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NEW YORK UNIVERSITY
Robert F. Wagner Graduate School of Public Service

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MISSION

The Wagner Review is the student-run academic journal of the Robert F. Wagner Graduate School of Public Service at New York University. The Wagner Review promotes dialogue on a wide range of issues related to public service by publishing original research from a diverse group of students and alumni that reflect the academic programs offered and scholarly research conducted at the Wagner School.

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Founded in 1831, New York University (NYU) is the largest private university in the United States. The University, which is composed of 14 schools, colleges, and divisions, occupies five major centers in Manhattan. It operates branch campus and research programs in other parts of the United States and abroad, as well as study abroad programs in more than 25 countries.

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EDITOR'S NOTE

Over the last hundred years, technology and innovation have accelerated the growth of national and International economies while shrinking our world. Reflecting on where the world has been and where we are going, we must redefine our notion of progress. At the end of the 19th century, the smoke-belching factories of industrial London were signs of vitality, while today the very same skylines over Guangdong fill us with trepidation. Standing at this juncture, we see that the finite natural resources we previously treated as inexhaustible are limited. We have greater wealth and greater disparity than we did a hundred years ago. There are more of us and we live in closer proximity to each other. The amplified way our actions affect each other makes it impossible to grow and change in the ways we have in the past.

In this issue, our authors examine the changes our societies need to make to transition from unrestrained growth to sustainable growth and to shift our focus from what we can do to a critical examination of how we do it. A sustainable future is one where economic cost is contextualized within human and environmental costs. It also means understanding and weighing trade-offs when they arise. As we strive to build this better world, we must realistically consider how restrictions affect the future of developed and developing nations and how changing our outlook will affect our quality of life. As Wagner students, we believe that bridging the gap between the practitioner world and the public policy scholarship world, is not only important, it's essential. The writings collected in our sustainability issue not only illustrate innovative policies, but new ways of thinking about policy. Our perspectives are local, domestic, and international. They are legal, environmental, economic, institutional, and social. These pieces ask us how satisfied we are with the world we've created and how we plan to balance competing interests going forward.

Dea Dennison and Adam Zeidel examine the institutional frameworks governing the growth of this century's ascendant and developing nations. Patrick McCandless and Alejandro Blei examine transportation solutions to the congestion problems created by the last century of domestic development patterns. Craig Mills examines emerging markets in Eastern Europe while Anna Brennan, Patrick Berry, Erica Dixon, and Gani Myrzaliyev examine a foundation at the end of its life cycle. In this issue we debut a Wagner Review series we call "Policy in Action." Michael Freedman-Schnapp draws on his firsthand experience as an organizer and resident in Williamsburg to observe how different factions work together to share the benefits of economic development. We are also pleased to publish the winner of our "Advise the Next President" contest. Wagner alumnus David Schmid and his fellow authors Spc. Joshua Broske and Sgt. Jason Fuller examine potential changes to the veterans' benefits system and military health insurance programs. They invite the next president to think about the sustainability of the war in Iraq and the priorities of current military spending. Placing human cost on the table, they advocate for a government that can be pro-soldier, regardless of whether it is for or against the war.

Our authors, review board, and editors all worked very hard to refine and articulate these points in the pieces you'll read here. Special thanks go to Sarah Wu, Sara Brown, Donzelina Barroso, Gwen Rocco, Kate Heckel, Rachel Davis, Rob Shiau, and Jenn McVetty for providing additional assistance with proof-reading and layout, and to Penelope Madry for coordinating our funding and printing. Thanks also go to Wagner's administrators, who continue to support and promote the Review and all that it stands for. And finally, we'd like to thank Mary Floratos, our skilled and patient designer, who gave style to the substance of our authors' arguments. By raising difficult questions for our peers, we hope to encourage dialogue that will shift the priorities of leaders and citizens alike. In another hundred years, we'd like to see people looking back on the progress of the 21st century with pride not just about how far we've come, but how we got there.

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INSTITUTIONAL REFORM

The Chinese Communist Party's Antagonistic Contradiction in the Area of Land Use

by Adam E. Zeidel

ABSTRACT

China's modern national government seeks to ensure its legitimacy by pursuing economic growth while maintaining the delivery of vital public services. To do this, the national government has followed a policy of decentralization, requiring local authorities to raise revenues for public services. Local authorities often pursue lucrative but illegal land use actions to raise these funds. Focusing on land use law, this paper examines how local land use decisions disregard central law and undermine central authority in China. While the volatile land use policies aggressively pursued by local authorities contribute to economic growth and provide needed funding for the local provision of services, they also foster economic inequality and deep-seated tensions within China's periphery. As a result of these land use policies, China's central government has laid the foundation for long-term problems that will undermine its central authority.

China's modern national government, currently the Chinese Communist Party (CCP), seeks legitimacy to help maintain its political perch. The national leadership envisions legitimizing central authority through its ability to grow the economy and allow for the provision of vital public services.[1] However, the CCP allows local governments to undermine central law to create this economic growth. By allowing this behavior, the CCP is endangering its long-term prospects as the central authority in China.

The contradictions present between central law and central authority are especially acute in the area of land use law. The CCP's current policies of flexibility, ambiguity, and contradiction, while essential to allow the economic growth necessary to bolster the CCP, continue to undermine the legitimacy of the central political structure.

China is a mostly agrarian nation.[2] Following Mao Tse Tung's communist revolution and the ensuing land redistribution, agricultural land has been communally managed and, since 1986, "owned" by the people "farm[ing] for themselves and…sell[ing] their own produce."[3] In recent years, the central government's emphasis on decentralization and the local provision of services has placed a financial squeeze on poorer local governments, leading them to turn to rural land acquisition as a solution.[4] However, these acquisitions have widened the distributional schism in China and "have become the leading [cause] of social unrest in a great many places in the Peoples' Republic of China."[5] Thus, one of the primary methods which local governments have employed to cope with a decentralization mandate from the center has become the major threat to central legitimacy that the CCP hopes to achieve through decentralization.

LAND USE LAW: RHETORIC AND REALITY

The chief source of law for China's land reform program is Articles 10 through 13 of the 1982 Constitution of the People's Republic of China. The pertinent sections of the constitution state:

- Land in the rural and suburban areas is owned by collective except for those portions that belong to the state in accordance with the law.
- The state may, for the public interest, expropriate or take over land for public use, and pay compensation in accordance with the law.
- No organization may appropriate, buy, sell or otherwise engage in the transfer of land by unlawful means. The right to use the land may be transferred according to law.
- All organizations and individuals using land must ensure its rational use.
- The state permits the private sector economy to exist and develop within the limits prescribed by law.
- The state protects by law the right of citizens to own private property and the right to inherit private property.[6]

Because the ruling CCP is not bound by democratic elections or even a strong judiciary,[7] the broad language in the constitution has allowed for perverse interpretations of clauses such as "in accordance with the law," "for public use," and "rational use," which have resulted in a lack of enforcement when such limits are misconstrued or ignored altogether.[8]

Another law of particular importance to land reform in China is Article 43 of the Land Administration Law which states that an individual must apply to the state

THE CCP'S CURRENT POLICIES OF FLEXIBILITY, AMBIGUITY, AND CONTRADICTION, WHILE ESSENTIAL TO ALLOW THE ECONOMIC GROWTH NECESSARY TO BOLSTER THE CCP, CONTINUE TO UNDERMINE THE LEGITIMACY OF THE CENTRAL POLITICAL STRUCTURE.

to commence a construction project on "land owned by the state [i.e. urban land]" or on "land originally owned by peasant collectives but having been appropriated by the state."[9] Thus, construction on collective rural land is possible if the land is first appropriated by the state and then transferred to a private entity. While local governments have legally pursued conversion consistent with the Land Administration Law, they also generally disregard applicable constitutional limits such as "public interest," "pay[ing] compensation," and "rational use."[10]

The extralegal nature of land conversions is a direct consequence of the requirements for state appropriation and redistribution. Since the national government has been unable to manage this trend, the task of appropriating collective land and redistributing it for profit to private interests often falls to local governments. These local governments are frequently all too happy to foster development through land conversion and take a portion of the profit in the process.[11] Commentators have noted that "converting rural land into commercial uses is regarded as a reliable source of capital to shore up [a local authority's] shrinking tax base."[12] Local governments

operate outside the law in these actions nearly as often as they do legally.[13] China's Ministry of Land and Resources recently reported that "[m]ore than 60% of all recent land deals in China are illegal, while the figure is as high as 90% in several cities."[14] Despite ample room in China's laws for local governments to participate in rural land conversion, local governments have shown a zeal for profit that strays outside of the boundaries of legality in the areas of "illegitimate occupation and use, illegitimate application approval, buying and selling of land, and illegal transfers."[15]

The CCP has taken notice of the alarming scale of illegal conversions.[16] As a result of satellite photos showing "the rate of conversion of agricultural land to non-agricultural use was fully two and one-half times greater than official statistics," the State Council and National People's Congress passed laws placing "a one-year freeze on all agricultural land conversions not specifically and directly authorized by the State Council." They also made unauthorized conversion of agricultural land to non-agricultural use a criminal offense.[17] Yet, the extralegal rural land conversions have persisted in an example of the center now being at the mercy of the contradicting policy it created and the actors it empowered to do its bidding.

As a result of its decentralization policy, the center may have made itself irrelevant. The central government often did not enforce the law when local governments turned to extra-legal revenue solutions due to a lack of resources and because the self-sufficiency these extra-legal solutions allowed was in line with the center's overall policy. Now that the center seems interested in meddling, leaders in the periphery who have taken advantage of their free hand would prefer to retain their independence.[18]

CONTROLLED CHAOS AND CONSEQUENCES

In the last twenty-five years, the creation of law and policy in China evolved to include a number of actors and agendas outside those of the narrow center of CCP leadership.[19] However, the CCP's central leadership has devoted a great deal of effort to creating a land use policy that will bolster its political goals, and it still holds a great deal of sway in the arena of initial policy creation.[20] The following analysis will evaluate how Chinese land use policy, no matter its direct source, is impacting the political goals of the CCP.

Although the CCP has reaped successes in economic development through short-term management of its country's volatile land use regulations, the deeper consequences of this volatility suggest a decrease in the authority of China's central government. However, not only the original delegation of power through decentralization jeopardizes central authority in China. The ill-effects of extralegal actions by local actors are causing fundamental problems for the center and in the long-term may undermine the successes the center has gleaned from the current policy.

Randall Peerenboom highlights the failure of China's local governments to enforce the law. He also presents evidence, such as the need for extralegal efficiency during periods of rapid growth, to refute the idea that "China is lawless chaos."[21] Indeed, for this short-term goal of transformation, it seems as though China's system of controlled chaos, whereby the national government realizes certain goals by ignoring its own laws and rhetoric, has succeeded in achieving rapid economic growth and providing public services. As a result, the country is experiencing the economic growth that the central government sees as a key to maintaining its legitimate hold on power.[22] However, the costs of this policy in the long-term include widespread economic inequality, the creation of deep-seated tensions, poor land use, and disrespect for the law. While China's successes in growth have been historic, the future for the current regime of central authority in China is uncertain because the land use policies used to fuel this growth and to provide services at the local level are giving rise to problems that undermine the sustainability of China's model for growth.

Political Consequences: Widespread Economic Inequality and the Creation of Deep-Seated Tensions

As China began its push toward a market economy, Deng Xiaoping, a core leader of the CCP after Mao, addressed the need for China to grow while "avoid[ing] polarization."[23] Deng's proposition for accomplishing these twin goals was to have one segment of society grow at the expense of another.[24] After this initial growth, Deng expected the group which had become enriched to pay back those who had suffered for this growth. However, the mechanism for wealth redistribution after this initial stage of growth was not defined.[25]

As one might imagine, this ideological move away from strict socialism to a more pragmatic, local structuring of incentives for growth did not encourage an enriched urban class (or its political allies) to redistribute newly accumulated wealth to the countryside.[26] Instead, the Chinese government attempted to solve the inequality problem that it had created by supplementing growth with more growth.

The solution the government promoted was "a combination of land reform, industrialization, and urbanization" that had its roots in Arthur Lewis' surplus labor theory.[27] According to the Lewis theory, agricultural

workers with a small marginal product in the agricultural sector (i.e. surplus labor) should be transitioned into jobs in the industrial sector where they will earn higher wages and be more productive.[28] As Wang Mengkui, the director general of the State Council Development Research Center stated, "large numbers of migrant workers [will] supply cheap labor, thus helping to enhance the international competitiveness of Chinese industries."[29] As a result of forced land conversions, people living in agrarian parts of China will transition to cities where they will earn higher wages by supplying their labor at a low cost to the industrial workforce.

However, this justification for agricultural land conversions is questionable given the evidence of the poor and illegal treatment of "surplus" agricultural workers once they arrive in urban centers. If policymakers were intent on making the Lewis model work, they would facilitate the transition of agricultural laborers to urban centers after land conversions resulted in the loss of their agricultural jobs and forced those laborers to industrial areas in search of work. Instead, the government has been unable to reform a system in which rural citizens and urban citizens are given different registrations.[30] Without urban registration, the workers from the periphery must find work illegally in cities and often have their rights violated in the process.[31] This predicament belies the sincerity of the effort to close the inequality gap through policy based on Lewis' surplus labor theory.

The chances of new growth trickling down from urban areas to agricultural areas are dubious considering that the "political leaders could settle into a collusive relationship with business and social elites"[32] if they have not done so already. Thus, theorists from the era of Deng[33] to modern Chinese economists[34] have fallaciously claimed that land conversions are aimed at growth which will ultimately bring greater equality and ease the strain upon poor regions struggling to provide public services. Instead, the land conversions are at the heart of growth that perversely increases inequality with every bounce in GNP.[35]

In addition to the creation of economic inequality, the process by which local governments force farmers off of land to allow for more profitable uses is planting the seeds for deep-seated tensions. While rural land in China is communally owned, by the end of the 1970s, farmers operated under the "household responsibility system" in which families were given an incomplete bundle of rights over a parcel of land which included "decision-making, [which] link[ed] rewards closely with their performance."[36] Consequently, by divesting rural land from its collective owners, local governments are moving families off land that those families have inhabited and cultivated as of right. In an example typical of rural land conversions in China, individuals in the Hanyuan Reservoir area were impoverished and angry[37] years after being removed from the land in spite of the fact that the individuals did not "own" the parcels of land which they used[38] and from which they were removed.

An example of farmers' strong connection to their land beyond collective ownership is the forced move of 300,000 farmers from the Sanmenxi Reservoir in 1956. He Qinglian reports that for twenty years following their removal, the farmers "staged organized attempts...to return home."[39] These farmers faced local government force at each attempt.[40]

Theorists from the era of Deng to modern Chinese economists have fallaciously claimed that land conversions are aimed at growth which will ultimately bring greater equality and ease the strain upon poor regions struggling to provide public services. Instead, the land conversions are at the heart of growth that perversely increases inequality with every bounce in GNP.

As families are moved off of land which they have been granted the right to use, they are not adequately compensated for the loss of their land and houses and are "depriv[ed of] and deni[ed] access to administrative litigation." Therefore, although rural Chinese families "still failed to have complete rights on land ... [because they] lack[ed] the right to transfer their contract land" and "the State was the real landowner," lingering claims to family land may transcend the simple solution of China's military putting down land-related protests.[41] Instead, land conversion in its current form is creating quite possibly long-lasting tension and resentment that might undermine some of the achievements of China's growth.

The Hanyuan incident illustrates why mere military action will not resolve tensions concerning land acquisitions. In October and early November 2004, "tens of thousands of villagers from the Hanyuan Reservoir area in Sichuan Province staged a series of protests over their forced relocation to make way for the Pubugou dam. In the course of the demonstrations, as many as 10,000 soldiers were reportedly deployed against the protesters."[42] In Hanyuan, like in so many other places, the chief cause of the villagers' unrest stemmed from the fact that the government forced them to move from fertile farmland

where they had been able to make a living to poor farmland where they could not.[43]

The hostile feelings generated by land acquisitions are exacerbated because "China lacks channels for people to air discontent in a more orderly fashion. Widespread corruption and an increasingly conspicuous wealth gap fuel a contempt for officialdom that can easily erupt into...class-based rioting."[44] Further underscoring that current land policy leads to the creation of deep-seated tensions which will not abate in response to military force, He Qinglian views the forced removals of farmers and subsequent military action as "emblematic of long-term systemic problems that will breed continued unrest in the future."[45]

In a sign that China's leadership recognizes trouble brewing amidst its economic growth, language placating the massive group of rural Chinese has crept into development goals. Deng began speaking of reform and growth in China in almost exclusively economic terms.[46] Scholars have interpreted the "Three Represents" theory, attributed to Jiang Zemin, the Chinese leader who followed Deng, as meaning that "minority interests should be properly dealt with," but only because if they were not "it'll affect the fundamental interests of the majority."[47] Currently, PRC President and CCP General Secretary Hu Jintao has propounded the idea of a "harmonious society" as a major part of his leadership. Commentators note that this concept is "a campaign that focuses on the need to reduce social disparities" and has grown out of the fact that "there is so much social unrest, they have to put this at the top of their agenda ... [i]t's about regime survival."[48]

Additionally, the national government has attempted to temper the potential chaos resulting from local governments' illegal land conversions by better aligning economic development with stability in the countryside. China's success with its programs for economic growth is indisputable.[49] However, the CCP has not been as successful in its attempts to promote beneficial land use while growing the economy.

Through broad national laws which codify the concepts of rational use, public interest, justice, and the rule-of-law, the central government has promoted the idea that it is not to blame for the illegitimate land conversions taking place in the periphery. Instead, it blames provincial officials. Accordingly, Prime Minister Wen Jiabao has condemned the "'reckless occupation of farmland'" and stated that "land grabs by officials eager to cash in on China's booming economy are provoking mass unrest in the countryside and amount to a 'historic error' that could threaten national stability."[50] Commentators like He Qinglian analyze the conflict differently, but they envision the same ultimate threat to national stability. In He's view there is "a choice between sacrificing a minority's right to make a living in order to buy the Communist regime a few more years in power [against] reducing the speed of economic development in order to cope with a variety of socio-economic problems,"[51] namely, forced relocation of farmers.

However, while the center may seek to insulate itself from the inevitable catastrophes of change[52] by using the fiction of rogue local officials acting wholly outside the national government's policies, the peripheral population's understanding of the true situation is immaterial in certain respects. At some point, the center will have to confront the burdens being borne by rural Chinese in land conversion. Already, the center has become embroiled in quashing local protests and violent demonstrations regarding land requisitions.[53] Whether this direct confrontation between the central government and rural populations will escalate remains one of the most significant questions in China.

Planning and Land Use Consequences

From the perspective of best practices in physical planning and land use management, China's land policies are flawed because political factors motivate and dictate land use policy causing poor outcomes. When the decentralization movement began in the 1980's, the motivating factor for reform was "to fundamentally change the economic structure that has hampered the development of the productive forces and to establish a vigorous socialist economic structure that will promote their development."[54] In other words, the CCP was painfully aware that without rapid economic growth, China "would find [itself] in a blind alley."[55]

For the purposes of land use, the reform meant that all decisions should conform to China's new national economic goals. Specifically, the 1984 City Planning Ordinance required all municipal and county governments "to develop master plans to guide their physical development in accordance with existing practices of local economic planning."[56] Consequently, while Western notions of urban planning and land policy emphasized balancing economic concerns with a "coherent 'social welfare function'" so as to act as "a vehicle for the articulation of local needs," Chinese urban planning "has exhibited...a tendency to focus on future visions and end products rather than on processes and implementation."[57]

CHINESE LAND USE: GENERAL TRENDS

Commentators studying China note a trend of "local elites us[ing] . . . programs to acquire land as a commodity for accumulating wealth (exchange value) at the expense of the local communities that view these sites as necessities for everyday life (use value)." This phenomenon, of course, is not uncommon in development elsewhere in the world.[58] However, in China this trend is exacerbated by the need of local governments to generate capital to

provide basic services. As a result, these local governments "have aggressively adopted place-promotion strategies and sought support from the private sector in partnership arrangements in which the upper hand is usually with capital."[59]

Furthermore, in China "residents are virtually shut out of the redevelopment decision-making process" as a result of China's autocratic history and because "key local officials do not need to care about or be responsible to the residents, as they are appointed by upper level governments rather than elected."[60] Finally, in the case of Chinese land use, the radical pace of development means any consequences occur quickly.[61]

A national focus on economic growth and the absence of local legal authority over land use have led local governments in China to join with developers in programs that extract "exchange value" at the expense of "use value."[62] While in the short term local governments are able to sustain themselves and provide services as a result of "extra-budgetary revenues" provided by the new developments, in the long term, the center's "laissez-faire attitude toward urban redevelopment" creates "negative social and environmental impacts."[63] Thus, the national emphasis on economic development and the lack of legal constraints in land use policy to achieve this goal have resulted in poor land use practices that threaten the long-term sustainability of China's short-term growth.

CHINESE LAND USE POLICY AND SOCIAL WELFARE: THE QUANZHOU EXAMPLE

Problems with land use also arise from local jurisdictions' ability and willingness to include social welfare elements in local land use policy. When a local government wants to incorporate an element of social welfare in its land policy, central government discourages this behavior. However, when a local government seeks only to enrich itself and disregards social welfare, China's land use system encourages this practice.

As an example of the first situation described, Daniel Abramson, Michael Leaf, and Tan Ying explain that in a proposed redevelopment of Quanzhou, local planners' early attempts to proceed through "localization" and with an emphasis on "contextual sensitivity...met with many false starts, dead ends, and detours."[64] Consequently, despite a "locally rooted but globally sophisticated political leadership...that respects local environmental conditions, and, by extension, local cultural and social conditions," the effort at a socially conscious redevelopment faced "pressures coming down from above" and "formal regulatory pressures from the central state."[65] These pressures originated in the tension between decentralization and national planning standardization. As a result of decentralization, the local Quanzhou government was forced to raise revenues through the planning process. However, as a result of national standardization in planning, the local government also faced restrictions that hindered its ability both to raise revenues and to consider social welfare in the planning process.

The redevelopment of Quanzhou began with the best of intentions. A rapidly developing economy and high rates of unregistered migration led city officials to believe that development beyond the city's 1998 master plan was possible and necessary. Trading development rights in the protected, historic Old City center area of the city for privately-funded public projects elsewhere, Quanzhou local officials hoped to balance exchange value with use value.[66] With Quanzhou producing 18% of the entire Gross National Product of the Fujian Province, local real-estate interests were closely tied to the economic growth of the municipality. Eventually, the city granted formal approval of a deal in which developers would finance city improvements through "rent-in-kind charges" in exchange for development rights.

However, national influence on local planning efforts exerted pressure on the proposed local solutions in Quanzhou and undermined strategies aimed at promoting "use value." The first of these pressures was the administrative and fiscal decentralization beneath many of the current tensions between the center and the periphery. This decentralization has "created sharp internal rivalries [with] the object of large-scale redevelopment [being] understood differently at different levels of local government."[67] Because inner city, district-level governments have viewed urban redevelopment as a way to compensate for revenue shortfalls caused by decentralization, they have supported policies that eschew "use value" and instead raise revenues with development "quickly outgr[owing] municipal master plans."[68] At higher levels of government, land use policy emphasizes the maintenance of current land use categories through land use management plans and the elimination of "independent decision-making power over land use conversions at lower levels of administration."[69] Thus, the fiscal burdens local governments face as a result of decentralization often undermine national policy that would curb the independence of local governments.

In addition to economic pressure to pursue poor planning because of national policy, local governments are also burdened by bureaucratic tunnel vision about urban planning at the national level. The attitude of the national government toward planning ignores all unique elements of cities and

> entail[s] the division of urban land parcels into standard use categories, separated by roads of standard widths deemed appropriate

> for any 'modern' city, and occupied by buildings that are to be spaced according to detailed standards for sunlight access and the layout of typical infrastructure lines. These national standards were developed essentially for new settlements on "greenfield" sites, with no regard for the complexities of existing urban fabric or land-use rights.[70]

While national planning standards are useful for undeveloped land (i.e. greenfields), in a developed but expanding city like Quanzhou these standards are inappropriate.

Once again, the central government's refusal to cede power, combined with a push for economic decentralization to bolster the center's legitimacy, results in problematic local policies. Local governments attempting to pursue socially inclusive planning have been undermined by a system that expects them to increase revenues from the redevelopment process and to adhere to ill-fitting national standards.

In Quanzhou, the negative effects of these national pressures emerged as local planning efforts began to suffer from rampant overbuilding and densification, such as the blatant violation of a local "planning policy to limit new buildings to three stories throughout the Old City center."[71] Some of the "most prominent transgressors" included buildings used or owned by the local government itself.[72] The inability of residents to exert any power in the process contributed to the problem. When the local government of Quanzhou turned to local developers to escape fiscal pressures from the national government, these developers "tended to favor sharp increases in density."[73]

Once initiated, weaknesses soon appeared in the collaboration between the local government and developers, as "the impact of this development on the historic fabric of the Old City [was] enormous."[74] Although densification and overbuilding accelerated, they were not balanced by proportionate increases in revenues.[75] Many commercial units went vacant, the city's social atmosphere declined, and "much of the old housing considered historic and aesthetically valuable [was] demolished by large-scale construction."[76] Although the redevelopment of Quanzhou began with a local government's concern for preserving use value while leveraging the exchange value of the land to meet economic, budgetary, and development objectives, this redevelopment was a failure because of national policy pressures.

When the luxury-end real estate market softened in 1994, the local government gained some breathing room as speculators opened up new areas for development.[77] With newly affordable land prices, the local government no longer had to capitulate to developer demands to increase density in the Old City and was not as vulnerable to the fiscal decentralization burden imposed upon it by central government policy.[78] Mindful of its past planning failures and on a stronger fiscal footing, the local government in Quanzhou focused on "localization of planning practice" in stark contrast to "nationally promulgated standards for urban upgrading and modernization."[79]

Quanzhou was able to preserve the Old City "as a unique but integral core for the entire municipality," which promoted the use value of this space by providing a "continuity of traditional culture and social activities within the community."[80] The lesson learned by Quanzhou was that its leaders could not work within the confines of national planning standards while still achieving social welfare. When the pressures of decentralization and high land prices were too much for the city leaders to bear, they were forced to place the planning policy in the hands of developers and the social welfare goals of the city suffered. Thus, cities often face the reality that planning by national standards is unrealistic, and to preserve social welfare through their planning process, cities need fiscal independence and a willingness to work without private developers.

In contrast, when local authorities illegally convert rural land into commercial uses in line with national economic policy, they receive little discouragement from the national level.[81] When land use policy serves the national government's economic interest, this form of "central power failing to control local powers" has promoted poor land use practices in both urban and rural settings.[82] Additionally, by allowing arbitrary land conversions without sufficient compensation in rural areas, China is essentially discouraging farmers from investing in their land due to tenure insecurity.[83]

CENTRAL AUTHORITY IS UNDERMINED

China's land use system is one in which local actors feel the center's influence only when those local actors promote values other than economic growth. One could interpret this behavior as the center reining in its power effectively as economic growth begins to allow the local self-sufficiency that the center desires. That reasoning would contradict the thesis that central power is slipping away as a result of land use policies. While local actors may feel the influence of the center's policy only in specific land use situations, considering the broader ramifications of these short-term practices is still important.

By focusing solely on the end of economic growth and not how local governments wield power at the lower level, so long as production quotas are met, the center neglects important norms and checks necessary for a holistic land use approach are. Aside from the local problems that the resulting poorly planned cities are causing, the

mismanagement of land ultimately undermines central authority.[84] This occurs in municipalities like Quanzhou where local governments' attempts to plan according to beneficial principles are stymied by regional and national priorities. Additionally, central authority is undermined as corrupt local officials are free to inflict disastrous urban plans while supporting the national agenda. By placing economic priorities above all others, the center is achieving short-term goals. However, the center is laying the foundation for long-term problems by delegating power in a manner that penalizes local governments for considering any beneficial planning values other than economic growth.

The Chinese central government recently revised the law in an effort to "signal an end to allowing independent decision-making power over land use conversions at lower levels of administration by restoring higher level checks on land use approval rights at the level of the provincial and central governments."[85] However, it may be too late—the center may have created a monster in the area of land use that it can no longer control. New laws can paper over the problem, but at the local level leaders now have motivations and expectations that differ radically from the center's desires. A strong drive to convert agricultural lands into industrial and profitable uses, an expectation that illegal measures will go unenforced, and a certain amount of greed all serve to undermine the new legislation from the center.

Citations

1 Pak K. Lee, *Into the Trap of Strengthening State Capacity: China's Tax-Assignment Reform*, 164 The China Quarterly 1007, 1023-24 (Dec. 2000). Susan L. Shirk, The Political Logic of Economic Reform in China (University of California Press 1993).

2 CIA.gov, The World Factbook: Labor force - by occupation, available at https://www.cia.gov/library/publications/the-world-factbook/fields/2048.html.

3 Eva Pils, Land disputes, rights assertion and social unrest: a case from Sichuan, 5 (forthcoming).

4 Michael Zhao, Rural Land Management Contradiction, China Digital Times, Aug. 4, 2006 available at: http://chinadigitaltimes.net/2006/08/rural_land_management_contradiction_sun_shanguang.php.

5 Roundtable Before The Congressional-Executive Commission On China, One Hundred Eighth Congress Second Session, Property Seizure in China, 4 (Jun. 21 2004).
Park, Rozelle, Wong & Ren *Distributional Consequences of Reforming Local Public Finance in China*, 147 The China Quarterly 751, 769 (1996).

6 Constitution of the People's Republic of China (adopted on December 4, 1982), art. 13 translated in English People's Daily Online (1982) (P.R.C.).

7 Jim Yardley, *A young judge tests China's legal system*, International Herald Tribune, Nov. 28, 2005.

8 Xiaobo Zhang, *Asymmetric Property Rights in China's Economic Growth* 11-12 (Paper presented at the session on Land Rights and Social Security in China of the Annual American Economics Association Meetings, Boston, Jan. 6-8, 2006), available at http://www.aeaweb.org/annual_mtg_papers/2006/0108_1300_0204.pdf.
Eva Pils, Land disputes, rights assertion and social unrest: a case from Sichuan, 5(forthcoming).

9 Land Administration Law Article 43.

10 Land Administration Law 43.

11 Wing-Shing Tang & Him Chung, *Rural-urban transition in China: illegal land use and construction*, 43 Asia Pacific Viewpoint 43, 49 (2002).
United States Embassy Beijing Report, *China's Farmland Loss Rings Alarm*,1997, 2 available at http://www.fas.org/spp/guide/china/earth/landloss.htm.

12 Wing-Shing Tang & Him Chung, *Rural-urban transition in China: illegal land use and construction*, 43 Asia Pacific Viewpoint 43, 49 (2002).

13 Wing-Shing Tang & Him Chung, *Rural-urban transition in China: illegal land use and construction*, 43 Asia Pacific Viewpoint 43, 46, 47, 49 (2002).

14 Sophie Beach, China says more than 60% of recent land deals are illegal–Interfax, China Digital Times, Jun. 8, 2006 available at: http://chinadigitaltimes.net/2006/06/china_says_more_than_60_of_recent_land_deals_are_illega.php.

15 Rural urban Transition in China: illegal land use and construction. Wing-Shing Tang and Him Chung. p. 47.

16 Joseph Kahn, *Chinese Premier Says Seizing Peasants' Land Provokes Unrest*, N.Y. Times (Late Edition (East Coast)), Jan. 21, 2006, at A3.

17 United States Embassy Beijing Report, *China's Farmland Loss Rings Alarm*, 1997, 1 available at http://www.fas.org/spp/guide/china/earth/landloss.htm.

18 Park, Rozelle, Wong & Ren *Distributional Consequences of Reforming Local Public Finance in China*, 147 The China Quarterly 751, 751 (1996).

19 Murray Scot Tanner, *How a Bill Becomes a Law in China: Stages and Processes in Lawmaking*, 141 The China Quarterly (Special Issue: China's Legal Reforms) 39 (Mar. 1995).

20 Murray Scot Tanner, *How a Bill Becomes a Law in China: Stages and Processes in Lawmaking*, 141 The China Quarterly (Special Issue: China's Legal Reforms) 39 (Mar. 1995).

21 Randall Peerenboom, *Ruling The Country In Accordance With Law: Reflections On The Rule And Role Of Law In Contemporary China*, 11 Cultural Dynamics 315, 341 (1999).

22 Susan L. Shirk, *The Political Logic Of Economic Reform In China* (University of California Press 1993).

23 *Deng Xiaoping* Excerpts From Talks Given In Wuchang, Shenzhen, Zhuhai And Shanghai (January 18 - February 21, 1992).

24 *Deng Xiaoping* Excerpts From Talks Given In Wuchang, Shenzhen, Zhuhai And Shanghai (January 18 - February 21, 1992).

25 *Deng Xiaoping* Excerpts From Talks Given In Wuchang, Shenzhen, Zhuhai And Shanghai (January 18 - February 21, 1992).

26 Athar Hussain, *Social Security in Present-Day China and Its Reform,* 84 The American Economic Review 276, 278 (May 1994). ("The huge rural-urban gap in social-security provision conflicts with the principle of equal treatment for all citizens.")

27 George G. Gilboy & Eric Heginbotham, *The Latin Americanization of China?* 103 Current History 256, 257 (2004).
Gustav Ranis, 22 *Journal of Economic Literature* 1127 (Sep. 1984) (reviewing W. Arthur Lewis & Mark Gersovitz, Selected Economic Writings of W. Arthur Lewis).

28 Gustav Ranis, 22 *Journal of Economic Literature* 1127 (Sep. 1984) (reviewing W. Arthur Lewis & Mark Gersovitz, Selected Economic Writings of W. Arthur Lewis).

29 George G. Gilboy & Eric Heginbotham, *The Latin Americanization of China?* 103 Current History 256, 257 (2004).

30 George G. Gilboy & Eric Heginbotham, *The Latin Americanization of China?* 103 Current History 256, 260 (2004).
Roundtable Before The Congressional-Executive Commission On China, China's Household Registration (Hukou) System: Discrimination and Reform (Sept. 2 2005) available at http://www.cecc.gov/pages/roundtables/090205/index.php.

31 George G. Gilboy & Eric Heginbotham, *The Latin Americanization of China?* 103 Current History 256, 259 (2004).

32 George G. Gilboy & Eric Heginbotham, *The Latin Americanization of China?* 103 Current History 256, 261 (2004).

33 *Deng Xiaoping* Excerpts From Talks Given In Wuchang, Shenzhen, Zhuhai And Shanghai (January 18 - February 21, 1992).

34 George G. Gilboy & Eric Heginbotham, *The Latin Americanization of China?* 103 Current History 256, 257 (2004).

35 Xueguang Zhou, *Economic Transformation and Income Inequality in Urban China: Evidence from Panel Data* 105 The American Journal of Sociology 1135 (Jan. 2000); Linxiu Zhang and Xiaobo Zhang Shenggen, Growth, inequality, and poverty in rural China: The Role of Public Investments, 11 (International Food Policy Research Institute 2002).

36 Fu Chen, Liming Wang, and John Davis, *Land reform in rural China since the mid-1980s, Part 1*, *available at* http://www.fao.org/sd/LTdirect/LTan0031.htm (Sept. 1999).

37 Eva Pils, Land disputes, rights assertion and social unrest: a case from Sichuan, 5 (forthcoming).

[38] Eva Pils, Land disputes, rights assertion and social unrest: a case from Sichuan, 5 (forthcoming). ("The new 1986 *Land Administration Law8* stated that the 'socialist ownership system' recognized only 'collective' ownership and state ownership.")

[39] He Qinglian, *The Hanyuan Incident: Draining The Pond To Catch The Fish* China Rights Forum (No.1 2005).

[40] He Qinglian, *The Hanyuan Incident: Draining The Pond To Catch The Fish* China Rights Forum (No.1 2005).

