maximums. These minimum requirements in practice tend to be quite unrealistic and often far exceeded (Ferlin 2008).

Any given project may contain city benefits, public backing, municipal support/help, but still quite time consuming, and not guaranteed (Ferlin 2008). If the project involves rezoning, the entire spatial plan must be approved, therefore, the county usually waits until a substantial amount of requests have been made in order to not go through the process over and over again. This also allows for an overall view of projects in respect to the spatial planning of the entire county.

One must complete ZPPU, then PPU, then UPU, then DPU in that order, although one may begin the next step prior to the former being complete, but they must be completed in lock step order. All information must be uniform throughout to avoid major delays or restarts. (Ferlin 2008)

Uses

Within the zoning documents exists various zoning use categories. Of primary importance on the coast are the regulations and characteristics of Tourist Zones. Within the Tourist zones, there are three levels. T1 is comprised of Hotels and Villas, allowing for 70% Hotel and 30% Villa. T2 is comprised of Hotel, Villas and Supporting uses (mixed use), where they maintain the same ratio of villas to be 30% of the entire project (maximum). The Last Tourist zone is T3, which allows camping and auto camps, while not allowing Hotels or Villas.

Bureaucratic Roadblock or Preservation Strategy?

The current zoning process can be simultaneously described as a bureaucratic barricade, or a brilliant preservation strategy. The amount of planning and paperwork required has been delaying projects since the independence of Croatia was declared in 1991. Since that time, no large scale green field development projects have been completed. (Katicin 2008). In other emerging countries such as Bulgaria and Turkey, where coastal opportunities attract immense real estate investment, projects have been going up at a fast pace in recent years. This pace and magnitude of coastal development may soon ruin the natural attraction to these areas. Thanks to the stringent zoning regulations, the pristine beauty of Croatia's Adriatic coastline, with its untouched beaches and over 1000 islands, is still intact (for the meanwhile). Mass development has yet to taint this virgin soil (or stone). However, once development begins, are adequate provisions in place to guide it, or will Croatia repeat the failures of some of its Mediterranean neighbors? The current zoning regulation is restrictive rather than prescriptive, stating what one cannot do, rather than what the country would like to see along its coast. "Unordered conditions and circumstances of building have managed to preserve the coast and give the chance for re-establishing the rules of the game in new circumstances", thus creating a "Fertile Delay" (Randic and Turato 2006 p. 222).

3.4 Availability of State and Local Staff

In the USAID Twinning program, City planners from the United States were partnered with Croatian municipalities to aid in their revitalization plans. Keith Gurnee and David Timmons aided the city of Umag, Croatia, with their waterfront revitalization plan. Both David Timmons and Keith Gurnee are impressed with the knowledge and experience of the Croatian State and local planning staffs. However, both agreed that the system operates far too slowly by design, exemplified by overwhelmed staff with bottlenecking plans to review. Even the public sector is affected as Daniel Katicin, head of the Tkon Municipality on the island Pasman, states that he has "been waiting for the county review of municipal plans for over a year" (2008). The process must go through too many individuals, "there is not one lead contact coordinating the process", states Katicin (2008). The current system brings confusion, unaccountability, repetitive work and ultimately, a delayed process.

An excerpt from Ch. 27 of the UN Environmental Impact Report summarizes a fundamental problem at the state level,

The Ministry of Environmental Protection, Physical Planning and Construction has responsibility for many areas of environmental protection without being given the corresponding authority to ensure delivery on these responsibilities. The comparative weakness of the Ministry of Environmental Protection, Physical Planning and Construction compared to other ministries, coupled with the division of responsibilities for operational aspects of environmental protection, continues to hamper progress in approximation, implementation and enforcement (Environment for Development 2008).

This comparative weakness is unacceptable as the Ministry of Environmental Protection, Physical Planning and Construction plays an integral role in not only the future of Croatia's coast, but in the success of nearly every Ministry's projects.

3.5 Public Involvement

Representative of both the public and private sectors were interviewed to gain an understanding of the level of public involvement in projects. Kristian Sustar, the director of Maistra, a large hotelier that develops projects often needing special permitting, commented regarding his firm, "We always get the public involved, right from the beginning . . . it makes the process much smoother in the long run and it helps give the public what they want in their communities" (2008). This hopeful information begs the question: How viable is the idea of public involvement for smaller projects?

David Timmons, of the USAID program, teamed with planners from the city of Umag and were tasked with creating a master plan for the Umag waterfront. During the process, David created a public involvement program where they sent out 4,000 flyers requesting public feedback for the project. Only 90 of the 4,000 flyers were returned (2.225%). David commented, "there is a different level of involvement in Croatia, it is not in the mindset of the public" (2008). Danijel Katicin, the head of the Tkon Municipality on the island of Pasman commented on this lack of public involvement; "People like to voice their opinions, but in the café, not on official reports". Katicin continues, "This form of gathering public opinion is not popular in Croatia, especially in the Southern coastal counties" (2008).

Part of the reasoning behind the public's lack of interest may be tied to their perception of their own lack of influence. A survey was conducted asking citizens to answer the question of who has the biggest

influence on the physical planning of coastal towns. This survey was conducted with 100 people in each of the towns of Dubrovnik, Stari Grad, Dugi Rat, Zadar, Goli Otok and the Labin Area. The results were quite similar for all seven areas and the totals are listed below. Of those interviewed, 50% felt that investors and capital owners had the biggest influence on physical planning of coastal towns, 31% thought it was the local authorities, 6% felt Architects and urban planners held the power, 4% thought the citizens held the power, 1% thought all were equal, 4% thought someone else did and 4% didn't know. (Croatian Archipelago, 2005 p.444) This low 4% figure of the citizen's perceived power is quite similar to the shockingly low level of involvement found by David Timmons.

If these results accurately depict the reality in Croatia, it is necessary to establish lines of open communication between residents and local authorities through forms such as public meetings, task forces or group workshops. Information and opinions found here should be factored into physical planning of towns to help change this perception (or this reality). As a minimum for transparency, open public hearings must be a requirement at each step of the permitting process.

3.6 Building Permits

Building permits are issued and monitored from the state level. This creates a huge disconnect between the local municipalities, who regulate land use and zoning, and the state. Illegal construction has been rampant throughout the coastal towns in Croatia, since federal authorities issue permits for buildings which may or may not meet the requirements of zoning and there has been little that the local municipalities could do to control it. Another one of the most prevalent problems facing local building code enforcement is that many individuals are able to obtain a building permit and just as many do not complete the project. There is a separate occupancy license, similar to a certificate of occupancy given at the final sign off of project completion that is difficult to obtain due to strict regulations. (Katicin 2008)

There is a need for a program which coordinates zoning and permits and forces individuals or firms who obtain a building permit to complete the project or at least to complete the facades, and hold off the interior until they have enough funds or rectify the reason for the delay, whatever it may be (Soric 2008). Similarly, a program was proposed to locate the owners of old stone houses in decay. According to the proposed program, should the owners not be located, the homes would be taken by eminent domain by local authorities then sold to parties who would commit to rebuild the existing structure to beautify the living environment, add to the neighborhood and remedy a safety hazard. Proceeds from the transaction

would go into a fund that the original owner could claim if said owner returns. The program was never approved. (Cimmerman 2008)

In many parts of Croatia, building permits are granted but infrastructure is not provided by the municipality (roads, water, sewage, etc.); thus delaying or preventing occupancy permits. Some developers opt for paying for this infrastructure in lieu of communal fees. However, these costs are often higher than the total fees due. For a new development, the first to build on a previously vacant plot of land bears the full cost of the infrastructure installation (no credits are given if other projects will use this infrastructure). This method of green field development is very unattractive to investors. Is this just another example of the *FertileDelay* (Randic and Turato 2006 p. 222)?

Fabio Jelacic, the head of the Umag city council, explained the permitting system as begin a formulaic approach.

1. Max 180 Kuna (+/- \$40USD) / Cubic Meter
 - a. Based on location and zone
 - b. Remote locations are charged less but receive less for road maintenance etc.
2. Project receives between 30-35% of funds for direct infrastructure requirements
3. Remaining 60-55% used for central functions of the city (Jelacic 2008)

3.7 Availability of Professionals in Croatian Real Estate

The current availability of Croatian real estate professionals (Planners, Engineers, Architects, and Construction Firms) satisfies present development requirements. If a justifiable number of the projects that are currently in the planning stages come into fruition, there will be high demand on the real estate service providers. Overall, the trades of the mentioned real estate professionals are considered of high quality but of slow production. This slow production of new developments often causes significant bottlenecks for Croatian real estate professionals, causing developers to search elsewhere for service providers. A brief analysis of the availability and quality of planners, engineers, architects and construction professionals is provided below.

Planners

The implementation of the Coastal Protective Belt has created a demand for planners that is not met in practice. Only a few firms in Croatia are licensed for Urban Planning, especially for establishing Urban Planning Arrangements (Banic 2008). International firms are often solicited for master plan work in large development projects. Developers interviewed were pleased with the work product but found that local authorities did not always accept the design. This emphasizes the importance of local understanding and communication with local and state planning authorities.

Engineers

Engineering firms in Croatia are of high quality but are limited in numbers. Eugene Soric, whose firm provides business, planning and engineering consulting services, foresees the need for more engineers as developments become more commonplace (2008).

Architects

There are large amounts of good architects in Croatia, but there is a lack of architects with experience in hotel and urban design. This lack of experience (directly caused by the lack of hotels being developed) makes Croatian architects fearful of being innovative (Seric 2008). This causes many developers to bring in a foreign architect. However, the international architect must be aligned with a local architect to verify their work. International architect and planner Dennis Frenchman comments on local verification, “This may be a good thing for many reasons: foreign development firms and their architects have a tendency to run over local tradition and culture to build a standard international product, local architects can help to overcome this if they have the right brief and are empowered” (2008).

Construction Firms

The reconstruction efforts after the war in the early nineties, which destroyed many parts of Croatia, are evidence of the strong construction capabilities in Croatia. Even though there is no shortage of qualified construction firms, there are both reputable firms and those with less than reliable reputations. This leads to the ultimate necessity of experience and reference verification. Having been involved with many construction projects, Eugene Soric notes that construction firms in general in Croatia are good but slow (2008). This appears to be a reoccurring theme in Croatia.

3.8 Financing

A tedious and lengthy development process causes the current investment climate in Croatia to be speculative. With this in mind, it is no wonder that many investors are purchasing coastal land and deliberately not developing-- waiting for land value to appreciate before they sell or build. This investment strategy is a direct result of the current market conditions, and is counter-productive towards Croatia's goal of creating a year round season. This goal and its economic significance are addressed in detail in Chapter 5. Ido Kapner, of the Carlton Group, who has experience investing for this large international investment fund in the coastal markets of Croatia, was interviewed to assess Croatia's investment climate for coastal properties.

Kapner recognizes the potential in the Croatian coastal property market but sees it as speculative for the meanwhile. His firm has been investing in Croatia for the last two and half years during which they have purchased over twenty properties. Since purchase, they have experienced an overall decline in land value but have noticed increases in the past six months (Kapner 2008).

Property Investments

The Carlton Group has invested in the residential, tourism and commercial property markets of Croatia. Residential properties have been turned into either vacation villas or residential projects for the domestic buyer. On these projects, "the permitting took much longer than expected and the need to pay people in each chain of the process was more expensive than anticipated"(Kapner, 2008). For the meanwhile, all tourism-zoned land has been purchased for speculative reasons, as the development process does not make economic sense at this time. Due to this economic infeasibility, the Carlton Group is no longer seeking investment in tourism zones; rather they are focusing their new investments on shopping malls in second tier cities. Target returns of 40% for coastal zone projects have not been met to date with the fall in land prices. When asked about the long-term performance of Croatia, Kapner responds, "I don't think the land value in Croatia will decrease, maybe 5%-10% during cycles, but overall it will continue to rise" (2008). In 2007 residential prices grew by 5.4% at a national level and by 13.4% on the Adriatic coast. (Residential Market Overview: Croatia 2008)

Ever increasing land prices and expectations of land owners and speculators are in some cases becoming an impediment to the efficient functioning of the market.

Holiday home properties have been experiencing constant capital appreciation over the last few years as a result of the increasing demand and the limited supply. Price per square meter varied among different areas in 2006. According to 'Croatia Real Estate Exchange', the average asking price along the entire Croatian coast is EUR 1,502/m², which marks a 13% increase compared to the previous year. The highest prices are commanded in the historic city of Dubrovnik, where average asking prices vary from EUR 4,000 - 8,000/m². However, the highest achieved price for a holiday home in this area is EUR 7,000/m². (Holiday Homes Market Overview: Croatia 2007.

Incentive for Success Program

The "Incentives for Success Program" was launched by the Croatian government in 2002 and has since provided 365 subsidized loans in the amount of 1.3 billion Kuna (+/- 260 million USD) for small family hotels (10-40 rooms, minimum three star rating).

The goals of the Program "Initiatives for Success" are: increased employment in tourism, development of small family-run businesses, prevention of grey economy, restricting of accommodation facilities by increasing the number of three-star and higher rating facilities, construction of new tourist facilities in accordance with the requirements of the modern market, raising quality by renovating and modernizing existing facilities, raising quality by constructing new facilities, construction of architecturally designed facilities which shape and size fit in with the surroundings and extension of the high season and increased revenues. (Ivanov and Kovacevic 2008)

This program has created 12,864 beds mostly in small apartment-hotels (Ivanov and Kovacevic 2008). The Incentive for Success Program" is raising the quality of the current apartment-hotel supply. However, it is also increasing the supply of apartment-hotels which is already in disproportion to the much needed larger hotel product. In order to increase quality of the overall Croatian tourism capacity, subsidy programs should be geared towards remodels and renovations of existing small hotels and construction of large scale hotels (of four and five star ranking). This program would increase the much-needed four and five star rated accommodations that are currently in gross undersupply.

