

Decentralization as an Alternative the Case of Rockford Illinois

Rolando Gonzalez-Torres

PhD / Southern Illinois University, Quigley Hall, Mail Code 4337,875 S Normal venue, Carbondale, IL 62901-4303, United States

*Corresponding Author: Rolando Gonzalez-Torres, PhD / Southern Illinois University, Quigley Hall, Mail Code 4337,875 S Normal venue, Carbondale, IL 62901-4303, United States

ABSTRACT

The State of Illinois is sadly immersed in a deep politic and economic standstill that retains it insolvent and immobilized with few possibilities of growth due to an excessive dedication on Chicago and almost none over the rest. Although historically there were intents to rely on some other cities with a variety of industrial products' manufacture, by now all of them have lost population and almost all their commercial bases while returning to Chicago Area. East St. Louis, considered an All-America City by the National Civic League in 1959, suffers today one of the nation's deepest social desertions and, from being a promising second largest city in the state, is now reaching stages of desolation as a place tossed away and abandoned by the general public. A decentralization policy for a more scattered development is urgent. From a comprehensive analysis of cities by size and population within the State and supported on a broad and assorted pool of variables, this work shows the practice done by Southern Illinois University's Master of Architecture students on finding and stablishing the ideal igniting point to begin a decentralization process. The result is the design of a new 640-acre urban center appointed to open different strategies to satisfy the existing needs on its zone and the ones coming in the future. The proposal provides a variety of spaces intended to work together and complementarily with Rockford's existing urban fabric with the idea of functioning as a twincities strategy by the introduction of a new freeway loop, and with renewed fast and ample contacts with Chicago and the rest of the state's highway and rail networks. The new urban center would act as the starting of many others, seeking for a more balanced State distribution to start moving a spread-out network of growing robust development.

Keywords: *decentralization, balanced development, State network, urban center.*

INTRODUCTION

The American State of Illinois is immersed in a deep standstill that retains it restrained with few possibilities of growth due to an excessive dedication on Chicago and almost none over the rest. Although historically there were intents to rely on some other cities with a variety of industrial products' manufacture, by now all of them have lost population and almost all their commercial bases while returning to Chicago Area. East St. Louis, considered an All-America City by the National Civic League in 1959, suffers today one of the nation's deepest social desertions and, from being a promising second largest city in the state, is now reaching stages of desolation as a place tossed away and abandoned by the general public. Α decentralization policy for a more scattered development is urgent. From a comprehensive analysis of cities by size and population within the State and supported on a broad and assorted pool of variables, this work shows the practice done by Southern Illinois University's Master of Architecture students on finding and stablishing the ideal igniting point to begin a decentralization process. The result is the design of a new 640acre urban center appointed to open different strategies to satisfy the existing needs on its zone and the ones coming in the future. The proposal provides a variety of spaces intended to work together and complementarily with Rockford's existing urban fabric with the idea of functioning as a twin-cities strategy by the introduction of a new freeway loop, and with renewed fast and ample contacts with Chicago and the rest of the state's highway and rail networks. The new urban center would act as the starting of many others, seeking for a more balanced State distribution to start moving a spread-out network of growing robust development.

THE BACKGROUND

The State of Illinois is sadly immersed in a deep politic-economic circumstance that retains it insolvent and immobilized with few possibilities of growth, progress and, what is worse, of even run on a steady black-number base. The economic crisis of its public structure, except for Chicago area, has tens of thousands of Illinoisans in a desperate situation, especially those working for public institutions and their providers and users in general.

This State has persisted as one of the more intensely centralized on the U.S. if we consider that the city of Chicago, a major world financial center with the second largest central business district in the United States, and its metropolitan area often referred to as Chicago land, has nearly 10 million people and is the third-largest in the U.S.[2]. It has absorbed over the past 85 years about 87% of all business and commercial developments around the State. The Windy City is an international hub for finance, commerce, industry, technology, telecommunications, and transportation: O'Hare International Airport is the second busiest airport in the world when measured by aircraft traffic; the region also has the largest number of U.S. highways and rail road freight [3]. Chicago has the third largest gross metropolitan product in the United States—about \$630.3 billion according to 2014-2016 estimates [4]. Also, the Chicago metropolitan area recorded the greatest number of new or expanded corporate facilities in the United States for calendar year 2014[5], and it ranks third in the U.S. in number of conventions hosted annually[6]. Illinois is No. 25 in territorial extension within the 50 states that make up the nation, but more than half of the state's population lives concentrated in the Chicago metropolitan area.