[41] Fu Chen, Liming Wang, and John Davis, *Land reform in rural China since the mid-1980s, Part 1*, *available at* http://www.fao.org/sd/LTdirect/LTan0031.htm (Sept. 1999).

[42] He Qinglian, *The Hanyuan Incident: Draining The Pond To Catch The Fish* China Rights Forum (No.1 2005).

[43] He Qinglian, *The Hanyuan Incident: Draining The Pond To Catch The Fish* China Rights Forum (No.1 2005).

[44] *Protesting in China*, The Economist, Sept. 29 2005.

[45] He Qinglian, *The Hanyuan Incident: Draining The Pond To Catch The Fish* China Rights Forum (No.1 2005).

[46] *Deng Xiaoping* Excerpts From Talks Given In Wuchang, Shenzhen, Zhuhai And Shanghai (January 18 - February 21, 1992).

[47] Three Represents - CPC's new thinking, CCTV.com, *available at* http://www.cctv.com/lm/1070/12/2.html.

[48] Paul Mooney, *Hu Jintao bad for intellectuals, good for peasants*, Asia Times Online, Mar. 10 2005, at 2-3.

[49] Athar Hussain, *Social Security in Present-Day China and Its Reform,* 84 The American Economic Review 276, 276 (May 1994).

[50] Joseph Kahn, *Chinese Premier Says Seizing Peasants' Land Provokes Unrest*, N.Y. Times (Late Edition (East Coast)), Jan. 21, 2006, at A3.

[51] He Qinglian, *The Hanyuan Incident: Draining The Pond To Catch The Fish* China Rights Forum (No.1 2005).

[52] Shenglan Tang and Gerald Bloom, *Decentralizing rural health services: a case study in China* 15 The International Journal of Health Planning and Management 189, 191 (Sept. 2000). ("[P]articular regions and sectors [would] race ahead, whilst some poorer regions [would experience] major financial difficulties.")

[53] *Protesters clash with police in China over land requisitions*, ABC News, Nov. 1, 2004, *available at* http://www.abc.net.au/news/stories/2004/11/01/1232457.htm.

China deploys troops to quell dam protest, Muzi.com News, Nov. 6, 2004, *available at* http://lateline.muzi.net/news/ll/english/1334310.shtml?cc=15837&ccr=.

[54] *Deng Xiaoping* Excerpts From Talks Given In Wuchang, Shenzhen, Zhuhai And Shanghai (January 18 - February 21, 1992).

[55] *Deng Xiaoping* Excerpts From Talks Given In Wuchang, Shenzhen, Zhuhai And Shanghai (January 18 - February 21, 1992).

[56] Daniel B. Abramson, Michael Leaf, and Tan Ying, *Planning Practice: Some Ideas from Quanzhou, Fujian*, *in* The New Chinese City: Globalization and Market Reform 167, 167 (John R. Logan ed. 2002).

[57] Daniel B. Abramson, Michael Leaf, and Tan Ying, *Planning Practice: Some Ideas from Quanzhou, Fujian*, *in* The New Chinese City: Globalization and Market Reform 167, 168 (John R. Logan ed. 2002).

[58] Yan Zhang and Ke Fang, *Is History Repeating Itself?* 23 Journal of Planning Education and Research 286, 287 (2004).

[59] Yan Zhang and Ke Fang, *Is History Repeating Itself?* 23 Journal of Planning Education and Research 286, 292 (2004).

[60] Yan Zhang and Ke Fang, *Is History Repeating Itself?* 23 Journal of Planning Education and Research 293-4 (2004).

[61] Yan Zhang and Ke Fang, *Is History Repeating Itself?* 23 Journal of Planning Education and Research 286, 293 (2004).

[62] Yan Zhang and Ke Fang, *Is History Repeating Itself?* 23 Journal of Planning Education and Research 286, 287 (2004).

[63] Yan Zhang and Ke Fang, *Is History Repeating Itself?* 23 Journal of Planning Education and Research 286, 293 (2004).

[64] Daniel B. Abramson, Michael Leaf, and Tan Ying, *Planning Practice: Some Ideas from Quanzhou, Fujian*, *in* The New Chinese City: Globalization and Market Reform 167, 173, 177 (John R. Logan ed. 2002).

[65] Daniel B. Abramson, Michael Leaf, and Tan Ying, *Planning Practice: Some Ideas from Quanzhou, Fujian*, *in* The New Chinese City: Globalization and Market Reform 167, 176-8 (John R. Logan ed. 2002).

[66] Washington.edu, *Introduction to Quanzhou* (Feb. 2, 1999), *available at* http://courses.washington.edu/quanzhou/vernac/quanzhou/qzintro.htm

[67] Daniel B. Abramson, Michael Leaf, and Tan Ying, *Planning Practice: Some Ideas from Quanzhou, Fujian*, *in* The New Chinese City: Globalization and Market Reform 167, 177 (John R. Logan ed. 2002).

[68] Daniel B. Abramson, Michael Leaf, and Tan Ying, *Planning Practice: Some Ideas from Quanzhou, Fujian*, *in* The New Chinese City: Globalization and Market Reform 167, 177 (John R. Logan ed. 2002).

[69] Carolyn Cartier, *'Zone Fever', the Arable Land Debate and Real Estate Speculation: China's Evolving Land Use Regime and its Geographical Contradictions* 10 Journal of Contemporary China 445, 446-7 (Aug. 1, 2001).

[70] Daniel B. Abramson, Michael Leaf, and Tan Ying, *Planning Practice: Some Ideas from Quanzhou, Fujian*, *in* The New Chinese City: Globalization and Market Reform 167, 177-8 (John R. Logan ed. 2002).

[71] Daniel B. Abramson, Michael Leaf, and Tan Ying, *Planning Practice: Some Ideas from Quanzhou, Fujian*, *in* The New Chinese City: Globalization and Market Reform 167, 177-8 (John R. Logan ed. 2002).

[72] Daniel B. Abramson, Michael Leaf, and Tan Ying, *Planning Practice: Some Ideas from Quanzhou, Fujian*, *in* The New Chinese City: Globalization and Market Reform 167, 177-8 (John R. Logan ed. 2002).

[73] Daniel B. Abramson, Michael Leaf, and Tan Ying, *Planning Practice: Some Ideas from Quanzhou, Fujian*, *in* The New Chinese City: Globalization and Market Reform 167, 174 (John R. Logan ed. 2002).

[74] Washington.edu, *Introduction to Quanzhou* (Feb. 2, 1999), *available at* http://courses.washington.edu/quanzhou/vernac/quanzhou/qzintro.htm McGill.ca, *Houcheng Xiang, Quanzhou - An example of redevelopment* (Apr. 18, 2008), *available at* www.arch.mcgill.ca/prof/mellin/arch671/winter2000/kwan/thesis/houcheng.htm

[75] Washington.edu, *Introduction to Quanzhou* (Feb. 2, 1999), *available at* http://courses.washington.edu/quanzhou/vernac/quanzhou/qzintro.htm McGill.ca, *Houcheng Xiang, Quanzhou - An example of redevelopment* (Apr. 18, 2008), *available at* www.arch.mcgill.ca/prof/mellin/arch671/winter2000/kwan/thesis/houcheng.htm

[76] Washington.edu, *Introduction to Quanzhou* (Feb. 2, 1999), *available at* http://courses.washington.edu/quanzhou/vernac/quanzhou/qzintro.htm McGill.ca, *Houcheng Xiang, Quanzhou - An example of redevelopment* (Apr. 18, 2008), *available at* www.arch.mcgill.ca/prof/mellin/arch671/winter2000/kwan/thesis/houcheng.htm.

[77] Daniel B. Abramson, Michael Leaf, and Tan Ying, *Planning Practice: Some Ideas from Quanzhou, Fujian*, *in* The New Chinese City: Globalization and Market Reform 167, 176 (John R. Logan ed. 2002).

[78] Daniel B. Abramson, Michael Leaf, and Tan Ying, *Planning Practice: Some Ideas from Quanzhou, Fujian*, *in* The New Chinese City: Globalization and Market Reform 167, 176 (John R. Logan ed. 2002).

[79] Daniel B. Abramson, Michael Leaf, and Tan Ying, *Planning Practice: Some Ideas from Quanzhou, Fujian*, *in* The New Chinese City: Globalization and Market Reform 167, 176 (John R. Logan ed. 2002).

[80] Daniel B. Abramson, Michael Leaf, and Tan Ying, *Planning Practice: Some Ideas from Quanzhou, Fujian*, *in* The New Chinese City: Globalization and Market Reform 167, 176 (John R. Logan ed. 2002).

[81] Eva Pils, Land disputes, rights assertion and social unrest: a case from Sichuan (forthcoming).

[82] Eva Pils, Land disputes, rights assertion and social unrest: a case from Sichuan, 47 (forthcoming).
Wing-Shing Tang & Him Chung, *Rural-urban transition in China: illegal land use and construction*, 43 Asia Pacific Viewpoint 43, 55 (2002).

[83] Carolyn Cartier, *'Zone Fever', the Arable Land Debate and Real Estate Speculation: China's evolving land use regime and its geographical contradictions* 10 Journal of Contemporary China 445, 466 (Aug. 1, 2001).

[84] Joseph Kahn, *Chinese Premier Says Seizing Peasants' Land Provokes Unrest*, N.Y. Times (Late Edition (East Coast)), Jan. 21, 2006, at A3.
Protesters clash with police in China over land requisitions, ABC News, Nov. 1, 2004, *available at* http://www.abc.net.au/news/stories/2004/11/01/1232457.htm.
China deploys troops to quell dam protest, Muzi.com News, Nov. 6, 2004, *available at* http://lateline.muzi.net/news/ll/english/1334310.shtml?cc=15837&ccr=.

[85] Carolyn Cartier, *'Zone Fever', the Arable Land Debate and Real Estate Speculation: China's evolving land use regime and its geographical contradictions* 10 Journal of Contemporary China 445, 447 (Aug. 1, 2001).

INFRASTRUCTURE MANAGEMENT

Challenges to the Provision of Infrastructure as a Public Good

Arguments for Market-Oriented Road Management Strategies

by Alejandro M. Blei

ABSTRACT

Economists have long debated the most efficient way to price public goods, particularly amenities such as roads and infrastructure that stimulate economic growth and form natural monopolies. But while scholars debate, governments build roads, and the public shoulders the costs of a car-centric American lifestyle, both in road construction and long commutes on congested roads. This paper explores the economics of public road provision and examines a variety of practical, market-oriented strategies for pricing road travel. These options are not only weighed based on cost-savings, but also on their equity impacts, and their effects on the location decisions that have built the United States over the past 60 years.

Around the world, urban areas are battling vehicular congestion, a condition that decreases productivity and quality of life in metropolitan areas and degrades the natural environment.[i] Vehicular congestion persists because the supply of roads has not kept pace with demand for road use. Though local governments can implement programs to regulate demand, these strategies often conflict with individual travel preferences and entrenched cultural norms. International examples and a growing body of literature suggest that a shift toward private provision, management, and maintenance of roads would yield more efficient outcomes for traffic management. While market-oriented initiatives can realign the supply and demand for road use, whether this approach can meet the mobility needs of society at large remains unclear. This paper examines the arguments and consequences of a market-oriented approach for roads and makes the case for more integrated domestic transportation policy.

THE IMPORTANCE OF ROADS

Roads come in a variety of forms but share a group of fundamental characteristics. Roads facilitate mobility and allow for movement of people, ideas, and goods between cities and across regions. As the underlying infrastructure of economic activity, roads enable the flow of labor and capital across space, providing the resources necessary for the production of goods and delivery of services. Indeed, the emergence of information technology has diminished roads' monopoly as an economic enabler (business transactions no longer require face-to-face contact), but roads remain inextricable from economic activity. A workforce requires housing, and access to housing in turn often requires road networks.

Modern societies rely on road networks nearly as much as they depend on housing. The distribution of food and the disposal of waste use road networks. Access to electricity and information technologies requires roads, as do construction and maintenance of facilities. Roads are also major source of economic opportunity. The American Road and Transportation Builder's Association represents a $200 billion-a-year industry employing 2.5 million Americans.[ii]

AUTOMOBILES AND ROADS

Today, the private automobile is the dominant mode of travel in the United States. The automobile accounts for 85% of all trips as well as 85% of all miles traveled. Population projections of 80 million additional Americans between 2000 and 2050 strongly suggest that the number of automobile trips and the number of miles traveled will increase.[iii,iv] These statistics are troubling because observed vehicle miles traveled (VMT) have been increasing at a faster rate than population is growing. If strong population projections are accurate, the amount of miles traveled by automobiles will increase dramatically. Because highway construction has not kept pace with existing increases in population and VMT, the supply of roads cannot meet the demand for roads.[v] The invariable result is traffic congestion.

According to several studies, traffic congestion places a heavy toll on the nation's productivity, quality of life, and natural environment. Moreover, projections of population growth and unmet highway needs suggest the problem will continue to worsen. The Texas Transportation Institute's 2007 Urban Mobility Report calculates that 4.2 billion lost hours and 2.9 billion gallons of wasted fuel directly result from traffic congestion and result in an annual drain of $78 billion on the U.S. economy. Estimates also suggest that vehicle transportation contributes to 25% of the nation's greenhouse gasses.[vi] The externalities associated with traffic congestion extend beyond lost economic opportunity and environmental damage. Congestion increases the time necessary to commute to and from work, results in more sedentary activity, and reduces free time that can be spent with family and friends. Repeated exposure to traffic congestion can elevate drivers' stress levels, which is associated with negative health outcomes. Congested roads also create poor health conditions for residents living near major traffic arteries. They also create unsafe and unpleasant conditions for pedestrians.[vii]

CAUSES AND IMPLICATIONS OF TRAFFIC CONGESTION

At a basic level, traffic congestion results from a mismatch between supply and demand: When the demand for roads exceeds supply, congestion results. Roads are designed to carry a specific number of vehicles, and when vehicle traffic exceeds that number then travel speeds decline. In severe cases, travel speeds slow to a standstill.

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i http://www.brookings.edu/opinions/2006/0630transportation_downs.aspx.

ii http://www.artba.org.

iii http://www.bts.gov/publications/transportation_statistics_annual_report/2003/html/chapter_02/travel_by_mode.html.

iv http://www.census.gov/ipc/www/usinterimproj/natprojtab01a.pdf.

v http://www.bts.gov/publications/bts_special_report/2007_10_03/html/figure_01.html.

vi http://mobility.tamu.edu/ums/media_information/press_release.stm.

vii http://www.med.nyu.edu/SBEHPS.

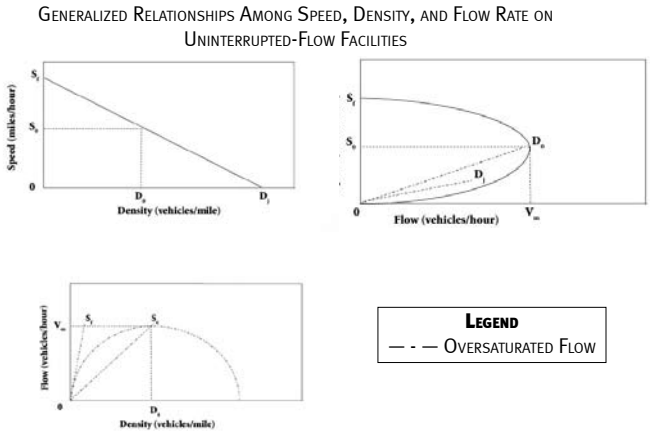

Figure 1.

Understanding Traffic Congestion: Speed, Density, and Flow. Beginning top left, as vehicle density increases, speed decreases. $\mathbf{S_0}$ and $\mathbf{D_0}$ refer to optimal speed and optimal density. Top right, vehicle flow equals 0 at two points: when there are no vehicles—density is zero and flow rate is zero—and when there are so many vehicles that speed equals zero and flow rate equals zero. Bottom left, as flow increases, density increases until the critical point ($\mathbf{S_0}$, $\mathbf{D_0}$) is reached. After this point, flow decreases as density increases. Maximum flow generally occurs between 35 and 50 m.p.h.
Source: Federal Highway Administration

However, not all congestion is undesirable. From a cost-benefit perspective, building a road that received too little traffic would be uneconomical. Traffic engineers classify the quality of travel conditions on roads by "level of service," a rating system that describes the level of traffic density. The level of service ratings (LOS) range from LOS A (free flow conditions with very few cars) to LOS F (extremely congested conditions with too many cars). While the highest classification, LOS A, may be desirable for individual drivers, governments and engineers attempt to design roads that will operate at LOS C. At LOS C, speeds are at or near free flow speeds but the freedom to move within the traffic stream and change lanes is noticeably restricted.[viii] For engineers, LOS C means that roads remain safely below but close to capacity, and traffic maintains the posted speed.[ix] Meanwhile, governments paying for the road receive a positive return on their investment because roads are used at their optimal level.

Roads designed for level of service C leave relatively little room for increased roadway demand before they reach LOS E, an outcome undesirable to road engineers. At LOS E, flow is irregular and speeds rarely reach the posted speed limit. In the absence of additional capacity to meet demand for roads, the result is a deteriorating level of service and worsening traffic congestion. Luckily, there are ways to improve traffic congestion that do not focus explicitly on new road construction.

Public transit is an obvious alternative to road construction to combat traffic congestion.[x] A 40-foot bus, the conventional bus size operated by transit agencies in the United States, comfortably handles 50 passengers. 60-foot articulated buses, also called accordion buses, can comfortably handle 80 passengers.[xi] Considering that average automobile ridership in the United States is 1.22 persons per vehicle[xii], one fully loaded articulated bus would remove 65 vehicles from the road. In other words, ten articulated buses carry the same number of passengers as approximately 650 automobiles. Thus, buses have the potential to increase roads' carrying capacity (of people, not cars) significantly.

Alternatively, subways, light rail, and commuter rail systems also could potentially decrease demand on road networks. Unfortunately, rail systems are costly, take years to build, and are subject to federal rules and regulations that can severely delay projects. More importantly, adequate ridership and operating revenue for these forms of transit rely on threshold residential densities. If transit services lack a relatively concentrated ridership base, rail systems face an uphill climb to meet the population's mobility needs. Sadly, low residential density and dispersed settlement preclude the feasibility of transit services in many areas of the United States.

Negative trends in community perception of public transportation have created significant hurdles for mass transit systems. While the automobile dominates American society today, virtually every major U.S. city had an extensive streetcar system during the early half of the 20th century. Even Los Angeles and Detroit—cities that evoke strong images of an automobile-oriented society—had heavily utilized streetcar systems before 1950. After World War II, white flight from city centers to the suburbs resulted in a depletion of the municipal tax base as well as the concentration of poor and minority populations within city limits. Subsidized urban highway construction facilitated flight to the suburbs. During the years that followed, transit systems were neglected, ridership

[viii] *Highway Capacity Manual* Transportation Research Board, National Research Council, Washington D.C.: 2000.

[ix] John D. Edwards, ed. *Transportation Planning Handbook.* (Washington DC: Institute of Transportation Engineers: 1999) pp.208-215

[x] http://www.bts.gov/publications/transportation_statistics_annual_report/2003/html/chapter_02/travel_by_mode.html

[xi] http://www.newflyer.com/index/cms-filesystem-action?file=06-10_hybrid.pdf

[xii] http://www.nctr.usf.edu/clearinghouse/acs2005VTR.htm

declined, and urban mass transit conjured associations with the urban poor who cold not afford automobiles. Transit's ability to combat traffic congestion is plagued by a history of metropolitan decentralization and low population densities, a car-centric transportation culture, and negative associations with transit as a travel mode primarily for the urban poor.[xiii]

Given these constraints, the United States needs to seek a system for managing its road network efficiently, equitably, and sustainably while minimizing traffic congestion.

AN ECONOMIC ARGUMENT FOR ROAD OWNERSHIP AND MANAGEMENT

Economic theory considers roads profit-making assets, but roads in the United States are publicly built and maintained, and thus remain largely outside the market economy.[xiv] The notion that roads are a public sector responsibility is highly logical, since roads are vital to the economy and security of the nation. A disruption on a major highway would prevent the movement of essential goods and compromise the ability of public safety and security personnel to respond to major incidents. Given a strong public interest in the quality and functionality of roads, governments are the most appropriate actors for the maintenance and management of roads.

THE MARKET APPROACH TO THE PROVISION AND MANAGEMENT OF ROADS RAISES IMPORTANT QUESTIONS: IS EVERYONE ENTITLED TO UNLIMITED USE OF ROADS? SHOULD USERS BE ALLOWED TO "DEMAND" ALL THEY WANT.

Economic arguments about roads, however, challenge the public ownership model. Economic theories posit that roads are a good and that like most other goods, roads are subject to market forces. When demand for roads outstrips available supply, economic arguments suggest corrective action to bring road use closer to a market equilibrium.

The market approach to the provision and management of roads raises important questions: Is everyone entitled to unlimited use of roads? Should users be allowed to "demand" all they want in the absence of an instrument that maximizes throughput and minimizes the negative externalities associated with traffic congestion? The longstanding U.S. tradition of publicly managing roads has caused citizens to feel a sense of entitlement to free use of roads and to question the appropriate role of the market in the public sphere. A switch to a market based approach might appear grossly un-American.

Nevertheless serious problems with the existing funding, management, and politics of roads suggest a shift to market-oriented principles could be beneficial. Major criticisms of the public ownership model are outlined below:[xv]

First, roads exist outside of the economy and are unresponsive to consumer needs. In the provision of any other good, manufacturers respond to fluctuations in demand by altering the quantity of the good produced. This leads to a corresponding shift in the price of the good. Roads exhibit none of these characteristics. Users consume as much as they want at little or no cost.

Second, government has a virtual monopoly on the provision of roads. This government led "command economy" exhibits characteristics of dysfunctional markets such as congestion, queuing, deterioration, and waste.

Third, the government has no incentive to improve road management, construction, or collection methods. If private players could enter the market, these players likely would find ways reduce construction costs, speed up delivery of projects, improve collection, and maximize throughput. There would be competition among firms to provide the lowest costs, a natural economic consequence that could ensure that consumers do not pay more than they are willing for road use. Lower overall costs combined with improved efficiency would yield more benefit to the national economy than the current government provision of roads.

Fourth, the funding of roads is highly inequitable. Road users contribute to federal and state road costs through gas taxes and registration fees. States often divert gas tax and registration fees to other state programs that bear little relation to road use. Federal gas tax revenues are amassed in a Highway Trust Fund, a pool of money that can be used for highway construction throughout the United States. States contribute proportional amounts to the Highway Trust Fund determined by population sizes and rates of gasoline usage. Currently, the disbursement of the Highway Trust Fund money is a political process and not a process based on need and factual analysis. Often, decisions to fund projects are the result of political rather than economic priorities. States with smaller populations

[xiii] *Taken for a Ride* (1996) Klein and Olsen. A PBS film

[xiv] Roth, Gabriel, "Why Involve the Public Sector in the Provision of Public Roads?" in *Street Smart: Competition Entrepreneurship and the Future of Roads* (New Brunswick, Transaction Publishers: 2006) p.3

[xv] Roth, Gabriel, "Why Involve the Public Sector in the Provision of Public Roads?" in Street Smart: Competition Entrepreneurship and the Future of Roads (New Brunswick, Transaction Publishers: 2006) pp. 11-18

and relatively low economic need gain at the expense of highly populated states with pressing economic needs.

For these reasons, the publicly owned and operated American road system has serious limitations. Lack of economic responsiveness, absence of economic incentive, and inequity of the decision making process under the current system all support the idea that market forces may alleviate congestion, operate roadways more efficiently, and potentially improve public safety.

PRICING OF ROADS

The market approach for roads only works with pricing structures that allocate a limited resource to those who are willing to pay for it. Logic suggests that consumers would pay more for better quality roads and less traffic congestion. Capitalist philosophy asserts that markets allocate goods based on purchasing power and create the invisible, desirable order of a functioning market. While markets can fail and can lead to socially undesirable outcomes, no one has determined whether the pricing of roads would yield such a market failure.

Though at first glance pricing of roads may appear inequitable, it actually helps realize ideas of a just society. Pricing would link payment to use. Many of the problems with the road system stem from the separation of payment and use. Presently, drivers often can use roads without limit, despite the expenses they pass on to other drivers, the environment, and the quality of the road. Use of the road system creates costs—such as opportunity cost of time for others drivers, impaired air quality, or wear and tear that eventually necessitates resurfacing of roads—that the current framework ignores.

Although drivers pay gas tax and vehicle and registration fees, these payments do not match the costs created by the road system, and the Highway Trust Fund has a predicted balance of $0 in 2009.[xvi] The inability of these payments to sustain the Highway Trust Fund indicates that drivers have not paid their fair share of the costs associated with highway construction and maintenance.[xvii] (Closer inspection might also indicate that gas taxes and auto fees are diverted to non-roadway expenses.) The zero balance of the fund understates the underpayment of drivers, because the Highway Trust Fund pays only for construction and maintenance, not costs borne by society at large. The lack of funding for urban highways, and external costs associated with increasing congestion signal that the current payment for road use needs to be re-examined.

[xvi] http://www.gao.gov/new.items/d06572t.pdf

[xvii] Closer inspection might also indicate that gas taxes and auto fees are diverted to non-roadway expenses.

Discussion of market based road strategies must make an important distinction between different pricing mechanisms such as conventional road pricing and congestion pricing. Road pricing attempts to charge for road use. Ideally, the price should equal the marginal social cost of driving so that price equals cost and the market of road use approaches its equilibrium point.[xviii] This ideal differs from the current taxation methods because the amount of taxes paid is unrelated to the costs of road use. Ultimately, the absence of a link between use and payment creates a divide between funding needs and available revenue for road systems. The impending bankruptcy of the Highway Trust Fund proves the severity of this mismatch. Congestion pricing is a subcategory of road pricing in which the fee for using a road increases in the presence of traffic and decreases when there is little traffic. Examples of road pricing, congestion pricing, and variable pricing follow in the next section.

Using road pricing to finance construction and maintenance of roads would be a radical departure from current funding methods of taxation and user fees. Since current transportation taxes are levied in proportion to resources used, solving our road capacity problems is not as simple as raising taxes by some marginal rate. Consider that a 100-mile trip in a hybrid vehicle might result in the same overall gas tax revenue as a 50-mile journey in a sport utility vehicle. This scenario is inequitable because the gas tax is used to fund roads, and the hybrid used more road. Using less gas per mile traveled is undoubtedly a better choice for the environment, but under this system wherein taxes for road construction do not reflect road use, revenue raised will never meet funding needs. Road pricing is a mechanism to help close this gap.

HISTORY OF CONGESTION PRICING

When Columbia professor William Vickery introduced the concept of congestion pricing in the 1950s, technological shortcomings prevented the implementation of his idea. The idea of charging drivers was not new, as tolling in United States was documented as early as the late 18th century.[xix] Tolling, however, has the potential to exacerbate congestion in heavily trafficked areas by causing queuing at tollbooths. In 1950, implementing Vickery's plan without major disruptions to traffic flow was difficult. Today, Vickery's idea is reality and technologies exist that make

[xviii] Brian Taylor, "Putting a Price on Mobility: Cars and Contradictions in Planning, " *Journal of the American Planning Association.* Chicago: Summer 2006. Vol. 72 Iss. 3.

[xix] Semmens, John, "De-Socializing the Roads" in *Street Smart: Competition Entrepreneurship and the Future of Roads* (New Brunswick, Transaction Publishers: 2006) p.36

tolling relatively easy for both drivers and toll operators. Vehicles can be equipped with low cost transponders that communicate with a toll road's computer system to record a transaction. Facilities in Atlanta, Dallas, Denver, Houston, Miami, New Orleans, New York, New Jersey, Illinois, and Oklahoma use this automated technology for traditional toll collection.

Cities throughout the world, notably Singapore and Stockholm, have used the automated toll technology described above to implement congestion pricing. Congestion pricing is a method of road pricing in which drivers must pay a fee to enter an area with severe traffic congestion. Theoretically, the imposition of this fee can decrease traffic levels in the target area. Drivers who place a high value on traveling in the area will opt to pay the fee, while others will opt not to drive to the area because the new fee is higher than the value they place on traveling in the area. Individuals who would otherwise have driven to the "cordon zone," or the congestion pricing area, but elect not to pay the congestion pricing fee can still access the area, although they must use an alternative mode of travel.

Although relatively few cities have implemented congestion pricing, where it is in use, it has reduced congestion. This raises an important caveat about congestion pricing. Implementers might have motives beyond a decrease in auto congestion. Congestion pricing can also be used as a revenue raising mechanism, with a secondary focus on congestion relief. Not surprisingly, when congestion relief comes behind revenue generation on the list of priorities, the free flow conditions Vickery envisioned may or may not appear.

Case Study: Congestion Pricing in New York vs. London[xx, xxi]

The proposed congestion pricing scheme for New York City, outlined in Mayor Bloomberg's policy document for sustainable development, PlaNYC, is an example of how difficult and nuanced formulation of congestion pricing plans can be. The plan proposes to charge automobiles from outside the congestion zone $8, automobiles from within the zone $4, and trucks $21 to travel within the congestion zone. The planned zone is Manhattan south of 86th Street excluding the West Side Highway and FDR Drive. Taxis, emergency vehicles, and vehicles with handicapped license plates would be exempt from the charge. Cars that pay tolls over bridges to enter Manhattan would pay only the difference between the congestion fee and the toll price.

Absent from New York's plan are pre-defined congestion reduction goals. Rather than setting targets for congestion reduction, the New York City plan says that the City would like to see a reduction in congestion and would like to raise money for mass transportation. For example, the city is advocating for a relatively arbitrary congestion charge of $8. One commentator mentioned that the fee is what it is because $8 is not $10. In other words, the psychological impact of a double-digit number would have killed the plan. Nevertheless, a strong case for congestion pricing remains. According to estimates, traffic congestion in the Central Business District (CBD) is responsible for billions of dollars in lost economic output and tens of thousands of lost jobs. Equally important, revenue raised via congestion pricing would go toward much needed mass transportation improvements that will benefit from less traffic on city roads.

New York's plan reflects the shortcomings of a government-led, as opposed to market-led, transportation decision-making process. The plan lacks research and data about drivers' behaviors including how much drivers would be willing to pay to drive into Manhattan during peak hours. The New York City government also lacks knowledge of how residents would respond to a different sets of pricing and mobility choices. This compromises the effectiveness of the plan because the congestion charges are arbitrary and there is little to suggest that the plan was the result of a coordinated research and policy analysis. Had such an analysis occurred, the New York City government might have benefited from wider public acceptance of the plan.

London's plan differs from New York's in the following ways: London officials conducted analyses on travel behavior and travel patterns, identified congestion reduction targets, and raised the congestion fee correspondingly. Congestion pricing improved traffic congestion to meet defined targets, and as a result central London has experienced economic benefits. Improving traffic congestion has improved accessibility to central London, which has been associated with increased retail transactions as well as higher land values.[xxii]

Case Study: Variable Toll Pricing of SR-91 Lanes, San Diego California[xxiii]

The California State Legislature's interest in attracting private capital to help with new highway construction resulted in State Route 91 Lanes (SR-91). After California passed a law allowing for the private development and construction of state highway facilities, performed with state oversight, a consortium of three companies provided

[xx] http://www.nyc.gov/html/planyc2030/html/plan/plan.shtml

[xxi] Sustainable NYC Discussion Series, November 30, 2007, NYU Wagner, New York, New York

[xxii] Sustainable NYC Discussion Series, November 30, 2007, NYU Wagner, New York, New York.

[xxiii] Sullivan, C., Edward, "Hot Lanes in Southern California" in *Street Smart: Competition Entrepreneurship and the Future of Roads* (New Brunswick, Transaction Publishers: 2006) pp 189 -223.

the necessary capital for a much needed project. The inclusion of private capital drastically expedited the project because the California state government would have needed five years to raise the funds through normal financing methods. In 2003, the consortium sold SR-91 to the Orange County Transportation Authority, and the facility's current operation is evidence that government can effectively manage market based road programs after initial private sector help.

SR-91 is the country's first example of variable toll pricing, which charges higher tolls during periods of peak demand and lower tolls during the off-peak periods. The tolled portion of SR-91 includes two lanes in each direction. SR-91 also includes five lanes in each direction on either side of the tolled lanes for drivers wishing to drive in un-tolled, regular traffic. On the tolled lanes, vehicles with three or more passengers receive a 50% discount, an arrangement that private toll operators do not particularly care for, but a requirement that state governments can write into contracts with developers of toll facilities. In this regard, SR-91 proves that governments can use market-based mechanisms and still achieve public policy goals and address social concerns. For example, governments can put a cap on the frequency of toll increases at private facilities.

According to observed patterns of daily demand, SR-91 determines a toll schedule that it provides to the public. Since its opening day in 1996, SR-91 has increased the general toll roughly once per year. The technology for dynamic pricing—where the rate changes in real time to adapt to changes in demand—exists, and is used by another California road pricing project. Variable pricing, also called "value pricing," is unique because it can achieve optimal throughput conditions at all times. Toll managers can make the promise of and deliver uncongested conditions on their roads because as traffic increases, the value pricing system increases the toll to a level that deters enough drivers from using the toll lanes so that traffic always flows smoothly through the toll lanes.

Figure 2.

Toll data from SR-91 website.

	Sun	M	Tu	W	Th	F	Sat
Midnight	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20
1 a.m.	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20
2 a.m.	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20
3 a.m.	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20
4 a.m.	$1.20	$2.25	$2.25	$2.25	$2.25	$2.25	$1.20
5 a.m.	$1.20	$3.70	$3.70	$3.70	$3.70	$3.55	$1.20
6 a.m.	$1.20	$3.80	$3.80	$3.80	$3.80	$3.70	$1.20
7 a.m.	$1.20	$4.20	$4.20	$4.20	$4.20	$4.10	$1.20
8 a.m.	$1.65	$3.80	$3.80	$3.80	$3.80	$3.70	$1.90
9 a.m.	$1.65	$3.05	$3.05	$3.05	$3.05	$3.05	$2.35
10 a.m.	$2.35	$1.90	$1.90	$1.90	$1.90	$1.90	$2.35
11 a.m.	$2.35	$1.90	$1.90	$1.90	$1.90	$1.90	$2.70
Noon	$2.35	$1.90	$1.90	$1.90	$1.90	$1.90	$2.70
1 p.m.	$2.70	$1.90	$1.90	$1.90	$1.90	$1.90	$2.70
2 p.m.	$2.70	$1.90	$1.90	$1.90	$1.90	$1.90	$2.70
3 p.m.	$2.70	$1.90	$1.90	$1.90	$1.90	$2.35	$2.70
4 p.m.	$2.85	$1.90	$1.90	$1.90	$1.90	$2.35	$2.85
5 p.m.	$2.85	$1.90	$1.90	$1.90	$1.90	$2.35	$2.85
6 p.m.	$2.85	$1.90	$1.90	$1.90	$1.90	$2.80	$2.35
7 p.m.	$2.35	$1.20	$1.20	$1.20	$1.90	$1.90	$1.90
8 p.m.	$2.35	$1.20	$1.20	$1.20	$1.20	$1.20	$1.90
9 p.m.	$2.35	$1.20	$1.20	$1.20	$1.20	$1.20	$1.90
10 p.m.	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20
11 p.m.	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20

	Sun	M	Tu	W	Th	F	Sat
Midnight	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20
1 a.m.	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20
2 a.m.	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20
3 a.m.	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20
4 a.m.	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20
5 a.m.	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20
6 a.m.	$1.20	$1.90	$1.90	$1.90	$1.90	$1.90	$1.20
7 a.m.	$1.20	$1.90	$1.90	$1.90	$1.90	$1.90	$1.20
8 a.m.	$1.55	$1.90	$1.90	$1.90	$1.90	$1.90	$1.90
9 a.m.	$1.55	$1.90	$1.90	$1.90	$1.90	$1.90	$1.90
10 a.m.	$2.35	$1.90	$1.90	$1.90	$1.90	$1.90	$2.35
11 a.m.	$2.35	$1.90	$1.90	$1.90	$1.90	$1.90	$2.35
Noon	$2.80	$1.90	$1.90	$1.90	$1.90	$2.90	$2.80
1 p.m.	$2.80	$2.65	$2.65	$2.65	$2.90	$4.50	$2.80
2 p.m.	$2.35	$3.80	$3.80	$3.80	$3.90	$5.10	$2.80
3 p.m.	$2.35	$4.10	$4.70	$5.95	$5.70	$10.00	$2.80
4 p.m.	$2.35	$6.85	$8.00	$8.50	$9.25	$9.50	$2.80
5 p.m.	$2.35	$6.65	$8.50	$8.50	$9.25	$8.00	$2.80
6 p.m.	$2.35	$4.10	$5.45	$5.75	$5.75	$4.90	$2.35
7 p.m.	$2.35	$2.90	$2.90	$2.90	$4.15	$4.55	$1.90
8 p.m.	$2.35	$1.90	$1.90	$1.90	$2.65	$4.15	$1.90
9 p.m.	$1.90	$1.90	$1.90	$1.90	$1.90	$2.65	$1.90
10 p.m.	$1.20	$1.20	$1.20	$1.20	$1.20	$1.90	$1.20
11 p.m.	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20	$1.20

Case Study: Road Pricing for German Trucks[xxiv]

In 1999 the German government decided to pursue distance related tolling on heavy trucks over 12 tons (for comparison purposes, the average weight of a US automobile in the year 2000 was 1.5 tons). The program began operation in 2005 with a fee of €12.4 cents per kilometer. The fee is not arbitrary but reflects the internal and direct costs of trucking as calculated at the request of a special European Union directive. Distance-related tolling, unlike a flat fee, accounts for the costs imposed by individual trucks. In Germany, a truck traveling 100 kilometers pays one-fifth of the fee that a truck traveling 500 kilometers pays. Computerized on-board units in trucks communicate with a satellite-based GPS system that calculates toll charges. Toll revenues fund transportation infrastructure, half for highways and half for federal railways and waterways.