Privatization and Public - Private Development

The Carlton Group has also bid on existing hotel tenders in the privatization process and is a bidder on the Brijuni-Riviera public-private development tender. Kapner has reviewed and has made offers for existing hotel portfolios, however, none of the investments penciled out. Kapner noted that the unattractive

investments were tainted by the need to maintain an expensive union labor force (with the purchase of the hotels), the short tourism season and the teardown status of most projects, not due to physical condition, but due to outdated design and layout. The Brijuni-Riviera tender has now been in process for over a year. Kapner sees the process as fairly transparent but questions the length of time for review and the overall attractiveness of the deal. During the tender, there have been government elections that Kapner believes have slowed the process. Due to the many hurdles of this market, Kapner's group has had difficulty in obtaining a major hotel flag for their project proposal (2008).

Banking

Kapner has seen no big problems in accessing debt capital in Croatia. Most of the major Croatian banks are owned by foreign banks (mainly Austrian or Italian), therefore, the differences between foreign and domestic capital is minimal. Frequently, when borrowing from one of these foreign owned Croatian Banks, money comes from either Croatian funds or the foreign partners. Kapner did note that smaller residential projects required domestic financing with a local presence. However, larger commercial deals, such as a shopping center, could attract the competition of foreign markets if desired. Kapner has been experiencing spreads of 270-350 basis points above Euribor (Euro Interbank Offered Rate), the rate at which euro interbank term deposits within the euro zone are offered by one prime bank to another prime bank. Financing is difficult for non-experienced groups as lenders would rather lend to experienced groups with whom they have relationships. This trend is common among all markets, but more prevalent in a challenging development environment such as Croatia. With improving central bank regulations, Kapner finds attractive construction financing, reasonable land financing and lots of opportunity for investment, as there are not many large investment players in the market (2008).

Financial Sustainability

The natural beauty of the Croatian coast is key to its future value and financial sustainability. Kapner notes that, "Croatia should not make the same mistake as the Spanish and French rivieras, where large concrete structures and standardized international property types with no variation take up the entire coastline. It is important for Croatia to maintain its natural appeal." However, Kapner addresses the difficulties in the taking advantage of this natural beauty (through realizing development projects). These difficulties are most present in the delayed permitting and governmental cooperation. Experienced in numerous Central and Eastern European markets, Kapner notes, "The permitting process in Croatia is by far one of the toughest in the region". This delay can be correlated to Kapner's analysis that the "local

municipalities along the coast are very powerful” which may create a power struggle between local and state governments, leaving the developer in the no-man’s land (2008). These delays will stifle the future growth and will continue to hinder the financial feasibility of development projects.

The Carlton Group is “in Croatia for the long haul” and may be trying to wait out the current regulations. This method is evidenced by their speculative tourism land holdings. Besides these regulatory concerns, Kapner points out a common complaint of market demand. “The big problem in Croatia is the seasonality. There is a need to increase from a summer season to include fall and spring, then eventually winter”. Another limiting factor is that “Croatia is not yet a destination and needs to be better branded” (Kapner 2008). These two points are pivotal in attracting the large hoteliers necessary to help establish Croatia as a year round destination, helping make this market financially sustainable.

4.0 Key Features of Croatian Design

Future growth of Croatia's coast will be economically driven by tourist and residential development; along with the development of their supporting services. All of the following design characteristics are extremely important to the development of future tourist and residential projects. Design of supporting service projects (such as hospitals and schools) should focus on the physical orientation and green building requirements described below (and to a lesser degree on traditional materials elements). However, support service projects must not forget their contextual relation to surrounding traditional Croatian architecture². In a financial paper for the University of Zagreb, Cizmar and Vlahov call for the growth of the hotel industry in an upscale market segment (2008). This type of project requires a developer to "implement principles of sustainable development and design and operate the mixed-use complexes in a professional way" (Cizmar and Vlahov 2008 p.468). As integral components of a development model which can be maintained for generations to come, appropriate design characteristics of physical orientation, traditional architecture and materials, and green building are described below.

4.1 Architecture

"During Construction of new facilities, it would be necessary to respect the traditional and indigenous style of development of the surrounding area, in order to preserve the harmony and visual identity of areas" (Ministry of Tourism 2003 Strategy Report 2003). In a report on the Influence of Globalization on Space Planning, Sanja Saban, former head of the Department of Urban Planning of National Park Medvednica writes, "In the last couple of decades a rapid development of information technology, an overwhelming influence of mass media and an increasing globalization have created a universal attractiveness and an increased consumption which exerts a growing impact on the character of urban space all around the world. International Style in architecture and town planning aims to erase all traces of the past, to impose uniformity and to render the historic heritage in a contemporary context almost invisible." She continues by stating that "the very phenomenon of universalization creates an absence of distinctive features and, in the course of time leads to a lack of identify of a particular society." This is something that Croatia cannot afford to do. Even though modern architecture and design is necessary and

2

"It is often forgotten that Croatia has a strong tradition of modernism and many examples show that it was not an 'insensitive international style' type but rather contextual" (Banic 2008).

appreciated, the historical value of Croatia’s colored past cannot be ignored and must be celebrated in preservation of traditional architecture, and significant incorporation of those traits into future projects.

In order to maintain the distinctive components of Croatian Architecture on the coast, it is necessary to identify them. The picturesque villages of the Dalmatian coastline make the covers of many travel magazines each year. It is the homes, churches, plazas and cafes in their natural settings that identify these villages. Each of these elements can be characterized by their clustered orientation, mix of uses, integration into the natural setting, stone walls and walkways, tile or stone roofs and cultural heritage.

Clustered Orientation

The tiny tiled-roof villages dotting the coastline of “The Mediterranean as it once was” are not only beautiful for their appearance, but also for their sustainable clustered orientation. Mixed-use is a term often thrown around in today’s planning discussions almost as if it is a new concept. The coastal towns of Dubrovnik, Sibenik and Rovinj date back hundreds of years yet they have embraced this mixed-use concept since their inception. At that time, the traditional constraints of local labor, local supplies, minimal

Figure 6: Clustered Orientation



Source: 2008 Field Research

traveling, and quality materials were almost totally out of necessity. But the concepts remain true today as each location has naturally transformed into the successful mixed-use tourist destinations currently so popular. Incorporating new developments into these areas, or establishing new areas with the same urban

planning concepts, will continue to attract tourists, employ locals and drive the Croatian economy. Maintaining this urban design approach in strategically-chosen areas will help to avoid the dreaded concrete sprawl along the beautiful Adriatic Coast.

Mixed-Use

Even though the mixed-use concept has been strayed from in recent years for new developments, historic city centers like Dubrovnik and Sibenik remain as inspirations for the mixed-use movement. Dubrovnik was a self-sufficient city (and Republic) for hundreds of years. People living in the city did not have to go out, but had access to all life necessities in walking distance. To this day, cars (except for delivery trucks) are not permitted within city walls. The ground floor storefronts and upper level apartments of the famed “Stradun” main street within the city walls serve as a model for modern day mixed-use developments. Today, just as 200 years ago, residents of Sibenik can visit a café as they stroll to work from their apartment and stop by the market or favorite night spot on their walk home. These examples of mixed-use developments can be replicated by embracing their fundamental traits. It must be emphasized that mixed use is an issue of scale. This traditional fine-grained mixed-use incorporates multiple uses in single buildings and directly next to one another. This differs from some segmented “mixed-use” projects, which do not capture the same benefits.

Figure 7: Mixed Use



Source: www.images.google.com

Creating of a mixed-use environment will help to establish a year round economy that Croatia’s coast desperately needs. In an article entitled, “Mixed-Use Developments - Creating a Place”, the author recommends to “Begin with the public spaces as the framework around which housing, retail and

commercial buildings are planned and designed.” This concept helps to “Build a strong sense of community for residents and workers, by creating social gathering places, developing a sense of stewardship and providing places for community events.” It is important to “Offer a wide-range of uses and activities so that they are vibrant and well-used during all seasons, and serve a variety of people of all ages, races and economic levels.” Some factors promoting mixed-use developments are the inclusion of civic sites helping to create a sense of place, walk-ability encouraging interaction, connectivity with other communities via roadways and public transportation and a mix of land uses which may provide housing with other non housing uses (Tombari 2005).

As the mixed-use concept is gaining popularity in Croatia for new development, it has some fundamental difficulties. In tourist-zoned areas, this concept is currently difficult to implement with zoning regulations that do not enable developers to sell individual units within tourist complexes. When questioned about the zoning policy’s restriction on allowing the sale of individual units in tourist zones, Marco Julia-Eggert, a business and hospitality consultant, states that “Planners are afraid that foreign purchasers will buy the properties and not occupy them, leaving them vacant”. Planners do not realize that these units could be rented through the neighboring hotel (for example as “condotel” units, popular in the US and elsewhere), and that “not allowing the sale of the individual units has a very negative effect on achieving desired returns for developers” (Julia-Eggert 2008). With the difficulties of assembling land in Croatia, planners may feel that this also makes the resale of the entire complex easier in the future, and that it doesn’t take a step back toward the issues land assemblage. This argument reinforces the fact that investors have been discouraged from entering the Croatian market due to the extended periods needed for return on investment caused by this zoning regulation.

Integration into the Natural Setting

In places such as Dubai and Las Vegas, developments have to draw from far away regions to create a lush and attractive landscape. Croatia does not have this same predicament. On the contrary, with its Mediterranean climate, nearly 100 days of sun, and fertile soil, Croatia offers scores of thriving indigenous plants. Capturing the essence of the area with popular lavender and rosemary bushes, Cyprus, palm, jacaranda, olive and fig trees, along with grape and tomato vines, helps to maintain the identity of the Croatian Coast. The visual essence of this native vegetation provides striking beauty, and is only emphasized with their pleasing aromatic qualities. Landscape design of future projects should avoid trying to make Croatia something that it is not; rather it should embrace the indigenous flora.

Building designs must incorporate themselves into the natural environment without excessive disruption. The relationship between building forms, siting, natural topography and views needs to be studied carefully and guidelines need to be prepared for new development which preserves the traditional cultural landscape. At a minimum, topographical changes should be minimal, and buildings erected in a green field environment should not overwhelm the character of the natural setting by their bulk or siting. Geological forms must be valued along with the endemic plant life. New developments should attempt to seamlessly flow into the existing natural or built environment in which they are integrating.

Figure 8: Integration into the natural setting



Source: 2008 Field Research

It must be understood that natural landscapes and views are the main draw of Croatian tourist market. These resources must be maintained and not overbuilt. Overbuilding has happened all through the Mediterranean. Now, countries such as Spain, are struggling to cope with the overbuilt situation that they have created. (Hiper Catalunya 2003). Croatia holds a distinct comparative advantage over the rest of the Mediterranean countries in this regard. “Natural resources are still the main motivational factor for the

arrival and stays of tourists in Croatia. Sustainable utilization, protection and development of natural resource are the “conditio sine qua non” of the long-term development of Croatian tourism” (Croatian Tourism Development by 2010 2003 p. 19).

4.2 Materials

Stone Walls and Walkways

The sheer beauty of the stone construction, so prevalent on the Croatian coast, is directly tied to its history and craftsmanship. Many of the buildings and walkways still visited today have been built in the sixteenth and seventeenth centuries. Stone was collected from native coastal quarries and locally hand-



Figure 9: Stone Walls and Walkways

Source: 2008 Field Research

crafted. Whether skillfully cut by artisans, crudely placed by peasants, or covered by pastel colored stucco, these stone walls have created an alluring identity for the Croatian coast. The enduring strength of this building material is evidenced by its existence today and its ability to withstand generations of use, exposure to the elements and at times, military attack.

The city of Dubrovnik has been fighting off aggressors since its inception. Venetian ships plotting for attack were thwarted in 971 as the patron saint of Dubrovnik, St. Blasé, warned of the assault. This attack was defeated and the feast of St. Blaze is still celebrated today with thousands of people celebrating in the streets of Dubrovnik and in Croatian communities throughout the world. However, this would not be the last attack on Dubrovnik, the centuries to follow would bring aggression from many fronts, including the Turks and Italians, each having their hand at trying to attack this beautiful Stone city. The most recent attacks were staged by Serbian-led Yugoslav forces in the early 1990's as Croatia and Slovenia declared independence from their former Yugoslav brothers. During the breakup of Yugoslavia, the Yugoslav army positioned destroyer ships outside the walls of the historic city and shot artillery for weeks on the UNESCO world heritage site. Even the modern artillery could not topple Dubrovnik as the war-torn city has returned to the world stage as the celebrated “Jewel of the Adriatic”. The stone walls of Dubrovnik have been repaired and will be standing for generations to come to view and enjoy. A map illustrating the areas attacked in the most recent war in Dubrovnik is attached as Appendix E.

Figure 10: Modern Intergration of Stone



Source: 2008 Field Research

Figure 10 above exhibits some modern approaches to maintaining stone wall construction. These methods are faster but retain a similar look. In these examples stone is being used as a retaining wall along the highway and used as a structural/decorative piece in a new hotel development.

Stonemasons

Even though the craftsmanship of the stonemasonry is still appreciated today, the trade has lost popularity amongst young workers. On the island of Brac, however, lies the last stone mason school in all of Croatia. The “Klesarska Skola” is a vocational high school program funded by the Republic of Croatia. According to program director, Tonci Vlahovic, the students learn the essential skills of crafting the stone by hand, and then are released into the working world with a final summer of using modern machines. When asked about the use of strictly hand tools during the majority of the curriculum, Mr. Vlahovic stated that “It is important to maintain the use of hand tools to get to know and appreciate the medium you are working with”. The detail exhibited in the works of these teenagers is breathtaking. Their works continue to identify the Croatian culture with traditional designs popular in renovations and upscale new development.