There was a time, at the end of the 19th century, when having a solid focal location of development in the United States was a good strategy that benefited economically throughout a whole State. Cases like Detroit, Baltimore, Los Angeles, Cincinnati, New York, Atlanta, Dallas and, of course, Chicago, speak of important anchors of manufacturing production and generation of employment, as well as large sums of investment attraction. Thus, road networks and the establishment or growth of airports and other facilities to boost the development grew rapidly, usually favoring regions closest to the development centers, but in some cases also to distant areas within its own State.With this economic development led to the territorial development and strategic investment in each State according to its own characteristics, and each Government and

Assembly developed strategies that were considered relevant. Markets, not only within the nation but by opening channels for export to other countries, gave a major boost to many companies who settled in those industrial growing points. During the first half of the 20th century, States like California, Texas, Michigan, Pennsylvania and Florida, among others, chose a balanced distribution at more than one strong point of development. This led to maintain a better balance of population and, most importantly, to establish lines of communication with other States for a better distribution of roads, and railroad from various locations within the State territory. As a particular case, the State of Wyoming, with its very low population, has not driven any growing Center since its foundation. On the other hand, States such as Minnesota and Illinois have been dedicated to strengthening only one large strategic center, which have found it very useful, but as a result the rest of the State is stagnating in underdevelopment for years and this is now ballasting more than ever because of changes in national and global economic strategies.

In California, there are 19 cities with more than 200 thousand inhabitants, of which five have more than 500 thousand, and despite being the most populated in the nation its population is very distributed through all the length of the State. The economy is strongly balanced at strategic points as Los Angeles, San Jose, San Diego, San Francisco and Fresno. In addition, in its ethnic distribution any race constitutes a majority of the State's population, because according to the American Community Survey 2015 Data Release [7], 39% of the residents of the State are white, 38% are Latino, 13% Asian, 6% African-American, 3% multiracial, and less than 1% Native American or Pacific Islander. Its rail network is the most efficient of the nation and its highway network connects splendidly with its neighboring states as well as with Mexico, not to mention the ports that provide contact by sea through the Pacific Ocean.

The current population of Texas is 27.5 million and 62% of them are divided into 5 major urban centers: Dallas-Fort Worth with 6.62 million, Houston 5.63 million, San Antonio with 2.35 million, Austin with 1.25 million and El Paso with 1 million. The rest is distributed throughout the State, particularly in settlements along the border with Mexico and the Gulf Coast. In 2010, Site Selection Magazine ranked Texas as the most business-friendly state in the nation, in part because of the state's three-billion-dollar Texas Enterprise Fund[8].An efficient connection with its neighboring States and Mexico through its network of roads and railways grants it a significant advantage in trade and economic purposes, not only for its manufacturing but also for its numerous tourist visitors.

Meanwhile, Illinois has maintained its commitment for Chicago as its favorite. The city of East Saint Louis might have been a major economic development focal point along the Mississippi River, with a prosperous industry and solid communication means, but all of it has been buried in a failed town.

By mid-19th century Galena Illinois was the busiest port between St. Paul and St. Louis often boasting as many as fifteen steamboats at a time docked along Water Street. It shipped a record 54,494,850 pounds of lead[9]. Time changes, and with the decline of the lead mining industry and the start of the California Gold Rush, the population of Galena began to decline and this was completely forgotten as soon as every attention came back to Chicago. In the 1920s Illinois was an industrial powerhouse building rail cars, rolling steel and slaughtering cattle. Peoria grew as a distillery and manufacturing center, while Quincy and Belleville produced stoves and Moline built plows, besides Peoria, Rock Island, and Moline built agricultural implements. By that time the sky over Chicago, Joliet, and Granite City glowed orange from steel mills. Rockford produced fine machine tools and knitting machines. Elgin made watches; Alton rolled brass and blew glass bottles. Meanwhile, rural southern Illinois enjoyed an oil boom, and refineries grew around East St. Louis[10]. In Jackson County, coal was still mined from outcroppings along the Big Muddy River and shipped to New Orleans since up to the 1950s— when coal was the nation's primary fuel, heating homes, forging metal, and powering locomotives. Several attempts have been done, but at the end Chicago has pulled predominance to its side.