Germany has not extended the program to automobiles, perhaps because heavy trucks are responsible for a disproportionate amount of "wear and tear" damage on roads. Moreover, gasoline taxes and registration fees are considerably higher in Europe than in the United States, and the relatively compact urban form of German cities, higher population densities, and excellent public transit likely lead to less of a reliance on the road network and subsequently, less traffic congestion.

The Effects of Road Pricing on Social Equity and Our Understanding of the Public Good

In theory, road pricing is an ideal choice for the management and funding of roads. It provides a direct link between use and payment and could help address a root cause of road under-funding and traffic congestion. Broader use of market strategies and the inclusion of the private sector in the construction and maintenance of roads appears to speed up project delivery, relieve congestion, and respond to consumer needs based on economic and not political priority.

Nevertheless, road pricing conflicts with certain realities in the United States. After the introduction of the mass-produced automobile, America's economic, cultural, and physical landscapes came to revolve around

[xxiv] http://ncppp.org/resources/papers/FHWAinternationalcase606.pdf.

it. Fuel costs and road fees historically have been low in the United States compared to other developed countries, a condition that has facilitated car ownership for millions.[xxv] Furthermore, municipal zoning regulations have encouraged highly segregated land uses that make automobile ownership virtually necessary for participation in economic activity. For these reasons, the United States has evolved into a car-centric society. In fact, the term "transportation disadvantaged" has been applied to those who for reasons of income, age, or disability cannot drive a car.[xxvi]

In a society that revolves around the automobile, charging for road use has serious implications. With inexpensive housing located far away from city centers and an overall lack of public transit, charging a poor person based on the amount he travels by car when he has no other mobility alternatives may create equity concerns.

Beyond spatial concerns, talk of road pricing generates concern over its regressive nature, namely that a flat fee for quantity of road used would hurt the poor proportionally worse than the wealthy.[xxvii] Most states eliminated sales taxes on food for a similar reason.[xxviii] Governments decided that food was an essential good and that taxing it would disproportionately—and unfairly—affect the poor. This contrasts with general sales taxes that apply to non-essential goods like stereos and computers.

Some might argue that taxing people for something as essential as road use is unfair. Roads, they would claim, enable economic opportunity, and restricting access to opportunity is unjust.

Public discontent with road pricing programs might be understandable when cars are the sole mobility option. Where there are viable transit, bicycle, and walking options, however, assuming that all individuals are entitled to as much automobile travel as they like is a mistake. Freedom of movement is an inherent human right, but this freedom is not synonymous with unlimited automobile travel. In other words, governments should not be able to bar movement from one area of a city to another, but they should be able to determine whether movement should occur by one mode of transportation or many. Governments should base this decision on economic, environmental, and social considerations.

Market-based road management strategies influence both social equity and the public good with sometimes contradictory results. On one hand, persuasive arguments for treating roads as profit-making assets exist. Adoption of market strategies could result in higher throughput, less delay, improved accessibility, higher land values, and more revenue for road construction. On the other hand, roads controlled by the private market could become too expensive for certain road users with few mobility options.

In the end, there is no one-size-fits-all answer for road management. While the right to freedom of movement includes the use of roads and automobiles, any successful fulfillment of mobility needs must include other transportation options. Unless non-car mobility options are available, implementing certain market approaches to road management may be unfavorable. A New York-style congestion pricing scheme would not be appropriate in the absence of adequate mass transit. Restricting access to areas of a city via automobile when access is practicably impossible without one seems unfair. Areas that lack rail transit and adequate bus service should consider SR-91-style high occupancy toll (HOT) lanes. With a HOT system, everyone has the option of driving, however those willing to pay more can drive in uncongested conditions while those unwilling or unable to pay drive in regular traffic conditions.

ROAD PRICING'S EFFECT ON THE BUILT ENVIRONMENT

Estimates predict that in 2025 half of the built environment in the United States will have been built since 2000.[xxix] Planners and politicians must recognize that one mechanism to prevent urban sprawl, pollution, and reliance on the automobile is to make people pay for the road service used. Advocating such a change will be difficult in the context of America's historical metropolitan decentralization, ample suburban open space, and reserves of prime agricultural land beyond suburban boundaries.[xxx] Americans increasingly look to the urban fringes for cheap housing and this trend, aided by the free use of roads, is likely to continue.

Road pricing is unlikely to influence urban form substantially in areas that are already built out (such as New York City), but relatively "un-built" areas of the country poised for population growth, including several Sunbelt locations, might embrace road pricing as a mechanism to promote more compact development.

[xxv] Susan Handy, "The Road Less Driven" *Journal of the American Planning Association*. Chicago: Summer 2006. Vol 72, Iss.3.

[xxvi] http://www.gao.gov/new.items/d0744.pdf

[xxvii] Interim Report: An Inquiry into Congestion Pricing as Proposed in PlaNYC 2030 and S.6068, Assemblyman Richard L. Brodsky, Chairman, Committee on Corporations, Authorities, and Commissions, July 9, 2007.

[xxviii] http://www.taxadmin.org/FTA/rate/sales.html

[xxix] Arthur C Nelson and Emil Malizia. "Leadership in a New Era/ Comment on "Planning Leadership in a New Era" *Journal of the American Planning Association*. Chicago: Autumn 2006. Vol. 72, Iss. 4.

[xxx] Peter Gordon and Harry Richardson. "Are Compact Cities a Desirable Planning Goal?" *Journal of the American Planning Association*. Chicago: Winter 1997. Vol 63, Iss. 1.

Higher costs associated with transportation create an economic disincentive to settle far away form central locations. Road pricing might create pressure for upward rather than outward growth. Realistically, pricing schemes are unlikely to be introduced into areas absent chronic congestion, and in these areas land use regulation may be a better choice to achieve more compact urban form. Unfortunately, U.S. metropolitan areas are characterized by fragmented local governments, each with the authority to enact its own vision for land use regulation within its borders. This makes land use regulation a theoretically valid but practically unreliable method for influencing urban form in a coordinated manner over metropolitan regions.

London style congestion pricing, SR-91-style variable pricing, and German pay-per mile pricing each have the ability to improve the urban. Consider a congestion fee. To maintain accessibility to the congestion zone, improvements to transit service must be made. As transit service improves, people may choose to settle around transit lines and continue using transit, which will help pump money into transit systems, take cars off the road, reduce pollution, and ultimately increase metropolitan accessibility. The results would benefit the city's overall transportation network and improve economic performance.

The land development benefits of SR-91-style variable pricing might be less robust than pay-per-mile road pricing or congestion pricing. Variable pricing provides no overt incentives for compact development because it does not necessarily reduce demand for driving—drivers can continue to drive in regular traffic conditions. Variable pricing in HOT lanes is a market-based solution that improves traffic management by allowing individuals to "buy their way out of congestion," a concept sometimes derided as elitist. "Lexus lanes" is a common epithet for these lanes. However, closer inspection shows the lanes are not necessarily elitist. Under different circumstances, road users place different values on their time. For example, a single mother with a child in daycare might consider a $5 toll worth paying on a day she is running late for work.[xxxi] Public transit vehicles can use tolled lanes to guarantee that buses always operate on uncongested right-of-ways. Transit vehicles could be exempt from any charges per a contract clause. In fact, the Federal Transit Administration supports Bus Rapid Transit service on variably priced lanes, recognizing that this model maximizes transportation investments.[xxxii] Variably priced lanes could also be used in conjunction with transit systems to cluster development around Bus Rapid Transit stations. This might enable the transformation of transit-oriented development—or the clustering of residential and commercial development around transit nodes—from a predominantly rail-centered phenomenon to one that includes bus transit. Uncongested road conditions on tolled lanes would effectively create a "subway on the street" using high-capacity and high-quality buses. Such a scenario would increase political support for funding transit systems and reduce roadway demand.

CONCLUDING THOUGHTS

Cars and roads confer enormous benefit to Americans by fulfilling essential mobility needs and providing access to economic opportunity. However, as population and personal wealth continue to grow, over reliance on the automobile and supply side solutions to traffic congestion are neither tenable nor sustainable options. America's roadway crisis will continue to be a tragedy of the commons unless demand for this finite resource is re-organized.

Free market approaches to road management are potential solutions to improve greatly the efficiency of roads. Throughout the world, examples of market-based strategies demonstrate that they can reduce demand, raise revenue, and shift mobility demands to other transportation modes, resulting in a more efficient transportation network. Technologies for quick and reliable implementation of road pricing are available and easy to use.

The free market approach also has the potential to create negative social outcomes by restricting certain groups from using roads. To avoid inequity, governments must supply quality and affordable mobility alternatives to automobile travel so that no citizen is denied access to specific areas of cities or regions.

In the end, road pricing is more than a demand management tool. Road pricing and market-based road management strategies hold the promise of transforming transportation decision-making from a political process to a process based on economic and social need. Governments will have an important role to play should such a transformation occur. While market strategies are tools to help achieve public policies they must not drive them. Fortunately, as these case studies show, the goal of a more efficient transportation network is attainable.

[xxxi] Sullivan, C., Edward, "Hot Lanes in Southern California" in *Street Smart: Competition Entrepreneurship and the Future of Roads* (New Brunswick, Transaction Publishers: 2006) pp 189 -223.

[xxxii] Sullivan, C., Edward, "Hot Lanes in Southern California" in *Street Smart: Competition Entrepreneurship and the Future of Roads* (New Brunswick, Transaction Publishers: 2006) pp 189 -223.

ENVIRONMENTAL PROTECTION

UNEP's GRASP Programme
Saving the Great Apes and Protecting Biodiversity in the War-Torn Region of The Democratic Republic of Congo

by Dea R. Dennison

ABSTRACT

The United Nations Environment Programme (UNEP) is the most significant international body attempting to conserve and protect the world's rich supply of genetic resources, doing so by integrating relevant issues and embracing an interdisciplinary approach in their work. This paper examines the role that the UNEP can play in 21st century environmental protection. Specifically, the case of the Great Apes in the Democratic Republic of the Congo illustrates how effective support and functionality of UNEP can provide sustainable protection to places that require official protection.

One of the most significant challenges facing the world community in the 21st century is the rapid loss of global biological diversity. Because the loss of biodiversity influences other global concerns such as poverty, sustainable development, international conflicts, and global security, resolving this issue requires a multi-disciplinary approach. The United Nations Environment Programme (UNEP) is the most significant international body attempting to conserve and protect the world's rich supply of genetic resources, which it does by integrating relevant issues into its work and embracing an interdisciplinary approach. UNEP's programming is vast in both scope and thematic coverage, including initiatives on the arts and environment, biodiversity, biosafety, conflict and disasters, education and training, energy, fresh water, governance, urban issues, poverty, indigenous people, and sports and the environment. As such, it is the only program in the world's governance system mandated to *protect* the environment while also attempting to mitigate poverty through sustainable development. The Great Apes Survival Project (GRASP), a UNEP program designed to protect great ape populations and their biologically diverse habitats and to promote sustainable development to improve the lives of their human counterparts, embodies both aspects of the program's mission. While UNEP has implemented the GRASP project in several countries, this paper will specifically explore the project in Africa's Democratic Republic of Congo (DRC).

LOSS OF BIODIVERSITY AND SCARCITY OF NATURAL RESOURCES ARE OFTEN SIGNIFICANT CAUSES OF ARMED CONFLICTS, PARTICULARLY IN THE DEVELOPING WORLD WHERE INDIVIDUALS OFTEN RELY ON FINITE RESOURCES FOR SURVIVAL.

Loss of biodiversity and scarcity of natural resources are often significant causes of and catalysts for armed conflicts, particularly in the developing world where individuals often rely on these finite resources for survival. One country marked by this complicated relationship between people and the natural environment is the DRC. If properly and legally regulated, the wealth of natural resources in the DRC has the potential to enhance the country's economic growth and stability, as well as to improve the daily lives of individuals and communities. Instead, corrupt government officials, neighboring states, private companies, and rebel factions have exploited and plundered the country's natural resources, preventing the majority of the DRC's citizens from profiting from the country's wealth.[i]

The DRC's terrain consists of pristine tropical rainforests, plateaus, mountains, savannas, and dense grasslands, all allowing the country to lead the African continent in biological diversity. It is home to three of the four species of great apes—chimpanzees, bonobos, and gorillas. Unfortunately, the DRC is also one of the most politically unstable, conflict-ridden, and impoverished countries in the world. This threatens the survival of the great apes, the country's precious biological diversity, and its vast supply of natural resources. In turn, environmental degradation such as soil erosion, water pollution, deforestation, and especially the negative effects of the mining industry contribute directly and indirectly to the violent conflicts and political tensions in the region. The struggle for access to and control of DRC's natural resources has been cited as a source of perpetuating national and transnational violence and warfare in the region.[ii]

In response to the country's economic, political, and environmental instability, UNEP implemented the Great Apes Survival Project (GRASP) in the region in the fall of 2005. The program is designed to protect the charismatic and endangered primates and the precious habitat in which they live, while simultaneously taking into consideration the survival and economic needs of the DRC's residents. However, the challenges facing the Congolese people and the GRASP program are daunting and complex. The GRASP program in DRC provides a glimpse into the convoluted challenges UNEP faces in preserving and protecting the world's biodiversity and highlights ways in which the program struggles and how UNEP could strengthen it.

Academics, critics, and advocates have discussed several restructuring scenarios for UNEP; This analysis explores two of these possibilities and considers them in the context of the GRASP program. One possible adaptation is that UNEP streamline its activities and concentrate on a few specific areas. These areas would include environmental analysis, negotiation management, and international coordination and catalysis. The second option is to convert UNEP into a World Environment Organization (WEO), by restructuring the entire program and expanding it into a specialized agency with, perhaps,

[i] "The State vs. the people: Governance, mining and the transitional regime in the Democratic Republic of Congo" (Amsterdam: Netherlands Institute for Southern Africa, 2006) 6.

[ii] http://stratfor.com/podcast/drc_peace_deal_provides_few_assurances

a global environmental representative.[iii] This paper analyzes which option would make UNEP more effective in protecting the world's natural environment by using UNEP's GRASP project in the DRC as a case study and ultimately argues that UNEP streamline its functions in order to best carry out its mission.

BACKGROUND ON UNEP AND GRASP

The United Nations Environment Programme (UNEP) and its Limitations

UNEP, the first international organization dedicated to environmental protection, plays a leading role in confronting problems surrounding biodiversity. It serves as a catalyst for international environmental cooperation and is responsible for collecting and dispersing information on an international level. It has a 58-member governing council that makes recommendations and suggests standards. More importantly, UNEP initiates discussions and develops international laws and treaties regarding environmental issues. In addition, it has also implemented three important Multilateral Environmental Agreements (MEAs) -- the Convention on Biological Diversity (CBD), the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), and the Ramsar Convention on Wetlands of International Importance of 1971. All share the common goal of protecting the earth's biological diversity and have garnered wide international support.[iv]

While UNEP plays a critical role in protecting the planet's ecological health and implementing international agreements and regulations, it is limited in its abilities and faces serious challenges to carrying out its mission. Among these challenges is UNEP's designation as a *programme* rather than a *specialized agency*. Ultimately, this means UNEP cannot operate independently since its budget comprises voluntary contributions from member states rather than mandatory assessment contributions. As a result, the program consistently faces financial uncertainty, including increasing budget shortfalls in recent years. In addition, each of UNEP's myriad areas of work includes many embedded layers of complexity, which makes shaping, managing, and coordinating all of its goals difficult for the program, particularly with a limited and inadequate budget.[v]

Additionally, UNEP is very broad in scope and competes for relevancy and donations with other programs within the UN, such as the United Nations Development Programme (UNDP) and the Commission on Sustainable Development (CSD). Sustainable development projects are increasingly significant to the international community as they aim to mitigate poverty, improve livelihoods, and protect the natural environment. As a result, these other UN programs have challenged UNEP's ability to lead and play a unique role in environmental affairs. However, the UN Conference on Environment and Development in 1992 reinforced the importance of UNEP by conferring it with the lead responsibility to develop international environmental law.[vi] If UNEP redirected and concentrated its limited resources into negotiating, developing, and implementing national and international environmental laws, the program would inherently become specialized and maintain its significance and relevancy on the world stage.

UNEP Great Apes Survival Project (GRASP)

In May 2001, UNEP formed alliances with other leading environmental organizations and launched the comprehensive and ambitious GRASP program to help Africa protect its biodiversity, alleviate poverty, and improve the lives of its people. While the program's primary intention is to lift the threat of extinction faced by gorillas, chimpanzees, bonobos, and orangutans, its secondary goals include protecting the biodiversity of the area and improving the lives of the local residents. Specifically, the goal of the program is "to conserve viable populations of great apes and habitat, forested tropical ecosystems that provide important services to humanity, wherever they exist, through pro-poor conservation and sustainable development strategies." The program is also designed to relieve threats faced by other animals, birds, and plants that share forest habitat with the great apes.[vii] UNEP believes that by conserving the primate populations and their habitat, it can simultaneously protect the livelihoods of many people who rely on the forests for

UNEP BELIEVES THAT BY CONSERVING THE PRIMATE POPULATIONS AND THEIR HABITAT, IT CAN SIMULTANEOUSLY PROTECT THE LIVELIHOODS OF MANY PEOPLE WHO RELY ON THE FORESTS FOR FOOD, CLEAN WATER, AND SHELTER.

[iii] David L Downie and Marc A. Levy, "The UN Environment Programme at a turning point: Options for change." In *The Global Environment in the 21st Century: Prospects for International Cooperation*, Pamela Chasek, ed, (New York: United Nations University Press, 2000) 365.

[iv] *Economic Instruments in Biodiversity-Related Multilateral Environmental Agreements* (New York: UNEP, 2004) 19.

[v] Downie and Levy 356.

[vi] Downie and Levy 358.

[vii] http://www.unep.org/GRASP/.

food, clean water, and shelter. GRASP's other objectives include collecting data, developing and enforcing legal frameworks, generating continual funding, educating and promoting awareness, and compensating indigenous peoples.

Another goal of GRASP is to create genuine partnerships among the many stakeholders in these ecosystems, particularly between UNEP and local communities. Wildlife has become an increasingly important facet of the relationships between African countries, industrialized nations, international NGOs, and businesses. In fact, there are currently more NGOs and wildlife conservation programs, and by proxy more multilateral financial aid, in Africa than ever before.[viii] Wildlife has provided economic benefits to African countries and communities in the form of eco-tourism, leading local communities to take an increasing interest in protecting animals and their habitats. Locally trained staff have become essential to primate conservation efforts. For instance, during recent outbreaks of war in both the DRC and Rwanda, local staff members maintained projects throughout the conflicts. This participation persisted despite lack of pay and direction from senior management and the substantial risk of physical harm.[ix]

The Democratic Republic of the Congo

BIODIVERSITY IN THE DRC

The Democratic Republic of the Congo is rich in mineral resources and is one of the wealthiest African countries in terms of wildlife and habitat resources. As a country that shares its border with nine other nation-states, its bountiful natural resources make it one of the most strategically and economically important countries in Africa. It has the third largest tropical forest range worldwide, and it constitutes almost half of the tropical rainforest ecosystem on the continent. Due to a low deforestation rate, the country has the highest species diversity on the entire African continent. It is also home to mountain and eastern lowland gorillas, chimpanzees, and bonobos (pygmy chimpanzees).[x] However, these populations are alarmingly low and highly endangered: estimates suggest that there are 370 gorillas in the DRC's Virunga National Park of only 700 mountain gorillas total worldwide in the wild.[xi] Recent wild chimpanzee populations have been estimated at 15,000[xii] in the DRC and 105,000 individuals worldwide.[xiii]

As the rich habitat in the DRC has significant economic potential and biological importance, the country has set aside much of the land for National Parks and Protected Areas to preserve the flora and fauna. Five of these protected sites, the Garumba, Kahuzi-Biega, Salonga, and Virunga National Parks, and the Okapi Wildlife Preserve, have international importance and are also designated as UN World Heritage Sites.[xiv] However, due to a massive influx of refugees, widespread corruption, and a lack of legal instruments, three of these sites are on endangered lists.[xv]

Because of the DRC's biological diversity, success of the GRASP program there will critically influence the success of the overall program. To ensure the protection of biodiversity and the great apes, UNEP formed a partnership with the Congolese government and other stakeholders on September 9, 2005, to develop the Kinshasa Declaration on the Great Apes. Signatories and stakeholders included 16 range states, six donor countries, 25 NGO partners, two MEAs, and two intergovernmental organizations. The Kinshasa Declaration set two ambitious goals: to reduce the rate of loss of great ape populations and habitats, and to secure the future of wild and subspecies by 2015.[xvi] While the agreement represents a significant step toward protecting great ape populations from extinction, it is not a legally binding instrument.

THREATS TO BIODIVERSITY IN THE DRC

Political instability, regional warfare, poaching, and the mining industry are among the primary threats to protecting the country's rich biodiversity. As a result of socio-economic unrest, regional conflict, and political corruption, a geo-political split has now left the western half of the country under control of President Kabila and the Congolese government and the eastern half under the control of multiple rebel factions.[xvii] One of the key conservation challenges facing UNEP's GRASP program in the region is to maintain political stability and neutralize tensions in the country. In addition to the DRC, several other countries in the region have been in conflict since the 1990s, including Uganda, Rwanda, Zimbabwe, and Angola. The signing of a peace agreement in January

[viii] Clark C. Gibson, *Politicians and Poachers*(Cambridge: Cambridge University Press,1999) 4.

[ix] Guy Cowlishaw and Robin Dunbar, *Primate Conservation Biology* (Chicago: The University of Chicago Press, 2000) 331.

[x] Ester Blom, et al, *Nature in War: Biodiversity Conservation During Conflicts* (Amsterdam: Netherlands Commission for International Nature Protection, 2000) 21.

[xi] www.iucn.org/en/news/archive/2007/08/15_gorilla_drc.htm.

[xii] www.janegoodall.org/africa-programs/programs/CCCDRC.asp.

[xiii] www.unep/grasp/docs/Chimpanzee.pdf.

[xiv] www.unep/grasp/docs/Chimpanzee.pdf.

[xv] *Parks for Biodiversity* 38.

[xvi] http://www.unep.org/grasp/Meetings/IGM-kinshasa/Outcomes/index-reports.asp.

[xvii] http://www.unep.org/grasp/Meetings/IGM-kinshasa/Outcomes/index-reports.asp 24.

2008 between Rwandan Tutsi rebel groups and the DRC's government indicates that tensions are easing. However, the peace remains tenuous, as Rwandan Hutu rebels were not invited to participate in the process.[xviii]

As a result of regional conflict and tension, the DRC has absorbed 4 million refugees from surrounding countries. To provide for themselves many of these refugees and Internally Displaced Peoples (IDPs) illegally log and burn forests for firewood and cooking fuel causing severe habitat degradation and destruction.[xix] These conflicts have left the great apes caught in the crossfire between groups, and the subsequent fragmentation of their habitat has isolated populations and left the apes vulnerable to stochastic events such as genetic invariability.[xx] Fragmented forests also leave the primates vulnerable to poaching, often for bushmeat, trophies, or illegal sale.[xxi]

Another major threat to biodiversity is the rapid increase of international multi-billion dollar development projects in the DRC. Due to their adverse effects on habitat, UNEP has identified agricultural, forestry, and mining projects as leading potential threats to the preservation of the great apes.[xxii] While development is necessary to create socio-economic stability, limited and outdated environmental regulations and inadequate enforcement create challenges for sustainability. One source of development in the agricultural sector is palm oil, used for biofuel and foods production. The increased worldwide demand for palm oil has made it the world's leading fruit crop. The DRC is ranked 9th in the world for its production.[xxiii]

Another example of international investment projects is the mining for coltan, copper, and cobalt. The DRC boasts one of the three largest supplies of strategic minerals widely used in the 21st century including coltan, cobalt, uranium, zinc, and copper, along with diamonds, gold, and silver.[xxiv] A recent surge in demand for coltan, (Columbite-tantalite), a necessary component of most modern computer-based technologies (including cellular phones, VCRs, and computer chips), has led to an increase in mining projects.[xxv] In February 2008, China reportedly agreed to invest $9 billion dollars into the DRC's mining industry to gain access to the country's rich oil and mineral supplies to meet its own growing domestic demands. This raises environmental concerns because Chinese investments, in comparison with most Western investments, generally have less stringent and transparent environmental regulations, requirements, and safeguards.[xxvi]

CURRENT STATUS OF GRASP IN THE DRC

In the summer of 2007, the GRASP program in the DRC faced a serious setback with the execution-style killing of four gorillas, one of which was pregnant, in Virunga National Park. Poachers left the bodies fully intact, and many infer that the killings were meant to warn opponents of the charcoal industry to stop speaking out.[xxvii] In fact, in March 2008, Congolese authorities arrested Honore Mashagiro, who was the director of the Park, on charges of arranging the killings of the rare gorillas and burning protected trees for charcoal. Authorities believe that profits from illegal charcoal burning are the likely motive, as the industry is worth approximately $30 million annually. Further investigations are ongoing in an effort to capture other participants and accomplices.[xxviii] While the arrest provides a sense of justice and progress, it also demonstrates the daunting and complex challenges facing the GRASP program and highlights the pervasive corruption within the country.

The brutal slaughter prompted an immediate response from UNEP, which quickly organized an international meeting on the status of primates and their habitats in October 2007 in Paris and outlined a mission to investigate the shootings. The mission highlighted UNEP's sense of urgency in assisting the DRC government and other stakeholders in protecting the gorillas and their habitat by: providing supplies to refugees; facilitating negotiations and talks between the UN peacekeeping forces and the rebels; protecting and monitoring natural resources; and assisting in the drafting and developing of national environmental laws and regulations.[xxix] In addition, UNEP has recently explored new approaches and methods to improve the implementation of the GRASP program, including organizing conferences and workshops, developing carbon offsetting projects, creating "Great-Ape-Friendly" certifications, and coordinating funding and visibility projects.[xxx]

[xviii] http://pbs.org/newshour/updates/africa/jan-june08/congo_01-23.html.

[xix] http://www.monuc.org/News.aspx?newsid=885.

[xx] http://www.unep.org/grasp/docs/Chimpanzee.pdf.

[xxi] UNEP Mission to DRC, 16-26 September 2007.

[xxii] http://www.unep.org/grasp/docs/gorilla.pdf

[xxiii] www.news.mongabay.com/2006/0425-oil_palm.html.

[xxiv] Esther Blom, et al. *Nature in War: Biodiversity Conservation During Conflicts* (Amsterdam: Netherlands Commission for International Nature Protection, 2000) 21.

[xxv] www.globalissues.org/Geopolitics/Africa/DRC.asp#EffectsontheenvironmentandWildlife.

[xxvi] hsttp://www.mineweb/view/mineweb/en page67?oid=47452&sn=Detail.

[xxvii] Scott Johnson, "Gorilla Warfare" (*Newsweek,* August 6, 2007) 28.

[xxviii] Clare Soares, "Wildlife park chief arrested over massacre of rare gorillas" *The Independent*, March 20, 2008. http://wwwindependent.co.uk/environment/nature/wildlife-park-chief-arrested-over-massacre-of-rare-gorillas-798418.html.

[xxix] www.unep.org/Documents.Multilingual/Default.Print.asp?DocumentID=519&articleID=5689&I=en.

[xxx] June 2007 Update from the GRASP Secretariat.

ANALYSIS

Restructuring UNEP

Although UNEP had some commendable and comprehensive achievements in the 20th century, the changing international environmental conservation landscape of the new millennium requires UNEP to consider restructuring to maintain its effectiveness and relevancy. One of the primary problems with the program is that it has too many responsibilities and too limited a budget. For GRASP to complete effectively its list of action costs it would require a budget of nearly US$30.5 million.[xxxi] To put the fiscal challenge in perspective, the entire Environment Fund, which is the total source for all of UNEP's programming, set for the 2008-2009 biennium is only US$157.3 million.[xxxii] This falls well below the resources required by UNEP to implement its many diverse projects effectively.

Additionally, there has been a dramatic increase in the number of local, national, and international environmental NGOs that work in partnership with UNEP and UNDP. UNEP is not only competing with UNDP for resources and relevancy, it also shares similar responsibilities with NGOs that could undoubtedly accomplish many of the tasks just as effectively. UNEP needs to create a unique and specialized niche by focusing on the areas of environmental conservation that other NGOs cannot accomplish. For instance, while UNEP is not the only organization collecting, dispersing, and assessing environmental information, it is the only one with the responsibility for approaching the entire range of environmental issues faced by the global community.[xxxiii] As globalization continues to progress rapidly, the need for an effective international body that takes this large picture into account has become increasingly important.

The Argument for a Streamlined UNEP

One of the main options for reform is that UNEP remain structured as a program but that it streamline some of its operations by focusing on a smaller group of functions such as developing, negotiating, and implementing environmental legislation and MEAs, and collecting, analyzing, and dispersing environmental data. UNEP has brokered some of the most important international environmental agreements based on impressive data collection and analysis, and the important accomplishments and positive impact that the program has had on protecting the world's biodiversity cannot be overlooked or overstated.

UNEP has proven to be particularly effective in initiating and managing the creation and expansion of multilateral environmental agreements, particularly the CBD, CITES, and the Ramsar Convention. David L. Downie and Marc A. Levy, Columbia University professors and proponents of UNEP, argue "If these roles were formalized, UNEP would become the acknowledged UN unit with responsibility for initiating and sustaining international negotiations… By focusing on treaty development and eliminating many other activities, it could build upon past strengths and provide clarity within the international community regarding which organization would be responsible for which tasks."[xxxiv] Multilateral agreements and legal framework must be implemented and enforced to preserve the great apes and their habitats in the DRC region.

Furthermore, a streamlined UNEP would allow for an increase in and improvement of the research and documentation of the species throughout the world. One of the major challenges facing biologists today is inadequate documentation of the majority of species found in the world. The world community cannot protect species that are unknown or undocumented.

In addition, some argue that the complex and multilayered nature of today's environmental challenges requires concentrated management at regional or community levels rather than on a global level. However, since national boundaries do not contain environmental issues such as pollution and climate change, having an effective international representative, such as UNEP, to deal with the competing interests of protection and development and to oversee international environmental legislation is important.

The Argument for a Specialized Agency

A second option is that UNEP transform and restructure into a specialized agency, perhaps becoming a "World Environment Organization" (WEO), to confront complex and challenging global environmental issues. The primary advantage of converting UNEP into a specialized agency under the auspices of the UN is that the budgetary process would change from one of volunteerism to one of mandatory assessment. This would help bolster the program's potential and capabilities. More responsibility and pressure would be placed on the developed nations, as mandatory assessments are progressive. Many perceive this as a fair trade-off, because industrialized nations consume the majority of the world's natural resources.[xxxv] Placing the financial burden on developed and wealthy nations might also have the long-run benefit of encouraging them

[xxxi] www.unep.org/grasp/Meetings/IGM-kinshasa/Outcomes/docs/Rules_E.pdf

[xxxii] http://www.unep.org/GC/GC24/download.asp?ID=311.

[xxxiii] Chasek, 366.

[xxxiv] Downie and Levy 366.

[xxxv] http://www.sierraclub.org/population/consumption/

to embrace environmentally conscious and sustainable growth.

A WEO would also project a sense of urgency to the world community about the importance of confronting environmental issues. It would give UNEP increasing ability to make broad policy decisions more easily and more effectively. In addition, it would give the program greater clout among national governments and other UN agencies, hence giving it a heavier hand at the negotiating table.

However, converting UNEP into a specialized agency may make the organization less effective at the international level because it could be perceived as an agent of U.S. foreign policy under the auspices of the UN. Because the majority of the agency's funding would come from the wealthiest nations, particularly the United States, UNEP would likely lose some of its independent decision-making power. It would be more susceptible to pressure by the main contributors to write and implement policies conducive to their agendas. In recent years, as demonstrated by U.S. withdrawal from the Kyoto Treaty, the U.S. has often demonstrated deference to economic concerns over environmental ones. Primary financial contributors would have more influence over the goals and objectives set by a specialized agency, meaning that UNEP could be forced to take a more Western stance when negotiating with developing nations.

Furthermore, agency status could complicate negotiations and multilateral agreements because internal consensus on broad and complicated environmental issues within the UN would be necessary for agency action. Further, if UNEP were an agency and the Security Council included an environmental topic on its agenda, the UNEP committee would be restricted from discussing the topic. As a program, UNEP retains some flexibility when negotiating by being able to work "under the radar."

RECOMMENDATIONS

There has been a recent spate of criticism directed toward the UN, much of it questioning the institution's role in the larger world. Prompted by the recent tragedies in Rwanda, Sudan, and Iraq, many argue that the UN is no longer relevant or effective in creating peace and security. This ineffectiveness stems largely from the opposing political and economic agendas of the rivaling countries with the Security Council. If UNEP becomes another specialized agency in the UN, it would be in danger of becoming ensnared in Security Council politics and succumbing to gridlock and inaction. On the other hand, UNEP could also become irrelevant, possibly even non-existent if it continues to spread its resources and capabilities too thinly. The world cannot afford to lose this essential environmental program, particularly in biologically diverse countries such as the DRC that are torn by ethnic, religious, and political conflict.

As the global population continues to grow in the 21st century, natural resources and biological diversity will be stressed to precarious levels. The world needs a strong and effective international organization that can and will lead the fight to protect the earth's biodiversity and environment. Restructuring UNEP by streamlining its functions would allow it to play a more powerful and cogent role in balancing the inherent struggle between economic development and environmental protection and also ensure its own sustainability. UNEP must be flexible and adaptable to confront the turbulent and complex geo-political and environmental issues facing the world today. This analysis proposes that UNEP would be most effective in protecting biodiversity in regions like the DRC if it streamlined its functions and maintained its focus on collecting, analyzing and dispersing data; negotiating and gaining consensus on multilateral treaties; and drafting, developing, and negotiating national and international laws. These are the areas in which it has always excelled and future restructuring should not divert the organization from these fields of expertise.