Figure 11: Stone Mason School (Klesarska Skola)



Source: 2008 Field Research

Stone was used in construction, as it was the most abundant building material available in most of Croatia. Buildings, walkways, walls and even roofs were made of stone. The popularity and ease of using concrete has taken over the use of stone as the building material of choice but stone has not lost its allure with its beauty and enduring qualities. The popular white stone from the island of Brac was used to build the now UNESCO world heritage site of Diocletian's palace in the nearby city of Split. This same stone was also used to build a portion of the White House in Washington D.C. Current use of the stone takes on this theme of using the stone for its beauty as it highlights the material as a focal point of design. Popularity of the trade is resurging as stone villas are being restored and as window and doorframes are added to new (or restored) buildings for the authentic feel.

The Klesarska Skola is not the only source of modern day stonemasons. Many stonemasons are learning on the job, and maintaining this age-old profession. According to Mr. Vlahovic, there are presently sixty-eight stonemasonry firms, each who employ between five and 250 employees, and approximately 480 stonemasons who operate as independent craftsmen (Vlahovic 2008). Maintaining this portion of cultural heritage is key to implementing the design themes of coastal development in Croatia in future projects.

Tile and Stone Roofs

Found all over the Mediterranean, the tile and stone roofs at one point lined the horizon of every cityscape. That time is now gone in most parts of the Mediterranean. However, Croatia prides itself as embodying the spirit of "The Mediterranean as it once was". Modern architecture does have its place in

Figure 12: Tile and Stone Roofs



Source: 2008 Field Research

Croatia, but as soon as flat roofs take over the tiled orange, yellow and red beauty, Croatia will no longer be the Mediterranean as it once was; it will be the eyesore that much of the Mediterranean has become.

The tiled roofs may or may not need to be a blanket requirement in new construction, but as with the stone, tile roofs need to be mandated in building renovations and incorporated in meaningful ways into the design of forthcoming new projects. Establishing these requirements will help maintain the visual context of the coastal cities.

4.3 Cultural Heritage

An excerpt from the former Ministry of Development and Reconstruction of the Republic of Croatia's 1997 Island Development Plan summarizes the state of cultural heritage on some islands and warns us of what can become of others on islands and the mainland alike.

Over the past few decades the natural and cultural heritage has been increasingly neglected, it disintegrated and became forgotten instead of maintained, and the harmony between the natural and the architectural complex is seriously off balance. The natural heritage is being cleared for new, mostly housing construction, infrastructure corridors attack the landscapes, and irregular dumps and too short sewage lines bring dirt and, increasingly, pollution to the island environment, threatening the natural heritage. Modern construction work thus creates an architectural heritage separate from the nature, while new consumption patterns and new life styles break the centuries old continuity of the cultural development. Protected buildings frequently serve as quarries, customs are forgotten, old tools are falling apart, and costumes are rotting. In terms of preservation, the underwater cultural heritage was treated worst: due to insufficient care and poor control, here occurred extensive devastation. (1997)

Granted this is not the case in all areas but it serves as a stark warning of what could be without careful intervention and action. There is a distinct need to maintain the historical relationships between buildings and their natural landscape that is unique to Croatia.

Real estate of such a culturally rich area directly reflects its cultural heritage. With the coastal area being so driven by tourism, this fact is only emphasized, as is the need to embrace this heritage through building design and practices. "Culture is the lifeblood of tourism" (www.unwto.org). It is important for Croatian developments to embrace the cultural heritage of Croatia as "culture is manifested in both the living and dynamic aspects of a people's everyday life as well as in built heritage, i.e. Monuments and

sites” From the fishing villages of Southern Dalmatian, to the wine growing region of Peljesac, to the Istrian Peninsula known for its amazing truffles, each area has a (or many) distinctive trait(s) which should be maintained and celebrated rather than neglected and lost.

Culture and tourism have a symbiotic relationship. . . Monuments and cultural relics may be preserved by using funds generated by tourism. In fact, those monuments and relics that have been abandoned suffer decay from lack of visitation. . . On the other hand, culture can be commercialized and simply become a commodity to serve tourists. In the process, it gets despoiled and degraded. Culture and tourism must be mutually supportive of each other to make the relationship sustainable. The nurturance of this relationship needs the full cooperation of the public and private sector working side by side with local communities. (www.unwto.org)

These recommendations from the World Tourism Organization call for the authenticity of such efforts. As Croatia positions itself to remain as “The Mediterranean as it once was”, this call for preservation of cultural heritage in its development is instrumental. Developers must understand the difference between copying the culture and continuing the tradition.

4.4 Green Building

Europe traditionally has been at the forefront of the Green building agenda. Green building has yet to become a prevalent requirement in new construction but it is definitely a big topic for architects, just not always for the clients. One only has to look as far as Germany and Holland to see huge advances in Green building technology, which may serve as fantastic models for future sustainable development in Croatia.

Green building characteristics popular around the world today can be found in many of the century old stone homes found all along the Croatian coast. Water reclamation, natural lighting, use of local materials and labor, recycling materials and use of hand tools were all common practices, more out of necessity than choice, but nevertheless they have existed. Embracing these age-old systems is just another way to achieve a Green building agenda, while also celebrating the area’s heritage.

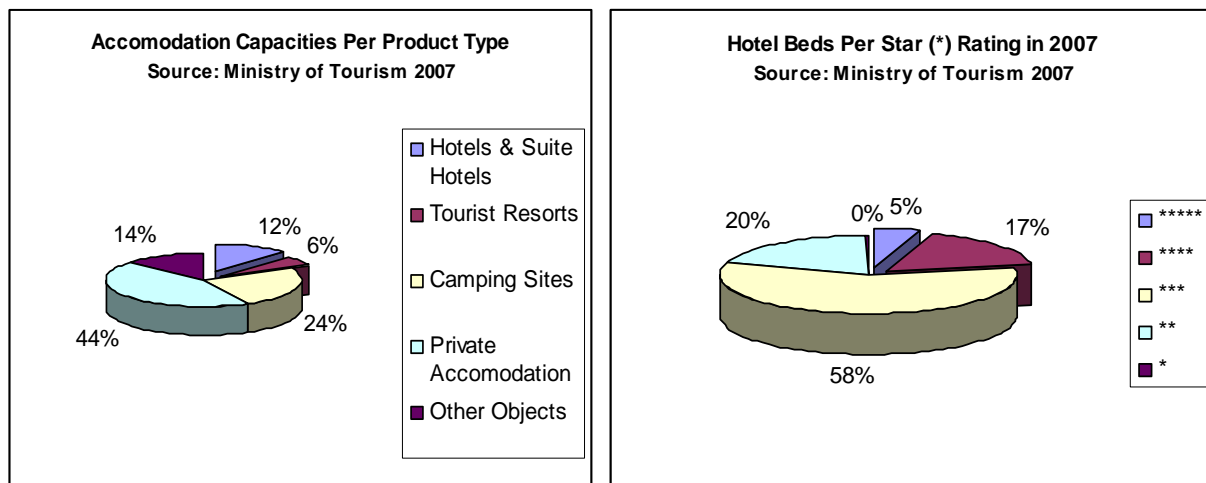
The Zagreb office market is the most advanced real estate market in Croatia and often sets the trends of real estate professional practice. Vedrana Likan, general manager of the Croatian division of the international real estate firm Colliers International, sheds some light on the Croatian market’s green demand as she said: “Any office building that is constructed now in Zagreb that does not conform to

international green building standards runs the risk of becoming obsolete soon. It is more cost effective to willingly adopt the latest technology now rather than being forced to do so later” (www.colliers.com). This rising demand for green office space in Zagreb is an indicator of the rising awareness of the Green building agenda in Croatia.

4.5 Current Supply

As Croatia strives to position itself as an upscale tourist destination capturing the essence of “The Mediterranean as it once was”, the low supply of four and five star hotels and traditional villas will not suffice for the inevitable demand. The existing developed real estate supply of this upscale market on the Croatian coast is not substantial enough to meet the existing or forthcoming demand (Seric 2008).

Figure 13: Accommodation Capacity per Product type / Hotel Beds per Star (*) Rating - 2007



Currently there is an oversupply of campsites and auto camps as well as private apartments for vacation rental in Croatia (Bordas, 2008). Along with this saturation, comes a scarcity of first-rate hotels. The charts above show Hotels and Suites along with Tourist Resorts comprising only 18% of the total accommodation capacity. Of this 18%, only 22% is in the four- and five-star rating. Two- to four-story concrete apartment buildings described in the introduction have begun to overtake portions of the Croatian coast and will continue to do so if regulations do not change.

This haphazard form of development is a direct result of the inability to create large cohesive projects, and is the result of a demand for needed accommodation near the sea. If the correct regulations and

Figure: 14 Oversupply of Concrete Apartment Buildings Inconsistent with Traditional Design



Source: 2008 Field Research

investment opportunities are put into place, the builders of these concrete apartment buildings will be able themselves to have investment opportunities in larger projects, which are better positioned for the market.

As described by Colliers International, Croatia, the coastal demand is strong; “The Croatian holiday homes market is experiencing a deficiency in supply, which is lagging behind the increasing demand and requirements of today’s end users. Continuous capital appreciation and good annual rental returns for existing properties have attracted the attention of developers and made this market one of the most attractive property segments in the country” (www.colliers.com).

5.0 Striving for a Year Round Tourism Economy

Croatia's booming tourism market is significant only during the peak summer months. As tourism remains the largest component of the country's GDP, it is important that this summer season be extended in order to advance the economy. Below is an analysis of the vision for the Croatian tourism market and a proposal on how to further develop the market.

5.1 Expanding the Seasonal Market

One of the prime obstacles to achieving sustainable development on the Croatian coast is the lack of demand due to a seasonal tourism economy. (Bartoluci 2008) Currently, there is a high level of seasonality with Croatia's emphasis on sun and sea tourism being most prevalent in the hot summer months. Below are graphs displaying the tourist traffic and tourist overnights per month for the 2005 year.

Figure 15: Tourist Traffic per Month

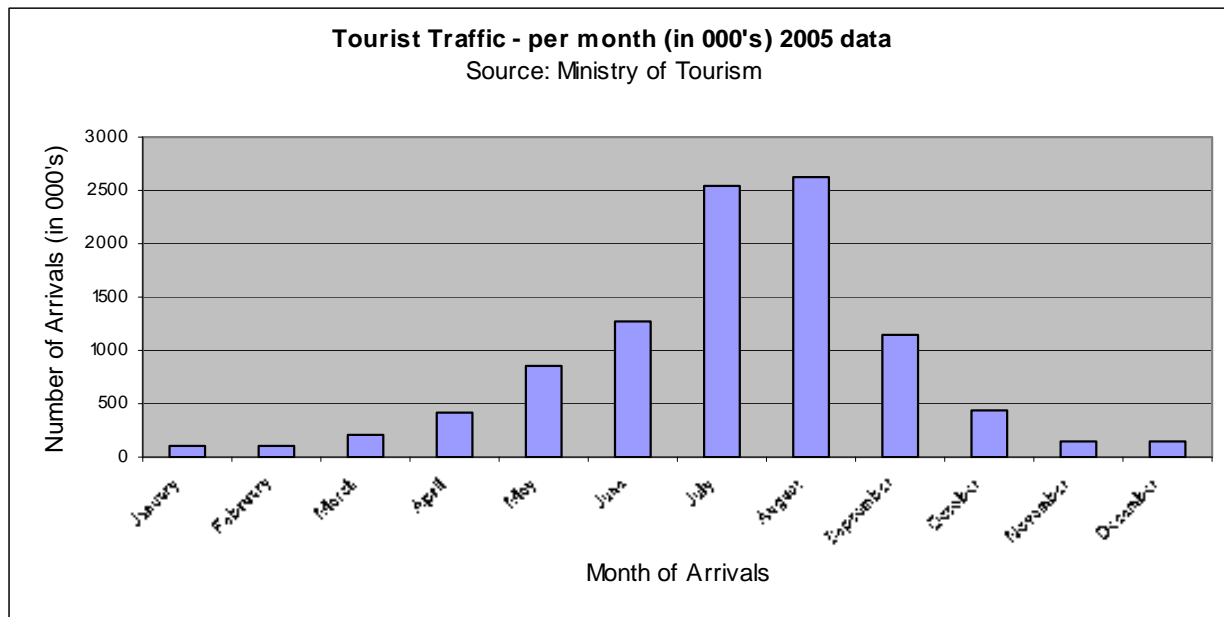


Figure16: Tourist Overnights per Month



This issue of seasonality has been studied by THR, Inc., of Barcelona, a market research and planning firm that has been involved with tourism in Croatia on many levels. THR has created several conceptual master plans for future resort developments in Croatia, along with a master plan for the county of Istria and the marketing plan for the Republic of Croatia; creating the tagline for Croatia as “The Mediterranean as it once was”. In an interview with THR’s President, Eulogio Bordas, he emphasized that increasing the length of the season would require high end mixed-use resorts, maintaining the cultural identity and natural beauty of Croatia, and establishing special interest tourism in strategic locations. (Bordas 2008) The Mixed-Use concept described in Chapter 4.1 is necessary to help achieve a critical mass of demand. Combinations of Hotel, Villa, Restaurants, Shops, Vineyards, Wellness Center, Conference Center etc, help to create a destination; above and beyond sun and sea. “The season will never be year round, but adding these elements could help extend the season to seven or eight months” (Seric 2008). Lessons could be learned from the French Riviera where Cannes remains one of Europe’s most frequented conference destinations, thus extending the initial draw of sun and sea (Seric 2008).

5.2 Tourism Development Themes

Croatia’s Ministry of Tourism Development Plan calls for a dynamic approach to tourism monitoring and reacting to trends and new demands. The 2003 Development Plan identifies, “In recent analysis of

market demand preferences, a few types of tourism are mentioned as being present on the market: ecotourism, cultural tourism, thematic tourism, adventure tourism, cruises and nautical tourism. In all of these areas, Croatia has much unused potential” (2003). Bartoluci agrees with the conclusions of Bordas and the Ministry’s Development plan and adds the additional concepts of “sport. . . and rural tourism. . . for which it has comparative and competitive advantages. This would create a new quality of tourism offer. . . and decrease the today’s expressed seasonality of Croatian tourism” (Bartoluci, Sustainable Development of Tourism 2008). The nine forms of tourism that will help elongate the Croatian tourist season are described below.

Ecotourism and Adventure Tourism

The beautiful landscape and numerous national and natural parks, described in Chapter 2.2, provide the ultimate setting for both ecotourism and adventure tourism. These two forms of tourism highlight the connection with nature and Croatia’s competitive advantage in that realm.

Croatia has the natural potential to develop many very diverse aspects of adventure tourism, such as white water rafting, canoeing, kayaking, paragliding, hot air balloon flights, free climbing, off-road racing, and many other activities. Croatian national parks, and the other protected areas that have great attractiveness, are a huge potential for ecotourism development, sustainable hunting tourism, rural tourism, year-round mountain holidays, as well as excursion tourism (Croatian Tourism Development by 2010 2003).

Croatia must address the need to accommodate for this type of tourism through investment for infrastructure in the parks system.

Cultural

Cultural heritage, as highlighted in Chapter 4.3, is gaining popularity as a form of Croatian tourism. Cultural tourism calls for the need to identify the distinctive qualities of each region (Croatian Tourism Development by 2010, 2003). From the gastro-tourism to folkloric performance and art, to the farm fresh (Ecologically produced) food, Croatian cultural heritage needs to be celebrated and sustained.

Thematic

“Thematic tourism has become one of the most important catalysts of development. It is mainly based on the 3-E principle: Entertainment, Excitement, and Education, and therefore includes tourism offerings

and contents which combine these three elements. Croatia has enormous potential because of its cultural heritage and natural beauties which can be combined in a countless number of ways to tempt tourists seeking unique experiences.” (Croatian Tourism Development by 2010_2003)

Religious

With Croatia’s rich Catholic heritage, Roman influences, and timeless Churches, there is great potential for Religious Tourism. Međugorje and Marija Bistrica serve as examples for established pilgrimage destinations, which draw hundreds of thousands of religious tourists yearly.

Aquatic

Connection to the water is a reoccurring theme within this analysis of sustainable development of the Croatian waterfront. The Croatian archipelago, along the beautiful Adriatic coast, is a unique opportunity for island-focused tourism and must be leveraged with the coastal land as a series of destinations from the mainland. Already a world-class sailing destination, the islands of Croatia attract smaller cruisers and charters enjoying easy overnight mooring from port to port. In addition, the rivers of the coast provide water access into picturesque destinations further inland. Finally, the undersea life of the Adriatic is a popular destination among the more knowledgeable SCUBA diving community. As nautical tourism is on the rise, this type of tourism must be embraced with increased marina capacity and boat charter tours. Expanding on the current nautical tourism, “One of today’s unexploited potentials is to make use of the rivers as a package tour selection.” (Croatian Tourism Development by 2010 2003). Tourism in these beautiful waterways must not be forgotten. In addition to tourism on the waterways of Croatia, tourism needs to increase under the water. World-renowned biologist and oceanographer Jacques Cousteau once described Croatia's waters as the cleanest and clearest in the world, making the expansion of the already established SCUBA segment a viable opportunity (www.internationalliving.com).

Sport

Sport tourism has gained ground in the Croatian market with the success of the Croatian Open Tennis Tournament in Umag, Istria, and the increasing interest of golf developments. Jonathan Smith, CEO of Golf Environment Europe, offers insight to the golf market, “Golf developments, if planned, designed and managed correctly, provide the opportunity for considerable economic, social and environmental enhancement. However, done badly, they can meet with considerable opposition, go through protracted

and often fruitless planning processes and harm local environments and communities. With tightening environmental and planning legislation, it has never been so important for golf to demonstrate its commitment to sustainable development. This effort is fundamental to the future growth and success of the golf industry” (www.invgolf.com). Problems arise in the large land and infrastructure requirements of golf courses. These physical demands, coupled with the need to surround golf courses with income generating features (hotels, villas, restaurants etc) to achieve a profit, often upset local communities when not planned appropriately or diplomatically. Addressing these issues is essential to the development of this product as a tourism generator, and season extender.

Agro & Gastro-tourism

Gastro-tourism and agro-tourism (rural tourism) involve the celebration of life in the country from interacting with local farmers, experiencing firsthand the traditions of making wine, olive oil, cheese etc.,

Figure 17: Agro & Gastro Tourism – celebrating the rural life



Source: 2008 Field Research

to the more serviced approach of wine tasting, gastronomy and simply enjoying the relaxing environment of the countryside. Programs to support this type of tourism are already in place in Croatia but must have more entrepreneurial backing to really create this as a “destination” market.

Spa & Wellness

Sheldon and Park, of the School of Travel Industry Management at the University of Hawaii, describe the natural attractors for spa and wellness tourism as including, “environmental features such as lakes, rivers, oceans, mountains, forests, and wilderness areas where tourists can experience healing and wellness. Natural attractors would also include the native plants, mud, salt and other natural products used in wellness treatments”. (Sheldon and Park 2008). Croatia reflects these qualities to the utmost with its amazing landscape and seascape. The sea air and healing waters of the Adriatic create a prime location for thalassotherapy, while the healing thermal springs of Croatia’s hinterland offer diversity to the wellness tourism offering. “This significant trend in tourism requires adequate infrastructure in order to position itself in the market as a quality tourism offering” (Croatian Tourism Development by 2010 2003). This tourism draw does not rely on the summer months to attract and may prove to be a key focal point or amenity of future projects

Corporate

“Corporate travel, conventions and incentive tourism, are becoming increasingly significant.” (Croatian Tourism Development by 2010 2003). This lucrative segment is a draw that could attract tourists year round given the right facilities and amenities. As a specific convention market, the development plan calls for lending support to institutions in their efforts to host international scientific gatherings and research projects in Croatia, thus helping establish Croatia as a regional academic and scientific centre. “This would attract an increasing number of foreign experts, scientists, professors and researchers. The necessary prerequisite for developing convention and scientific tourism is the construction of quality convention centers, both in Zagreb and Dubrovnik” (Croatian Tourism Development by 2010 2003). This convention concept must be included in large resort developments as an additional draw to attract visitors throughout the year.

6.0 Operations

When questioning the sustainability of operations on the coast of Croatia, the key factors are the quantity and quality of hospitality human resources. With current unemployment rate at 11.8%, there is sufficient local labor pool from which to draw. The opening of the EU borders will also fill any additional voids in the labor pool. However, attracting foreign labor will deteriorate the authenticity of the cultural experience in providing a tourist experience. (Bartoluci 2008) Professor Bartoluci, of the Tourism Department at the University of Zagreb stated, “it will be difficult for an imported Romanian employee to properly serve and sell a local fish product in a high end restaurant when he/she is not familiar with the product.” This concern is directed at foreign labor, but the quality of both foreign and domestic workers is questioned. In her report entitled, The Importance of Educated and Knowledgeable Employees for the Hotel Industry Performance: the Case of Croatia, Nina Vokic writes, “Findings of the research reveal that Croatia has not yet reached the stage of maturity in hotel industry that involves recognizing the need for educated and knowledgeable employees, and that greater investments in their education, training and development are needed” (2008).

Highlighting the need for educated employees, Vokic notes that competent employees can bring a competitive advantage to an enterprise and are vital for the tourism industry as the in its nature is people- and service-oriented. She continues that there are few unskilled tourism-related jobs as most require some understanding of the types of services required by visitors, who come from a totally different culture, and many also require proficiency in a foreign language. However, as hotel managers did not assign excellent grades to Croatian tourism education at any level, it can be said that tourism education in Croatia is under attack that it is not providing the skills that the industry (Vokic, 2008).

Nevenka Cavlek, head of the Tourism Department at the University of Zagreb, recognizes the gaps between educational output and employment needs, not just in Croatia, but also throughout Europe. More importantly, she recognized the role that educational institutions play in bridging that gap. (Cavlek 2008)

Vokic concludes her research with recommendations on how to address the needs of the growing tourism business in Croatia. In order to further raise public awareness and appreciation of tourism, and to develop a ‘tourism culture’ within the population, Vokic’s “macro” recommendations for enhancing Croatian hotel employees’ education are summarized below:

1. Improvement is needed in the quality of tourism programs in Croatia. Through cooperation between the education system, policy makers and the tourism businesses, the gap between what is taught in the educational institutions and the realities of the tourism and hotel industry needs to be bridged
2. Increase the real world experience in hotels for hospitality students
3. Tourism education should become a standard component of all education programs, especially as Croatia intends to shift into the high-quality tourism sector
4. Continuing education in tourism is needed in addition to formal schooling
5. Croatian government should start a campaign to motivate students to enroll and get a formal degree in tourism, but government should also enable and motivate tourism professionals to work in the industry (2008)

Below are a summary of Vokic's four "Micro" Recommendations for adapting Croatian hotel employees' knowledge and skills to fit the requirements of quality hotels:

1. Croatian hotel companies should invest more in training and development of their employees (equivalent to 1% of payroll and related expenses)
2. Croatian hotel companies should undertake a considerable training effort and expense to formally train new and current employees
3. Due to the increased sophistication of the tourist visiting Croatia, the quality of training needs to rise to meet the increased demand. Using both internal (in-house) and external training, and both on-the-job and off- the job training methods, hoteliers should invest in their employees' communication, interpersonal, team-working and cross-cultural skills in addition to technical skills (including language and marketing skills)
4. Training and development activities of Croatian hotel companies should be planned, formal and coordinated by a specialist training officer, as opposed to sporadic and ad hoc sessions (2008)

Recognizing these challenges and needs, Cavlek, the director of the Tourism Department at the University of Zagreb, has established the ITHAS program to add to the regular curriculum. Cavlek states, "Since tourism is about travelling in a multicultural environment the idea was to give the students a chance to get "condensed" theoretical and practical education in an international and multicultural environment, using English as the main language of communication" (2008). Innovative academics, such as Professor Cavlek, need to gain more support from the Croatian government and tourism industry in general to

succeed in their educational goals. This increase in the quality of Croatian hospitality workers industry will help justify the industry's relatively high wages which, when compared to the region, are high.

7.0 Infrastructure for Development

In the past, Croatia has significantly lagged behind with sufficient infrastructure. This insufficiency would only be magnified during the busy tourist season where infrastructure capacities from roads to natural gas would be tested to their respective extremes. Substantial improvements have been made over the past few years, and plans are in the works for continued advances. An analysis of the ability and capacity of each major infrastructure system is presented below.

7.1 Services

Waste

The Ministry of Environmental Protection, Physical Planning and Construction developed the Waste Management Strategy for Croatia in 2003 where it is presented a plan to handle the municipal waste management, coordinate legislation with EU directives and organize waste management policies and procedures in general. This document also proposes to establish regional or municipal waste management companies, responsible for carrying out the development and financing of waste management facilities where waste will be processed in a sustainable manner. This strategy also called for the reduction of the number of landfills. Some of the closed landfills will become transfer stations or recycling yards. Hazardous waste will be stored in separate at facilities in each regional center, and then sent to a single national hazardous waste disposal site. Harmonizing the waste management plan with EU directives constitutes some of the largest funding requirements for EU accession (www.buyusa.gov/croatia).

Croatia has recently ratified the Kyoto protocol and in doing so has taken the obligation to reduce its overall Green House Gas emissions by at least 5% below the 1990 level during the commitment period 2008–2012. For Croatia to reach that goal, use of renewable energy will remain instrumental in this effort (Schneider 2008 p.75-85).

Even though the plans of the waste management system seem to be in place, a United Nations Environment Programme report questions the capability of this already strained Ministry to perform to EU standards; “Of particular concern are the staffing levels in local authorities responsible for issues such as municipal waste collection and disposal. The distribution and fragmentation of responsibility within the administration is hampering efforts to align with the *acquis* (EU requirements). The relative weakness of the Ministry of Environmental Protection, Physical Planning and Construction in relation to

other ministries weakened the influence of environmental protection in Croatia and jeopardizes its ability to fully implement the requirements of the environmental acquis” (www.unep.org).

Water

Due to its renewable drinking water reserve, which annually supplies 32,818 cubic meters per capita, Croatia is among the 30 richest water countries in the world. In Europe, Croatia is the third richest water country, behind Norway and Iceland. Managed by the Ministry of Agriculture, Forestry and Water Management, the public water supply serves 80% of population in Croatia. The National Project on Extending Water Supply Network estimates that by 2015, around 94% of the population will be serviced, bringing Croatia closer to the standards of EU countries (Water for Life 2007 p.28-29).

“Croatia is endowed with relatively abundant water resources and characterized by great rivers and the karst coastal area. . . At present 86% of public water supply comes from renewable groundwater resources and only 14% from surface waters. For the purpose of protecting groundwater against pollution, the sanitary zones of water-well protection have been defined. The past system of the protection of drinking water turned out to be uneconomical, therefore a new regulation and accompanying guidelines for the definition of zones with sanitary protection of drinking water are in process of preparation” (Innovative Practices Pertaining to Water-Related Environmental Issues in Republic of Croatia. 2005).

Electricity / Power

The demand for electricity in Croatia is currently strained. The Ministry of Environmental Protection, Physical Planning and Construction recognizes this strain and has assessed that by 2010, Croatia will “make up for the predicated lack of energy and ensure new 1500 MW of power” (Strategija Prostornog Uredjenje Repulike Hrvatske 1997).

There will also be a focus on reconstruction and expansion of existing production capabilities. For the period between 2009 and 2015, Croatia envisions the entry of private investors in the future projects of the National Energy Company (HEP). HEP is implementing an investment program to construct and restructure three large power plants to meet all Croatian energy demands by 2015 (www.ansamed.info).