A streamlined UNEP could redirect a substantial portion of its resources to expand its research capabilities. One of the major hindrances of protecting the great apes and biodiversity is the lack of knowledge about the various species and their complex relationships. A streamlined budget would allow UNEP researchers and biologists to collect, analyze, and monitor data necessary to set up effective protection measures.

Additionally, streamlining UNEP would allow it to channel a substantial portion of its resources into drafting and implementing the legal foundation critical for the long-term preservation of the world's natural resources and diverse ecosystems. This foremost need is demonstrated by the case of the DRC. Presently, the country has a weak legal framework in place for the protection of great apes and their habitat. The country's legal instruments are inadequate, outdated, and non-binding, and they do not address the modern principles of natural resource management or sustainable development.[xxxvi] Environmental regulations and laws must be put in place before transnational corporations, outside nations, and the DRC's corrupt officials further exploit the country's natural resources at the expense of the people of the DRC.

A recent 2007 UNEP report highlights the urgency for legal safeguards to be put in place "at a time of rapidly rising multi-billion-dollar international investments in

[xxxvi] GRASP strategy plan in DRC.

the [DRC's] forest, mining, and agricultural sectors."[xxxvii] China is the second largest export partner in the DRC at 21% and is one of the most rapidly developing countries competing for natural resources.[xxxviii] China is undergoing a period of rapid industrial growth, and it has imposed very few, if any, environmental standards. UNEP needs to support and help the DRC develop and implement environmental standards and regulations that ensure that development and investments are sustainable and benefit the local people of the DRC.

One of UNEP's primary goals should be to make the Kinshasa Declaration a legally binding MEA. Without the necessary legal enforcement measures, pervasive loss of biodiversity and the extinction of the great apes will be inevitable. By streamlining, UNEP could redirect some of its stressed financial resources into not only negotiating and implementing legislation, but enforcing it as well.

For instance, as the demand for coltan increases with advances in computer technology, there will be a race between nations and transnational corporations to acquire the necessary raw materials to compete in the global market. Putting pressure on governments and companies to ensure that these materials and natural resources are acquired and extracted using legal and sustainable methods is essential. Regulating standards in the mining industry could also help to bring about political stability and reduce corruption by cutting off the funding for war, as rebels often profit from illegally exploiting raw materials.

Finally, UNEP should streamline its functions to become more effective at negotiating peace, stability, and environmental protection. One of the main obstacles UNEP faces in protecting the rich biodiversity of DRC is the continued upheaval and instability of the region. As a streamlined program, UNEP would remain a neutral force, rather than an extension of government policies, allowing it to have more influence at the negotiating table. As a recent report on UNEP's mission in the DRC explicitly states, "it is essential to work in partnership with existing actors…UNEP must not be perceived as coming with a top down solution and heavy hand, but rather as a bridge builder between stakeholders and a technical expert on environmental law, assessment, and institutional capacity building. The program should start in a focused way and gradually scale-up as both visibility and small successes are achieved."[xxxix] UNEP has the potential to mitigate and neutralize conflicts by inviting cooperation and providing the opportunity for stability to all stakeholders; streamlining the program would vastly increase its potential to do so, and by proxy, also provide essential protection to the environment.

Environmental issues, especially conservation of biodiversity and natural resources, impact all cornerstones of life—food, water, health, local and global economies, and national and international security. As a result of globalization, nations have become increasingly interconnected and interdependent. Just as the extinction of a keystone species, such as any one of the great apes, could threaten the stability of an ecological community, the collapse of a keystone environmental organization like UNEP could ultimately threaten or destabilize the global community. The world community must continue to have an independent body that will be able to use all the tools necessary to preserve and protect the natural environment, on which all life depends.

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[xxxvii] http://www.unep.org/Documents.Multilingual/Default.Print.asp?DocumentID=519&ArticleID=5689&I=en.

[xxxviii] http://www.cia.gov/library/publications/the-world-factbook/geos/cg.html#Econ.

xxxix UNEP Mission to DR Congo, September 16-26, 2007.

REGIONAL GROWTH

Options for Expanded Ferry Service in New York

Evaluating the Case for Regional Ferry Service in Light of the San Francisco Water Transportation Authority's Proposal for Ferry Service in the Bay Area

by Patrick McCandless

ABSTRACT

New York City is currently experiencing both economic and population growth, but its long commute times and congested road and rail lines threaten to jeopardize the competitiveness of the city and the region. One proposed solution to the problem lies in the waterways that originally made New York a mercantile hub. This paper explores budgetary, social, and policy implications of using ferry service to alleviate New York's congestion problems and help the region accommodate future growth. In particular, the city's decision is framed through lessons and best practices from a ferry service proposal in San Francisco. Ultimately, the future competitiveness of New York relies on a complex balancing act of economically sustainable and consumer-friendly strategies for growth and planning.

The need for expanded and improved transportation options in New York City is unquestionable. According to 2002 U.S. Census data, counties in the New York metropolitan region account for eight of the 20 counties in the nation with the highest commute times, with the Bronx, Queens, Staten Island, and Brooklyn occupying positions one through four on the list.[i] Last spring, New York City Mayor Michael Bloomberg identified transit and traffic congestion as the largest barriers to sustaining regional long-term growth.[ii] Decades of inadequate funding, neglect, and mismanagement of the Metropolitan Transportation Authority (MTA) led to the near demise of the City's subways and buses. In the late 1980s, additional funding was appropriated for the MTA but remained inadequate. Current funding deficiencies and the high cost of rail capital projects will delay the MTA's ability to bring the system to an optimal level of performance until 2019 at the earliest. Planned expansions like the Second Avenue Subway and East Side Access for Long Island Rail Road (LIRR) at Grand Central will cost billions of dollars but will not improve transportation options for many in the region.

In this context New York policymakers have begun to study the feasibility of expanding and subsidizing regional ferry service. With low capital costs and the ability to connect remote parts of the city to the Central Business Districts (CBDs) of Midtown and Lower Manhattan, expanded ferry service could significantly decrease commute times, improve residential quality of life, and allow New York to attract the highly educated, highly skilled workforce that is essential in today's global economy.

EXPANDED FERRY SERVICE COULD SIGNIFICANTLY DECREASE COMMUTE TIMES, IMPROVE RESIDENTIAL QUALITY

This paper examines the possibility of increasing ferry service in New York by reviewing a range of relevant studies and literature and assessing San Francisco's review of ferry service proposals in 2002. This study examines reports detailing excessive commute times in New York City, the potential for ferry service to decrease commute times, the possibility to improve the economic condition of Lower Manhattan through increased access to transit, and the important role ferries played in the aftermath of the September 11th terrorist attacks. Ultimately the paper concludes that a number of routes and connections to the Central Business District warrant further analysis, but that the case of San Francisco illustrates a need to carefully weigh the full costs and benefits of ferry service in light of the high operational subsidy required to encourage ridership.

The environmental and social impacts of ferry service must also be examined. This analysis will examine the forecasted neutral impacts of ferry service in San Francisco on reducing automobile use, possible improvements to regional air quality, and potentially negative environmental impacts of ferries themselves. The potential costs and benefits are especially noteworthy, because, while inexpensive from a capital perspective, San Francisco ferry service receives a large subsidy per passenger compared to bus and rail alternatives. This subsidy carries social and equity implications that must be analyzed when considering expanding ferry service in New York City.

THE CASE FOR EXPANDING FERRY SERVICE IN NEW YORK CITY

Existing Transit Conditions in the Boroughs Outside Manhattan

New York City's extensive transportation network provides many residents with superior transit access, but the system does not serve all residents equally. Mayor Bloomberg's PlaNYC proposal to grow New York sustainably through 2030 illustrates the toll that the existing transportation options can take on residential quality of life. Below is the testimony of Brian Block, who travels to his job in Manhattan daily from Southeast Queens:

> By the time I get to work I am fatigued. By the time I get home I am fatigued. If you live in Manhattan you can just jump on the IRT. My co-workers can walk to work. They can take a bus down Fifth Avenue, a bus up from the Village. They don't understand. Once you live in Southeast Queens and have to get to Manhattan, you're tired when you get to work…It's cold, you're wet, you're freezing, you're angry, you're frustrated, and you have to stand there and wait. You have no recourse, no choice."[iii]

The serious quality of life impacts expressed in this testimony and the continuing relocation of the middle class from the CBD in light of rising real estate prices pose a serious challenge to New York's ability to provide a decent quality of life for its citizens and to continue to attract new residents. Given this challenge, exploring a wide range

[i] U.S Census, 2002 American Community Services, http://www.census.gov/acs/www/Products/Ranking/2002/R04T050.html.

[ii] New York City. Long Term Planning and Sustainability Office. *PLANYC: A Greater, Greener New York.* New York: 2006.

[iii] New York City. Long Term Planning and Sustainability Office. PLANYC: A Greater, Greener New York. New York: 2006.

of transportation options, including the less conventional but increasingly popular idea of connecting urban areas by ferry is appropriate.

Just as New York's natural ports helped it become a global capital, its geographic layout also well suits the City to improve access to Midtown and Lower Manhattan through ferry service. Paul Kamen and Christopher Barry's "Urban Passenger-Only Ferry Systems: Issues, Opportunities and Technologies," argues that planners should develop ferry routes in neighborhoods that are relatively proximate to central business district by sea, but far from existing transportation options and connections.[iv] Given these criteria, neighborhoods in Western Queens, West and Southern Brooklyn, and Staten Island appear to be good candidates for new ferry service. Southeast Queens, Southern Brooklyn and Staten Island are particularly appealing because residents in these areas must now travel relatively long distances on subways and congested highways to the CBDs.

Data from recent waterfront rezonings at the Department of City Planning confirm that ferry service may dramatically decrease commute times to Manhattan from the outer boroughs. As part of the rezonings of Williamsburg and Greenpoint in Brooklyn and Long Island City in Queens, the City Planning Commission required the construction of ferry terminals. The City estimates that average commute times from Long Island City to East 34th Street will decrease from 42 minutes to 32 minutes, from 52 minutes to 25 minutes from Greenpoint, from 43 minutes to 20 minutes from North Williamsburg, and from 39 minutes to 12 minutes from South Williamsburg.[v]

Creating Links to Lower Manhattan and Adding Redundancy to the System

A network of ferries could aid Lower Manhattan's redevelopment and allow it to better compete with Midtown. Bruce Schaller, a former transportation consultant who currently serves as Mayor Bloomberg's Deputy Commissioner of Planning and Sustainability at the City Department of Transportation issued a report in 2003 documenting the potential of ferry service to improve transportation options and the economic conditions in Lower Manhattan.[vi] The report identifies insufficient transit connections to the suburbs as a hindrance to Lower Manhattan's ability to attract job seekers from Westchester and Long Island.[vii] Schaller's report determines that travel to Midtown from Westchester is, on average, ten to 15 minutes faster than trips to Lower Manhattan, and two to six minutes faster for Long Island commuters. As a result, Westchester residents account for only 16% of the Lower Manhattan work force while New Jersey residents account for 61% of the Lower Manhattan work force. Service from Glen Cove, Long Island to Pier 11 at the World Financial Center is predicted to take 45 minutes by ferry—at least 17 minutes fewer than the average LIRR ride from Glen Cove to Penn Station with a subway connection to Lower Manhattan.[viii] New ferry service from Westchester to Pier 11 would also decrease commute times to Lower Manhattan for these commuters and improve Downtown's ability to attract new business and industry. Overall, Schaller's analysis shows that residents throughout New York would experience significant time savings if a regional ferry service provided service to Lower Manhattan.

In addition to the transportation and time savings benefits of ferry service, the mode would provide the existing transportation infrastructure with an important layer of redundancy in the event of a terrorist attack on a bridge or tunnel. The New Jersey PATH terminal at the World Trade Center was destroyed after the September 11th attacks, leading to a sharp increase in New Jersey commuters traveling by ferry.[ix] Most private ferry operators experienced ridership increases of 200% following the attacks. Given the considerable impacts that would result from destruction of one or more bridges or tunnels to Manhattan, the layer of redundancy provided by ferry service could be critical.

Improved Transit Options to the Far Rockaways, Queens

One prominent example of a neighborhood that would benefit from ferry service is the Far Rockaways in Southeast Queens. The geography and transportation access points to Manhattan in the Rockaways appear to fit Kamen and Barry's criteria for ferry service. Kamen and Barry recommend locating ferry service between points that are in close proximity over water but are reasonably far from each other via existing transportation access points. The neighborhood is adjacent to Southeast Brooklyn, and is largely separated from the mainland by the Jamaica Bay—connected only by a small isthmus near the Nassau County border.

The Rockaways currently offer poor transportation options to Midtown and Lower Manhattan. The area's primary transportation modes to Manhattan are express

[iv] Barry, C. & Kamen, P."Urban Passenger-Only Ferry Systems: Issues, Opportunities and Technologies," <http://www.well.com/user/pk/spa/Ferry-annual.pdf>.

[v] New York City, 2006

[vi] Schaller, Bruce. *Rail, Ferry or Bus? Improving Suburban Access to Lower Manhattan,* Brooklyn: 2003.

[vii] Schaller, p.5.

[viii] Schaller, p.5.

[ix] Schaller, p.5.

bus service to Midtown and the A train, which runs from the Rockaways to 207th Street in the Manhattan neighborhood of Washington Heights. Express bus service on the QM16 makes four stops in the Rockaways at twenty-minute headway intervals. From its first stop at Neponsit/Rockaway Beach to 57th Street and Third Avenue, where the bus route ends, travel times are scheduled to take one hour and eighteen minutes.

The A train makes four stops in the Rockaways and runs on a circuitous path from Brooklyn to Manhattan, first heading North across Jamaica Bay to Jamaica, Queens, then Southwest to Bedford-Stuyvesant before heading directly West to Lower Manhattan at the Broadway-Nassau stop. The MTA estimates the A train will arrive at Chambers Street in Lower Manhattan 52 minutes after departing from its first stop at Rockaway Park Beach, and will reach 42nd Street and 8th Avenue in one hour and six minutes. These estimates are for travel times once the train has left the station, however, and do not account for time spent walking to and from the train, wait times in the station, or connecting trips to other subways or bus lines once passengers arrive in Manhattan.[x]

Commutes from the Rockaways to Manhattan are not only long, but also inconvenient and unpleasant for many travelers. Because the MTA projects that its system will not be in a "State of Good Repair" before 2020, subway tracks, trains, and signals will continue to operate below optimal performance standards. The results are slow moving trains where tracks have not been replaced for years, and a system sensitive to small operational glitches, which can cause additional delays and unpredictable service. Additionally, express buses cross Brooklyn's bridges and tunnels with other traffic, not in a separate lane. Continued excessive traffic congestion, particularly at bridge and tunnel crossings, means that express bus riders will also continue to experience unpredictable delays and inconvenient service. These conditions illustrate the need to improve transit for residents in the Far Rockaways, and drastic improvements in transit may justify heavy subsidies. The location also satisfies Kamen and Barry's criteria for selecting neighborhoods appropriate for ferry service. Instead of a long train ride with multiple stops, or an express bus ride on congested highways, ferry service would allow for a short, uninterrupted trip between the Far Rockaways and the Manhattan Central Business Districts.

CASE STUDY: SAN FRANCISCO'S 2002 PLAN FOR REGIONAL FERRY SERVICE

San Francisco has embarked on an ambitious plan to expand ferry service that offers useful models and illustrates some potential policy issues associated with expanding ferry service. While the planned expansion will certainly increase transportation options for middle-class San Franciscans, the net effect on automobile ridership will be negligible, and the cost of subsidy per rider will be at least two to seven times the subsidy cost of rail or bus. The lesson for New York is that, while ferry service may be a viable option to improve access to transit and quality of life, it carries a large per passenger price tag compared to other options and must be considered in this context.

The San Francisco Bay Area Water Transit Authority's "Strategy to Improve Public Transit with an Environmentally Friendly Ferry System" analyzes options to reduce personal automobile use by the year 2025. In this period, San Francisco expects its job base to increase by 1.2 million and its population to increase by 1.4 million. These increases will lead to a 30% increase in region-wide travel and a 40% increase in trips across the San Francisco Bay. Furthermore, seven out of ten Bay area residents contacted by the Water Transit Authority identified increased transportation options as a major concern, and indicated approval of a plan to increase tolls on bridges in exchange for congestion relief. To determine the best course of action to prepare San Francisco for this growth, the Water Transit Authority examined a range of transit expansions. These included adding a new crossing tunnel for the Bay Area Rapid Transit (BART, San Francisco's subway system), new express bus service, expanded commuter rail service, new bridges and roads, and new ferry systems.[xi] The new rail options are the most expensive, with both high capital and operating costs. Expanded ferry service has both low capital and total operating expenses compared to all other options except for commuter rail service.

The Water Transit Authority (WTA) identifies three goals in determining the viability of a new ferry line:

- The fare box recovery (percent of the cost/ride paid for by the passenger) should not be unreasonably low, requiring a large public subsidy;
- The fare should not be so high as to discourage ridership;
- The service should not be so infrequent as to discourage ridership.

[x] New York, Metropolitan Transportation Authority, *Schedules and Timetables for New York City Buses and Subways,* New York: 2007. <http://mta.info>.

[xi] San Francisco Bay Area Water Transit Authority, *A Strategy to Improve Public Transit With An Environmentally Friendly Ferry System,* San Francisco, 2002.

Given these goals, the WTA defined a viable route as one that would serve between 450 and 1,650 passenger trips per day.

Is San Francisco's System Worth the High Subsidy Costs?

Ferries are often seen as an inexpensive option to increase transit accessibility, but the WTA review shows that while this is true from a capital perspective, the operational subsidy required to draw ridership is high compared to rail or bus. Instead of stressing the accessibility benefits of ferry service, the WTA's study focuses on "reliability, the need for flexibility… sensitivity to 'personal space,' and a desire to help the environment." The target commuter is identified as "an employed, adult trans-bay commuter currently using an automobile to transit the bay, typically over a bridge, for work."[xii] WTA embarked on a large-scale marketing campaign emphasizing the comforts and reliability of ferry service over automobile trips to lure these potential consumers. In San Francisco, the case for ferry subsidies is motivated by quality of life improvements, not primarily on environmental benefits or significant improvements to regional mobility.

The case for subsidy must consider the amount of future operating subsidies required for the ferry system. Figure 1 illustrates the expected fare box subsidy per ticket compared to other forms of transit in San Francisco. According to this figure, the average operating subsidy in terms of total dollars is significantly higher than the $1.85 average subsidy for Bay Area Fixed Route transit, with several ferry systems requiring five or more dollars in total subsidy per passenger. However, in comparison to the $12.12 subsidy per ride on the Altamont Commuter rail, the subsidy for ferry service is much lower.

WTA argues that a subsidized ferry service is justified despite the presumption that their target commuters are middle class and already have reasonable transportation options. The Authority is not attempting to improve transportation options for low-income and lower-middle class San Franciscans. WTA marketing literature argues that improved ferry service will have a greater impact on reducing overall congestion, because ferry service will shift more drivers from their cars to transit than would a new subway, a limited expanded commuter rail service, or improved bus service. While the transportation equity benefits of subsidized ferry service are questionable, economic and environmental benefits may justify a subsidy. Kamen and Barry argue that for every three ferry commuters, two cars are taken off the road. They conclude that paying each rider of the San Francisco-Berkeley ferry five dollars would be economically justified given the reduction in overall regional congestion.

Unfortunately, these estimates are not supported by the findings in the environmental review. Ferry service is only expected to reduce the rate of Vehicle Miles Traveled (VMT), a key statistic to analyze transit's impact on automobile travel by .07%. In addition, new ferry service could also create "higher energy use per passenger miles traveled than other transit modes." [xiii] In other words, ferry operations will not significantly reduce air pollution compared to existing conditions. Ferries will increase "cold start" emissions of those reaching the terminals by cars, and may have the potential for collision with gray whales and the release of toxins into the marine environment. Ferry service has been opposed on environmental grounds in a number of localities including Hawaii and San Francisco. These findings are troubling because planners generally view mass transit as a way to move people from place to place using less energy. If there is an environmental case to pursue ferry service, it is not persuasively detailed in the WTA's environmental review.

Ferry service is only expected to reduce the rate of Vehicle Miles Traveled (VMT), a key statistic to analyze transit's impact on automobile travel. by .07%.

Other findings from the environmental review raise questions about the value of the subsidized service. First, the costs and benefits are measured for the year 2025,[xiv] but the plan proposes the new ferry routes be fully implemented by 2015. Second, the environmental review does not explain the significance of the regional net reduction of toxic emissions such as NO_x, PM_{10}, and CO levels compared to a No Build option, in which the city chooses not to add any transit improvements. Similarly, the magnitude of reduced congestion on the BART system is not estimated or highlighted, leading one to conclude the reduction is minimal. The potential for increasing energy-per-passenger miles traveled raises significant questions about the project's real environmental and energy saving benefits. Finally, the reduction in total 2025 VMT compared to 2025 No Build conditions is only a fraction of one percent. The Policy Findings Statement, the definitive word on the project's overall costs and benefits, does not justify successfully the large per passenger

xii San Francisco Bay Area Water Transit Authority, *Marketing Plan for South San Francisco/Oakland Ferry Service, San Francisco,* 2007.

xiii San Francisco Bay Area Water Transit Authority, *Final Program Environmental Impact Review,* San Francisco, 2003. P. 47

xiv It is unclear why 2025 was chosen as the baseline year for comparing ferry services' environmental effects.

subsidy required by the proposed ferry service. Finally, the Environmental Impact Review was paid for and released by the Water Transportation Authority, the very agency hoping to implement and operate ferry service, thus raising questions about the objectivity of the findings.

While an expensive per passenger subsidy might make sense to reduce regional congestion or improve air quality, the only proven benefit of San Francisco's ferry service appears to be improving the "quality of life" for upper-middle class San Franciscans. While ferry service may have subsidiary benefits for regional productivity and in attracting new workers to the region, the WTA does not provide evidence for this possibility. As presented, the argument for subsidy is less than appealing.

Further analyses could evaluate the capital and operating costs and benefits of San Francisco's regional ferry service compared to new rail or bus service per passenger served. The capital investment for new ferry service is a fraction of the cost of a new BART crossing. Annual ferry service capital and operating costs are estimated, respectively, at $396 and $295 million, and the annual capital and operating costs for new rail service are estimated at $7.1-10.3 billion and $1.1 billion. A ferry would likely serve a broader area of the metropolitan region, but would also likely serve fewer passengers overall than rail. The WTA argues that ferry service would take a greater percentage of cars off the roads than the alternatives, but the .07% reduction in VMT is negligible. A more comprehensive evaluation of the public policy benefits of San Francisco's ferry service would delineate the total operating and capital costs per passenger as well as the economic, environmental, social, and fiscal costs, and compare any benefits to those of alternative transportation projects.

LESSONS FOR NEW YORK FROM THE SAN FRANCISCO CASE STUDY

San Francisco's examination of ferry service raises questions about its feasibility for New York, but further analysis must be conducted. Although ferry service is operationally expensive and may not significantly reduce traffic congestion, the potential benefits for neighborhoods with poor transportation options and the possibility to increase transit access to Lower Manhattan warrant further investigation into subsidized ferry service in New York.

Ferry connections to Lower Manhattan remain appealing because transportation options to the area continue to lag behind Midtown Manhattan, the nation's largest Central Business District. In an age of high oil prices and increasing awareness of global warming and the international implications of excessive oil consumption, cities and states have shown renewed interest in sustainable transportation and investing in their transportation infrastructures. While Lower Manhattan is the fourth largest CBD in the nation, its economic status has slipped as a result of the September 11th terrorist attacks and competition from Midtown.[xv] While other factors, such as limited capacity for new office space and a historical over-concentration of the financial industry in an economy that is increasingly decentralized, have also contributed to Lower Manhattan's decline, the lack of convenient transportation options certainly limits the area's ability to attract new industry.

If ferry service is pursued in Lower Manhattan, New York policymakers should carefully weigh the costs and benefits of new ferry service compared to the overall economic benefits of adding new service. In May 2007, ferry service commenced between Yonkers and Pier 11 in

TABLE 1.

Passenger Rides per Subsidized Period	Capacity (149 people) x 2,080 Trips Per Year (8 Trips/Day x 5 Days/Week x 52 Weeks/Year) x 2 Years	619,840 rides
Total LMDC Grant	$4,200,000	
Estimated Cost per Passenger per Ride Subsidy	Total Grant/Rides per Subsidized Period ($4,200,000/619,840)	$6.78

[xv] Silver, Sheldon. Downtown Lower Manhattan Association and Association for a Better New York Breakfast. New York, New York, 20 May 2005.

Lower Manhattan, charging commuters $12 for a one way fare, or $400 dollars for 40 one way tickets (approximately equivalent to a monthly pass at a price of $10 one way.) The *Times Herald-Record* reports that the Lower Manhattan Development Corporation authorized a $4.2 million grant for the service's first two years.[xvi] The Yonkers/Lower Manhattan ferry service runs four times in the morning and four times at night and carries 149 passengers per trip. Data is not readily available showing the cost per ride subsidy, but a simple equation provides a rough estimate (see Table 1).

This data assumes all trips run at full capacity with no off-peak ridership between Pier 11 and Lower Manhattan, but the subsidy range is equivalent to what was seen in San Francisco. To better understand the policy implications of the Yonkers to Lower Manhattan ferry, real data regarding the per-trip subsidy should be collected and compared to the cost of comparable alternative approaches like rail or bus service. Such a study would add to the dialogue surrounding this issue, but is beyond the scope of this paper.

Strong conclusions regarding the feasibility and economic costs and benefit of subsidized ferry service in New York in light of the San Francisco case study are impractical at this point given the lack of readily accessible data on proposed New York routes and past studies by City agencies. The New York City Economic Development Corporation has formally studied ferry options to the Far Rockaways but declined to provide a copy of their report, stating that the report was not for public consumption (although the 2005 *New York Times* story cited earlier reported that the study determined conditions for new ferry service were promising[xvii]). Contacts at the Port Authority confirmed that a report on ferry service to the Far Rockaways was completed nine years ago, but was destroyed in the September 11th terrorist attack on the World Trade Center, the former location of the Authority's headquarters.

What New York can learn from the San Francisco case study is that ferry service is operationally expensive and must be analyzed in this context. The average ferry service subsidy in San Francisco ranged from $5-12 per passenger per ride, compared to an average subsidy of $1.18 for BART service per passenger per ride and $1.64 for bus service.[xviii] While San Francisco cited benefits of decreased automobile ridership and improved air quality, the technical documents acknowledged that these benefits were small. Given the limited dollars allotted to public transportation in New York, policy makers should identify a convincing social, economic, or time-savings benefit argument to justify the high operational costs of ferry service.

In conclusion, the case for subsidized ferry service for the New York metropolitan region is unclear, yet clearly warrants further study. New York's policy makers have determined that transportation and infrastructure issues will significantly impact the region's ability to sustain growth and development and remain an attractive location to businesses and residents. Given the lack of transit options for many neighborhoods in the boroughs outside Manhattan and poor regional access to Lower Manhattan, ferry service could reduce travel times for thousands of New Yorkers. Considering San Francisco's experience with ferry service, policy makers must carefully consider the social, economic, and transit benefits of subsidized ferry service in New York in light of the high subsidy required to serve broad populations of users.

[xvi] Rife, Judy. "Ferry from Yonkers to NYC Launches," *The Times Herald-Record* 30 Apr 2007.

[xvii] Sewell Chan, *Ferry Plan for Far Rockaways Faces Doubt, The New York Times,* August 6th, 2005, Metro Section.

[xviii] San Francisco Bay Area Water Transit Authority, *Final Program Environmental Impact Review,* San Francisco, 2003.

EMERGING MARKETS

An Analysis of Foreign Direct Investment Options in the Czech Republic, Poland, and Ukraine

by Craig E. Mills

ABSTRACT

The emerging markets of Eastern Europe provide a diverse array of investment opportunities for foreign governments and corporations. However, many Central and Eastern European countries are struggling to modernize their political, regulatory and economic frameworks as they grow, making them risky investments. This paper analyzes economic and social data from 37 European nations from 1999-2004 to assess the relationship between economic and social characteristics and the level of foreign direct investment (FDI) a country receives. An ordinary least squares regression is used to focus on the FDI activities in the Czech Republic, Poland, and Ukraine. This model helps to discern which of the three nations might be the most attractive to a foreign investor under various conditions.

The recent accession of several Central and Eastern European countries (CEECs) into the European Union and the ongoing discussion of membership consideration for other CEECs have highlighted the economic development differences in this region. Some CEECs have instituted sound structures that have helped each progress economically, while others continue to struggle. One way to gauge a country's progress is by measuring its level of foreign direct investment (FDI). To be considered an acceptable risk and therefore an attractive investment, a country must often meet many preconditions. In this way, FDI can be viewed as a proxy of a country's economic viability. CEECs are not homogeneous, and accordingly, the stock of FDI differs among countries. Some nations attract far more FDI than their neighbors, while others that appear very promising given their natural resources, human capital, or geopolitical importance lag significantly. This discrepancy cannot be explained by traditional FDI determinants, such as market size, trade costs, input costs, and relative factor endowments. Rather, country-specific factors, such as the level of privatization, the share of private business, and investment risk levels of each host country (i.e., the recipient nation of FDI capital) play an important role in investment decision making. Thus, other factors that contribute to FDI disparities are worthy of investigation.

SOME NATIONS ATTRACT FAR MORE FDI THAN THEIR NEIGHBORS, WHILE OTHERS THAT APPEAR VERY PROMISING GIVEN THEIR NATURAL RESOURCES, HUMAN CAPITAL, OR GEOPOLITICAL IMPORTANCE LAG SIGNIFICANTLY.

This study analyzes economic and social data from 37 European nations from 1999 through 2004 to understand the relationship between economic and social characteristics and the level of foreign investment a country receives. Specifically, the focus is on investment activities in the Czech Republic, Poland, and Ukraine, with recommendations about which is most attractive to foreign investors. Section two provides a conceptual framework and a review of related literature. Section three discusses the transition from planned to market economies and provides a brief overview of the three target countries. Section four reviews the econometric model. Section five presents the findings of the data. Finally, section six analyzes the findings and summarizes key investment implications.

The Czech Republic, Poland, and Ukraine are in various stages of modernizing their economies. One way to examine each country's relative success is to determine the degree to which each has succeeded in attracting foreign capital to grow and diversify its economy. These countries are in a competitive race to position themselves as prime investment centers and regional leaders in Central Europe. Ukraine, for example, has vast natural resources and a large population of 47 million residents. Yet, its economy has not fully developed, democratic institutions have not been successfully implemented, and the country is experiencing political turmoil that threatens further destabilization. At the same time, Ukraine is losing a significant portion of its population to emigration and poor life-expectancy due largely to heavy tobacco and alcohol consumption, particularly in men, and poor diet.[i]

Poland, the largest of the recent EU members, currently has tremendous economic momentum. Its primary airport, Chopin International in Warsaw, is nearly doubling in size to accommodate increased commercial traffic. Several other large-scale projects are also now underway in the Warsaw region. Additionally, a close political alliance with the United States bodes well for Poland to become the recipient of military projects, thus paving the way for it to become a regional power. However, the nation retains structural economic problems, a persistently high unemployment rate, and a continued exodus of its young and talented entrepreneurs to other nations within the EU.

Meanwhile, the Czech Republic has been extremely successful at attracting American and other foreign companies to open satellite offices in their country. Officials have made significant inroads toward liberalizing the economy and creating a generally favorable business environment. Yet as a small, landlocked nation, much of the economic activity is centered exclusively in and around Prague. Moreover the Czechs must work to distinguish themselves in a phalanx of small, newly independent republics.

CONCEPTUAL FRAMEWORK

Although there has been extensive theoretical work on foreign direct investment [e.g., Hymer (1960), Caves (1982), Buckley and Casson (1976)], there is no agreed-upon model providing the basis for empirical work. Rather, Dunning's (1974, 1980) ownership, location, and internationalization (OLI) paradigm has provided a framework for most estimating equations. Dunning

[i] World Health Organization, European Regional Office, 2005 http://www.euro.who.int/eprise/main/WHO/Progs/CHHUKR/burden/20050606_2.

proposes that FDI can be explained by three categories of factors: ownership advantages (O), such as intangible assets for firms to operate overseas; location advantages to investment in the host country rather than the donor country (L); and the benefits of internalization (I). The work on FDI in transition economies has focused primarily on location advantages of the region (Resmini (2000), for example).

Following Caves (1982), it can be assumed that firms will invest abroad when the expected return exceeds the costs. Analyses therefore need to itemize the main factors in the donor and host countries determining expected net profitability from investment. A politically and economically stable region offers attractive investment potential for business leaders. Economic and political integration with common markets, currency, and political institutions ensure a measure of predictability that mitigates the risks of investing and doing business abroad.

Factors Influencing Expected Profitability

Investors examine many opportunities for risk and reward. They move forward with an investing decision only when expected profit is greater than expected cost plus risk.

$$(E_{profit} > E_{cost} + risk)$$

Expected profitability will be higher in host economies if input costs, most notably labor, energy, and raw materials, are lower than in the donor economy. For most of the CEEC transition economies, the key resource offered is labor. The labor forces of CEEC countries have reputations of being highly skilled particularly in the sciences (see EBRD (1999)). However, investors prefer low-wage locations only if the reduced labor cost is not compromised by lower labor productivity or an overvalued currency. However, local market demographics alone may not drive investing in Europe. For example, proximity to other markets may help a smaller market country overcome disadvantages of size or relatively low technology inputs compared to its neighbors, which may have presented more of an obstacle before economic integration. Indeed, Carstensen and Toubal (2004) note that investment in one of the better performing countries guarantees access to all of their markets and to the nearby European Union.

Determining Country Risk

Studies of FDI in emerging markets have investigated indicators of economic and political risk (see Lucas (1993); Jun and Singh (1996)), with emphasis on three main elements: macroeconomic stability, institutional stability, and political stability and freedom. The first element, macroeconomic stability, is defined by economic growth, inflation rate, and exchange rate risk. The second element, institutional stability, is indicated by appropriate tax structures, transparency of legal regulation, and lack of corruption. These factors are all necessary to attract FDI. In the transition context, these characteristics have been gauged in a variety of ways. For example, Holland and Pain (1998) follow Wheeler and Mody (1992) in using a principal components analysis across macroeconomic and institutional variables. Garibaldi et al (1999) use a variety of World Bank and EBRD indicators. Countries attracting high levels of investment are characterized by a low country risk, a high share of private businesses, and high levels of reform. On the other hand, in such countries as Bulgaria and Romania, the slow progress toward a market economy has impeded FDI flows, despite the lowest labor costs in Central and Eastern Europe. This study uses monetary policy, corruption, and political freedom in a country as proxies for risk.

Many experts argue that FDI and an economy's openness will be positively correlated (see Caves (1996); Singh and Jun (1995)). Proxies for the liberality of the trade policy, however, are difficult to measure in transition economies. Pre-reform trade orientation in CEECs was highly skewed toward the former Soviet Union, but trade relationships did not necessarily stem from comparative advantage (see Portes et al (1993)). Based on this history of unproductive trade with the Soviet Union, previous empirical work has used a CEEC's level of trade with Western economies, or with the EU specifically, as a proxy for openness of the country's economy.

MOVING TOWARD MARKET ECONOMIES

All of the former Soviet republics had to overcome the effects of mismanaged, centrally-planned economies. The abandonment of Communist economic practices led to a significant decline in economic output in Central and Eastern Europe primarily because large structural and institutional distortions of Communism riddled nearly all of the economies with inefficiencies. Among the characteristics of economies planned by the Communist Russians and implemented by national governments were administratively set prices, long-term plans that stressed quantity over quality, and a prohibition on private enterprise. Adjustments triggered by liberalization of domestic and external markets caused significant shifts in demand.

Under Soviet administration, specialization of production was assigned rather than based on true market demands. For instance, the Czech Republic focused on heavy industry, crystal glass, and raw materials, while Ukraine concentrated on agriculture, ferrous materials, and military weaponry. Such economies triggered widespread inefficiencies. Over-employment was pervasive, since the communist ideal promoted official full employment. The result was chronic wastefulness of resources and ecological

devastation to the environment. Moreover, shortages and inferior quality basic consumer goods were commonplace.

Although nearly all the economies of the Soviet bloc nations lay in ruins at the collapse of the empire, the Czech Republic, Poland, and Ukraine have taken varying paths toward recovery and transformation to market economies due to political factors and economic policies of the newly independent republics. These developments in turn have shaped their viability as investment candidates to foreign investors.

Studies indicate that countries that delay stabilization and liberalization suffer longer and deeper economic contraction and experience a delay of post-adaptation recovery. The initial phase of economic recovery, particularly when following a decline in output, usually does not require a serious monetary investment because recovery is generally a function of reallocating existing resources. For example, in an agrarian economy, a labor surplus in agriculture will transition into heavy industry if this sector has traditionally been under-developed for the sake of maintaining full employment. As the structural unemployment transition period improves, productivity will rebound and temporarily negate the need for investment. Later, however, new investments and sources of financing become a crucial condition for continued growth. The scale and quality of investment, in turn, depend on the business and investment climate.

So far, integration of the Eastern European countries appears to have been beneficial to the existing member-states.

Free political competition, free media, civil society networks, and effective protection of civil rights generally help to improve economic institutions and to fight social pathologies such as corruption. Political freedom and democracy can also help build domestic ownership of a reform program. Meanwhile, the international community can create external incentives for building good institutions and following sound policies. The enlargement of the EU is a prime example of how high-income countries effectively export good institutions and policies to middle- and low-income countries. Figures 1 through 4 (see Appendix A) show GDP and FDI data for the Czech Republic, Poland and Ukraine compared to the EU (referred to here as the EU 15 for the countries who were members prior to 2004).

As the figures indicate, economic integration within Europe has been generally positive for all the countries involved. Given the political and economic advantages EU members enjoy, and the EU members' desire for continued stability on the continent, geographic expansion of the EU into CEECs seems natural and mutually beneficial. Frank Schimmelfennig explains that such integration is possible for three reasons:

- Individual national governments made a series of rational decisions in intergovernmental negotiations;
- The choices these governments made in the negotiation process were primarily driven by economic benefits;
- International institutions assumed a functional role in managing problems in international cooperation, in terms of both cost reduction and compliance enforcement.[ii]

Formal intergovernmental treaties, such as the Treaty of Rome, the consolidation of the Common Market, and the Maastricht Treaty, have enabled countries to proceed with integration confident that all parties will cooperate. So far, integration of the Eastern European countries appears to have been beneficial to the existing member-states. EU nations have enjoyed clear economic and competitive advantages over the CEECs. The effects of economic integration of EU members have been studied by Joaquin Maudos, Jose M Pastor, and Lorenzo Seranno, who observed significant efficiency improvements of members who joined between 1976 and 1986. During this time, new members were able to achieve efficiencies through access to wider markets, greater economies of scale, and through specialization. Streamlined processes helped to standardize common practices, and new members were able to procure raw materials on more favorable terms.

During the accession negotiation period, the EU seeks institutional reforms that create greater transparency in the political, legal, and financial sectors of applicant countries. Such reforms help to explain some of the variability in economic outcomes the CEECs have experienced. Background information in section three provides some context for the variability in the data.

Country Profile Czech Republic

Economy

The Czech Republic has made remarkable progress in moving from a central to a free market economy. Among the ambitious efforts the Czechs undertook to transform their economy were:[iii]

- Restoring price relations to allocate goods more effectively, thereby reducing scarcity;
- Establishing a floating exchange rate versus foreign currencies exchange rate liberalization;

[ii] Schimmelfennig, 2004, pp. 76-78.

[iii] Evzen Kocenda, *Corruption Economic Growth and the Political Economy of EU Accession Lecture,* CERGE EI Prague, June 2006.

- Lifting price controls so market forces would determine prices;
- Restoring economic incentives to encourage investment and development;
- Easing trade restrictions;
- Increasing the share of private ownership to increase efficiencies;
- Privatizing state industries;
- Supporting small and medium enterprises;
- Creating proper institutional and legal frameworks to support entrepreneurial activities.

The Czech Republic is one of the most stable and prosperous of the post-Communist states of Central and Eastern Europe. Growth between 2000 through 2005 was supported by exports to the EU, primarily to Germany, and a strong recovery of foreign and domestic investment. Domestic demand is playing an increasing role in growth as interest rates drop and the availability of credit cards and mortgages increases. Current account deficits of around five percent of GDP are beginning to decline as demand for Czech products in the EU increases.[iv] Inflation is under control. Recent accession to the EU has created further momentum and direction to structural reform.

POLITICAL INFRASTRUCTURE

After the fall of Communism, the Czech Republic's political orientation was almost immediately western-focused. By the mid-1990s, as the political reality of anti-Communism receded and Czechoslovakia formed two separate states, attention turned increasingly to flaws in the reform process, which was evidenced by widespread corruption, weak corporate governance, rising debt, and the growing volume of bad loans in the banking sector.[v] These problems undermined the Civic Democratic Party's (ODS) hold on Czech politics, paving the way for the Czech Social Democratic Party's (CSSD) emergence as the main force within a divided opposition. Economic instability forced the government to adopt austerity measures in the spring of 1997, which charted the nascent republic on a path toward robust growth.

Around the same time, political developments leading to more comprehensive western integration began to accelerate. In March 1998, the Czech Republic began accession negotiations with the EU; The following March it joined NATO. In May 2004, the Czech Republic joined the EU and currently is discussing the merits of Euro adoption.

[iv] CERGE, *Czech Republic 2005 Year After*, Chapter 3.

[v] CERGE, *Czech Republic 2005 Year After*, Chapter 1.

Country Profile Poland

ECONOMY

Poland, like the Czech Republic, steadfastly pursued economic liberalization throughout the 1990s and today stands out as a success story among transitional economies. Poland successfully met the basic preconditions of macroeconomic stabilization and extensive liberalization to overcome declines in output following the transition. Early on, Poland began implementing sweeping economic reforms, including the rapid introduction of market policies such as the abolishing subsidies, introducing profit incentives, floating its currency to increase foreign trade, and opening its economy to foreign markets.[vi]

A large portion of the economic growth can be attributed to newly-established, mostly small- and medium-sized private enterprises, which fostered economic restructuring, generated more efficiency from labor resources, and helped speed economic recovery. Poland's focus on manufacturing trade with the EU, in turn, has hastened the restructuring of Polish industry by forcing improvements in efficiency to increase competitiveness vis-à-vis Western industry—creating a virtuous cycle in the process.

Even so, much room for improvement remains, especially in reducing the unemployment rate.[vii] Since its accession into the EU, Poland has consistently had the highest unemployment rate of the member nations.[viii] Poland's agricultural sector remains handicapped by an oversupply of labor, rampant inefficiency due to the prevalence of small farms, and lack of investment. Agriculture employs 28.7% of the work force, but contributes only five percent to the GDP,[ix] reflecting low productivity. Unlike the industrial sector, Poland's agricultural sector remained largely in private hands during the decades of communist rule.

Poland joined the EU in May 2004, and surging exports to the EU contributed to Poland's strong growth in that year, although its competitiveness could be threatened by the zloty's appreciation. Additionally, Poland benefited from $23 billion in EU development funds. As a result, farmers have begun to reap the rewards of membership via booming exports, higher food prices, and EU agricultural subsidies.

[vi] Fogel and Zapalsky, *A Comparison of Small and Medium-Sized Enterprise Development in Central and Eastern Europe*, *Comparative Economic Studies*, Fall 2001. p 36.

[vii] *Eurostat,* August 2006 epp.eurostat.ec.europa.eu

[viii] *Eurostat,* August 2006 epp.eurostat.ec.europa.eu: based on a review of unemployment data from June 2004- August 2006

[ix] US State Department, state.gov/r/pa/ei/bgn/2875.htm.

Figure 1: GDP Levels 2000 - 2004 ($millions)

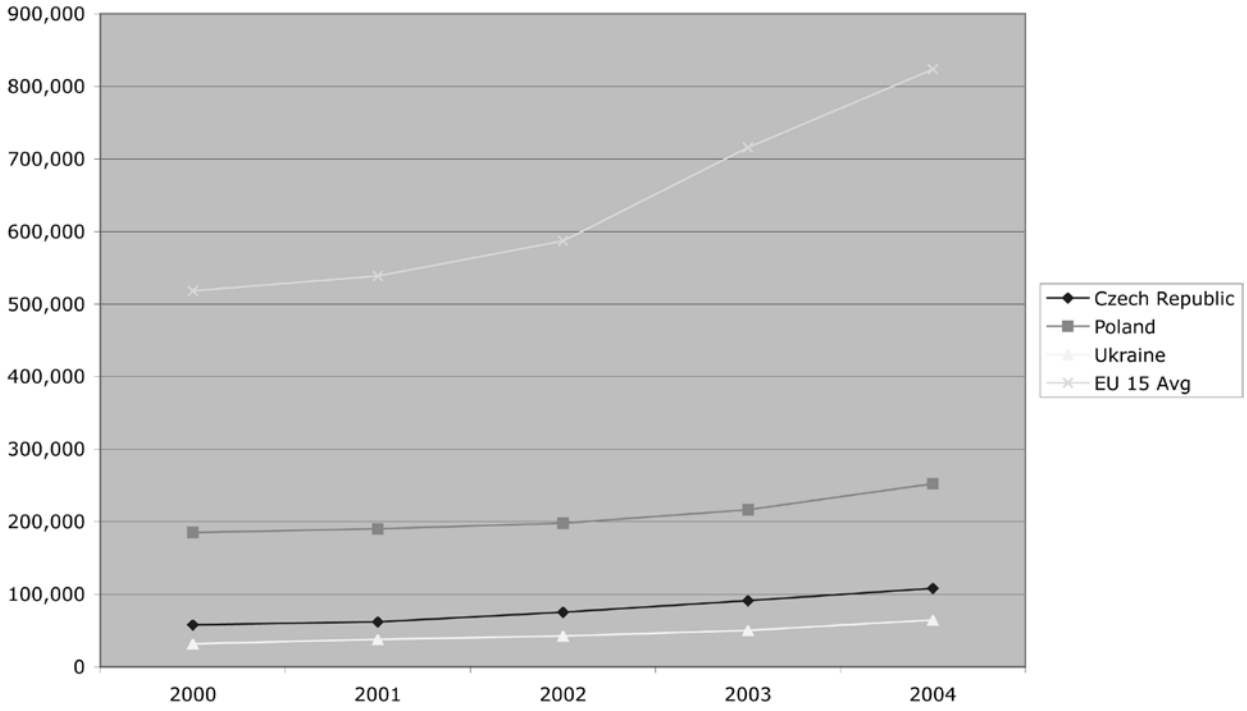


Figure 2: GDP Per Capita (Thousands)

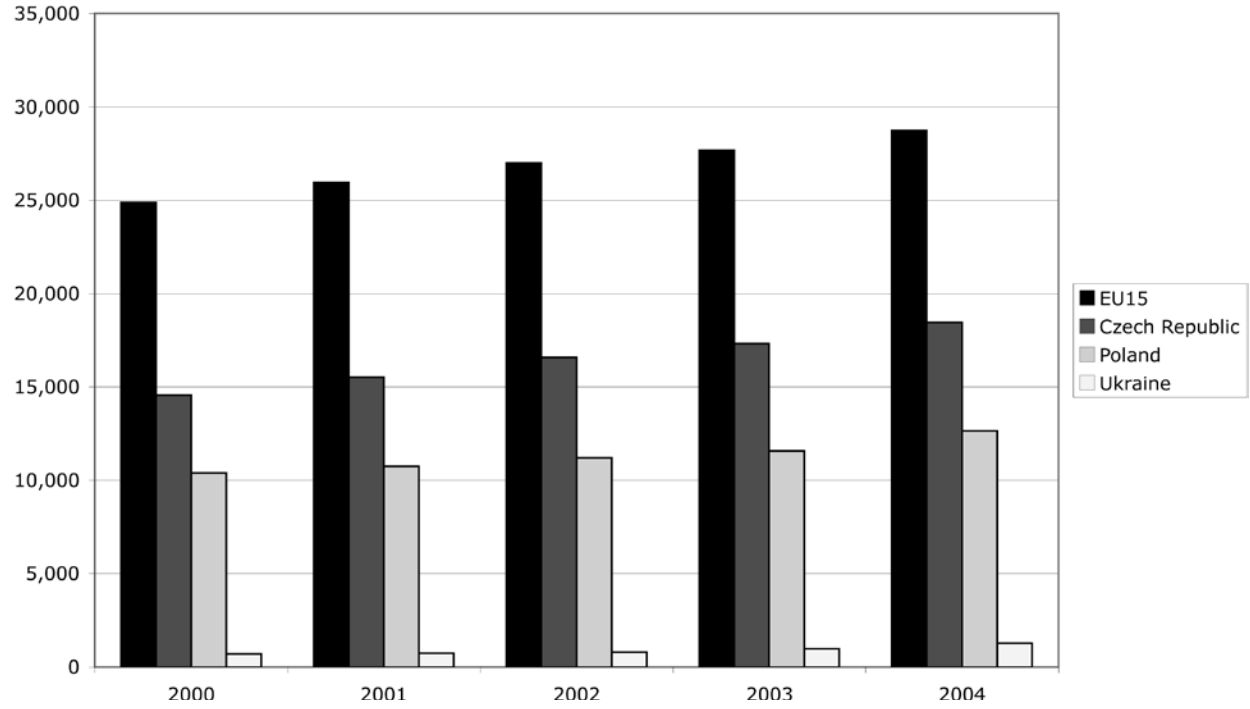


Figure 3: FDI Levels 2000 - 2004 ($millions)

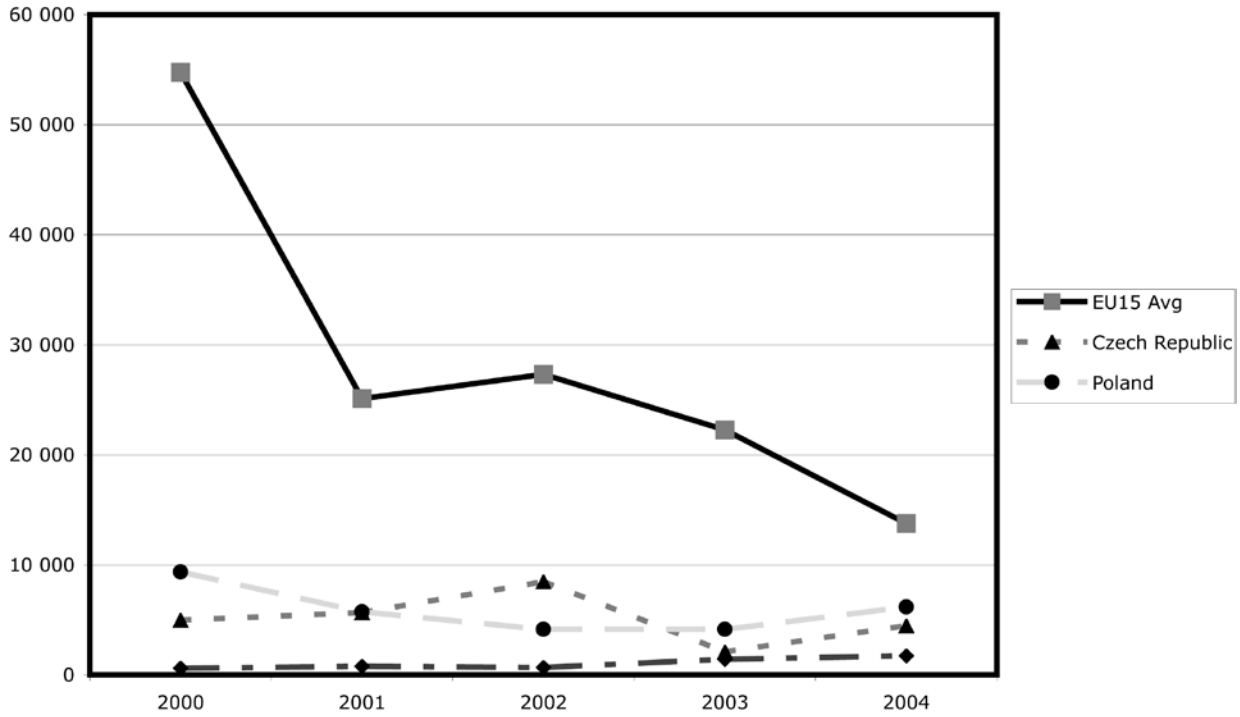
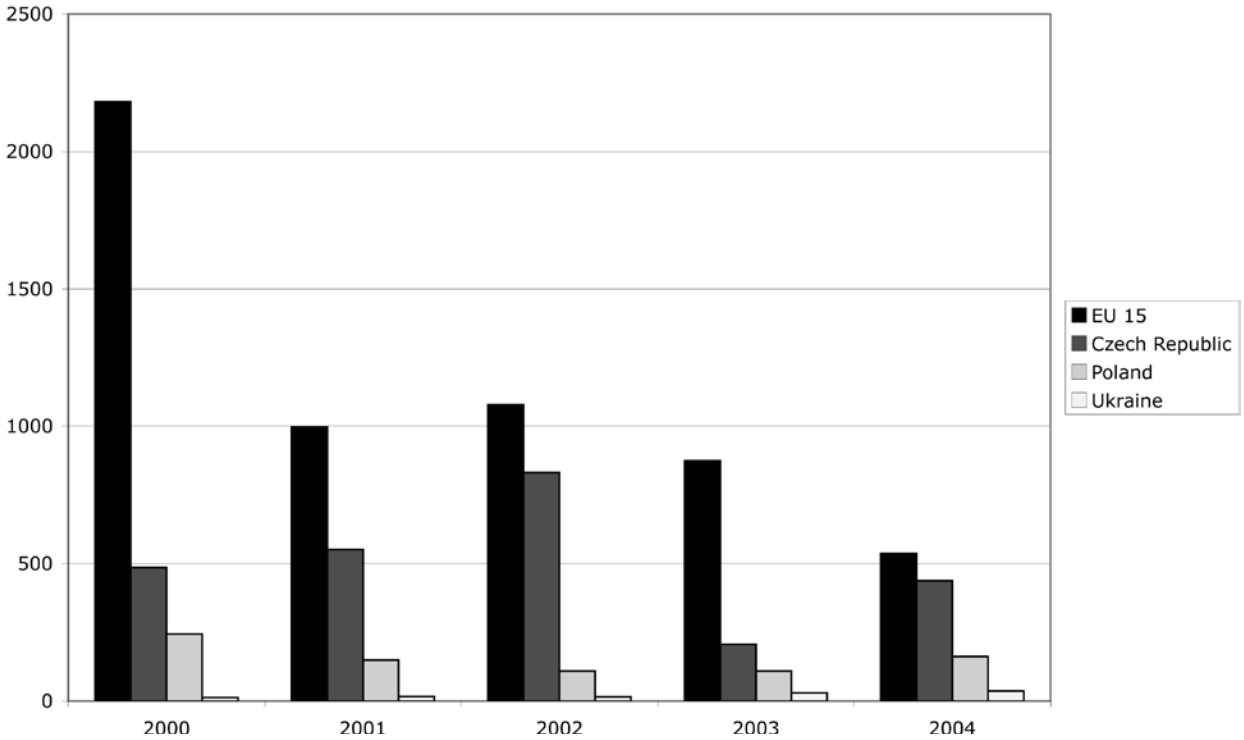


Figure 4: FDI Per Capita 2000 - 2004



POLITICAL INFRASTRUCTURE

Under Communism, Poland was home to only three officially sanctioned parties. Today it boasts dozens. Few parties win enough votes to gain power outright, thus parties often form coalitions.[x] Some of the notable parties include:

- Law and Justice (PiS), a Polish conservative political party, currently part of the governing coalition and party of the President of Poland, and Jaroslaw, current party president and Prime Minster of Poland;
- Democratic Left Alliance (SLD) Democratic Party; and,
- The League of Polish Families (LPR), a deeply conservative political party within the Polish Parliament, and a coalition partner in Poland's current ruling government.

The Poles adopted a new constitution in October 1997, following a national referendum on the issue. It aimed to strike a balance between the main forces in Polish society—Roman-Catholicism, liberalism, and state paternalism—and is generally viewed as having served the country well, although it contains some ambiguities that are occasionally tested in the Constitutional Tribunal. The constitution's "guarantees" of free healthcare and education, a minimum wage, and a range of other social provisions have not adequately been met. Similarly, although the constitution guarantees equality between the sexes, there is considerable evidence of discrimination in pay and employment. To safeguard macroeconomic stability, the constitution declares that public debt should not be greater than 60% of GDP, and that the budget deficit must not exceed the limit set by parliament.[xi]

Politicians must address the emigration issue if the government is to continue to support its generous social programs. According to data from the Labor Ministry, one million Poles have sought work elsewhere in the EU since Poland joined in 2004. Meanwhile, unofficial estimates from migration specialists suggest the figure could be as much as 100% higher. The effects of such outward flows on the Polish economy are already evident. Pressures on wages have increased substantially as companies fight to retain workers tempted by better prospects abroad.[xii] At the same time, the government is wrestling with the difficulties of public-sector reform. Officials have particular difficulty controlling spending and standing up to special-interest groups.

Country Profile Ukraine

ECONOMY

After Russia, the Ukrainian Republic was the most important economic component of the former Soviet Union. Blessed with abundant natural resources, it produced about four times the output of the next-ranking republic. Ukraine's bountiful, fertile farmland, and large agricultural workforce accounted for more than 25% of the total Soviet agricultural output.[xiii] Likewise, Ukraine's diversified heavy industry supplied unique equipment and raw materials to industrial and mining sites in other regions of the former USSR. Ukraine depends on imports of energy, especially natural gas, to meet 85% of its annual energy requirements.[xiv] Shortly after independence in December 1991, the Ukrainian government liberalized most prices and structured a legal framework for privatization, but widespread resistance to reform within the government and the legislature soon stalled reform efforts and led to some backtracking. By 1999, contraction and a lack of commitment to economic reforms led to a drop in output to less than 40% of the 1991 level.[xv]

Ukraine's dependence on Russia for energy and its lack of significant structural reform have made the Ukrainian economy vulnerable to external shocks. A recent dispute with Russia over pricing led to a temporary gas cut-off. In January 2006, Ukraine reached an agreement with Russia that almost doubled the price it pays for Russian gas and could cost the Ukrainian economy $1.4-2.2 billion annually and cause GDP growth to fall three to four percent.[xvi] Government officials eliminated most tax and customs privileges in a March 2005 budget law, bringing much economic activity out of Ukraine's large extralegal economy, but more improvements are needed including fighting corruption, developing capital markets, and improving the legislative framework for businesses. Reforms in the more politically sensitive areas of government structure and land privatization are still lagging. Outside institutions, particularly the International Monetary Fund, have encouraged Ukraine to quicken the pace and scope of reforms.[xvii]

Although Ukraine, with its low gross national income (GNI) per capita, may well fit into the definition of a

[x] poland.gov.pl/Political,Parties,395.html.

[xi] The Economist Intelligence Unit Limited 2006 Country Profile 2006 www.eiu

[xii] Emerging Europe Monitor: Central Europe & Baltic States, September 2006

[xiii] *The World Factbook* cia.gov/cia/publications/factbook/geos/up.html#Econ.

[xiv] *The World Factbook* cia.gov/cia/publications/factbook/geos/up.html#Econ.

[xv] CERGE, Czech Republic 2005 Year After, Chapter 3..

[xvi] Country Watch, *Ukraine Review 2006*.

[xvii] Country Watch, *Ukraine Review 2006*.

developing country, in many respects this is no longer the case.[xviii] According to the World Bank, Ukraine's growth performance has been strong since 2000. GDP growth totaled 50% between 1999 and 2004 and 12.1% in 2004—the highest in Europe.[xix] While growth has been increasingly broad-based, industry has played the leading role, and between 1999 through 2004 industrial production grew by 87%.[xx] Ukraine has a highly educated work force. About 70% of adult Ukrainians have a secondary or higher education.[xxi] Ukraine has ample human capital and industrial potential. It also has a large internal market of some 47 million consumers. These characteristics highlight Ukraine's potential to become a developed nation with a diverse economy and market potential supported by domestic supplies of labor and natural resources. Ukraine's economic development is mature enough that it would likely benefit from trade liberalization with a developed neighbor.

POLITICAL INFRASTRUCTURE

Of the three countries under study, Ukraine has been by far the most politically tumultuous. Since independence, the politics of the Ukraine have been riddled with scandal, corruption, violence, and murder, contributing to an undercurrent of instability that plagues the country. Strategic political alliances are split roughly evenly, with the western half of the country generally supporting NATO and EU membership and the eastern half favoring alliance with Russia. Internal politics reflect this split as opposing parties fight for dominance.

Ukrainian political parties remain dominated by key personalities and have not yet developed into mature organizations such as those in more politically developed Western democracies. As a result, ideological and nationalistic divisions exist across the Ukrainian political party spectrum. Because of the multiparty system in which few parties dominate, parties often form coalitions, and allegiances change from election to election, making the political process chaotic. This lends to outsider apprehension about investing in the country. Such instability was underscored between 2004 and 2005, when protests and political unrest unfolded throughout the country in response to allegations of massive corruption, voter intimidation, and direct electoral fraud during the Ukrainian presidential election.

METHODOLOGY AND DATA

The data analysis focuses on the link between foreign direct investment and a list of country characteristics. As mentioned previously, the changing dynamics of Europe, including new economic unity in the EU and the dissolution of Communist regimes, make investment decisions in the region complicated. Thus, traditional investment models may not offer effective means to evaluate FDI activity. One method to help evaluate investment options is to examine empirical social, economic, and political data unique to Europe, which offers an objective way to guide decision-making.

The countries in this study were selected because they are generally considered to be geographically in Europe and because proximity to other markets often influences investment decisions. Thus, this study excludes Iceland, Turkey, and the CEECs in Central Asia. It also omits principalities and duchies Andorra, Liechtenstein, and Monaco. Lastly, it omits Serbia because political circumstances there make obtaining data difficult. FDI data for Belgium and Luxembourg was combined until 2002. In 2002, investment ratios were 10/90 Belgium to Luxembourg; while 2003 and 2004 the ratio averaged 35/65. Thus, in order to estimate for FDI levels for 2000 and 2001, values have been inputted based on a 30/70 ratio for 2000 data based on 2003 in order to account for variation that might exist during normal investment cycles, and a 10/90 ratio for 2001,based on 2002, when there was a general downturn in FDI activities due to a recession.

MODEL SELECTION

As discussed earlier, there is no single agreed upon model to project FDI. Economic unity and regional advantages play a role in wealth building in Europe. Although economic integration has played a pivotal role, a country need not necessarily join the EU (Norway and Switzerland, for example) if the country transacts extensively with EU members. Risk, profitability, and governance structures to enforce business practices may play key roles in attracting FDI and are primary concerns for investors. To proxy risk, profitability, and governance, this analysis uses determinants of foreign direct investment flows from the source country to recipient economy in the following model:

$$\ln FDI = \beta 0 + \beta(\ln GDP) + \beta(\text{corruption}) + \beta(\text{political rights}) + \beta(\text{contract enforcement}) + \beta(\text{trade policy}) + \beta(\text{fiscal burden}) + \beta(\text{gov't intervention}) + \beta(\text{monetary policy})$$

[xviii] The World Bank defines Ukraine as a lower middle-income country with a gross national income (GNI) per capita of US $1,260; World Bank Country Brief 2005, at http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/ECAEXT/UKRAINEEXTN/0,,menuPK:328543-pBgsPK:141132-piPK:141107-theSitEPKi528533,OO.html.

[xix] World Bank Country Brief 2005,

[xx] World Bank Country Brief 2005.

[xxi] *Background Note on Ukraine,* US State Department, at http://www.state.gov/r/pa/ei/bgn/3211.htm.

+ β(wages & labor) + β(property rights) + β(regulation) + β(EU membership)

Please refer to Appendix 1 for an explanation and discussion of the variables.

DATA FINDINGS

This econometric analysis uses ordinary least squares regressions to demonstrate that larger and more developed economies are expected to receive more FDI. The positive parameter of the log GDP variable indicates that the level of investment is larger the larger recipient country's GDP. In 2000, (see Table 1) Specification 1 shows a 1.05 change in FDI associated with a one percent change in GDP, all else held constant. With other variables entered into the model, the impact of GDP change remains significant, accounting for .7% change in FDI. Several of the determinants did not have a significant impact alone, but cumulatively become highly significant. For the Year 2000 the R^2 models range from .695 for the log GDP model (Specification 1) to .946 for the full model.[xxii] Thus, the insignificance of some country-level variables is not a sufficient argument to omit them from the analysis; these

Table 1: Foreign Direct Investment 2000

	Model Specification		
Regressor	**(1)**	**(2)**	**(3)**
Log GDP 1999	1.04* [.118]	.696* [.122]	.696* [.141]
Fiscal Burden		-.277* [.119]	-.317* [.134]
Property Right		-.273* [.065]	-.376* [.116]
EU Member 1999		.551* [.218]	.366** [.189]
1999 CPI			-.104 [.061]
Political Rights			-4.48E-02 [.07]
Contract Enforcement			1.17E-02 [.01]
Trade Policy			4.79E-02 [.146]
Government Intervention			.276 [.149]*
Monetary Policy			-4.97E-02 [.072]
Wages			-3.9E-02 [.115]
Regulation			2.35E-02 [.123]
R^2	**.695**	**.864**	**.946**

Note: [standard error]
* Significant regressors at the 5% level.
** Significant regressors at the 10% level

[xxii] R^2 is a measure, from 0 to 1, of how well a regression line approximates actual data points; a higher R^2 suggests a stronger fit. An R^2 1.0, for example, indicates a perfect fit

variables may not individually influence the amount of investment, but in conjunction they can influence the decision of whether or not to invest in a particular country. Property Rights, Fiscal Burden, and EU Membership in 1999 also proved to be influential. A positive and statistically significant dummy variable for EU membership suggests members attract relatively more investment. Indeed, FDI activity of EU member nations far outranked CEECs, both in absolute and per capita terms.

In 2004, the influence of GDP remained strong (Table 2). Again, the measurements do not show an impact alone, but they combine to make an impact. In Specification 3, the negative and significant parameters of the Corruption, Fiscal Burden, and Property Rights variables indicate that the higher the recipient country's ratings of the variables are, the lower the expected level of investment is.

Although membership in the EU went from being a significant indicator of economic success in 2000 to less significant by 2004, this should not discount the importance of the Union. One explanation for the decrease in significance could be that as ten nations joined the EU, regional economic and trade policies became more uniform and membership became less significant internally, while other factors such as labor costs, geography, or language

Table 2: Foreign Direct Investment 2004

	Model Specification		
Regressor	**(1)**	**(2)**	**(3)**
Log GDP 2003	.730* [.093]	.739* [.158]	.953* [.134]
2003 CPI		-.428E-02 [.08]	-.202* [.069]
Fiscal Burden		-.173 [.144]	-.230** [.118]
Property Rights		-.225 [.144]	-.271* [.111]
Political Rights			-2.092E –02 [.076]
Contract Enforcement			1.28E –02 [.10]
Trade Policy			9.12E-02 [.165]
Government Intervention			3.10E-02 [.160]
Monetary Policy			-1.67E-02 [.069]
Wages			4.90E-02 [.132]
Regulation			-.288 [.184]
EU 10 Member			-.288 [.215]
R^2	**.660**	**.715**	**.909**

Note:[standard error]
* Significant regressors at the 5% level.
** Significant regressors at the 10% level.

became increasingly important influences on FDI. Huge outflows of aid from Germany, Sweden, the Netherlands, and Denmark, and higher flows into the new accession members seem to confirm this finding. The three countries discussed in this research have relative stability that offers a nearly risk-free opportunity for investing. Of the three CEECs studied, Poland and the Czech Republic improved their investment attractiveness by aligning their political and economic systems more closely with those of their western neighbors, while Ukraine struggles to implement institutional changes favorable to investment.

ANALYSIS AND INTERPRETATION OF THE DATA

The data offers excellent comparative analysis of the investment atmosphere in the countries under study. It also underscores the differences in their economies. As the model appears to indicate, a combination of several characteristics in conjunction with growing GDP offers the best prospects for attracting FDI. Although the Eastern nations have lagged behind their Western neighbors in current FDI dollars, reform and opportunity have contributed to a siphoning of investment dollars from Western to Eastern nations. Poland and the Czech Republic appear to have benefited at the expense of Germany, the Netherlands, Sweden, and Denmark, all of which actually suffered outflows of investment capital in 2004. As corruption, trade, and fiscal policy have improved, Eastern countries have benefited from increasing inflows. Moreover, the data suggests that in a largely contiguous mass of countries, proximity boosts trade and integration. Integration, in turn, forces assimilation, which enhances trade.

Comparing economic outcomes in the three countries supports the conclusions of the econometric model. For example, Poland has attracted $85 billion in investments since 1990, and is tied with Germany as the most attractive investment option in Europe. Inexpensive land and a skilled labor force make the investment environment an attractive option. In 2005, FDI in the Czech Republic totaled $10 billion, double 2004 levels. Meanwhile, Ukraine has a comparatively low level of FDI. Since 1990, Ukraine received only $6.6 billion of foreign direct investments or $140 per capita,[xxiii] far below its regional neighbors. Poland, by contrast, has FDI intake nearly ten times as high, while the Czech Republic, for several years, has received more FDI per capita than any other country associated with the former Soviet bloc. In 2002, annual inflows from FDI in the Czech Republic reached $9.3 billion or 13.3 % of GDP.[xxiv]

Ukraine's FDI, although still low compared to that of other Eastern European nations, is steadily growing. This trend is projected to continue over the next few years. Ukraine lags in many respects on individual measures, which could help explain low investment levels and the hesitancy of subsequent investment in spite of the opportunities. In the meantime, investors can avail themselves of lower risk investment opportunities in Poland and the Czech Republic. Although FDI in Ukraine will remain constrained by a generally poor institutional environment for business, as well as political and economic uncertainty, the size and potential of the domestic market will continue to attract inflows into certain key sectors. For example, Hungarian investors recently struck a deal to take over the Ukrainian unit of Austrian bank Raiffeisen for $950 million, the latest sign of intense foreign interest in entering the Ukrainian banking sector. Together with a buoyant real estate market, banking is fuelling a sharp rise in FDI inflow. Nevertheless, investors cite factors such as the unsatisfactory state of infrastructure, insufficient development of telecommunication networks, technical barriers in trade, and problems with customs as major obstacles in Ukraine that impede higher FDI. There are more investors on the sidelines who would welcome free trade agreements between Ukraine and the EU. The government, however, cannot provide financial support for all industries to promote development. Ukraine needs access to inexpensive capital that is more available in Europe. For example, the short-term interest rates for loans in euros are roughly 7% in the EU, while the rate is 15% in Ukraine.[xxv]

As previously mentioned, Norway and Switzerland are two wealthy non-EU nations. Their development was

ALTHOUGH THE EASTERN NATIONS HAVE LAGGED BEHIND THEIR WESTERN NEIGHBORS IN CURRENT FDI DOLLARS, REFORM AND OPPORTUNITY HAVE CONTRIBUTED TO A SIPHONING OF INVESTMENT DOLLARS FROM WESTERN TO EASTERN NATIONS.

[xxiii] US State Department, *2005 Investment Climate Statement—Ukraine,* at http://www.state.gov/e/eb/ifd/2005/43044.htm.

[xxiv] US State Department, *2005 Investment Climate Statement—Czech Republic,* at http://www.state.gov/e/eb/ifd/2005/42007.htm.