Croatia has made headway in its effort to focus on renewable energy. According to Article 5, section 2, of the Republic of Croatia Energy Policy and Energy Strategy, the Republic of Croatia will be “ensuring the secure and reliable supply of energy and its efficient generation and use, specifically the use of different renewable energy resources” (Strategija Prostornog Uredenje Repulike Hrvatske 1997). This can be evidenced by the wind farms that have been erected in various locations throughout Croatia. Most recently, in Podbilo, Newar Senj in the Northern Adriatic the wind farm Vratarusa is being constructed to produce 125 million kWh net power output. This 57 million Euro project will be one of Europe’s largest and will be operating a trial period later this year. (www.ansamed.info) A map describing the current and projected electricity system of Croatia is attached as Appendix F.

Figure 18: Windfarms of Croatia



Source: 2008 Field Research

Natural Gas

Currently, there is no natural gas pipeline in the Dalmatian region of Croatia. Piped gas only exists in Zagreb, Slavonia and the rest of Northern Croatia out to the Istrian peninsula. Plans have been produced to lay the infrastructure to the Southern counties including satellite natural gas locations in Zadar,

Sibenik, Split and Dubrovnik by 2015. Currently, only containerized gas is available in the Southern regions. Appendix G highlights the current and proposed situations.

7.2 Transport System

The entire transport system of Croatia was analyzed to judge its ability to handle the growing population, economy and traffic. Dr. Stanislav Pavlin of the University of Zagreb School of Traffic Engineering was interviewed to gain clarification of Croatia's transport strategy and its sufficiency.

Roads

The starkest contrast from the days of communist infrastructure has been the new highway system. Prior to the new highway system, a winding two-lane highway (the Magistrala) shuttled all of the traffic along the Adriatic. The Magistrala is still in use today, but over the last ten years it has been supplemented with a modern highway system, which has dramatically improved drive times, accessibility and safety on Croatia's transit system. The new highway provides at least two lanes in each direction, modern rest stops with complete service stations, electronic traffic information and a scenic driving experience.

Figure 19: New road under construction , new road reaching to the Adriatic below Split



Source: 2008 Field Research

The new highway has been making its way from the North to the South. The highway can now be accessed as far South as Makarska, a coastal town between Split and Dubrovnik, where one can speed to the Capital city of Zagreb within five hours (this same trip took approximately eight hours on the former

road system). The highway is schedule to connect all the way to the major port of Ploce later this year. The plan to connect the southernmost city of Dubrovnik is almost imminent.

Dr. Pavlin estimates that the highway is still two to three years from reaching Dubrovnik. However, this final portion of the highway also comes with the most complications. First of all the land mass itself is only a tiny sliver in Southern Dalmatian, bordered by the Adriatic to the West, and Bosnia and Herzegovina to the East. According the Dr. Pavlin, this new highway requires a 400-meter wide corridor of the highway and related infrastructure. In this geographically slim portion of Croatia, some areas barely have that amount of land without the buffer land requirements. Due to this factor, Dr. Pavlin noted that the project designers are still deciding if the highway will run along the coast or if they will partner with Bosnia and Herzegovina and run the highway near the border to be used by Bosnians and Croatsians (and others) alike. Once the highway reaches Dubrovnik and eventually attaches to the border of Montenegro, traffic will only increase into the popular city of Dubrovnik. In order to achieve sustainable development, a new local system needs to be put into place in Dubrovnik to handle the high level of traffic. A park and ride system may be an option as there is a huge unmet demand for parking in Dubrovnik, especially in the summer months (Pavlin 2008). Appendix H is attached mapping the major highways and roadways throughout Croatia.

Sea

Due to the political instability and ensuing war in Croatia during the early 1990's, maritime and rail trade routes were altered to circumvent Croatia. The ports of Rijeka and Split only record 50% and 15% of their prewar cargo traffic (www.buyusa.gov). During the time of the Croatian port decline, Italian (Trieste) and Slovenian (Koper) ports gladly took up the slack and have kept most of it (Pavlin 2008). Almost a full decade after Croatia's Independence War, its seaports recorded sufficient growth rates to justify development projects (www.buyusa.gov)

The current improvements of the road system in Croatia will help to support the growing port and sea industries by improving the ground transportation to and from the port locations. The forthcoming improvements to the rail system will also aid in the expansion of port traffic. Maritime traffic is displayed in the attached Appendix I.

Figure 20: Sea Transport – Ferry line carrying passengers and cars



Source: 2008 Field Research

The Jadrolinija Ferry Lines (seen in Figure 20) currently runs throughout Croatia providing access between Croatian islands and numerous ports for daily commuters, merchants and tourists. The ferry also services routes to and from Italy and is a popular choice for summer tourists.

Rail

The rail system of Croatia is nearly 150 years old and the current fleet of trains is mostly outdated. For passenger travel, bus transport is faster, more frequent and similarly priced (Pavlin 2008). As the port traffic detoured during the war time in Croatia, so did the rail traffic. The popular trade route linking Slovenia, Croatia and Serbia has now circumvented Croatia by altering its route to include Austria, Hungary and Serbia. With its outdated system and minimal usage, the rail system is sorely in need of an overhaul. The Croatian government acknowledges this need and has conceived a plan to invest two billion euros to rapidly increase the competitiveness of Croatian ports with rail access, primarily Rijeka and Ploce (www.buyusa.gov). Appendix K highlights the rail system throughout Croatia.

Air Travel

The existing airport capacity is more than needed for Croatia's current and projected travel demands. Even though Dubrovnik's tourism arrivals have reached the prewar highs, the number of people entering Dubrovnik by air is down significantly. Prior to the war, Dubrovnik Airport was operating at 2/3 capacity in the summer months, now it is operating at 1/3 capacity. Improvements in the Croatian road network can be attributed to this change. (Pavlin 2008). Croatia has a total of eight main airports, (13 airports in total). The major hub is Zagreb, a 4E category airport. Airports in Dubrovnik, Split, Zadar, Rijeka and Pula are all category 2c airports that directly serve the coast, while Osijek hosts one 2C airport (and one 1A airport) in Eastern Croatia. Croatia also has a popular category 1A airport on Brac. (There are four other airports servicing more remote parts of Croatia). Appendix L maps out the locations of each of Croatia's airports. Increases in flights from low cost providers such as Click-Air, and UK's Easy Jet, in addition to the current flights of Iberia Air and Croatian Airlines are making travel to Croatia easier, less expensive and more attractive.

8.0 Recommendations – Forming Initiatives and Policies

The proposals in this section draw from findings in this thesis and create an overall recommendation on moving forward with quality development of the Adriatic coast. Numerous recommendations were made in prior sections including the need to preserve Croatia’s cultural landscape, incorporation of traditional features into design, providing sufficient infrastructure, extending the tourist season, improving the quality of the tourist experience and increasing the transparency and effectiveness of the zoning and permitting process. Pulling from these recommendations, there is a need for a General Adriatic Coastal Planning Policy which will be described below. Some precedents have been analyzed to conclude how to better structure and enact this much needed plan.

8.1 Need for an Adriatic Coastal Planning Policy

The Ministry of Tourism calls for a Developmental Spatial Plan for Croatian Tourism to have been completed by the end of 2005 (2003). As tourism accounts for nearly 20% of Croatia’s GDP, and the Adriatic Coast supports 95% of all visitors, this spatial plan is essential for the economic longevity of Croatia as a whole. “A definition of area usage for tourism needs to be defined on a national scale” (Croatian Tourism Development by 2010 2003). This spatial plan for tourism development in Croatia will provide guidelines for the county and municipal plans rather than allowing ad hoc reviews of individual projects without a holistic strategy. Without the strategic planning at the (entire) coastal level, the planning laws are subject to local interpretation without the proper guidance. “Development of Croatia’s tourism depends on spatial plans as the key implementation documents which give tourism the role as a developmental stronghold and determining factor in the overall economic development, and they guarantee a more responsible and efficient management of resources in tourism destinations” (Croatian Tourism Development by 2010 2003).

The Ministry of Environmental Protection, Physical Planning and Construction recognizes this need as evidenced in their 1997 Strategy Report highlighting the coast and ports as being of high economic interest (1997 p. 47). This report recognizes that the concentration of development on the Croatian coast is lower than most coastlines of the Mediterranean and also distinguishes the value in this (1997).

The Coastal Plan produced must be prescriptive not restrictive. It is necessary to establish a vision and a process to review projects to see how said projects factor into the Coastal Plan vision. As evidenced by the failure of the 1967 “Adriatic Project”, illustrated below, this is easier said than done.

8.2 Precedents

In developing recommendations for the coast, two projects stand out as lessons and cautionary tales for how and how not to best develop the region. These are the former Adriatic Projects of the Upper and Southern Adriatic, which took place from 1967 – 1972 and the California Coastal Commission, which monitors over development of the California coast and the California Coastal Act.

Adriatic Project – Projects of the Southern and Upper Adriatic 1967 – 1972

As the Adriatic Highway was completed in 1965, the modern tourism economy began to accelerate. As a by-product, illegal non-permitted building began to take flight as well. The Adriatic Projects³ were motivated by the lack of harmony between economic and spatial planning in tourist developments. This disharmony was similar for all types of development, but was emphasized even further with tourism, which served as the driving force of the planning process. “*Adriatic Project – Projects of the Southern and Upper Adriatic 1967 – 1972*” is a book which critiques the overall project and provides great insight to the methodology and unfruitful results. Vladimir Mattioni, the books author, offers some compelling reasoning as to why the project was ultimately unsuccessful while stating what lessons could be learned from the experience. Selected findings of both the positive and negative characteristics of the project are summarized below drawn from the author’s analysis and Mattioni’s conclusions.

The referenced project, which was conducted under the guidance and partial funding of the United Nations, encompassed regional plans for the Southern and Upper Adriatic during the rule of Yugoslavia. Many advantageous concepts and learning experiences may be taken from this process, but the underlying

³ Under the auspices of the United Nations and the Socialist Federal Republic of Yugoslavia, a complete plan of the heavily underdeveloped Adriatic Coast was launched in 1964. A total of thirty six urban planning documents were created with the two regional spatial plans for the Southern and Upper Adriatic Coast of Croatia, six general plans for areas on the coast, three general planning level studies, twenty two detailed plans of new tourism settlements and three detailed plans for resolving specific functions plans. Even though the results were not realized, one can find many positives with this process. The team effort established by the UN, SFR Yugoslavia, Socialist Republics of Croatia, Montenegro and Bosnia (to the South) and Slovenia (to the North), Various municipalities and hired foreign professionals 3- This program was conducted in cooperation with the Urbanism Institute of the Socialist Republic of Croatia, the Federation of Architects of the Socialist Republic of Croatia and representative from the Chambers of Commerce from Rijeka, Split and Pula as well as the Socialist Republics of Montenegro and Bosnia to the South, and the Socialist Republic of Slovenia to the North. (Mattioni 2003)

problems of this process were numerous. Despite consuming nearly \$7million USD during the six years of the project and employing a total of 2,953 experts monthly, to work on the projects, only one item was recognized in some fashion-- the Babin Kuk development in Dubrovnik. There were many reasons for the fruitless planning, which can be broken down into the planning process and its implementation.

In the planning process, the Adriatic Project faulted by considering tourism and industry to be symbiotic, failing to prioritize infrastructure, neglecting to consider public standards or domain, and exploiting natural resources. "The Adriatic Project" reflects upon these issues in detail. First, tourism and industry were considered symbiotic and henceforth, they were put into plans as alternating land uses all along the coast. This was a concept foreign to planners, but fiercely supported by the strong central Yugoslav government. Second, infrastructure was considered low on the priority list. There was no planning for excess capacity in infrastructure; it was only designed to satisfy the immediate demands. In a growing economy, this attitude often spells disaster for long term usage and resource consumption. Third, nowhere in the plans was there mention of public standards or public domain. There were no plans for education, social welfare, housing, culture or healthcare. Mattioni states, "The public was viewed only in the function of the contingent of the labor force for industry and tourism, as a sort of colonized native people conducting low qualified service jobs". He continues in describing the inclusion of highly qualified managers in the plans, however states that they were "viewed as executors for the required services and not as subjects with various social needs" (2003). All topics of public domain were dealt with in the general and detailed plans in the form of an "addendum" to the main components of the plan. Lastly, natural resources were exploited for their "maximal social efficiency" (Mattioni 2003). These resources were not a cherished commodity, but an opportunity primed for a one-time harvest.

Implementation of the final plans of the Adriatic project was also of concern. Mattioni finds that the plans were quickly passed and not realized as intended. Coupled with the underlying issue of the content, this was due to the decentralization of the central economic development program. Another reason is that the administrative procedures were too open for the local municipalities and were unsupported by the state (2003).

At a time when this program was being launched, the duties of the central economic development program were cast upon the local authorities. This brought about disharmony and inability of the local authorities to cope with the projects. As there was no administrative process put into place, it was assumed that the local governments would take it upon themselves to enact the strategic plans. The

fundamental problem was the sheer magnitude of and capital required for the planned projects. In addition, the projects, at the local level, often incorporated various municipalities, which may or may not have seen eye to eye with each other. Without the direct support of the state for capital and clear direction, the local municipalities focused on their own projects that were within their respective capabilities and available funds. In 2003, Mattioni reflects upon the time since the Adriatic project by stating, “That is how tourism on the Adriatic coast developed, to the present, without out single dollar invested in primary infrastructure, thanks only to the Adriatic Highway, existing sea and airport and existing power plants!” Since this critique was written in 2003, significant infrastructure in Croatia’s road system has been put into place. This further calls for the need for an all-inclusive coastal plan before the increased traffic brought in by the improved roads overwhelms the Croatian coastline.

Still, many positives can be drawn from the experience of the Adriatic Project including the use of fundamental methods and the experience gained by the professionals and politicians involved. The approach to this project was a procedural approach to planning, which included “organization, methodology, economic and spatial models, standards and norms” (Mattioni 2003). The economic support for this project, in the form of economic studies, was strong and well founded. This formal approach to planning would set the standard for work in the future. The experiences of local government working with the state government (albeit mostly unsuccessful), foreign professionals working with domestic professionals, and practitioners working with politicians, enabled the parties involved to benefit from each other’s ideas and ways of conducting business. Regardless of the outcomes, parties involved obtained an understanding of the process with its opportunities and limitations.