[xxv] As in June 2006, European Central Bank, MFI interest rates, at http://www.ecb.int/. Bulletin of the National Bank of Ukraine, No. 6/2005 (147) at www.bank.gov.ua.

possible because of close economic integration and free trade agreements with EU members. If Ukraine chooses not to pursue EU membership, it could benefit by following EU member countries' lead. Ukraine's sustained long-term growth is hampered by an absence of technological sophistication, high costs of doing business, limited access to finance, and weak domestic competition.[xxvi] Ukraine could substantially lower these barriers by the liberalizing trade and creating free trade agreements with the EU.

After reaching a record high of 6.1% annual growth in 2005, the Czech GDP surged to 7.4% annualized rate in the first quarter of 2006, just below market expectations (7.5%) that had become increasingly optimistic about the level of activity in the economy.[xxvii] Investment activity remains robust; for example, Hyundai has invested heavily, and the spillover effects are beginning to take hold as four other Korean companies operating in areas connected to the automotive industry prepare to invest in the Czech Republic as well. This pattern is likely to continue, ensuring healthy FDI levels over the next few years.[xxviii] Czech Republic FDI inflows as a percentage of GDP, averaging about ten percent per year since 1999,[xxix] have been among the highest in the world. According to official data, German, Dutch, and US firms have been the most active investors, with EU countries accounting for more than three-quarters of total FDI.

Although high unemployment remains the most difficult social problem facing the Polish government, reducing the high level of government borrowing is the country's biggest economic policy challenge. Such high levels of borrowing have led to tensions between fiscal and monetary policy. The substantial deficit forces the government to issue large amounts of government bonds, many of which are bought by foreign investors. This increases the zloty's sensitivity to economic and political news, pushing up the zloty in 2001 but depressing its value from 2002 until early 2004. Budgetary problems were particularly serious in 2001, as slow economic growth and poor spending control produced high budget deficits and a sharp increase in government debt. Only a range of one-off measures kept the budget deficit from increasing further, and in mid-2003 concerns resurfaced that public debt would breach the critical level of 55% of GDP in 2004. This would trigger emergency fiscal measures to prevent the debt from rising above the constitutional limit of 60% of GDP. The rise in the zloty in 2004 caused the measure of public debt used to assess compliance with the constitutional limit to fall from 49.9% of GDP in 2003 to 48.1% of GDP the following year. It rose to 48.8% of GDP in 2005.[xxx]

CONCLUSION

A variety of factors influence foreign direct investment activities in CEECs. Each of the countries studied has pursued different objectives in moving toward market economies. The empirical results suggest that GDP, corruption, and a variety of characteristics significantly influence FDI inflows. Participation in the free market inevitably drives a society to improve democratic institutions, subsequently improving competition, transparency, and trade openness. This analysis has policy implications. Improvements in a country's investment climate could attract higher FDI inflows, leading to higher GDP and the virtuous cycle of attracting more investment.

The most effective way for the CEECs to modernize their economies is through increased FDI. International firms outsourcing production to the region frequently transfer knowledge and emerging technologies. Moreover, membership into the EU appears to play a significant role in improving GDP and FDI, because in joining a country's economic and social systems become more uniform with those of their Western neighbors and their instability decreases. Integration also provides access to markets, services, and capital previously unavailable to CEECs.

For the risk-averse investor, investment in the Czech Republic would be wise. It continues to perform well and its prospects for continued growth remain positive, although with a possible change in government and its skepticism toward the euro, some degree of uncertainty may be inherent. Currently, it appears Poland may be in the best position to become a formidable power in the region, but not without making politically unpopular reforms, such as privatizing much of the public sector, especially energy and agriculture. Poland's yields on agricultural output are dismal given the level of employment in the sector. Ukraine may be ten to fifteen years away from solidifying democratic structures to ensure adequate returns on investment. For the risk taker, however, the reward could be substantial, assuming a willingness to endure the not insignificant transaction costs an investor will pay in the extralegal market. As the economies of these nations become more market-driven, political developments, while still influential, will exert a smaller role in derailing growth. This, combined with EU macroeconomic guidelines, makes a strong case for continued growth in the Czech Republic and Poland. Meanwhile, Ukraine is generating a great deal

[xxvi] World Bank Country Brief 2005.

[xxvii] Emerging Markets Monitor, *Central Europe & Baltics*, August 2006.

[xxviii] Emerging Markets Monitor, *Central Europe & Baltics*, August 2006.

[xxix] Emerging Markets Monitor, *Central Europe & Baltics*, August 2006.

[xxx] Economist Intelligence Unit, Country Profile 2006 www.eiu.com.

of interest. It is large enough to host national businesses on a considerable scale, yet, Ukraine will need to institute further reforms in order to create a more favorable climate which is less bureaucratic and corrupt.

The results of this study indicate that increased foreign direct investment and stronger democratic institutions are closely correlated. The results also serve as a powerful lesson for the incentive for creating and increasing stability throughout Central and Eastern Europe. After centuries of conflict, Western Europe has become a very politically stable region since World War II; economic integration has been a key driving force of stability. Now, as the Czech Republic and Poland demonstrate, closer economic ties to the West can be beneficial for CEECs. Hopefully their success can be implemented throughout the rest of the continent.

APPENDIX 1

Discussion of the Variables

(See Table 3 for more detailed information).

Gross Domestic Product. Economic output is thought to have a direct influence on investment decisions. Although a one- or two-year period may not be representative of growth trends, five-and ten-year trends indicate whether or not a country has a steady track record of growth. Thus, GDP and growth rates are viewed as proxies for both economic activity and the potential for continued growth. As a result, these are thought to be strong determinants of subsequent FDI.

Corruption remains a primary concern in the former Soviet bloc countries. Many businessmen cite corruption and transaction costs resulting from corruption as a key deterrent to investing. Political and business leaders of these nations acknowledge the problem as well. A higher level of corruption undermines the confidence of transacting in a host country, reducing the likelihood of investing.

Political Rights. Studies indicate that countries which are predominately electoral democracies notably improve stability of their political institutions, economic growth, and public faith in democracy. Thus, increased political rights acts as a proxy for combating corruption, improving transparency, and fortifying the rule of law.

Enforcing Contracts. Contract enforcement is an important consideration for investors because stable and efficient transactions can occur only if a country enforces commitments. The cost of recovering damages also influences decisions to do business abroad. Investors seek assurance that an effective and reasonably efficient tort recovery system exists to ensure access to justice through legal channels. This measure examines the efficiency of contract enforcement by following the evolution of a payment dispute and tracking the time, cost, and number of procedures involved from the moment the plaintiff files the lawsuit until actual payment for damages.

Trade Policy is a key factor for measuring economic freedom. The degree to which government hinders access to, and the free flow of, foreign commerce can have a direct bearing on FDI. For example, when a government directly taxes the importation of a product through tariffs, or impedes its access through non-tariff barriers, it distorts incentives. Some groups in that country will have an incentive to produce that product instead of another one that they may be better suited to producing. At the same time, the tariff can act to elevate or depress price equilibriums.

Fiscal Burden. Higher tax rates act as a disincentive for investors. The marginal tax rate confronting an investor is in effect a price paid for supplying an entrepreneurial venture. The higher the tax, the lower the rewards and less investment will occur. Likewise, when a government expends money, it acquires resources, diverting them away from potentially more productive private choices and goals. This is true whether the expenditure is to acquire resources for its own purposes (government consumption) or for transfer payments among citizens. As a government increases (decreases) its expenditures, it necessarily reduces (increases) the level of economic freedom in a society. Such expenditures reflect the total fiscal burden.

Government Intervention. Too much government interference can be detrimental to private economic activity because of government's (often inefficient) consumption of resources, but also because government consumption can crowd out private initiative and investment, and the resultant inefficiency deters economic growth. Economic freedom and the economy suffer.

Monetary Policy. The value of a country's currency is shaped largely by its monetary policy. With a stable monetary policy, investors can rely on market prices for the foreseeable future. Hence, investment, savings, and other longer-term plans are easier to make, and investors enjoy greater economic freedom. Inflation distorts pricing, misallocates resources, and raises the cost of doing business, deterring investment. There is no singularly accepted theory of the right monetary policy, but most theorists support low or zero inflation. A good way to gauge the influence of monetary policy on economic freedom is to analyze the inflation rate over a period of time.

Wages & Labor. In a free-market economy, prices allocate resources to their highest use. Most governments exercise some degree of wage and price controls. By so doing, they inhibit information and curtail economic activity. Government control can emanate not only from explicit price controls, but also from heavy involvement in the economy, which distorts pricing. Therefore, the more a government intervenes and controls prices and wages, the lower its level of economic freedom and the higher its score.

Property Rights. The ability to accumulate private property is a primary motivator in a market economy, and the rule of law is vital to a fully functioning free market economy. Secure property rights give investors the confidence to undertake commercial activities, save their income, and make long-term plans because they know that their income and savings are safe from expropriation. The less protection private property receives, the lower a country's level of economic freedom and the lower the incentive to undertake investment activities.

Regulation. Regulations are effectively a form of taxation that makes it difficult for entrepreneurs to create and/or maintain new businesses. In some countries, government officials discourage any private-sector initiatives; in a few, such activity is illegal. Although many regulations hinder businesses, the most important are associated with licensing new companies and businesses. If regulations are applied evenly and transparently, it lowers the regulatory burden, because it enables businesses to make long-term plans more easily. If regulations are applied inconsistently, it raises the regulatory burden on businesses by creating an unpredictable business environment.

EU Member. Membership in the EU provides access to a large, wealthy trading market. Membership also mitigates risks to investors by providing a level of assurance to investors that transparency and adherence to certain business practices and principles will be followed. Countries have become wealthier through membership as transaction costs have decreased, practices and processes are standardized, and the access to markets to sell goods and services is increased.

Table 3: Description of Variables

Variable	Notation/ Measurement Scale	Description	Source
Log of Foreign Direct Investment (Dependent)	Log FDI 1999 Log FDI 2003	Log of total foreign direct investment measured from 2000-2004	United Nations Conference on Trade and Development <www.unctad.org>
Corruption	1999 CPI 2003 CPI	Measure of corruption perception in countries based on measure	Transparency International <transparency.org/>
Log GDP	Log GDP 1999 Log GDP 2003	Log of total gross domestic product measured from 1999-2003	World Bank
Political Rights	Rates each country on a seven-point scale for political rights. 1 represents the most free; 7 the least free	Measures a country's freedom by examining its record in political rights Measures if a country grants its citizens rights to form political parties that represent a significant range of voter choice and whose leaders can openly compete for and be elected to positions of power in government.	Freedom House <freedomhouse.org>
Contract Enforcement	Number of procedures from the moment the plaintiff files a lawsuit in court until the moment of payment.	Measures the efficiency of contract enforcement by following the evolution of a sale of goods dispute and tracking the time, cost, and number of procedures involved from the moment the plaintiff files the lawsuit until actual payment	<doingbusiness.org/>
Fiscal Burden	This scale lists a score from 1 through 5. The higher the tax rate, the higher the score.	Measures government components of taxing and spending based on Top marginal income tax rate • Top marginal corporate tax rate • Year-to-year change in government expenditures as a percent of GDP. A higher score indicates higher burdens	Heritage Foundation, *Index of Economic Freedom* <heritage.org/index>
Property Rights	1 Very high. Private property guaranteed by government; court system efficiently enforces contracts. 5 Very low. Private property outlawed or not protected; expropriation frequent.	Scores the degree to which a country's laws protect private property rights and the degree to which its government enforces those laws. It also assesses the likelihood that private property will be expropriated and analyzes the independence of the judiciary, the existence of corruption within the judiciary, and the ability of individuals and businesses to enforce contracts.	Heritage Foundation, *Index of Economic Freedom* <heritage.org/index>
Trade Policy	1 Very low. Weighted average tariff rate less than or equal to 2.5%. 5 Very high. Weighted average tariff rate greater than 20%.	Measure based on a country's weighted average tariff rate—weighted by imports from the country's trading partners.	Heritage Foundation, *Index of Economic Freedom* <heritage.org/index>

Table 3: Description of Variables (continued)

Variable	Notation/ Measurement Scale	Description	Source
Monetary Policy	1 Very low Weighted rate of inflation less than or equal to 3%. 5 Very high. Weighted rate of inflation greater than 20%.	This factor's score is based on a country's weighted average annual rate of inflation from 1995 to 2004.	Heritage Foundation, *Index of Economic Freedom* <heritage.org/index>
Wages	1 Very low. Wages and prices that are set almost completely by the market. 5 Very high. Wages and prices are set almost completely by the government.	Measures the relative degree of government control over wages and prices.	Heritage Foundation, *Index of Economic Freedom* <heritage.org/index>
Regulation	1 Low. Corruption is virtually nonexistent, regulations are minimal and applied uniformly; a 5 Very High. Corruption is widespread, regulations are applied randomly, and the general level of regulation is very high.	Measures: • Licensing requirements to operate a business • Ease of obtaining a business license • Corruption within the bureaucracy • Labor regulations, such as established work weeks, paid vacations, and as well as selected labor regulations • Environmental, consumer safety, and worker health regulations	Heritage Foundation, *Index of Economic Freedom* <heritage.org/index>
EU Member 1999		Dummy variable that equals 1 if country is an EU member in 1999	Eurostat <eurostat.ec.europa.eu>
EU 10		Dummy variable that equals 1 if country is a new EU member as of May 2004	Eurostat <eurostat.ec.europa.eu>

PHILANTHROPY

The Atlantic Philanthropies
Setting Strategy for the End of a Foundation

by Anna Brennan
Patrick Berry
Erica Dixon
Gani Myrzaliyev

ABSTRACT

In 2002, with the approval of founder Charles Feeney and the Board of Directors, the Atlantic Philanthropies decided to spend down the organization's entire $4 billion endowment within twenty years. This paper examines how the Atlantic Philanthropies chose to pursue this unorthodox strategy and define its own legacy. Largely motivated by Feeney's firm belief of "giving while living," the Atlantic Philanthropies reassessed its programmatic focus and grant-making approach so that it could engage in opportunities in a more flexible and creative manner. As a result, although the organization is actively working toward its conclusion, it continues to take advantage of opportunities for growth, change, and long-term impact.

The other big foundations, they have an unlimited life. They're perpetual organizations. If you decide to limit your life, it concentrates the mind wonderfully. Somebody will be able to make a judgment on this organization within our lifetime as individuals. That really causes you to ask very tough questions. What will we do? How will we do it? How will be sure that it will have an impact? It's a very different approach to philanthropy.

— John R. Healy, Former CEO,
The Atlantic Philanthropies

The Atlantic Philanthropies, a large multinational foundation, has decided to spend down its entire endowment over the next ten years—effectively putting itself out of business. While organizations go out of business all the time, the opportunity to observe a foundation actively planning its own expiration is rare. A spend-down strategy seems counterintuitive to the mission of *any* organization. However, using the framework of Paul C. Light's "Spiral of Sustainable Excellence"—paying particular attention to the foundation's efforts to advocate for legislative and cultural change, an enhanced understanding of the logic of spending down emerges. The Atlantic Philanthropies serves as an example for other foundations interested in the philosophy of "giving while living" and creating an organizational legacy,

The Atlantic Philanthropies is "dedicated to bringing about lasting changes in the lives of disadvantaged and vulnerable people."[i] The foundation funds four program areas: aging, disadvantaged children and youth, population health, and reconciliation and human rights. It has locations in seven countries: Australia, Bermuda, Northern Ireland, the Republic of Ireland, South Africa, the United States, and Vietnam. Atlantic was established in 1982 by Charles Feeney, the founder of Duty Free Shoppers. Heavily influenced by Andrew Carnegie's philosophy of philanthropy, Feeney committed himself to "giving while living" and in 1984 signed the majority of his near-billion dollar fortune over to his foundation.[ii]

In 2002, The Atlantic Philanthropies made the momentous decision to spend down its entire four billion dollar endowment within twenty years. The adoption of a spend-down strategy was significantly influenced by Feeney's firm belief in "giving while living," although Feeney himself initially resisted adopting such a rigid strategy.[iii] After much reflection, however, Feeney and the rest of the Atlantic board decided that a spend-down strategy would, in fact, give them more freedom to make bold choices than they would otherwise have had. As Heidi Waleson explains in a report on nontraditional foundation structures, "linking payout or lifespan to mission can offer a foundation unique opportunities to be deeply involved in areas it cares about, to be responsive to changing circumstances, and/or to make large investments that can prove to be strategic tipping points in its fields of endeavor."[iv] While some other foundations have begun to contemplate strategies beyond the traditional model of five-percent payouts in perpetuity, Atlantic's decision stands out because of the sheer amount of money involved: it has dispensed approximately four billion dollars worth of grants since deciding to spend down and has roughly the same amount left to spend.[v]

As a part of this new strategy, Atlantic completely overhauled its grant-making process. It has defined new program areas and abandoned some old ones, such as higher education. It has also begun to focus more strategically on helping its grantees develop the capacity to use effectively the large grants it is making and preparing them for life beyond Atlantic funding.[vi] The process was difficult and resulted in several tumultuous years during which staff turned over at a furious pace: From 2001 to 2005, Atlantic's overall staff increased from 82 to 100, but during the same period, 75 staff members left.[vii] As Eyal Yerushalmi, a current Atlantic program associate, describes: "a lot of people left when we decided to spend down, a lot of people were either let go or…they weren't behind the spend-down…There [was] a huge cultural shift."[viii]

Today, Atlantic is led by a new President and CEO, Gara LaMarche. Hired in April 2007, LaMarche was tasked with shepherding The Atlantic Philanthropies through its final years of active grant-making, effectively driving the organization out of business by 2020. Since joining Atlantic LaMarche has invested significant time and energy in examining the organization's priorities to refine and more fully implement the spend-down strategy and ensure Atlantic's desired ends are met.

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[i] The Atlantic Philanthropies. Annual Report 2006. 2007.

[ii] Because the transfer occurred in Bermuda, where Atlantic is incorporated, its exact amount is unknown; estimates range upwards from half a billion dollars. Feeney's current net worth is valued between one and five million dollars Michaels, M. "Secretive Philanthropist Breaks Long Silence." The Chronicle of Philanthropy 8 Oct 2007 11 Nov 2007 <http://www.atlanticphilanthropies.org/about/the_billionaire_who_wasn_t>.; "The Secretive Do-gooder." The Economist 1 Oct 2007 8 Nov 2007 <http://www.atlanticphilanthropies.org/about/the_billionaire_who_wasn_t>.

[iii] Michaels, 2007.

[iv] Waleson, Heidi. Northern California Grantmakers. Beyond five percent: The New Foundation Payout Menu. San Francisco: 2007, pg. 32

[v] Bays, J., Dua, &Taliento, L.K. "A Nonprofit Goes for Broke." The McKinsey Quarterly Sep 2006 30 Nov 2007 <http://www.mckinseyquarterly.com/A_nonprofit_goes_for_broke_1851>.; Waleson, 2007.

[vi] Bays et al, 2006.

[vii] Bays et al, 2006.

[viii] LaMarche, Gara. Interview. 2007.

A MODEL FOR ANALYZING STRATEGY

The development and implementation of a new organizational strategy, like Atlantic's plan to spend down its endowment, can be analyzed through many lenses. Traditional models from the for-profit business world examine elements like financial controls and resource allocation, capacity for innovation, management competencies, internal and external conflict resolution, and ability to plan for the future.[ix] While these models can be applied to not-for-profit organizations,[x] newer models developed to focus specifically on nonprofits highlight strategic elements distinct from an organization's profits, such as the value of accomplishing an organization's mission or the importance of generating external support.[xi] Although these are all useful approaches to understanding the ways in which organizations set and carry out their strategies, they may fail to draw out some of the unique advantages and challenges facing The Atlantic Philanthropies. Paul C. Light's "The Spiral of Sustainable Excellence" offers a model for more thoroughly evaluating Atlantic's evolution.

Light's spiral model describes an organization's growth from an "organic" beginning, when basic questions of survival are at stake, to a "reflective" stage, during which the organization focuses on "expanding [its] mission to include broad questions of long-term legacy."[xii] In between, organizations move through an "enterprising" phase of growth, an "intentional" phase of focusing, and a "robust" phase of strengthening.[xiii] While the five stages can occur in sequence, organizations do not necessarily move through them in order. An organization can move quickly through each stage or linger in one for years. And an organization can slip backwards just as easily as moving forwards—not every organization will advance to the reflective stage.

The Atlantic Philanthropies has reached the reflective landing of Light's spiral. Its strategy-setting process is not that of a young organization trying to determine the environment in which it exists, its advantages within that environment, and the competition it may encounter. Rather, Atlantic is a mature organization that can revisit and reflect upon its organic roots in order to plan the final phase of its life. The decision to spend down its endowment catapulted Atlantic into this stage, where questions of "advocacy, example, and legacy" are paramount.[xiv] In fact, that seems to be what a spend-down strategy does: it forces an organization to move beyond the day-to-day and take long-term, overarching goals into account, even while limiting the time available for the organization to achieve them. By analyzing the strengths and advantages of Atlantic's plan as well as its potential problems through the framework of Light's reflective landing, a spend-down strategy, can be more clearly understood.

Advocacy, Example, and Legacy

Light's framework predicts that when an organization reaches the reflective landing of the spiral, it will begin to focus on legacy, rather than the issues of strength, growth, and survival that characterize the other stages.[xv] Perpetual foundations typically view their legacies in terms of the organizations or institutions they fund. The Carnegie Corporation is credited with establishing America's public library and teacher pension systems. The Russell Sage Foundation began the social work profession. Public television owes its existence to both Carnegie and the Ford Foundation.[xvi] Atlantic's leadership, and LaMarche in particular, is acutely aware that they cannot know for certain which programs, if any, will have lasting impacts that can determine the organization's legacy. In response to this uncertainty, Atlantic is beginning to define its legacy more broadly than a perpetual foundation would. Legacy is not simply the enduring impact of the organizations it funds, but also Atlantic's potential for legal and cultural change through advocacy and its example for other foundations contemplating a spend-down strategy. By focusing on its ability to make lasting impacts in all three of these areas, Atlantic is increasing its odds of successfully establishing its legacy.

Advocacy has always been central to Atlantic's strategy, in part because of its competitive advantage: as an organization chartered in Bermuda, Atlantic is able to fund political activities forbidden to American nonprofits.[xvii] However, LaMarche also sees advocacy as being particularly important to a spend-down organization in a way that is tied closely to legacy: Funding a program only helps its current participants, while funding advocacy that results in changes to laws and policies can have a much broader and more lasting effect.[xviii] This strategy is not peculiar to a spend-down organization, and organizations with policy changing missions can certainly exist within any of Light's stages. What sets a reflective organization like The Atlantic

[ix] Taylor, B. "Strategic planning - Which style do you need? ." Long Range Planning 17(1984): 51-62., p. 51.

[x] Bryson, J.M. "A strategic planning process for public and non-profit organizations." Long Range Planning 21(1988): 73-81.

[xi] Moore, M.H. "Managing for value: Organizational strategy in for-profit, nonprofit, and governmental organizations." Nonprofit and Voluntary Sector Quarterly 29(2000): 183-204.

[xii] Light, P.C. "The spiral of sustainable excellence." The Nonprofit Quarterly 11Winter 2004 08 Nov 2007 <http://www.nonprofitquarterly.org/section/639>.

[xiii] Light, P.C., 2004.

[xiv] Light, P.C., 2004.

[xv] Light, P.C., 2004.

[xvi] LaMarche, 2007.

[xvii] LaMarche, 2007.

[xviii] LaMarche, 2007.

Philanthropies apart is its focus on advocacy *beyond* mission—as part of its legacy.[xix]

Additionally, Atlantic is no longer content to define advocacy only as promoting legislative change. Instead, it is broadening its goals for lasting impact. During the past year, the foundation spent a great deal of money, time, and effort to encourage the United States Congress to pass comprehensive immigration reform. If successful, the resulting legislation would have been the first bill to address the issue in 22. Though the bill did not pass, and for now the moment for reform seems to have passed, had the effort been successful, would another bill have been needed in 20 more years, when Atlantic will no longer exist? More and more, Atlantic's leaders are coming to view even radical legislative change as a means to temporary effects, not lasting ones.[xx] A possible remedy for this is to fund organizations and programs that push beyond legislative changes to lead shifts in the culture of a society:

> "We ought to be even more aggressive about identifying the strength and nature of resistance to our programme goals and working where possible with trends, and not against them …. For example, we work on gay rights in South Africa but not in the U.S. In South Africa, there are stronger protections for lesbians and gays than virtually anywhere else in the world, and little organized resistance. Yet the law is well ahead of the culture, so there is still work to do. In the U.S., by contrast, the culture on gay rights is ahead of the law, and despite strong opposition, the trends are moving in a positive direction. Which should be a priority for us?"[xxi]

By pressing for cultural transformations beyond legislative change, Atlantic is helping to ensure that its advocacy will lead to long-term impact.

The Atlantic Philanthropies is even focusing some of its attention on the cultures of other foundations, using its example to demonstrate the positive potential of a spend-down strategy. In 2005, for example, Atlantic commissioned McKinsey & Company to study the initial impact of its spend-down strategy.[xxii] It has also worked closely with other spend-down organizations, including the Aaron Diamond Foundation, the Beldon Fund, and the French American Charitable Trust to develop a more concrete road map for implementing this strategy.[xxiii] Atlantic is also funding the Aspen Institute's study of spend-down philanthropies. When asked if this was part of a broader strategy or just a good opportunity, LaMarche responded, "Oh, it's very much part of strategy."[xxiv] He elaborated that Atlantic is "trying to model a way of doing spend-down that … others might want to follow."[xxv] There is evidence that the culture of foundations is shifting from establishing perpetual foundations to creating a foundation with a limited lifespan. In 2004, the Foundation Center found that although just nine percent of 879 surveyed foundations were not planning to exist forever (with 22% undecided and the remainder perpetual foundations), "[f] unders who had established foundations in the previous decade were more likely to indicate they would not exist in perpetuity."[xxvi]

Return to Organic Questions

As part of the process of defining and refining the broad and lasting changes it hopes to effect, Atlantic has also begun revisiting its origins. As forecasted by Light's model, the foundation's leaders and staff have "return[ed] to the organic questions that sparked their initial journey, challenging themselves to merge their present capabilities with their past intentions."[xxvii] A striking example of this process is the series of worldwide staff meetings that LaMarche called to hone the organization's vision statement. Upon starting at Atlantic, LaMarche began taking a new look at how the organization defined its "vision and values,"[xxviii] from the focus of its grant-making to staff policies about internal diversity. In restating and refining Atlantic's vision, LaMarche hoped to "articulate what the foundation was about in a way that would capture what people already felt, but also … lay down some markers for where [he] wanted to take it."[xxix] It is also important to LaMarche that the vision gain broad acceptance, so that, as he wrote in a memo to the entire staff, "it becomes OUR vision, not simply mine."[xxx] He therefore submitted his version of the vision statement to his staff members throughout the world, asking them to discuss and revise it. To encourage staff at all levels to feel comfortable participating, the vision meetings were led by junior staff members. In this way, LaMarche ensured that members at all levels of the organization, including even "the receptionists and a cook in Vietnam,"[xxxi] helped him revisit where Atlantic had come from, look at the organization's organic values, and become truly reflective.

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xix Light, P.C., 2004.
xx LaMarche, 2007.
xxi (LaMarche Memo, July 2007).
xxii Bays et al, 2006.
xxiii LaMarche, 2007.
xxiv LaMarche, 2007.
xxv LaMarche, 2007.
xxvi Walseon, 2007, p. 32.
xxvii Light, P.C., 2004.
xxviii LaMarche, 2007.
xxix LaMarche, 2007.
xxx (Memo, April 2007
xxxi LaMarche, 2007.

Highlighting Important Dangers

While using a tool like Light's spiral may not be absolutely necessary to realize that issues like legacy, vision, and lasting example are particularly important for any spend-down organization, it is highly useful in pointing out some of the dangers that a reflective organization may face. Light identifies "complacency and routine" as threats facing reflective organizations.[xxxii] LaMarche recognized this danger to Atlantic even before accepting the position of CEO, as he described in a memo written just a few months after beginning his tenure:

> "I was told over the years by John R. Healy [Atlantic's former CEO], and I heard it echoed in the comments of staff members initially, that Atlantic was in effect a ship set on a journey for the remainder of its life, with possible mid-course corrections in the next few years… I told the Atlantic search committee and board before I was hired that I had little interest in coming here to preside over such a static situation."[xxxiii]

The Atlantic Philanthropies has a strong idea of where it wants to go in its final years of operation, but that does not mean that its direction is set in stone. The board's decision to hire LaMarche, knowing that he would push the organization to continue to evolve and "take risks,"[xxxiv] further reflects the organization's ongoing battle against this danger of complacency.

Another of the potential dangers that Light identifies also seems to have been foreseen by the Atlantic leadership when the decision to spend-down was made.[xxxv] Light warns that reflective non-profits "may become so focused on self preservation that they forget what brought them into being in the first place."[xxxvi] Spending-down effectively negates this very real danger. An organization that is going to exist in perpetuity cannot imagine its own legacy in thirty or forty years because simply continuing to function becomes a primary focus of its mission. Spending-down avoids this focus, and allows for the larger, legacy-driven activities in which Atlantic is involved.

LIMITATIONS OF LIGHT'S MODEL

The fact that the three key foci Light identifies for a reflective organization – advocacy, example, and legacy – have played a key role in Atlantic's spend-down strategy seems to justify using this framework to help understand Atlantic's strategy. So, too, does the fact that Light's model identifies Atlantic's reflection upon its organic beginnings through LaMarche's vision-value process. This analysis can be somewhat misleading, however, as there are some weaknesses in using Light's model to examine The Atlantic Philanthropies.

First, some of Light's stages focus on the ability to survive financially—an organization's ability to feel viable and secure enough to look to the future plays a large role in being both robust and reflective. It would be easy to mistakenly categorize a well-endowed organization like Atlantic as reflective merely because it has the financial security to look beyond next week, next month, or next year. More importantly, there is some evidence that Atlantic, while demonstrating all of the key characteristics of a reflective organization, is also tackling the challenges that define other levels. Shortly after the spend-down decision was made, the organization went through what LaMarche called "quite a substantial overhaul."[xxxvii] Changes in staffing, funding areas, and the types of grants given resulted in the kind of structural strengthening that Light describes as aspects of the robust phase.[xxxviii] In addition, over the past few months Atlantic has worked to change its organizational structure and culture by reorganizing meetings and de-emphasizing organizational hierarchies—activities that are in Light's intentional stage. The inability to definitively categorize every aspect of Atlantic within one stage further complicates Light's model. Despite these weaknesses, however, the advantages of using this model of a reflective organization to understand Atlantic's strategy-setting, advantages, and potential challenges far outweigh the kinks in what Light admits should be a "pliable view of organizational growth."[xxxix]

CONCLUSION

The decision for a successful philanthropic organization to put itself out of business may seem illogical and counter-productive, however, using Paul C. Light's "Spiral of Sustainable Excellence" to examine the decision leads to a deeper understanding of the benefits of spending down. Atlantic's example suggests that a spend-down strategy is a highly effective way to utilize the strengths and avoid the pitfalls facing a reflective organization. By focusing its attention on the areas of legacy, advocacy, and example, as well as reexamining its organic roots, The Atlantic Philanthropies is discovering opportunities for growth, change, and long-term impact in the final decade of its life.

[xxxii] Light, P.C., 2004

[xxxiii] (Memo, July 2007).

[xxxiv] LaMarche, 2007.

[xxxv] The spend down decision was made before LaMarche was hired.

[xxxvi] Light, P.C., 2004.

[xxxvii] LaMarche, 2007.y

[xxxviii] Light, P.C., 2004.

[xxxix] Light, P.C., 2004.

POLICY IN ACTION

End of the Zero-Sum Game?
Ethnic Politics and Gentrification in Williamsburg, Brooklyn

by Michael Freedman-Schnapp

ABSTRACT

New York City politics have long-standing divisions and roots. By examining Williamsburg's recent land use and economic development in the context of the neighborhood's ethnic and political factions, This paper draws on the author's work as a community organizer to place land use issues in the context of neighborhood character and popular sentiment. It poses questions about whether the neighborhood can leave behind its zero-sum politics and equitably share the benefits of development.

In September 2004, a friend persuaded me to volunteer for the campaign of Ron Clinton, a Latino social worker associated with the Pueblo Democratic club, who was running for the North Brooklyn seat in the State Senate.[i] Clinton had impressed me with his work as an organizer for Howard Dean's campaign earlier that year, and I knew little about his opponent, then-Council Member Martin Malave-Dilan.

Largely ignorant of Williamsburg's[ii] neighborhood politics, I was taken aback on Election Day when a worker for Malave-Dilan approached me and advised that I was supporting the wrong candidate. She told me that Clinton was supported by Hasidic Jews who were trying to gentrify the neighborhood and take homes away from Latinos. I had never heard ethnic politics, outside of black-white relations, discussed in such a racially charged manner.

This perception of politics as a zero-sum game—that gains from one racial, ethnic, or socio-economic group invariably come at the expense of another—defines the political debate over development in New York City. The local development debate centers around arguments that require a developer to preserve and reuse a local factory will deny one ethnic group the resources to build affordable housing and will dislocate long-time residents, that constructing high-rise buildings on the waterfront will bring in high-income families and gentrify the entire neighborhood, and that using zoning to require artisan and light industrial uses on the ground floor will deter property owners from erecting new buildings. All of these statements represent the development debate in New York City generally and North Brooklyn in particular. While these issues may be a product of the city's hyperdiversity[iii] and ethnic parochialism, these winner-take-all sentiments are also directly rooted in the recent history of open ethnic and political conflict in Williamsburg, particularly between Hasidic Jews and Latinos.

With a new group of gentrifiers—young, predominantly white professionals—entering the neighborhood, development politics in Williamsburg is gaining new dimensions. Even though the benefits the neighborhood will reap from development are not limited, many political actors still act as if the benefits are finite, and they behave as if their neighbor is plotting to steal an unduly large portion. While "tak[ing] the politics out of politics"[1] may not be possible or even desirable, the particular nature of this debate inhibits further development of broader cross-interest group coalitions. Therefore, the chances of attaining what I call "value-added development"—the harnessing of development and government investments to create new neighborhood amenities that add value for both the community and for the developer—is slim. The debates surrounding the Schaefer Landing project, the massive 2005 rezoning of Greenpoint-Williamsburg, and the proposed redevelopment of the Domino Sugar factory show that the more development politics change, the more they remain the same.

WILLIAMSBURG IN THE THROES OF CHANGE

As a neighborhood that appears to be maintaining development momentum in the face of a nationwide housing slump, Williamsburg, Brooklyn is facing stark choices about its future. In the wake of major changes to the area's zoning on over 110 blocks, and with most of the neighborhood's industrial loft buildings already converted to housing, land owners in Williamsburg are rapidly demolishing one-and two-story industrial buildings to erect high-end luxury residential developments.

The neighborhood's great resource for development is the three miles of waterfront between the Brooklyn Navy Yard and Newtown Creek. During the 19th and most of the 20th centuries, the area was a bustling center of shipbuilding, cargo movement, and oil refining, not to mention the home of prominent national brands such as Schaefer beer, Domino Sugar, and Eberhart-Faber pencils. Currently, while land owners wait for the right market to redevelop, many areas of the waterfront are vacant; Other portions are still occupied by large warehouses and lumber yards. This not-yet-reborn waterfront is what the Bloomberg administration and development interests point to as the golden opportunity for Brooklyn in the 21st century.[2]

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i Much of the information about Williamsburg and Greenpoint in this article comes from my experience as a North Brooklyn resident for the past five years and advocate for industrial jobs over the past four years. I represented the New York Industrial Retention Network, an independent non-profit organization that advocates for keeping well-paying blue-collar jobs in New York City, during the public debate over the 2005 rezoning. I have also been involved for the past two years as a board member of Neighbors Allied for Good Growth (NAG), and recently was selected to be the co-chair of the board. Through this activism, I have had been exposed to the political views of virtually all facets of the community; this experience informs the vast majority of the insight and analysis in this piece. Where information comes from my experience living and working in North Brooklyn, it is attributed as such.

ii For further geographical detail of the Greenpoint and Williamsburg areas and the locations of the projects discussed, please see Appendix A.

iii Ethnic hyperdiversity in the New York context is discussed in Miyares, Ines. "From Exclusionary Covenant to Ethnic Hyperdiversity in Jackson Heights, Queens," *Geographical Review*. New York: Oct 2004. Vol. 94, Iss. 4; pg. 462, 22 pgs; In its effects on the formation of New York City political coalitions in Mollenkopf, John Hull. *A Phoenix in the Ashes*. Princeton, NJ: Princeton University Press, 1992; In the San Francisco context as "hyperpluralism" in DeLeon, Richard Edward. *Left Coast City*. Lawrence Kansas: University of Kansas Press, 1992.

Upland, however, the neighborhood is extremely active. There are long-established ethnic communities of Puerto Ricans, Dominicans, Hasidic Jews, Italians, and Poles, as well as a rapidly growing population of young, predominantly white professionals. There are hundreds of light manufacturers and artisan businesses that have started or relocated in the neighborhood and several lively retail strips. Williamsburg and its northern neighbor Greenpoint are largely economically healthy and vibrant communities.

As real estate pressure on existing residents and businesses continues to mount, however, Williamsburg is in danger of losing this vitality as a product of its own success. New residents can afford to pay significantly more than existing residents, which has led many landlords to rapidly raise rents. Rising costs are displacing many residents, particularly Latinos, from Williamsburg to elsewhere in Brooklyn.[3] Despite the quality of life gains for residents who are able to stay in gentrifying neighborhoods, similarly undesirable displacement of lower-income residents and lower-rent commercial uses has been a repeated feature of recent history in New York and other older American cities.[iv] This same process is breaking up the mixed-income nature of the area and is forcing out families who, during the late 1970s and 1980s, helped revitalize Williamsburg following a crisis in the mid-20th century of disinvestment and abandonment that left the neighborhood struggling. Myriad grassroots efforts sprouted up to stabilize and revitalize these neighborhoods, and these efforts grew into the City's current "community development" movement and have become a critical component of the current development debate.

NOT ONLY IS WILLIAMSBURG LOSING THE HUMAN CAPITAL OF FORMER RESIDENTS, BUT THE NEIGHBORHOOD'S DEFINING PHYSICAL QUALITIES THAT DROVE ITS REVITALIZATION ARE ALSO AT SEVERE RISK.

Not only is Williamsburg losing the human capital of former residents, but the neighborhood's defining physical qualities that drove its revitalization are also at severe risk. Particularly in Northside Williamsburg, residents were historically attracted to small-footprint buildings (typically 25'—50' street frontages), local retail establishments, and a mix of uses side-by-side or even in the same building. By contrast, new developments have large footprints (upwards of 100'—200' street frontages and in some cases 800' on the waterfront), little relation to the street or surrounding buildings, and a much narrower range of uses. A design mistake in a large new development, such as having a parking lot take up 75' of prime street frontage, or having new construction break a consistent building streetwall, has a large impact on the neighborhood for which neighboring buildings cannot compensate.

Many thoughtful New Yorkers have advocated for value-added development: The creation of the elevated High Line park in Manhattan's Chelsea neighborhood was the product of this type of community advocacy. For years, property owners had argued for the abandoned, elevated freight rail line to be torn down so they could proceed with developing parcels under the structure. A small coalition of residents, businesses, preservationists, and park activists successfully advocated for the city to preserve the High Line as new open space. As a concession, the city offered the property owners development rights that they could sell to nearby sites in exchange for the preservation of the structure.[4] While the High Line park is not open as of this writing, numerous developments are already underway that arguably would not have proceeded without public investment in the High Line.

In Williamsburg, value-added development could take on several different forms. These include on-site housing units affordable to households being displaced from the community, additional high-quality public space, or new development or façades that are well integrated with existing streetwalls. Because the success of the new local economic revival has come at a steep price—the loss of commercial and building diversity; the crowding of local services, especially transit; and construction accidents displacing residents of neighboring buildings—novel disputes over development and zoning have erupted in Williamsburg over the past decade. The changes in neighborhood struggles about development stem from the groups previously involved and the events of the historical debate.

ETHNIC GROUPS IN WILLIAMSBURG

There are three main political factions in the neighborhood: 1) the Latino (mostly Puerto Rican and Dominican) population of Southside Williamsburg and Bushwick; 2) the Satmar Hasidic population of South Williamsburg; and 3) the growing population of young, primarily white,

[iv] For examples of the nature of gentrification-caused displacement of residents and businesses and policies to mitigate these well-documented effects, see Maureen Kennedy and Paul Leonard. "Dealing with Neighborhood Change: A Primer on Gentrification and Policy Choices". Washington: Brookings Institution, April 2001; Alexander von Hoffman. *House by House, Block by Block*. New York: Oxford University Press, 2003; Diane Levy et al. "In the Face of Gentrification: Case Studies of Local Efforts to Mitigate Displacement." Urban Institute: Washington, DC, 2006. Sharon Zukin. *Loft Living: Culture and Capital in Urban Change*. New Brunswick, NJ; Rutgers University Press, 1989.

Racial and Ethnic Composition of Brooklyn Community Board 1	
White Non-Hispanic	48%
Hispanic (All Races)	39%
Black Non-Hispanic	6%
Asian	4%
More Than One Race	3%
Some Other Race	2%
Foreign-Born	34%

Source: 2000 Census

professionals, centered around Northside Williamsburg (colloquially and over-broadly referred to as "hipsters.") Other significant groups in the area are second and third-generation Italian-Americans in central Williamsburg and mostly first-generation Polish-Americans in the northern reaches of Williamsburg and Greenpoint.

Satmar Hasidim in Williamsburg

Hasidism is a branch of Orthodox Judaism that generally emphasizes charismatic leadership, strict adherence to Jewish religious law, worship through joy, Torah scholarship, and frequently inward-focused communities.[v] The main Hasidic group in Williamsburg is the Satmar community.[vi] Satmars first settled in Williamsburg in 1947, when the founder Rebbe Joel Teitelbaum emigrated to the United States after narrowly surviving the Holocaust.[5] (Metzler 1995, 11).[vii] The Satmar population grew rapidly as the group's adherents followed the Rebbe to Williamsburg. The Satmars' high reproductive rates—families typically have six to ten children, and their population doubles every twelve years—combined with out-migration of non-Hasidic Jews from Williamsburg, led to the Satmars becoming the dominant Jewish group in Williamsburg by the late 1960s.[6]

Satmar politics have a fairly rigid structure, with a charismatic religious leader at the top (a relative of the founder Joel Teitelbaum, in keeping with a common Hasidic pattern) and a dozen or so paramount rabbis directly below him. Members of the community generally follow directives from the leadership about how to vote (delivered in synagogue on the service before an election), thus making the community a uniquely solid voting bloc.[7]

Since the death of Joel Teitelbaum in 1979, the community has undergone a series of succession fights that came to a head in 2006 with the passing of his nephew Moses Teitelbaum.[8] Currently the group is split into two main factions, one led by Zalmen, Moses's third son, and another by Moses's eldest son Aaron. These kinds of leadership splits are common in Hasidic groups as they grow, but the Satmar succession fight is unusually intense.[9] This leadership crisis may change the community's patterns of interaction with those outside of the community.

Boriqueño and Domincano Williamsburg

Latinos in Williamsburg are primarily of Puerto Rican and Dominican descent, although a few other Central American nationalities make up a small part of the community. Puerto Rican migration to Williamsburg began with the advent of cheap airfare from San Juan to New York City and peaked in the 1950s and early 1960s.[10] Puerto Ricans moved to Williamsburg, among other neighborhoods, in large numbers.

After initially facing discrimination in the neighborhood, Puerto Ricans began to engage politically in the 1960s. The best remembered Latino political culture of that time is militant groups like the Young Lords, but many grassroots groups simultaneously grew up to solve neighborhood problems, some in Williamsburg. The Catholic Church also served as a focal point of community organizing in the neighborhood.[11] These two sources of activism—the Church and grassroots groups—continue to compete for Williamsburg Latinos' political support even today.

By the mid-1970s, Williamsburg's Latino population was comprised just as much of Dominican and other Central American groups as it was of Puerto Ricans.[12] While Washington Heights in Manhattan has a more concentrated Dominican population, Southside Williamsburg and neighboring Bushwick also account for a major share of the City's Dominican population.[viii] Non-Puerto Rican Latino groups seem to have followed a similar pattern of political involvement as Puerto Ricans, though their political strength in some ways is handicapped by a (perhaps incorrect) perception of lower voter participation and eligibility rates.

There are several community and advocacy groups that anchor the Williamsburg Latino community. Los

[v] The Hebrew root of the word Hasidic literally means "divine love". "Hasidism" refers to the religious practice, "Hasid" refers to an individual, and "Hasidim" is its plural.

[vi] Like most Hasidic groups, Satmar is named after the town in Hungary (Satu-Mare) from where the leadership originates. Other Hasidic groups in Williamsburg include the Klausenburg, Pupa/Pappa, Tzelem, Vishnitz, Spinka, Krasna, and Viener, but the Satmars are by far the majority group and the most physically tied to Williamsburg.

[vii] The Satmar are also distinguished from other Hasidim by their strong anti-Zionist stance, based on a conviction that a temporal state of Israel should only exist at the coming of the Messiah (Rubin 1972, 30–32).

[viii] The main Dominican migration to New York City began with the fall of the nation's travel restrictions with the 1961 assassination of President Rafael Trujillo and was further eased by the 1965 liberalizing of U.S. immigration laws (Waldinger 1996, 128–133).

Sures, the one most tied to the Southside, began in the early 1970s as a unification of various grassroots groups working to stabilize the neighborhood in the face of residential abandonment. The organization now develops and administers a range of affordable housing units in Williamsburg and provides several social service and economic development programs.[13] The St. Nicholas Neighborhood Preservation Corp., locally known as St. Nick's grew out of the activism of a Catholic Parish in eastern Williamsburg and administers a variety of affordable housing, education, and economic development services. While not as Latino-focused as Los Sures, St. Nick's has adapted with changing neighborhood demographics to serve the community. Finally, a new Church-sponsored group, Churches United for Fair Housing (CUFH), formed in 2003, has led a great deal of advocacy around affordable housing in Williamsburg.[14]

"Hipster" Williamsburg

Since the early 1990s, there has been massive gentrification in Williamsburg, particularly in Northside Williamsburg around the Bedford Avenue L Train stop. From my experience, the population that has moved in appears primarily white, almost entirely American-born, and largely not native to New York City. While many in this community resent being called "hipsters," this term is often used to describe the population driving the localized arts- and consumption-focused gentrification occurring in the neighborhood.[15][ix]

In contrast to long-time residents, many of these new residents seem to be far more likely to work in the financial, information, professional services, or arts and entertainment sectors, which gives them higher incomes relative to existing residents. From my observations, they are also less likely to have children and more likely to live with roommates, which has led to much higher combined household incomes.[x] Even though some of the gentrifiers may not consider themselves financially successful, their relative affluence and formation of higher-income households appear to be a major reason that local rent levels are rapidly rising.[xi]

One should note that many new residents in this group have also started businesses in the neighborhood, particularly artisan and light manufacturing establishments. These include numerous woodworking shops, set and display manufacturers, high-end art movers, a glass studio, and an antique lighting restorer. These shops have positive economic benefits for the hundreds of local residents whom they employ in well-paying jobs, many of whom are Latino.[xii]

Because the young professional community is newly established, only a few neighborhood institutions have been founded by newer residents. These include Neighbors Allied for Good Growth (NAG)[xiii], Greenpoint Waterfront Alliance for Parks and Planning (GWAPP), and First Stop Brooklyn, an alliance of art galleries. None of these institutions have the level of clout of a group like United Jewish Organization (UJO), since members of the newer groups are highly mobile and not yet fully vested in the neighborhood. Despite their memberships of relative newcomers, many of these groups boast leaders who did not exactly move to the area recently—almost all have lived in the neighborhood for more than a decade, and most have lived here for more than two.[xiv] These groups also have several prominent leaders of Polish and Italian descent who are long-time Williamsburg and Greenpoint residents.

[ix] Several definitions of "Hipster" may be handy to consult.
Top-rated definition from UrbanDictionary.com: "People in thier [sic] teens to 20s who generally listen to indie rock, hang out in coffee shops, shop at the thrift store and talk about things like books, music, films and art."
From the Hipster Handbook by Robert Lanham: "Hipster: \hip-stur\n. One who possesses tastes, social attitudes, and opinions deemed cool by the cool…the Hipster walks among the masses in daily life but is not a part of them and shuns or reduces to kitsch anything held dear by the mainstream…"

[x] These observations are confirmed by ESRI's Community Tapestry website profile of zipcode 11211 (Williamsburg), which identifies it as a "trendsetter" neighborhood, characterized by "young, diverse, mobile, educated professionals with substantive jobs…more than half of households are single person or shared."
Accessed April 12, 2008 at http://www.esri.com/data/community_data/community-tapestry/index.html

[xi] The Furman Center for Real Estate & Urban Policy shows that Greenpoint/Williamsburg rents moved up from 45th out of 59 NYC neighborhoods in 2002 to 21st in 2005, that it has the third highest rate of price appreciation for two to four family homes, and it has the eighth highest amount of new construction. These statistics probably understates the trend, as it encompasses many non-gentrified portions of North Brooklyn.

[xii] This information comes from my work as a citywide advocate for retaining blue-collar jobs and having visited many local factories. The appearance of well-paying industrial sector jobs in North Brooklyn being held largely by people of color (especially Latinos) matches citywide statistics. The 2006 American Community Survey shows that 80% of the NYC production workforce are people of color and about 43% are Latino; the 2000 Census shows that 64% of the manufacturing workforce are foreign born. According to 2006 NYS Dept. of Labor statistics, manufacturing jobs in NYC pay $48,000 annually on average while retail and restaurant jobs pay $34,000 and $25,000, respectively.

[xiii] Formerly named "Neighbors Against Garbage," because it formed in opposition to an illegal waste transfer station on the Northside waterfront.

[xiv] This is based on my knowledge of these individuals.

VOTING BLOCK BEHAVIOR IN NORTH BROOKLYN

Because ethnic groups in North Brooklyn are politically organized, their leaders are able to leverage their electoral power to demand and receive subsidized housing, parks, business assistance programs, and favorable land use decisions. Any serious analysis of local planning policy must appreciate the power of these organized ethnic groups.

Ethnic voting blocs are not novel in New York City. The Democratic dominance of New York City was built in the 19th century on working-class Irish-American votes. Williamsburg was politically dominated by Italians and secular Jews through the Seneca Democratic Club for much of twentieth century.[16] Ethnic-based voting blocs continue to be a feature of the formation of local political coalitions in New York City and help control the distribution of publicly funded goods.[17]

As noted above, the Satmar vote in nearly complete lockstep. The leadership determines its electoral preferences via direct negotiation between politicians and a *Shtadlan*—a main intercessor to deal with the outside community—a concept carried over from Eastern Europe Jewry.[18] Currently, the director of UJO, Rabbi David Neiderman, serves as the main voice of the community at most political levels.[19] In an example of this voting bloc phenomenon, the Satmar-dominanted election districts were the only ones except a few in the Upper East Side to give Council Speaker Gifford Miller— a candidate whose campaign took an unexpected nose dive right before the election—a majority of votes in the 2005 Mayoral Primary.[20] The Satmar have used the power of voting as a block to procure public sector goods for the community, such as in 1984 when Hasidim were designated as an official "ethnic minority group" by the federal government after a decade-plus lobbying effort led by the Satmars. [21]

The Latino political establishment is much more fragmented than the Satmar's and is characterized by frequent infighting and shifting alliances. However, there is at least one solid ethnic voting block controlled by Assemblyman Vito Lopez. Lopez is one of the most prominent leaders of the Williamsburg Latino community, even though he is not technically of Latino heritage, as he is the son of an Italian immigrant with Spanish roots. He created a formidable electoral coalition based out of neighboring Bushwick and incorporating several neighboring communities. Lopez has represented all of Bushwick, part of Ridgewood, and much of Southside Williamsburg at the state level since 1983 and took the helm of the Brooklyn Democratic Party in 2005. The anchor of his political machine is the Ridgewood-Bushwick Senior Citizens Council, a non-profit organization that employs over 2,000 people to deliver a variety of social services, including food kitchens, senior programs, tenant organizing, and affordable housing development. By explicitly leveraging Ridgewood-Bushwick's vast client network into electoral power, Lopez reliably delivers a block of votes that politicians at the local and state levels consistently seek. [22] A range of City and State legislators, as well as local judges owe their election to Lopez, including the above-mentioned State Senator Martin Malave-Dilan. St. Nick's, Los Sures, and Churches United for Fair Housing have been allied with Lopez in the past, but all gradually broke with him as their goals diverged. One notable exception to this dependence on Lopez's machine is Congresswoman Nydia Velázquez, the first female Puerto Rican member of Congress. [23]

BECAUSE ETHNIC GROUPS IN NORTH BROOKLYN ARE POLITICALLY ORGANIZED, THEIR LEADERS ARE ABLE TO LEVERAGE THEIR ELECTORAL POWER TO DEMAND AND RECEIVE SUBSIDIZED HOUSING, PARKS, BUSINESS ASSISTANCE PROGRAMS, AND FAVORABLE LAND USE DECISIONS.

By contrast, the predominantly white professionals of Williamsburg are not an organized voting bloc on the local level. The only other notable voting bloc is the Italian-Americans of central Williamsburg, and its the power appears to have greatly waned as people of that demographic progress in age and relocate out of Brooklyn.

ORIGINS OF ETHNIC POLITICAL CONFLICT IN WILLIAMSBURG

The high levels of Latino and Satmar political organization have their roots in a long-running, zero-sum conflict between the two groups over public resources. Tensions between Puerto Ricans and Hasidim began to build in 1965 with the introduction of the Community Action Program. This was a Federal anti-poverty program gave significant direct grants to community organizations over a period of several years and was used by many to organize disparate political power bases into traditional political machines. Because participating groups needed to have an official organization to participate, the Hasidim and other Jewish groups formed the UJO, over which the Satmar were soon able to establish near-complete control.

By contrast, the Puerto Ricans of Southside Williamsburg formed multiple grassroots organizations that competed with each other for resources from the program. Puerto Ricans resented the greater resources allocated to UJO by the program and saw the unequal distribution as a manifestation of the racism that had plagued them since their arrival to New York.[24]

The rancor over the short-lived Community Action Program transitioned into more bitter interethnic struggles over the allocation of public housing units constructed in the urban renewal area between Broadway and Division Streets. Price observed that the Democratic political machine, centered in the Seneca Democratic Club, used the housing units as political currency. The Housing Authority allocated the apartments as directed by the club, secretly establishing a racial quota in order to deliver public units to Hasidic families. Therefore, the inhabitants of the first round of projects were far more white, Jewish, and Hasidic than the neighborhood overall. This was strongly resented by the Puerto Rican community, although relationships among the diverse residents in the housing projects were fairly peaceful.[25]

Los Sures, which had unified several competing grassroots groups in the early 1970s, along with Brooklyn Legal Services filed suit against the City in 1976 over the racial imbalance in the projects. After two years of tense litigation, a consent decree letter was issued in 1978 in which New York City Housing Authority (NYCHA) admitted to using illegal racial quotas in five large Southside housing developments. To remedy the situation, the City was required to adjust tenant population to achieve a more equitable racial balance.[26] During the lawsuit, groups sponsored by the local Catholic parishes took a more moderate approach and worked to sponsor a new NYCHA development, Roberto Clemente Plaza. The different approaches taken by grassroots community groups and church-sponsored groups continue to fuel current conflict over development in Williamsburg.

To accommodate the exploding cohort of school-age children in the Satmar community in the 1980s, the local school board agreed to rent space in a public school for segregated Satmar parochial instruction.[27] This greatly angered local Latinos, who perceived it as an unfair allocation of resources. These tensions heightened in October 1990, when ethnic groups held back-to-back protests at the local police precinct. First the Hasidim protested police treatment of a suspect, and the next day Latinos protested the favorable treatment of Hasidim.[28]

Competition over scarce public services and fair treatment from authorities ignited a series of public arguments that boiled over into the realm of development. As the Hasidic population continued to grow rapidly, Satmar developers and community institutions repeatedly sought land in Southside Williamsburg. Gentrification, having established a beachhead in Northside Williamsburg, began to creep southwards, putting real estate pressure on the Latino community. Hemmed in on both sides, Los Sures and an assortment of grassroots groups protested for help from the City to stabilize their community. The fight came to a head in 1997 when UJO wrote to the City requesting that it be given joint control of all housing projects in conjunction with Los Sures, even inside the latter's traditional service boundary. [29]

After a series of tense protests by Latino groups, Mayor Giuliani intervened by brokering an agreement with Council Member Ken Fisher, who represented the Hasidic area, and Assemblyman Vito Lopez on housing development in the neighborhood. According to the terms of the agreement, the Satmar community would receive a number of zoning approvals to expand into a manufacturing area to the south and into Bedford-Stuyvesant across Flushing Avenue, rather than into the Latino-dominated Southside. In turn, Latino housing groups would receive land for developing affordable housing in various places throughout Williamsburg and Bushwick.[30] This agreement established an effective détente between the Latino and Hasidim, although a few squabbles have broken out since then over the distribution of affordable housing.[xv]

THE DYNAMICS OF DEVELOPMENT POLITICS

Since urban renewal and the Community Action Program, Williamsburg residents have used development politics to seek housing opportunities. Community organizations, political clubs, and the franchise were used to help direct allocation of housing units, rezonings for housing, and construction and management of affordable housing. The channels for these resources were organized along ethnic lines and competition between groups fomented the zero-sum attitude that any gains by one group came at the expense of another. As gentrification changed the neighborhood, the development amenities that residents and institutions sought also changed. Public open space, the quality of street facades, the heights of the building, retaining artistic uses, and maintaining diverse uses on the street have all recently moved to the forefront of development politics.

The increased prominence of these issues flows from what I call the "gentrifier's paradox": As wealthier residents

[xv] The Hasidic expansion to the south, however, raised the hackles of African-American groups in Bedford-Stuyvesant because of the perception that the housing built there would be segregated (Marwell 2007, 87–88).

arrived seeking to enjoy the neighborhood qualities that make Williamsburg unique, the real estate market moves to accommodate them by pushing older residents out, converting industrial loft buildings, and constructing new condo high-rises. However, this has led to a market failure, because the new types of development actively destroy the qualities including mixed income, mixed uses, and diverse building stock, that made the neighborhood appealing in the first place.[xvi] Therefore, many of the groups that these young professionals have founded seek to address these market failures by harnessing (or requiring) the real estate market to create more of these positive neighborhood qualities. The question remains as to whether those concerned can form a viable, sustainable political coalition with other interest groups.

Three case studies illustrate how the debate has changed over the past decade: the development of the Schaefer Brewery, the 2005 rezoning of Williamsburg and Greenpoint, and the proposed redevelopment of the Domino Sugar factory.

SCHAEFER LANDING

The redevelopment of Schaefer Landing is a prime example of the old pattern of zero-sum development assumptions by community groups. In 1976, Schaefer Brewery moved production to Allentown, Pennsylvania, and left their main building in Williamsburg vacant. During the 1980s a Kosher winery, a lumberyard, and a yeshiva reoccupied the support and warehouse, but the 1915 factory remained a blighted, vacant structure at the corner of Kent Avenue and South 9th Street.[31] As part of the 1997 Giuliani-brokered agreement discussed above, the Schaefer site was rezoned for housing, and the main building was demolished in 1999.

Completed in 2006, the new development is a dense cluster of three 25-story buildings set closely against the street with a narrow, unadorned public esplanade that is little used by the general public. A water taxi serves the development hourly during rush hour and has a small ridership. Immediately surrounding the development are largely industrial and warehouse sites, although several blocks away there are converted lofts and apartment buildings. One of the three buildings in the complex, now called Schaefer Landing, houses 140 units that are rented to families making under $40,000 annually. The remaining 210 units in the other two buildings were sold as market-rate condos.

Initially the Giuliani administration proposed that the Schaefer development be solely market-rate, but both Hasidic and Latino groups advocated for the site to be set aside for affordable housing construction.[32] Perhaps seeking to avoid the delays that beset Queens West, a similar waterfront development in Long Island City that used the same towers plus esplanade model, the City was determined to make the development enticing to private developers. In the end, the City agreed to set aside 40% of the units for affordable housing. Giuliani prioritized the Schaefer project so highly that it was one of a handful of deals signed in the last hours of his mayoral term.[33]

Latino and Satmar groups fought over the 140 affordable units—the proverbial development goodie pie—from 2001 to 2005, despite the détente brokered by the City. UJO was designated the community sponsor of the project, meaning that they were the lead group working with the developer to create a pipeline of applicants. When, among other signs, the floor plans showed quite a few apartments with six or seven bedrooms, which signaled the designation of the units for large Hasidic families, Los Sures became concerned that Latino families would be excluded from the development. While the project was still in the pre-development phase, Los Sures took these concerns to the public.[34]

Cathy Herman, formerly Los Sures' Director for Planning and Development, explained in an interview that when a non-profit housing group seeks to fill affordable apartments, that there are various ways the Satmars can rig the process to the needs of its own clients. Because many Hasidim are self-employed, there is a great deal of flexibility in reporting their income for purposes of qualifying for the apartments. In this instance, when housing counselors asked for a third-party income verification statement, many Hasidim applicants would refuse to produce the additional documentation and walk out the door. There are also Latinos who are self-employed and present similar problems with income verification, but it is an issue that arises more frequently with the Hasidim. In addition, the use of criminal background checks by developers of the units frequently screens out Latinos for eligibility because of minor offenses.[35] These instances demonstrate strategies utilized by both side of the housing debate for disqualification of participants from both groups.

Ultimately, Los Sures and other groups were able to get a fair number of non-Hasidic tenants into the Schaefer affordable apartments.[36] According to a spokesperson for NYC Housing Preservation and Development, the residents represent a "diverse mixture" of various racial and ethnic groups, but the department has so far refused to release detailed statistics on the Schaefer apartments' makeup.[37]

The fight over the affordable units at Schaefer Landing was defined in the zero-sum terms of the pre-gentrification

[xvi] Wolf-Powers refers to this in the context of industrial displacement as a "diseconomy of scale"— i.e. as increasing numbers of high-end residential units are built, there are diminishing marginal benefits to the local economy as a whole (2005).

debate. Each side was asking, "How much can I get for my group?" and saw a gain by one side as a loss for the other. Even though Schaefer required significant gentrification to succeed (many of the market rate units sold for over $1 million), the for-profit development of Schaefer was seen as a given by many. The affordable housing pie was viewed as fixed, the deal done. Additional density could not be traded for more affordable units. There was no debate about the design of the public realm, the size of the commercial space, the fact that the esplanade is closed to the public at dusk, or the existence of the prominent guardhouse that projects the outward appearance of a gated community more likely found in suburban Phoenix than a housing community in Brooklyn.

REZONING WILLIAMSBURG

The project that redefined the terms of the development debate was the massive 180-block rezoning of Williamsburg and Greenpoint. Affordable housing was no longer was the sole issue. Promoting the creation of more parks, maintenance of Williamsburg's diverse building stock, and preservation of space for industrial jobs moved to the forefront because of the already obvious changes in the neighborhood's demographics. These issues, though, never approached the prominence of the affordable housing issue in the neighborhood.

The story of the rezoning begins with the 197-a plan, a community-created plan given legal status by the City's 1989 Charter. These plans, typically created through consensus-building processes, are designed to be comprehensive neighborhood-level guides to local development.[38] Residents had organized for several years to remove an illegal waste transfer station on the Northside waterfront. To prevent undesirable heavy industrial uses from continuing to occupy the waterfront, the local Community Board began to put together a 197-a plan. The task took over a decade and culminated in a lengthy, comprehensive review and approval of the plan by the City in 2002. The primary goal of the Williamsburg plan[xvii] was to rezone the waterfront for "a mix of medium-density residential and light manufacturing uses" while maintaining a diversity of income groups and building types. [39]

The rezoning that the Bloomberg administration proposed in 2003 was couched as flowing from the 197-a plan, but did not reflect the plan's key recommendations. Instead, it focused on allowing residential development in 110 blocks zoned for manufacturing. The administration initially proposed that the two dozen blocks on the waterfront be 20 to 40 stories with no effective provisions for affordable housing. The community began to organize in opposition early, with the Community Board establishing a special task force in 2003 to hash out a comprehensive response. The North Brooklyn Alliance, a coalition of about thirty-five neighborhood groups including NAG, Los Sures, St. Nick's, and GWAPP, formed to advocate for the resulting community plan during the process.

Notably absent from this coalition were Churches United, UJO, and Ridgewood-Bushwick. In the rezoning campaign, Churches United and Assemblyman Lopez negotiated with the administration separately, leveraging the wider political ferment to make affordable housing the main issue.[40] The Satmar community stayed quiet during the rezoning campaign, because it did not directly affect their area of Williamsburg. However, there was a great deal of successful behind-the-scenes lobbying by community leaders to have specific industrial areas on the Northside converted to residential use, as members of their community were developing projects on those sites.[xviii]

The community campaign to change the rezoning agreed on four broad goals: demanding on-site affordable housing, creating more open space, retaining industrial jobs, and preserving community character. For each group participating in the coalition, agreement on overarching goals involved acknowledging the importance of other groups' primary concerns and agreeing not to undermine these concerns while pushing their individual issues forward. The formation of the coalition was abetted by the decade-long process of consensus building that had taken place with the 197-a plan and the additional two years the Community Board had spent formulating a comprehensive response to the City's plan. Had the City pushed such a rezoning forward any earlier, the response would have been much less organized.

This coalition method of organizing was significantly different than the earlier turf fights in Southside between Latinos and Hasidim. The new dynamic began to surface in the late 1990s and evolved in stages. Los Sures participated in the initial creation of the 197-a plan, but at the same time, their then-ally Assemblyman Lopez brokered the 1997 agreement with the City, which set land use priorities for many areas covered by the 197-a plan. Los Sures began to move away from their alliance with Lopez around that time because they thought the agreement undermined the 197-a planning process and that it gave Ridgewood-Bushwick more than its fair share of development sites.[41] By participating in the 197-a plan, Los Sures shifted their primary goal of advocating for affordable housing to promoting a comprehensive

[xvii] The organizing process split into two separate, but parallel plans for Greenpoint and Williamsburg.

[xviii] This information comes from my work as an citywide advocate for retaining blue-collar jobs.

community plan, and they moved away from transactional politics built on class and ethnic solidarity. By the end of the 2005 rezoning, both Los Sures and St. Nick's had fully broken from Assemblyman Lopez.

When community groups went to meet with City agencies and local elected officials to advocate for changes to the rezoning, they were met with a consistent response—asking for any modification to the plan required taking away affordable housing units from the waterfront. However, this was demonstrably false. In early 2005, advocates unearthed a purchase agreement between the developer and landowner for the waterfront parcel between North 4th and 5th Streets; the purchase price of the land was dependent on how much density would be allowed and how much affordable housing would be required by the City.[42] That is, any modifications to the plan would come out of the pocket of the landowner, who was already getting a *tenfold* return on their land, rather than out of the City budget for the development project.

Of the four issues championed by the North Brooklyn Alliance, two—preserving the built character of the neighborhood and creating open space—are not traditional working-class issues, a change that reflected the shifting demographics of the neighborhood. Affordable housing was championed by groups with roots in the Latino, Italian, and Polish communities; the push for more open space and preserving the built character of Williamsburg came from the predominantly white professionals in the Northside and Greenpoint. One group that bridged competing issues and eased tensions within the North Brooklyn Alliance was NAG, relying on its track record of building coalitions that bridged the neighborhood's class and ethnic divides[xix]

In the end, these groups got few concessions from the City. Affordable housing advocates scored a significant victory in getting the first medium-density inclusionary housing program in New York. However, the program was incentive-based, exchanging additional density for affordable housing rather than meeting the community's demand for a mandatory program. There were also numerous public sites set aside to develop 1,345 units of affordable housing in the neighborhood.[43] As affordable housing was the main concern in the administration's negotiations with elected officials, once there was final agreement about the housing issue they scrambled at the last minute to find a few concessions for the other issues.[xx] The City conceded some industrial retention measures, such as preserving the manufacturing zoning on a block with two large loft buildings and a commitment of $24 million to business retention. There were some minor measures to create new open space beyond what the 197-a initially called for, but the City has followed through on none of these as of this writing.[xxi]

No concessions were offered to preserve the built character of the community, and perhaps the building stock will change more than it would have had the City not modified the rezoning; because of the strong push for affordable housing, the zoning for the 100-odd upland blocks was changed to allow higher density construction in exchange for a paltry amount of affordable housing.

DOMINO SUGAR: THE PIE SWEETENS?

One thing that the public agreed on during the debate over the 2005 rezoning was the need to keep the massive 150-year-old Domino sugar refinery just north of the Williamsburg Bridge for continued industrial use. Domino shut down production in 2003, and shortly thereafter a partnership of Community Preservation Corporation (CPC) and for-profit developer Isaac Katan purchased the site. However, at the end of the rezoning process, the City made a surprise commitment to rezone the factory for residential use in the future.[44] Since then, the five-block long waterfront site has been proposed for several thousand units of housing, some 30% of which would be in a range of income-tested affordability programs.

After the approval of the Greenpoint-Williamsburg rezoning in May 2005, the cause of preserving the neighborhood's built character was dealt two successive blows. The City Council overturned the landmark status granted to the former Austin-Nichols building on the waterfront at North 3rd Street in December 2005, and a massive, suspicious fire destroyed most of the historic Greenpoint Terminal Market in May 2006.

Perhaps as a concession to preservation interest groups in the face of these two significant losses, the City landmarked three central buildings in the Domino refinery. CPC, the only half of the development team that is speaking publicly, was initially resistant to the landmark designation, but supported it at hearings in front of the landmark commission. CPC representatives have repeatedly said in public said that retaining the three refinery buildings improves the project.[45]

[xix] Full disclosure: while I was not involved with NAG during the rezoning, I am now the Co-Chair of NAG's Board of Directors).

[xx] This information comes from my work as an citywide advocate for retaining blue-collar jobs. The announcement of the final agreement was supposed to be at 10am the morning the ULURP clock ran out, but was pushed until the late afternoon, almost missing the legally-binding deadline because of the need to generate and document these additional concessions.

[xxi] The City did a favorable move on this issue post-rezoning by engaging a planning firm to create a master plan for the privately-built waterfront esplanade. This option was never discussed during the rezoning, but the need for such an effort became evident in the planning process for the first waterfront developments.

However, at a public hearing in August 2007, tensions arose between previously aligned community groups. While many pleaded for preservation of more of the refinery and additional consideration of how the development would impact the neighborhood, affordable housing advocates dismissed this as taking a lifeline away from poor people. For many long time local activists, the pitting of affordable housing against preservation was a bizarre twist on a consensus that many thought had been established in the 197-a plan and rezoning campaign.

As of this writing, the City is assembling an Environmental Impact Statement for the proposed zoning change and the Landmarks Commission is reviewing proposed additions to the preserved portions of the factory. An intense battle likely lies ahead as the plan moves through the approval process from the Community Board to the City Council.

TOWARD A NEW DIALOGUE OR MORE OF THE SAME?

In the case of Domino, the developers have indicated that the proverbial development goodie pie is not fixed—they have said that incorporating neighborhood preservation and providing more open space will not sink the project, and, in fact, may make it more successful. New elements at Domino might create financial burdens or they could create an added-value form of development. Similarly, the one waterfront development that is going forward under the 2005 rezoning was under-girded by a financial plan that dealt with the potential for concessions to the community. No doubt similar flexibility may be found in other large-scale developments.