California Coastal Commission: A Parallel Model

California has established the California Coastal Act as a regulatory body of the California coast “to preserve, protect, and where possible, to restore the resources of the coastal zone for the enjoyment of the current and succeeding generations” (Badrach et al. 1976). The California Coastal Commission was enacted to carry out the law (www.coastal.ca.gov). Both positive illustrations and negatives impacts can be drawn from the California Coastal Commission.

The concept for this paper was fueled by parallels between the coastal opportunities Croatia shares with California. Initial research was done to prove that Croatia should enact a program similar to the California Coastal Commission legislation for the Adriatic coast. However, after further review, it became clear that the California process was itself more restrictive than prescriptive. In order to gain

more detailed insight to the California Coastal planning process and its relation to Croatia's coast, interviews were held with Keith Gurnee⁴, an Urban Planner experienced in both California and Croatia.

Keith Gurnee was a strong advocate⁵ for the California Coastal Act of the 1970's during its inception. The California Coastal Act was brought about by the people of California in response to very rampant, visionless development getting out of hand on the California coast. However, the people of California may have gone too far. Since the inception of the California Coastal Act, Gurnee has changed his stance due to the "bureaucratic nightmare" that the California Coastal Commission has become. When asked what triggered the change in perception, Gurnee stated, "It is now far too political and very abstract". He continues, "It has stopped just as many good projects as it has bad ones". Gurnee warns that Croatia does not want to institute such a plan and find themselves in a situation where they are not allowing anything. "By not allowing development, you are hermetically sealing the country as a museum. . . this is not something anyone wants" (Gurnee 2008).

The underlying problem with the California Coastal Commission is that it was created as a defensive reaction to stop things. The Coastal Commission was thus created out of fear and not out of vision. It was created as a body of regulation. In order to properly implement a coastal regulatory plan "you need people to be problem solvers not problem finders". According to Gurnee, the regulatory committee should permit, allow and motivate, not just stifle development. What the regulatory body does not need is an "overzealous staff of preservationists." (Gurnee 2008)

When asked how California could retool their coastal monitoring if they had the chance, Gurnee states; "If they could do it all over again, they would have a vision process for an overall plan, establish the plan, and review proposals to see how they operate in that plan. Be careful to make sure that the vision drives the coastal process, not just regulation, for regulation's sake." Gurnee recommends that the regulatory body designate certain sights for new town development and identify that these are the best places to do it, "creating an outlet for man's yearning to be next to the sea" (2008). Gurnee fondly recalled his time in

4 - Keith's firm RRM Design Group has master-planned numerous projects along the California coast including the, Port of Los Angeles Waterfront, Venice Beach ocean front walk, Marina Del Rey's Marina Beach and numerous others. Mr. Gurnee was also involved with the USAID Twinning program where City planners from the United States were partnered with Croatian municipalities to aid in their revitalization plans. Keith Gurnee aided the city of Umag, Croatia with their Waterfront revitalization plan.

5- Those initially against the California Coastal Commission were the local governments who would lose control over their own regions.

Croatia and urges for a regulatory measure to establish design requirements to “keep tradition” in projects (2008).

Just as important as the content of coastal regulation will be the implementation and monitoring. With Croatia being primed for Coastal development in the coming years, Gurnee remains optimistic of the capacity of the local planning officials but warns that to enact a coastal plan, Croatia “Must bring the state, counties and cities together for the common good. In Croatia, there is a large disconnect between national and local politics” (2008).

As a final paradox, Gurnee inquired, “Who will fund the process?” (2008). This is a simple question, but one that the authors of the initial Adriatic plans did not address, which could explain the project’s ultimate lack of execution.

The research conducted over the course of this thesis preparation has led to the conclusion of the eminent need for an all inclusive Coastal Study, Coastal Zoning Policy and a managing body to oversee the process. . . An Adriatic Coastal Planning Policy.

8.3 Establishing an Adriatic Coastal Planning Policy

Drawing on the experience above, this section recommends the framework for a new Adriatic Coastal Planning Policy aimed at encouraging the right kind of development while conserving the traditional cultural landscape of the region. The proposed policy is built around the following key development principles:

1. Identification of future development locations
2. Prioritize environmental concerns
3. Highlight connection with the sea
4. Balance public and commercial interest
5. Maintain tradition and context
6. Spatial Clustering
7. Establishing Green building standards

This policy is only as good as its enforcement; therefore it is necessary to establish a program to carry out its regulations. Each of the above seven principles are discussed in the section below:

Key issues relating to the above policies include:

- **Identifying Development Locations--** As a first step, prior to any further green field development, there must be an identification of future development locations. These locations will be defined through a highest and best analysis. Given the economic significance of tourism on the Croatian coast, this should be completed in cooperation with the Ministry of Tourism's development plan. Preliminary analysis identifies the need for four and five star hotels and year round tourism generating projects, described in Chapter 4, as economic drivers.
- **Prioritize Environmental Concerns--** Coastal areas are inherently sensitive environmental areas. It is therefore of utmost importance to prioritize ecological and topographical concerns for all coastal development. As a basic guiding principal for spatial allocation, a policy to maintain certain percentage of coastline in natural state should be established. Approximately 85% of the Croatian coast is currently in this natural state. With the coastlines of many Mediterranean countries only maintaining 30% in the natural state, we see where the Croatian coastline could head without this regulation. The natural landscape and topography should be embraced in future developments.
- **Connection with the Sea--** Coastal projects should highlight connection with the sea. One way to accomplish this is to encourage water dependant uses. This also assists the hinterland areas which attract less development; encouraging non-water dependant uses to be set back from the waterfront. This connection to the sea should be enjoyed by all, therefore it is important to keep public access to the waterfront. This can be accomplished with a system of parks, waterfront trails and with the maintenance of certain view corridors.
- **Public Interest--** One of the principal problems of the Upper and South Adriatic projects was their lack of public interest and capacity in planning. There must be a balance of public interest and capacity with commercial interest and capacity. When planning to increase tourist capacity, plans for the local workers and supporting zoning need to be factored into the planning requirements. Hotels, beach clubs, and offices need to be proportionately planned with schools, hospitals and housing. The public needs to be involved in this process to address their concerns, especially when in the planning stages.

- **Maintain Tradition**-- The small country of Croatia is rich in heritage, but in order to maintain this heritage, traditional design and programming components need to be incorporated into new developments. The traditional design characteristics, as described in Chapter 4, will help reinforce the character found in existing traditional developments. This concept is of utmost importance for tourist areas and the surrounding residential and retail that accompanies it. For institutional buildings, such as hospitals, the use of traditional materials and design will not be required to the same extent. However, the design of the buildings must be in context with the traditional developments of the surrounding area. In the tourist and residential developments, programming according to traditional and folkloric activities of an area will help to reinforce its identity. This can include embracing the local customs of art, gastronomy or trades, or by gearing programming towards the themes developed by the Ministry of Tourism (for specific regions).
- **Spatial Clustering**-- The picturesque towns and villages so popular among tourists are revered for their quaint feeling, walk-able environments, and limited consumption of open space. The spatial clustering design used in these towns is a model for future developments to ensure a vibrant, live-work lifestyle with minimal environmental impact. This concept of spatial clustering has reemerged as a necessary component of planning and is a key feature of “smart growth” which is the antithesis to urban sprawl. This form of planning will aid in the tactful use of the precious natural environment of the Croatian coast.
- **Green Building Standards**-- With continued awareness of our limited resources and our global impact, it is important that upcoming development projects have a minimal draw on infrastructure and resources. Current Green building practice in Croatia is gaining popularity but is still voluntary for the most part. Establishing Green building requirements is essential and will bring Croatia one step closer to rising to the standards set by the rest of Europe. As mentioned in Chapter 4.4, embracing the traditional “green” systems is a creative way to achieve a Green building agenda, while also celebrating the area’s heritage.

Implementing this program may prove to be its most difficult challenge. Funding, staffing, cooperation and monitoring are all components, which must be factored into this all-important policy. Highly qualified planners and strategists must be employed to avoid another “Adriatic Project” of the late sixties and early seventies. Cooperation amongst Ministries and levels of government must occur in a transparent process geared towards an established vision.

8.4 Recommendations for the Private Sector – Developers and Investors

Many of the ideas listed in these recommendations require group effort and often government intervention. What are individuals to do to endeavor projects in today's climate? Below are recommendations for individuals of how to navigate the development process on the Croatian coast with the current regulations in place.

Individual developers must endeavor to follow the recommendations of the *Adriatic Coastal Planning Policy* on an individual's scale. As one of the most challenging tasks of the development process, private developers must first focus on land acquisition. One must identify large land plots already assembled or begin the tedious task of land assemblage. Foreigners are highly encouraged to establish a joint venture with a local partner for a project of any scale. In the design of the project, it is essential to embrace heritage with development. It is also key that developers respect and maintain the coastline to the greatest extent possible.

The tedious tasks of land assemblage, green field development and rezoning have discouraged numerous investors away from the Croatian coast, and it is for good reason. After following all of the requirements and heavily investing on the frontend, there are no guarantees that a project will actually be permitted. "It is common for 'road blocks' to be erected in front of projects that are not supported by instrumental officials or key locals" (Timmons 2008). With the lack of transparency in this process, it may be recommended to circumvent new building regulations by sticking to remodeling existing properties on properly zoned parcels. Even though this method still produces no guarantees for a given project and dramatically limits the size of investment, it is one way to substantially hedge risk while affording an opportunity for investing in the Croatian coastal market.

8.5 Recommendations for the Public Sector – Local and State Government, Policy Makers

The public, specifically the state, is instrumental in achieving sustainable development on the Croatian waterfront. The size and scope of establishing and realizing the vision for Croatia's coast requires the public's direct involvement. There are six tasks that the public needs to focus on for this to occur:

1. **Establish an Interim Coastal Commission** to monitor (allow/disallow) coastal development projects is necessary while efforts are made toward enacting the Adriatic Coastal Zoning Plan. This commission should consist of public officials, private developers and conservationists. Allowing only one of the groups to control would negate the validity of the entire process. This Commission would incorporate the basic vision elements of the Adriatic Coastal Planning Policy as its guide.
2. **Complete the privatization process** in order to enhance Croatia's competitiveness and free the government from duties better suited for the private sector. This enables the public sector to focus on its public responsibilities.
3. **Enact an Adriatic Coastal Planning Policy.** To be effective, this plan will take some time to prepare and put into action. However, it must be completed in a diligent and expedient manner as this plan is of utmost importance to the coast of Croatia which serves as the leading tourist attraction, economic stimulus and natural resource. This planning policy will guide future development of the Croatian coast while maintaining its natural beauty.
4. **Increase the transparency of the zoning procedure** through simplified regulations with a prescriptive vision apparent to all. More transparent processes attract investment and dissuade corruption. Public involvement will be a key aspect of this process helping to maintain honesty and create a vision.
5. **Review financial impacts of zoning policy** as the State looks to attract quality investors delivering a quality product. Slow and opaque processes, coupled with financial limitations (such as the inability to sell individual vacation units) are factors, which dramatically limit the returns of investors. These policies must be reviewed as they are causing honest foreign investors to struggle through the development process or to place their capital elsewhere. It also raises a concern with the type of investor, which may expedite the process with suspicious practices or questionable capital. Putting this action plan into place will minimize the aforementioned limiting factors; helping change the development process from sporadic, slow and opaque, to strategic, expedient and transparent. The goal of the state should be creating a prescribed development product, consistent with the vision of the Croatian people and more attractive to investors. Dissuading capital with unnecessary regulations would only hamper returns.

6. **Monitor the success of the public-private-development process** of the Brijuni-Riviera project as a feasible model for development's advancement in Croatia. Gaining popularity around the globe, the public-private partnership model is seen as a means to achieve large scale development with the guidance of the state, interest of the public and expertise of the private market. The Brijuni-Riviera project is a clearly defined request for proposal with seemingly transparent requirements and processes. A tender has been offered for the specifically chosen locations and a fairly clear set of objectives was identified for each property including the desired number of beds, unit mix, services, amenities, themes and concepts to be included. A complex tourism study was conducted to help identify these elements. The company has prequalified a list of planning firms, giving options to the bidders, but maintaining a desired level of quality and product understanding. If the state is able to buck the current trends of the incomplete privatization process, they have found a way to accomplish many of the goals of the proposed Adriatic Coastal Zoning Policy. The success of the Brijuni-Riviera project can serve as a model or as a lesson for future growth options. See Appendix L for a more complete review of the Brijuni-Riviera project

These six tasks listed above are all understood by the government, recognized, and even called upon by various Ministries. However there is a lack of cooperation amongst Ministries, amongst counties, and between different levels of government (from local to state). This division, among responsible parties, leads to a lack of responsibility and accountability. With the current challenges of the land registries and zoning processes, it is no wonder that understaffed county and state planning officials are bogged down. As great strides are made towards computerizing and simplifying the land registry, the physical planning process must be streamlined and the Adriatic Coastal Planning Policy must be enacted before the system is exploited by suspicious capital and unsavory investors who are finding ways to take advantage of the system and the Croatian people. The fact that some projects are in fact occurring is reassuring, but with the lack of transparency and sheer length of time that it takes to obtain approvals, one has to wonder how sustainable the process is. "The current process is not sustainable" (Seric 2008).

9.0 Conclusion

If the current development process is retained as the status quo, the overdeveloped Mediterranean of many surrounding countries may also be the fate of the Croatian waterfront. This is not what the Croatian people, its politicians, or its visitors would envision. The people of Croatia must establish a clear vision of what would be beneficial for their coast. The data and analysis presented in this research is a small step towards establishing that vision and provides information for individuals endeavoring to develop on the Croatian coastline to make their own analysis. Through the creation and implementation of the visions of the Adriatic Coastal Planning Policy, the opportunities for the Croatian waterfront abound, and sustainable development can be realized for generations to come.