A developer's resistance to adding or subtracting a particular value-added component does not necessarily mean that the element will cost more money. The developer could be publicly objecting on grounds of financial risk or the complications of implementing such an action, even though such a step would ultimately create a value-added form of development.

The dialogue over Domino is still largely one based on a zero-sum assumption because of the contentious history of development politics in the neighborhood. As the Latino-Hasidim fights receded, the fight over displacement by gentrification progressed. Many returned to the old, divisive playbook of winner-take-all, notably Churches United for Fair Housing, which called for a bigger project and the rejection of historic preservation. A community board meeting on April 8, 2008 (just before this article went to press) featured a bitter argument between a 100-person-plus contingent from Churches United demonstrating in support of the Domino plan and a new group of middle-class residents around the factory site concerned about the project's scale. Concerns about affordable housing and about the development's scale are not in true opposition to each other. Still, the factions seem to be talking past one another and assuming the pie is fixed. Perhaps in the absence of strong leadership to negotiate with the developers and the City, infighting between agendas that are incorrectly assumed to be competing will be Williamsburg's inevitable future.

Even though the old development dialogue was conducted with a zero-sum mentality, Herman points out that even in the 1990s, the fighting between Latinos and Hasidim may have actually expanded the pie because the City needed to address the needs of both groups. Each group, by pointing to what the other received, was able to enlarge their own slice and push the City to make further concessions.[46] The 2005 rezoning included a similar expanded scope resulting from competing factions, when concessions for industrial retention and open space groups were hastily generated at the conclusion of political bargaining.

If residents will not pay more for a vibrant neighborhood, good urban design, or quality public space, they could undermine the potential for value-added development. The current development politics in Williamsburg beg the question: Why should developers foot the bill for public amenities the City should be providing or at a minimum encouraging? If the City forces developers to include so many community benefits that their return on investment falls below that of comparable projects, then financial backers could pull out.

If anything, these caveats demonstrate the need to address the effects of new, large-scale development on neighborhood quality with a comprehensive approach. The more that advocacy groups and the City make urban design and its effects on neighborhood a citywide priority, the more they will become a part of the standard development process in New York City. Other municipalities, such as Chicago and Santa Monica, California, have set higher design review and public access standards and appear to have encouraged better design without discouraging new projects.[xxii]

This contention will be tested as the national housing market continues to collapse. Value-added strategies

[xxii] The difference in median quality of new architecture between these municipalities and New York City is striking. Chicago requires design review for projects over two acres, which is most new downtown developments; Santa Monica requires it for "new construction, additions or remodel of an existing building" in most cases. For more detail about these cities' design review processes see: Schwieterman, Joseph P. *The Politics of Place: A History of Zoning in Chicago*. Lake Claremont Press, 2006. and City of Santa Monica. "Architectural Review Board Established 1974" http://smgov.net/planning/planningcomm/archreviewboard.html

may only be possible in an era of government fiscal prosperity. To persuade developers to engage in positive forms of development, local governments frequently invest money of their own either in public improvements or subsidies to incentivize behavior. Although New York City's market appears to be more stable than other parts of the country, many large-scale residential projects appear to be waiting out the mortgage market crisis before breaking ground. Schaefer Landing sold all of its units two years after opening; currently all but one major waterfront development in Williamsburg and Greenpoint are stalled. Perhaps the market is saturated for high-rise luxury development on the Williamsburg waterfront at the moment. If that is the case, residents of all stripes in Williamsburg can breathe a sigh of relief and work to retool the development debate to perform better come a sunnier economic day.

CITATIONS

[1] Louis, Errol. Class Lecture, New York University, Sep 19, 2007.

[2] Bloomberg, Michael R. "Press Release: Mayor Bloomberg Announces First Affordable Housing Development in Greenpoint-Williamsburg Waterfront Area," Oct 7, 2005. Accessed Apr 12, 2008 at http://nyc.gov/html/om/html/2005b/pr385-05.html.

[3] Patch, Jason. "Where the Gentrification Frontier Extends: Displacement, Disinvestment, and Deindustrialization in Brooklyn." Aug 16, 2003.
Patch, Jason. "Fashioning Gentrification: The New Role of Women in Neighborhood Change," Ph.D. dissertation, New York University, September 2005.

[4] Gill, John Freeman. "The Charming Gadfly Who Saved the High Line," *New York Times*, May 13, 2007, The City Section.

[5] Rubin, Israel. *Satmar: An Island in the City*, 1st Ed. Chicago: Quadrangle Books, 1972.
Rubin, Israel. *Satmar: Two Generations of an Urban Island in the City*, 2nd Ed. New York: Peter Lang Publishing, 1997.

[6] Meltzer 1995; Rubin 1972.

[7] Price, Stephen Charles. "The Effect of Federal Anti-Poverty Programs and Policies n the Hasidic and Puerto Rican Communities of Williamsburg." Ph.D. dissertation, Brandeis University, 1979; Marwell, Nicole P. "Ethnic and Postethnic Politics in New York City: The Dominican Second Generation," in *Becoming New Yorkers: Ethnographies of the Second* Generation, ed. Kasinitz, Philip, John H. Mollenkpof and Mary C. Waters. New York: Russell Sage Foundation, 2004, pp. 227–256.; Marwell, Nicole. *Bargaining for Brooklyn*. Chicago: University of Chicago Press, 2007.

[8] Newman, Andy. "Rabbi Moses Teitelbaum Is Dead at 91," *New York Times*, April 25, 2006, Metro Section.

[9] Rubin 1997, 70–73.

[10] Marwell 2007, 40.

[11] Marwell 2007, 40–41; Price 1979, 60–67.

[12] Marwell 2007, 51.

[13] Marwell 2007.

[14] Lamport, Joe. "A Ministry For Affordable Housing," *Gotham Gazette*, July 2004. <http://www.gothamgazette.com/article/housing/20040721/10/1051>, accessed Dec 17, 2007.

[15] Patch 2005, 69–71.

[16] Erie, Steven P. *Rainbow's End*. Berkeley, CA: University of California Press, 1988., Price, 1979.

[17] Mollenkopf, John Hull. *A Phoenix in the Ashes*. Princeton, NJ: Princeton University Press, 1992.

[18] Price, 1979, 107.

[19] Imperiale, Laura. Interview by author, New York, Nov 30, 2007.

[20] Bronzan, James and James E. Wilkerson. "Where the Candidates Found Support," *New York Times,* Sep 15, 2005.

[21] Krantzler, George. *Hassidic Williamsburg*. Northvale, NJ: Jason Aaronson Inc., 1995. 35, 212.

[22] Marwell 2007, 101–119.

[23] Marwell 2004, 241.

[24] Marwell 2007, 43; Price 1979.

[25] Price 1979; Marwell 2007, 49–51.

[26] Marwell 2007, 51–53.

[27] Marwell 2007, 61.

[28] McQuiston, John. "Hispanic Rally Assails Hasidim In Williamsburg," *New York Times*, Oct 26, 1990, B3.

[29] Marwell 2007, 62–63.

[30] (Marwell 2007, 70–71; Baker, Russ. "The Rise & Rise of Rudy's Rudy," *New York Daily News*. March 19, 2000.

[31] Anderson, Will. *Breweries of Brooklyn*. 1976. Excerpt accessed via <http://www.beerhistory.com/library/holdings/schaefer_anderson.shtml>, Dec [17], 2007.; Dickter, Adam. "Housing Tensions Brewing: Latinos fear unequal access in chasidic-controlled development slated for old Schaefer Brewery site in Williamsburg," *The New York Jewish Week*. New York, N.Y., May 24, 2002. Vol. 214, Iss. 52; pg. 1.

[32] Herman, Cathy. Interview by author, Brooklyn, Nov 29, 2007.

[33] Herszenhorn, David. "Last Acts of the Giuliani Era Stall in Bloomberg's City Hall," *New York Times*, April 4, 2002, Metro Section.

[34] (Dickter 2002; Marwell 2007, 86–87).

[35] Herman 2007.

[36] Herman 2007.

[37] Wolf, Rubin, email communication, Dev 6, 2007.

[38] Baron, Eve. "197-a Planning Helps Implement Citywide Planning Goals." Municipal Arts Society, Nov 1, 2007. http://www.mas.org/viewarticle.php?id=1880&category=8.

[39] Brooklyn Community Board 1. "Williamsburg 197-a Plan," draft edition, 1998. <http://www.billburg.com/197a/recommendation/index.html>, Accessed Dec 16, 2007.

[40] Imperiale 2007.

[41] Marwell 2007, 81–82; Herman 2007.

[42] Lander, Brad. Email communication, Dec 16, 2007.

[43] Doctoroff, Daniel L. to Speaker Gifford Miller. "Points of Agreement," New York, May 1, 2005.

[44] Doctoroff, 2005.

[45] Clark, Roger. "Brooklyn Residents Host Benefit Concert to Save Domino Sugar Factory," television news story, New York: NY1 News, June 1, 2007; Hutton, Adam. "Council sweet on landmarking," *The Brooklyn Paper*. December 15, 2007; Oder, Norman. "Affordable housing the focus at the New Domino hearing," *Atlantic Yards Report*, Aug 1, 2007. <http://atlanticyardsreport.blogspot.com/2007/08/affordable-housing-focus-at-new-domino.html>, accessed Nov 30, 2007.

[46] Herman, 2007

SOLDIERS' VOICES

National Defense
Fighting for Our Soldiers at Home

by David Schmid
Joshua Broske
Jason Fuller

ABSTRACT

The staff of the Wagner Review felt that the 2008 volume would not be complete without addressing the upcoming presidential election in November. We issued an open call to the Wagner community to provide the next president with a policy platform or a piece of advice to guide the next administration toward pressing domestic issues. In their response, David Schmid, Spc. Joshua Broske of the 837th Mobile Augmentation Company, Ohio Army National Guard, and Sgt. Jason Fuller of the 82nd Airborne Division, United States Army, discuss the shortcomings of America's current policy towards its armed forces members. They argue that comprehensive reforms to healthcare, benefits, recruitment, and spending are necessary to increase troop readiness and provide for the men and women who have served in Iraq and Afghanistan. Weighing military spending, efficiency costs, and human costs, they provide a thoughtful and informed perspective on America's home front battle.

While the wars in Iraq and Afghanistan have been the focus of the national security debate during this year's Presidential elections, another issue simmers beneath the surface of the national campaign discourse, one that ultimately impacts our ability to sustain our present engagements: the overwhelming burden that has been placed on reserve and active duty members of the armed forces.

Intensive and continuing deployments in Iraq and Afghanistan continue to stretch the military's troops and resources to the point where the current strain is unsustainable over the long-term. Tours of duty have been extended and the time between deployments has decreased significantly. Recruiting and retention efforts have become ineffective leading to continual issuance of stop-loss orders. These efforts have grown so challenging that the armed forces have weakened their admission standards, leading to a dramatic increase in medical and criminal history waivers for recruits. Meanwhile, the military hospital and health care system have proven woefully inadequate. Often, returning combat veterans with post-traumatic stress disorder frequently are undiagnosed or untreated.

Although all of these issues are common knowledge to military personnel currently serving, and have received major media coverage, our nation's elected officials have not given these issues adequate attention. While many of the challenges facing our military are complex, many of the solutions are common sense and good public policy. This critique includes an examination of some of the most pressing issues confronting our military and policy recommendations that we believe will alleviate some of these burdens from the point of view of those currently serving.

TROOP LEVELS AND FORCE STRUCTURE

In mid-April 2008, President Bush announced the reduction in U.S. Army combat tours from 15 months to 12 months, thus reinstating the standard length of deployments that had been in effect before the troop surge in 2007.[1] While this reduction represents a major step forward for a combat force saddled with an overwhelming burden, it is only a first step towards addressing the strain on our nation's military.

In addition to extended tours, troops have often quickly been redeployed, sometimes less than a year after returning from the first tour of duty. This not only permits little time for troops to be with their families and attend to personal business after months abroad, but also leaves too many units under-equipped and lacking adequate training. The practical implication has been a reduction in the combat readiness of active duty units, which is a severe burden on reserve units, leading to further stop-loss orders and extensions for soldiers throughout the armed forces. The Pentagon has begun to consider shifts in the force structure that would allow the Army to be more flexible and responsive. The most recent defense budget proposes an increase in the number of Army and Marine troops.[2] However, any effort to expand the force size will have to overcome recent challenges in recruiting and retention. While decision makers debate these policies, units continue to be redeployed with little time between tours.

Unit rotation is a complicated issue, especially given the current open-ended commitment in Iraq. A workable solution would require large investments to revamp Army force structure and further expand personnel and recruiting. Limiting the length of combat tours to 12 months, while adjusting the force structure to ensure a minimum of 18 months between deployments would reduce the strain on both our active duty forces and our over-burdened National Guard and reservists. Ultimately, the next administration will have to articulate clear mission parameters, as well as engage the American people in an open and honest discussion that includes benchmarks, timelines, and candid estimates of resources and costs.

SERVICE BENEFITS

Addressing the issue of troop levels and force structure is just the beginning of what the President-elect will need to address for our service personnel. To foster a stable, healthy, and motivated fighting force, and better maintain a stream of qualified and motivated recruits, the benefits offered to active duty and reserve soldiers need to be reexamined.

Senator Jim Webb (D-VA) and Senator Chuck Hagel (R-NE) have sponsored the Post-9/11 Veterans Educational Assistance Act, which would extend education benefits offered by the current Montgomery GI Bill. The bill would guarantee tuition payments for even the most expensive private institutions of higher learning.[3] This bill—which asks soldiers to buy in, and requires tuition costs to be shared by the government and the academic institution—is the perfect example of common sense legislation that represents a real investment into the development of our servicemen and women, and a recognition of their service. Presidential candidates should seriously consider a range of measures including enhanced job placement and career counseling for both reservists and soldiers with expiring enlistments, expanded financial literacy training and advisement, and free pre-kindergarten education for military children. The 44th President should vigorously support any legislation that offers enhanced benefits to support the stability and vitality of the quality of life of our armed forces.

Upon being sworn in, the President should immediately establish a nonpartisan military benefits committee to devise creative, comprehensive, and independent proposals to enhance the quality of life benefits offered to military personnel. However, this committee should differ from those typical in Washington—it should consist of recent members of the armed forces, combat veterans of Iraq and Afghanistan, and both active duty and reserve members. These former soldiers are the best situated to serve as advocates for their brothers and sisters in the military, and their unique understanding of the conflicts in Iraq and Afghanistan makes them the most qualified to make recommendations for change. Once empowered, this committee of advocates would be capable of drafting specific recommendations for much needed benefits that go far beyond those proposed in this analysis.

MILITARY HEALTHCARE SYSTEM

The military currently has a two-tiered health care system, with the Department of Defense providing care to current soldiers and Veterans Affairs (VA) system caring for veterans. Both systems have completely separate disability and benefits systems, and transitioning from the military hospitals to VA care is often an onerous and bureaucratic process. Meanwhile, the tragic lack of quality care uncovered at Walter Reed hospital in Washington, D.C., has exposed the serious flaws in the healthcare system for our nation's veterans.

WHILE MANY OF THE CHALLENGES FACING OUR MILITARY ARE COMPLEX, MANY OF THE SOLUTIONS ARE COMMON SENSE AND GOOD PUBLIC POLICY.

In addition to the poor state of the VA hospitals, the military lacks capacity to provide needed mental healthcare for returning personnel. A recent study found nearly 20% of service members who have returned from Iraq or Afghanistan exhibit symptoms of depression or post-traumatic stress disorder, and yet only half of these service members have received mental health treatment.[4] The report paints a dire picture of the VA system's lack of screening and its shortage of adequately trained mental health professionals.

The lack of coverage for members of the National Guard and Reserve is equally appalling. Currently, National Guard and Reserve personnel and their families receive no coverage under TRICARE, the military's managed health care program, unless they have been on active duty for 30 days or more.[5] Further, TRICARE coverage lapses for those who had previously been mobilized to active duty but have since returned to reserve duty. Members who have not been called to active duty and who do not receive coverage from employers are often forced to pay out of pocket. Because these costs are often prohibitive, many elect to go without coverage. This decision has severe negative consequences for unit readiness.

A wide array of recommendations has been made to address the shortcomings of military health, but any significant progress will require presidential leadership. First, sweeping change in the way information is shared between the military, VA, and civilian hospitals is necessary to ensure continuity of quality health care. Second, the military must adopt a mandatory and thorough mental health screening process for returning soldiers. This will require the hiring and training of a sufficient number of mental health care professionals in both military and VA hospitals. Finally, the military must find a way to provide full medical insurance for National Guard members and reservists under TRICARE upon enlistment. These recommendations only scratch the surface of the health care issues confronting our military, but each represents some of the most pressing issues that require immediate presidential attention and action.

POTENTIAL COST SAVINGS

All of these proposals to improve services to our military personnel have costs, many extensive. Department of Defense officials estimate that adding 10,000 soldiers to the Army would cost as much as $1.2 billion. RAND estimates that the cost of treating service members who return from war with symptoms of post-traumatic stress disorder or depression could run as high as $6.2 billion.

Much of the money to provide adequate treatment and services can be found in the Pentagon's weapons acquisition budget. While the Department of Defense's budget request for fiscal year 2009 weighed in at $515.4 billion dollars, the Pentagon's weapons acquisition budget reached $1.6 trillion.[6] The Government Accountability Office recently released a report that dozens of the weapons acquisition programs are billions of dollars over budget and years behind production schedules. Hundreds of millions in cost overruns could be saved by demanding more accountability from the defense contractors who responsible for these projects.

Some particularly striking and expensive examples of potential program cuts that could save money are programs like the Joint Striker Fighter, designed as an

interceptor for Russian bombers, and the V-22, a failed attempt at designing a tilt-rotor aircraft to supply Marines in combat zones. These are example of programs that have little relevance to our current engagements and could significantly scaled back (or in the case of the V-22, cut entirely) to free up valuable dollars for more strategic investments in the welfare of our soldiers.

To face the challenges of the War on Terror, the next president will have to oversee weapons acquisition allocation more vigilantly, both to ensure that the military has the equipment necessary to defend our nation and to avoid expensive cost overruns. The President should require the Pentagon to produce a thorough review and analysis of the justification and relative prices for each of these programs. However, the President will have to make an independent judgment about the need for expensive weapons acquisition programs that both Congress and corporate lobbyists have so vehemently championed, but which do not necessarily meet our defense needs. Trade-offs between weapons acquisition and maintenance and care for personnel are difficult choices but our country's commitment to demanding and lasting military engagements makes them necessary.

A NATION'S COMMITMENT

While many of the challenges faced by our military are complex, common sense and good public policy suggest many solutions for the problems.

Accomplishing these goals will require strong political leadership that can put these proposals on the national agenda. With a wave of momentum and a mandate for change, a new president is perfectly situated to ensure that effective policy proposals get the national attention each deserves. Members of Congress from both parties are likely to coalesce around sound policy proposals that support our troops in a time of war. Our elected officials will feel compelled to respond if a new president elevates the issues facing our troops are to a national level of awareness through effective advocacy and strong leadership.

In a Veteran's Day address, President John F. Kennedy once said that "we must never forget that the highest appreciation is not to utter words, but to live by them." Our next president should continue to recognize the professionalism and patriotism of our military. But to do so without a concentrated effort to address the severe strain that has been thrust upon our armed services would be shortsighted and reckless, and would threaten to undermine the very institution whose people have sacrificed so much. The next president will always be able to depend on the professionalism and patriotism of our armed forces to lead the fight against terror. In return, the servicemen and women should expect the Commander-in-Chief to lead the fight for them here at home.

CITATIONS

1. Ann Scott Tyson and Josh White, "Strains to Remain Despite Shorter Tours", The Washington Post, April 11, 2008.
2. Department of Defense, FY2009 Budget Request Justification, www.defenselink.mil/comptroller/defbudget fy2009/FY2009_Budget_Request_Justification.pdf.
3. The Post-9/11 Veterans Educational Assistance Act, thomas.loc.gov/cgi-bin/query/z?c110:S.22:.
4. RAND Corporation, *The Invisible Wounds of War*, http://rand.org/pubs/monographs/MG720/.
5. Department of Defense Military Health Systems Website, http://www.health.mil/.
6. New York Times Op-Ed, *Wasting and Wanting at the Pentagon*, http://www.nytimes.com/2008/04/02/opinion/02wed1.html?scp=1&sq=government +accountability+defense+&st=nyt.

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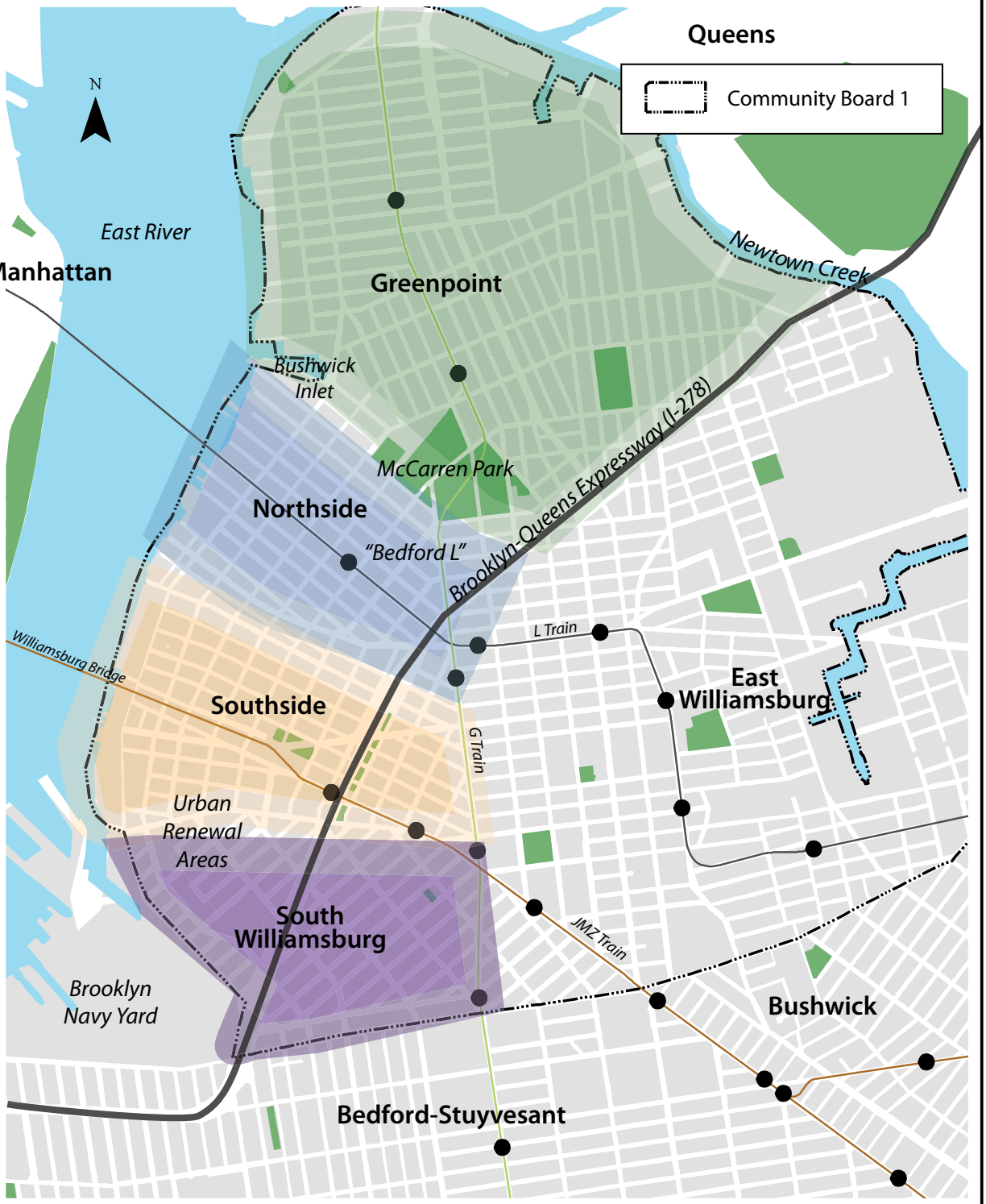
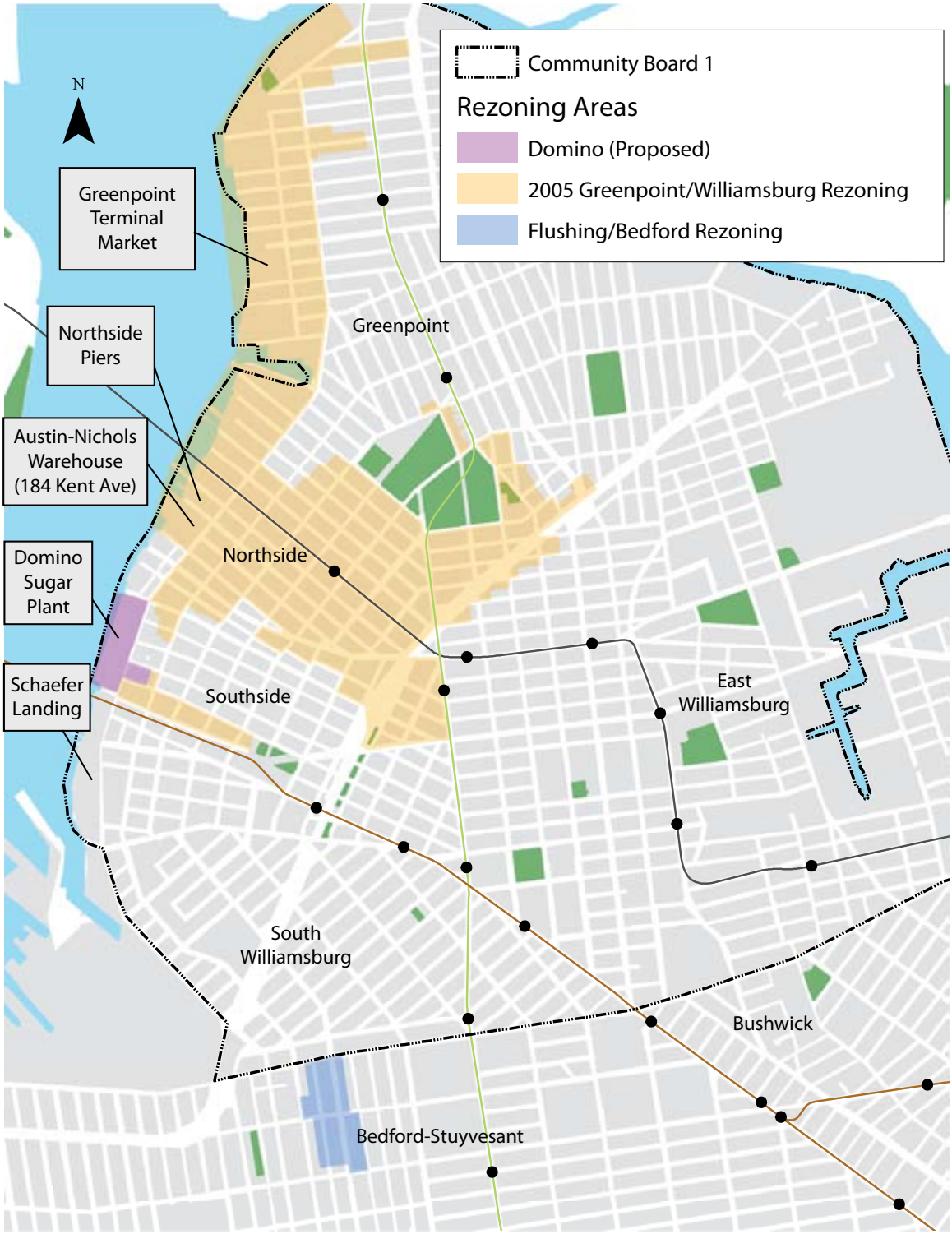
Map 1: Overview of North Brooklyn Waterfront Neighborhood & Landmarks



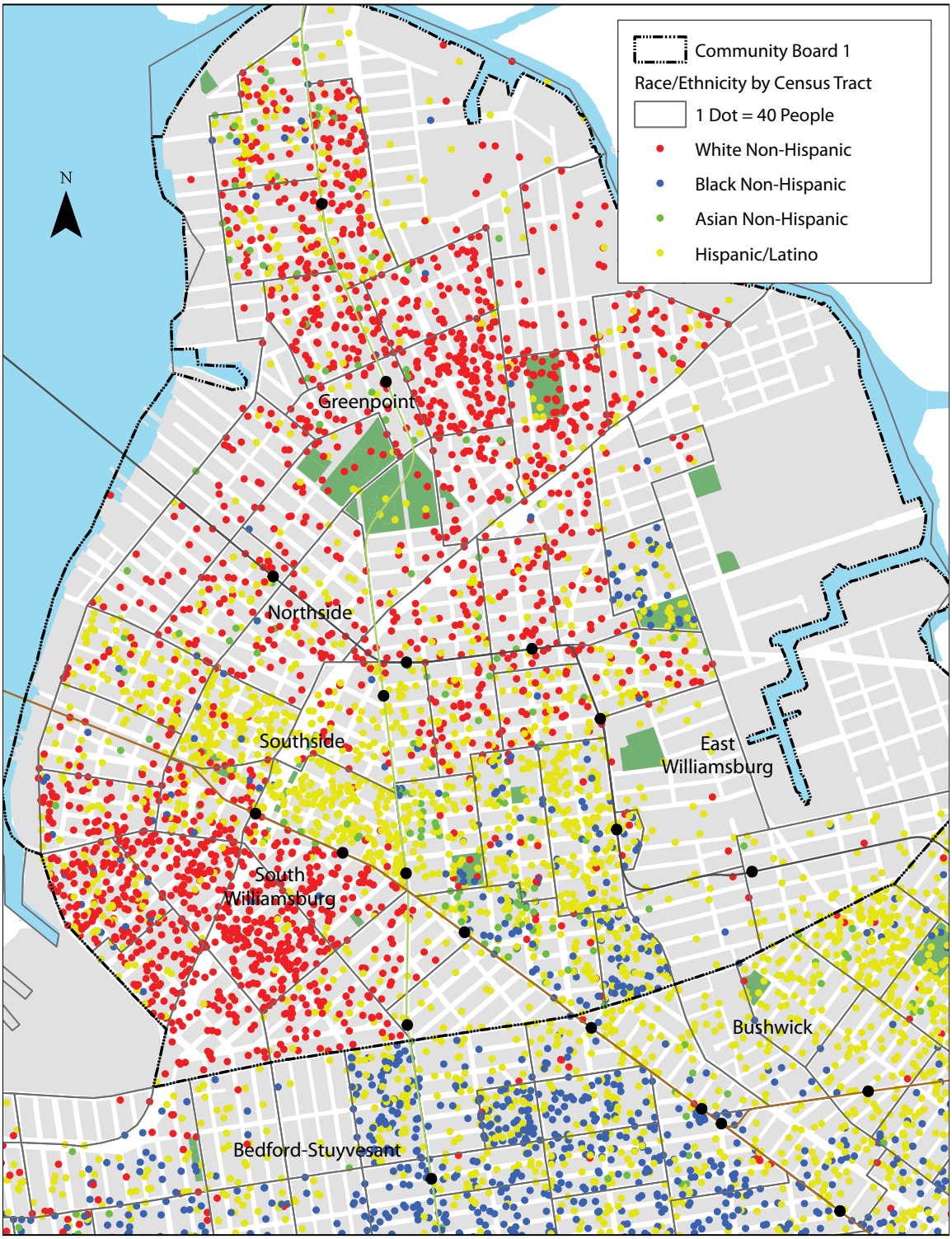
Basemap: DOITT/NYC DCP 2005; NYCTA 2004

Map 2: Rezoning Areas and New Major Development Sites in North Brooklyn



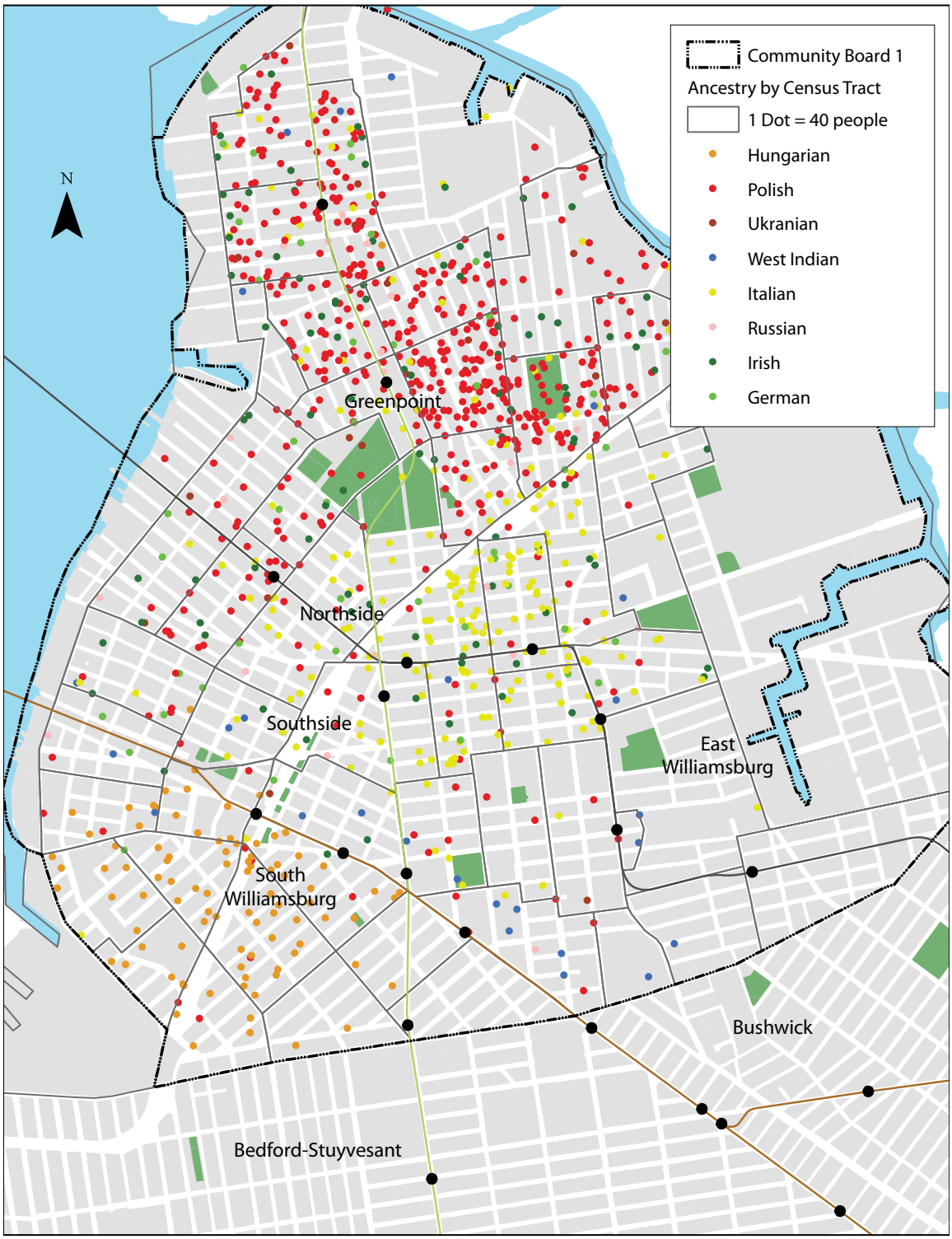
Basemap: DOITT/NYC DCP 2005; NYCTA 2004

Map 3: Residency of Major Racial/Ethnic Groups in North Brooklyn



Source: 2000 Census; Basemap: DOITT/NYC DCP 2005; NYCTA 2004

Map 4: Residency of Top Eight Ancestry Groups in North Brooklyn



Source: 2000 Census; Basemap: DOITT/NYC DCP 2005; NYCTA 2004

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