Appendix A

National Parks of Croatia

Plitvička Jezera

The most beautiful and the best known of all Croatian National Parks, part of the UNESCO World Heritage, located near the main route that links Zagreb with Dalmatia. It includes a string of 16 lakes which are connected by waterfalls naturally created by limestone barriers. Most of the area of the Park is covered by dense beech, fir, spruce and pine forests. Particularly important is the Čorkova uvala virgin forest where giant fir and spruce trees grow to more than 50 meters in height. Various animals live in the Park, brown bear and wolf among them; many of them are the species whose numbers are dwindling in the wild.

Kornati

The most indented island group in the Mediterranean, comprising 140 uninhabited islands, islets and reefs, is a veritable labyrinth built of seawater and stone. Visually and geomorphologically, the outer islands and their cliffs that soar to over 100 meters are the most attractive and will surely impress every visitor. The Piškera Marina is located within the National Park itself and there are eight other marinas in the vicinity.

Brijuni

Brijuni is a group of two larger and twelve small islands near the west coast of Istria. The islands are famous as a location with the best-preserved Mediterranean vegetation; a considerable part of the Veliki Brijun island has been turned into a landscape park with domestic and imported plant and animal life. The key feature of this National Park are surely the fabulous heritage monuments, particularly those from Roman and Byzantine periods (at Verige and Kastrum). On account of their exceptional natural beauty, these islands have been a preferred summer hideaway for many statesmen of the world.

Krka

On account of its hydrological and geomorphological features, Krka is the most amazing among the rivers of the Croatian karst region. For about two-thirds of its 72 kilometers-long course, the river runs through deep canyons cut into limestone plateaus. The area of the National Park covers the course of the Krka river between Knin and Skradin. Much of the river is actually a string of elongated lakes - natural reservoirs created upstream of every one of the many waterfalls. The most beautiful among them are the

Skradinski Buk and the Roški slap. There is a small island in the middle of the lake between the two; a Franciscan monastery stands on the island.

Paklenica

A National Park on the southern slopes of Velebit - the largest mountain massif of Croatia, extends from its highest peaks to the shoreline. The impressive canyons of Velika Paklenica and Mala Paklenica which are 400 meters deep, belong to a group of the most attractive natural phenomena created by erosion, with a large number of unusual karst formations and many caves. Paklenica is also renowned for its abundance and variety of plant and animal life. Another landmark is the monumental vertical cliff named Anića Kuk, popular with alpine climbers in Croatia.

Risnjak

Risnjak is a forested mountain massif in Gorski Kotar, to the north of Rijeka. It includes the area of the Kupa river headwaters. Due to its location between the Alps and the Dinara mountain and the effects of both the coastal and continental climates, this small area (30 square kilometers) is a habitat for various species of flora and fauna, including brown bear, lynx, chamois, deer and short-toed snake eagle. The beauty and variety of forests, karst formations and monumental vistas are attracting numerous hikers.

Mljet

The island of Mljet lies to the southwest of Dubrovnik. The National Park covers the western part of the island with two deep coves called lakes, the Veliko jezero and the Malo jezero, connected with the open sea by only a few meters-wide channel. Mljet is one of the most verdant locations in the European Mediterranean with abundant and diverse Mediterranean vegetation. Two first-class cultural and historical monuments can be found in this beautiful natural setting: the erstwhile Benedictine monastery complex built in the 12th century on a small islet in the middle of Veliko jezero (a hotel today) and the remains of the palace built in ancient times in the village of Polače (the name of the village derives therefrom).

Sjeverni Velebit

This National Park comprises the most interesting and attractive part of the highest regions of Velebit. It includes the Strict Natural Reserves of Rožanski kukovi and Hajdučki kukovi with their magnificent karst formations and the Lukina jama, one of the deepest caves in the world. The famous Velebit Botanical Garden is also there. Nature - National Parks." Government of the Republic of Croatia. 2007. 19 July 2008 <http://www.vlada.hr/en/about_croatia/nature/national_parks>.

Appendix B

Nature Parks of Croatia

Biokovo

An imposing limestone mountain range above the Makarska Riviera, abundant in various plant and animal species, offers beautiful vistas to visitors.

Kopački rit

A large wetland area at the confluence Drava and Danube rivers, rich in plant and animal life, particularly the marsh birds, deer and boars.

Lonjsko polje

One of the largest swamps in Europe, located along the Sava river, east of Sisak. Covered by extensive oak forests where many bird species live, including storks.

Medvednica

A mountain near Zagreb and its principal recreational site, with preserved beech and fir forests and interesting caves and deep valleys with mountain streams.

Papuk

The largest mountain range in Slavonia, covered by forests; built partially of eruptive rock.

Telašćica

A narrow bay cut deeply into Dugi otok is a favorite destination for yachtsmen; the tallest cliffs in Croatia (up to 180 m) add to its attraction.

Učka

A mountain in the eastern part of the Istria peninsula, soars above the Kvarner Riviera and offers stunning views of the Kvarner bay with its islands and Istria hinterlands; rich in plant life with a very interesting natural relief.

Velebit

The largest and the most beautiful of Croatian mountains has been proclaimed a World Biosphere Reserve on account of its unique natural relief and plant and animal life. It is also the largest protected area in Croatia, an area that also includes the Paklenica National Park and the Sjeverni Velebit National Park.

Vransko jezero

The largest lake in Croatia, located in the vicinity of Zadar. On account of its proximity to sea, it is a habitat for both marine and freshwater fish; many birds live there also.

Žumberak - Samoborsko gorje

Located to the west of Zagreb, a popular destination renowned for its extensive meadows, picturesque villages and deep canyons. (http://www.vlada.hr/en/about_croatia/nature/national_parks)

Appendix C Transit Access

Source: Strategija Prostornog Uredjenje Repulike Hrvatske



Appendix D

Basic Components of Each Level of Planning

County Spatial Planning Arrangement (1:1,000,000)

- Use and Purpose of Space
- Infrastructure system
- Required uses, organization of protected space

Spatial Planning Arrangement for Municipalities or Cities (1:25,000, building zone area 1:5,000)

- Use and Purpose of Surface Area
- Infrastructure system
- Required uses, organization of protected space
- Building Zone Area

General Urban Plan (1:5,000 or 1:10,000)

- Use and Purpose of Space
- Net for economic and social activity
- Traffic and communal infrastructure net
- Conditions for use, arrangement of protected areas

Urban Plan Arrangement (1:5,000)

- Use and Purpose of Surface Area
- Traffic, street and communal infrastructure net
- Conditions for use, arrangement of protected areas
- Design and building requirements

Detailed Plan Arrangement (1:1,000 or 1:500)

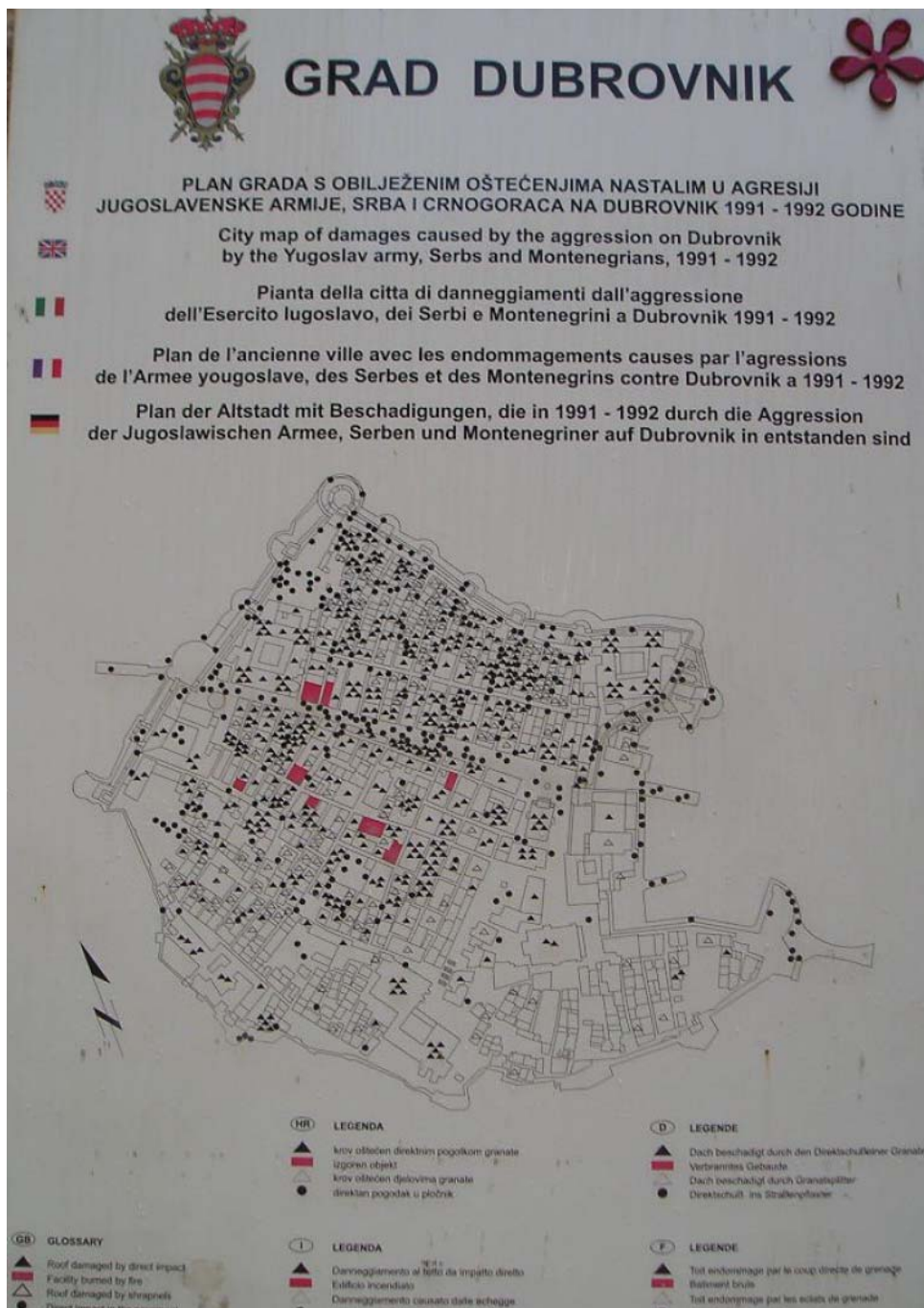
- Detailed Purpose of Surface Area
- Traffic, telecommunication and communal infrastructure net
- Conditions for use, arrangement of protected surface area
- Conditions for building

Alternatively, some areas not identified by the Urban Plan Arrangement as an area requiring a Detailed Plan Arrangement will have to file for a Location License (similar in nature, but a different process is to be followed)

Appendix E

Dubrovnik Shelling

Source: www.images.google.com



Appendix F

Electric Power Supply System

Source: Program Prostornog Uredenje Republike Hrvatske



Appendix G

Natural Gas Pipeline and Terminals

Source: Strategija Prostornog Uredjenje Repulike Hrvatske



Appendix H

Road Access

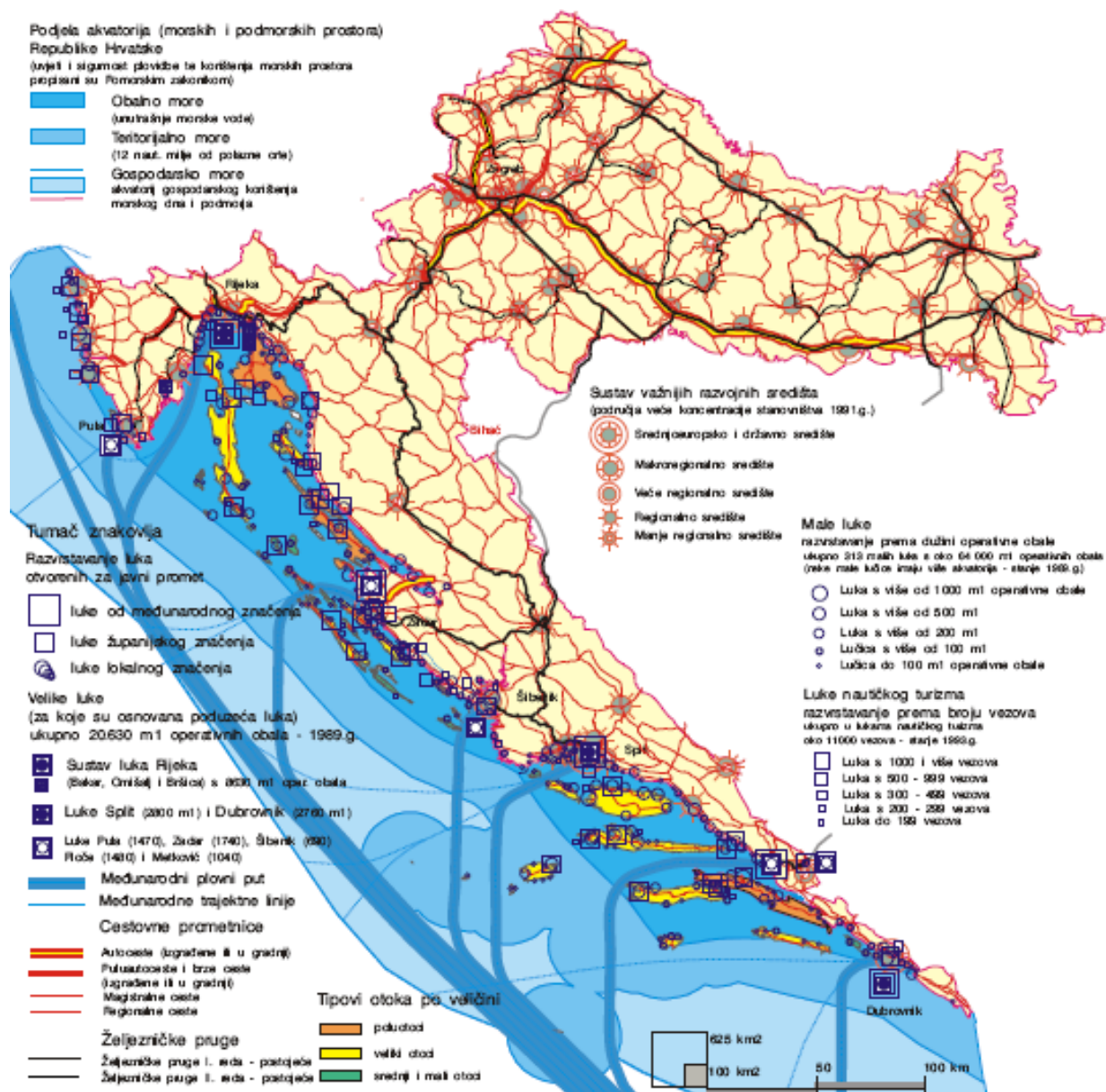
Source: Strategija Prostornog Uredjenje Repulike Hrvatske



Appendix I

Sea Access

Source: Strategija Prostornog Uredenje Repulike Hrvatske



Appendix J

Railway Access

Source: Program Prostornog Uredjenje Republike Hrvatske



Appendix K

Airports

Source: Strategija Prostornog Uredenje Repulike Hrvatske



Appendix L

Public-Private Development as a Model



The Brijuni-Riviera project clearly identifies sights suited for Tourism development. The sights are large sights (i.e. former military bases) which are already in State or County control.



The project is set up as a public and private development project where the public side is owned 1/3 by the county of Istria and 2/3 by the Republic of Croatia. The private party enters as the developer who presents the master plan to the public entity, and if chosen, finances and carries out the development on agreed upon terms.



A tender has been offered for the specifically chosen locations and a fairly clear set of objectives was identified for each property including the desired number of beds, unit mix, services, amenities, themes and concepts to be included. A complex tourism study was conducted to help identify these elements. The company has prequalified a list of planning firms, giving options to the bidders, but maintaining a desired level of quality and product understanding.



Source: Brijuni-Riviera Project Official Website

Works Cited

- "About Croatia: Nature." The Government of the Republic of Croatia. 12 July 2008
<http://www.vlada.hr/en/about_croatia/nature>.
- Banic, Gorana. 12 May 2008. Interview conducted by the author.
- Bartoluci, Mato. The Role of Tourism Policy in Sustainable Development of Croatian Tourism.
University of Zagreb. Zagreb: University of Zagreb, Faculty of Economics and Business, 2008.
- Bartoluci, Mato. 24 June 2008.
- Berlage Institute Rotterdam, and Croatian Architects. Croatian Archipelago. Rotterdam: Berlage Institute,
2005.
- Biocina, Marco. "Heritage Foundation: "Croatia at the bottom of the ranks"" Nacional. 16 Jan. 2008. 28
May 2008 <<http://www.nacional.hr/en/articles/view/41796/18/>>.
- Blazevic, Damir, Antun Sevsek, Dinko Peracic, Marko Sancanin, and Miranda Veljacic. Platforma 9.81
Superprivate. Zagreb: AGM d.o.o., 2004.
- Bordas, Eulogio. 6 June 2008. Interview conducted by the author.
- Bucar, Kristina, and Sandra Renko. Sustainable Tourism Development: The Case of the Island of Hvar.
Zagreb: University of Zagreb, Faculty of Economics and Business, 2008.
- The California Coastal Plan: A Critique. San Francisco: Institute for Contemporary Studies, 1976.
- Cavlek, Nevenka. Tourism Education Through Experienced Learning: A Case of ITHAS. Faculty of
Economic and Business, University of Zagreb. Zagreb: University of Zagreb, 2008. 358-68.
- "Ch. 27 EU Environmental Policy." United Nations Environment Programme. 13 July 2008
<http://www.unep.org/dec/docs/env_croatia.pdf>.
- Cimerman, Ratko. 26 June 2008.
- Cizmar, Sanja, and Antonio Vlahov. Opportunities and Risks of Sale-Leaseback Model in Croatian
Tourism. Rep.No. Faculty of Economics and Business, University of Zagreb. Zagreb: University
of Zagreb, Faculty of Economics and Business, 2008.

"Climate in Croatia." Find Croatia. 19 July 2008 <<http://www.find-croatia.com/generalinfo/climate.croatia.html>>.

Convention Concerning the Protection of the World Cultural and Natural Heritage. United nations educational, scientific and cultural organization. Paris: United Nations, 1972.

Cota, Boris, and Darko Liovic. The Position of Local Self-Governments in Relation with Central Government in the Republic of Croatia in Period Between 1991 and 2007. Rep.No. Faculty of Economics and Business, University of Zagreb. Zagreb: University of Zagreb, 2008.

"Croatia 2007 Progress Report EU." European Commission Enlargement. 12 July 2008 <http://ec.europau/enlargement/pdf/key_documents/2007.nov.croatia_progress_report_en.pdf>.

Croatian Tourism Development by 2010. Republic of Croatia. Ministry of Tourism. Zagreb: Republic of Croatia, 2003.

"Energy: Croatia; Construction of Wind Farm in Senj Launched." Ansamed. 23 June 2008. 23 June 2008 <<http://www.ansamed.info/en/>>.

"Energy: Croatia Opens Door for Private Investors." Ansamed. 20 June 2008. 11 July 2008 <<http://www.ansamed.info/en/>>.

"Environment for Development." United Nations Enviroment Programme. 14 July 2008 <http://www.unep.org/dec/docs/env_croatia.pdf>.

Falcon, Louis. Hiper Catalunya. Barcelona: Metapolis IaaC, Institute of advanced architecture of Catalonia Actar, 2003.

Ferlin, Vida. 19 June 2008. Interview conducted by the author.

Frenchman, Dennis. 28 July 2008. Interview conducted by the author.

Guide to Doing Buisness in Croatia. Price waterhouse coopers. Zagreb: Price Waterhouse Coopers. 2006. 6 June 2008 <<http://www.pwc.com/extweb/home.nsf/docid/299240c30c3e5a848525711100636470>>.

Gurnee, Keith. Telephone interview. 18 July 2008. Interview conducted by the author.

"HITRO.HR Programme Summary." E-Croatia. 23 June 2008 <<http://e-croatia.hr/sdu/en/programhitrohr/oprogramu://>>.

Holiday Homes Market Overview: Croatia. Colliers international. Zagreb: Colliers International, 2007.

Innovative Practices Pertaining to Water-Related Environmental Issues in Republic of Croatia. Ministry of environmental protection, physical planning and construction, republic of croatia. Zagreb: Republic of Croatia, 2005.

Ivanov, Marijana. Credit Financing of Croatian Tourism. Rep.No. Faculty of Economics and Business, University of Zagreb. Zagreb: University of Zagreb, 2008.

Jelicic, Fabio. Telephone interview. 8 May 2008. Interview conducted by the author.

Julia-Eggert, Marco. 25 June 2008. Interview conducted by the author.

Kapner, Ido. Telephone interview. 21 July 2008. Interview conducted by the author.

Katarina 06, Opening the Pula Coast. Zagreb: UPI-2M, 2006.

Katicin, Danijel. 1 July 2008.

Kekic, Martina. "State Geodetic Administration National Report on Croatia." EUREF European Reference. 4 June 2008 <<http://www.euref-iag.net/symposia/2007london/07-04-kekic.pdf>>.

Kovacevic-Pasalic, Rafaela. 26 June 2008. Interview conducted by the author.

"Laws, Regulations, and Legislative Information." California Coastal Commission. 18 July 2008 <<http://www.coastal.ca.gov/ccatc.html>>.

Lisanin, Marija T. Sustainable Demand Management in National Parks: Example of Plitvice Lakes National Park. University of zagreb. Zagreb: University of Zagreb, 2008. 1536-556.

Macan, Trpimir, Josip Sentija, and Ivo Bacan. A Short History of Croatia. Zagreb: Croatian Writers' Association, 1992.

Mattioni, Vladimir. Jadranska Projekti. Zagreb: Urbanisticki Institut Hrvatske, 2003. 52-65.

Mihaljek, Dubravko. Free Movement of Capital, the Real Estate Market and Tourism: A Blessing or a Curse for Croatia on its way to the European Union? Bank for international settlements. Basel: Bank for International Settlements, 2005. 185-228.

Miscevic, Ljubimir. 25 June 2008.

"Mixed Use Developments - Creating a Place." Project for Public Spaces. 2008. 17 July 2008
<http://www.pps.org/mixed_use/info/mixed_use_approach>.

National Island Development Programme. Republic of Croatia. Ministry of Development and Reconstruction. Zagreb: Republic of Croatia, 1997.

"Nature - National Parks." Government of the Republic of Croatia. 2007. 19 July 2008
<http://www.vlada.hr/en/about_croatia/nature/national_parks>.

"New wave of office development in Zagreb starting." Colliers International Croatia. 1 Apr. 2008. 22 July 2008 <<http://www.colliers.com/markets/croatia/news/new%20wave>>.

O Katastru i Zemljsnim Knjigama. Republic of Croatia. State Geodetic Administration. Zagreb: Republic of Croatia, 2008.

"Opportunity knocks in Croatia: an overview of existing, new, planned and rumoured golf developments and master-planned communities." Invest in Golf. 24 July 2007. 16 July 2008
<<http://www.invgolf.com/opportunities/croatia.htm>>.

Paljetak, Jelena. 27 July 2008. Interview conducted by the author.

Park, and Pauline Sheldon. Sustainable Wellness Tourism: Governance and Entrepreneurship Issues. Rep.No. School of Travel Industry Management, University of Hawaii. Zagreb: University of Zagreb, 2008.

Pavlin, Stanislav. 26 June 2008.

Perry, Guy. Telephone interview. 9 May 2008. Interview conducted by the author.

Program Prostornog Uredenje Republike Hrvatske. Republic of Croatia. Ministry of Environmental Protection, Physical Planning and Construction. Zagreb: Republic of Croatia, 1999.

Randic, Sasa, and Idis Turato. IN-BETWEEN / a book on the Croatian coast, global processes, and how to live with them. Rijeka: K.L.J.B. d.o.o. Rijeka, 2006.

"Real Estate Portfolio Club Adriatic." Croatian Privatization Fund. 1 July 2008
<<http://www.hfp.hr/default.asp?id=4>>.

Residential Market Overview: Croatia. Colliers international. Zagreb: Colliers International, 2008.

"Retiring in Croatia." International Living. 8 May 2008
<<http://http://internationalliving.com/countries/croatia/retire>>.

Saban, Sanja. Influence of Globalization on Space Planning. Rep.No. Faculty of Architecture, University of Zagreb. Zagreb: Unversity of Zagreb, 2005. 238-45.

Schestauber, Karla. Real Estate Country Facts: Croatia. Unicredit group, bank of austria. Vienna: Bank of Austria, Creditanstalt AG. 2008.

Schneider, Daniel R. Sustainable Energy Production and Consumption. Leusden: Springer Netherlands, 2008. 75-85.

Segrt, Manja. "Croatia's Next Government Will Continue EU Bid, Deputy PM Says." Bloomberg. 16 Oct. 2007. 15 July 2008
<<http://www.bloomberg.com/apps/news?pid=newsarchive&sid=amsy8gvmlbsq>>.

"Senior officials of Croatian Privatisation Fund arrested on corruption charges." Find Croatia. 17 June 2007. 20 July 2008 <<http://www.find-croatia.com/blog/senior-officials-of-croatian-privatisation-fund-arrested-on-corruption-charges/>>.

Seric, Mario. 2 July 2008.

Simic, Ruzica. 25 June 2008. Interview conducted by the author.

Simms, Sean. Telephone interview. 8 May 2008. Interview conducted by the author.

Soric, Eugene. 1 July 2008. Interview conducted by the author.

Strategija Prostornog Uredenje Repulike Hrvatske. Republic of Croatia. Ministry of Environmental Protection, Physical Planning and Construction. Zagreb: Republic of Croatia, 1997.

- "Sustainable Development of Tourism." United Nations World Tourism Organization. 2001. World Tourism Organization, United Nations. 17 July 2008
<<http://www.unwto.org/sdt/fields/en/social.php?op=2&subop=3>>.
- Sustar, Kristian. 18 June 2008. Interview conducted by the author.
- Timmons, David. Telephone interview. 7 May 2008. Interview conducted by the author.
- Tombari, Edward A. Smart Growth, Smart Choices Series: Mixed-Use Developments. National association of home builders. Washington DC: National Association of Home Builders. 2-8. 2005. <http://www.nahb.org/fileupload_details.aspx?contentid=39196>.
- "Transparency International: Corruption Perceptions Index." Transparency International. 23 July 2008
<http://transparency.org/policy_research/surveys_indices/cpi>.
- 2007 Statistical Yearbook. Republic of Croatia. Central Bureau of Statistics. Zagreb: Republic of Croatia, 2008.
- "UNESCO World Heritage: Croatia." UNESCO. UNESCO. 11 July 2008 <<http://www.unesco.org>>.
- "United States of America Department of Commerce - Croatia - Industry Sector Analysis." US Commercial Service. 1 July 2008 <<http://www.buyusa.gov/croatia>>.
- Vahinic, Dominik. 2 July 2008.
- Vavsik, Franjo. 2 July 2008.
- Vlahovic, Tonci. 2 July 2008.
- Vokic, Nina P. The Importance of Educated and Knowledgeable Employees for the Hotel Industry Performance: The Case of Croatia. Faculty of Economics and Business, University of Zagreb. Zagreb: University of Zagreb, 2008. 1926-941.
- Water for Life. Croatia in focus, croatian government bulletin. Zagreb: Republic of Croatia, 2007. 28-29.
- "What is the role of HITRO.HR service?" One-stop-shop. 23 June 2008 <http://www.hitro.hr/eng/what-is-hitro.hr/sto_je_e.htm>.