The 1930s Depression forced many Illinois business firms and industrial plants to close, and tens of thousands of workers lost their jobs. But when World War II came, Illinois industry revived and aided the war effort. Aviation plants sprung up around Chicago. Ships were floated down the Mississippi to the Gulf, by those moments only Chicago and East St. Louis were perceived as strong and favorable production centers within the State. When the war ended, Illinois was a leading industrial state, although Chicago was clearly starting to be everything. Its manufacturing output had jumped from \$2.1 billion in 1939 to \$6.68 billion eight years later. The new television and electronics industry was centered in Illinois by then, where Zenith, Motorola and Western Electric produced the latest consumer goods. General Motors' diesel locomotives built in LaGrange replaced the nation's steam trains, a strong beat to coal dependency from the south. But all this heavily industrialized output shifted in the 1970s when Southern Illinois coal no longer fueled the state; imported oil and natural gas took its place. Transportation networks still crossed in Illinois thanks to the new interstate highways and jet air travel, but railroads and the related industries started to suffer[10].

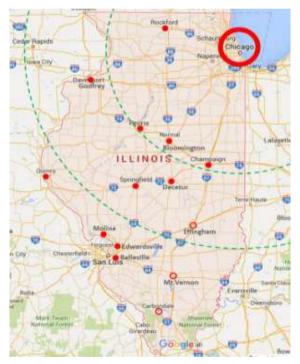
By the beginning of the 20th century. East St. Louis was a thriving industrial town built by the "great capitalists," including Andrew Carnegie and J.P. Morgan. The railroad played a major role in its economic growth. Factories ran 24 hours a day. Jobs were plentiful. The population not only grew, but doubled each decade through the first half of the 1900s[12]. In 1959, the National Civic League named East St. Louis an All-America City, honoring its culture of civic excellence and the cooperative spirit among residents. businesses, nonprofits and government [13]. It was by then a national leader in aluminum production. However, the city suffered later from the mid-century deindustrialization and railroad restructuring. As a number of local factories began to close because of changes in industry, the railroad and meatpacking industries also were cutting back and moving jobs out of the region. This led to a precipitous loss of working and middle-class jobs. The city's financial conditions started to deteriorate. Ironically, by that time, East St. Louis was on the precipice of disaster. Industries had already begun to abandon the city for greater economic opportunities elsewhere. Constant competition with Saint Louis and a furious growth of crime without proper control soon emptied the production centers and with them many people move out in few years. Crime increased. "Brown fields" -areas with environmental contamination by heavy industry- have made redevelopment more difficult and expensive. Street gangs appeared in city neighborhoods. Like other cities with endemic problems by the 1960s, violence added to residential mistrust and adversely affected the

downtown retail base and the city's income. Between 1960 and 1970, the city lost nearly 70 percent of its businesses. Unemployment soared, thus residents moved out of town and the population drain continued for years. Between 1970 and 2000 the city lost 55 percent of its population and by now there is still no clear perception for its future.

Chicago has historically been the spearhead in the development of the whole State and it mainly worked well until the middle of the 20th century. Nevertheless, with a heavily centralized state distribution it is now suffering of anomalous situations as other large cities while the rest of the state is passing a deep economic crisis on public finances. Therefore, the search for solutions with a distributed statewide economic development is now indispensable for two main reasons: 1) the balanced growth of statewide would facilitate its demographic redistribution —partly relieving the pressure currently suffered by the metropolitan area of Chicago- and that of its industry, so the connection via roadway and railway with the neighboring States of Wisconsin, Iowa, Missouri, Kentucky and Indiana, and through them with the rest of the nation, would not depend on a single hub, as it is now, and would result in a strong and solid state all around; and 2) asmany of the crippling urban problems suffered by Chicago, as some other mega-cities in the world, are derived from its high concentration of people, traffic, industry and trade, so by stopping its growth and new productive investments and, as possible, moving part of the existing ones to other parts of the State, would be a relief valve for the Windy City. As evidenced by successful cases in other States, the active and constant support of three, four or more important urban centers not only improve the life around the State but of each of them as well.

A REMEDY IS POSSIBLE

From a first analysis of major cities by size and population within the State of Illinois–excluding greater Chicago area— and by grouping them into three stripes according to their distance from Chicago, there is a group of potential cities of future growth on the first stripe: Rockford, Peoria, Normal-Bloomington and Urbana-Champaign; on the second stripe: Godfrey, Springfield and Decatur; and on the third stripe: Quincy, Moline, Edwardsville and Belleville. In addition, and for their strategic location at the crossroads of major highways, there could be added Effingham in the second stripe, and Mount Vernon and the Carbondale-Carterville-Marion corridor in the third stripe. These cities, for their size, location and infrastructure could promote as important focal points of development which, in the form of sustenance, collaboration, and support networks, could not only facilitate the trend of the State towards a healthier, balanced, and better distribution, but, as said, they could also alleviate the current peak-times' excesses on Chicago's life (urban density, traffic and airports' congestions, supplies' shipping, homelessness, crime, etc.). The allocation of specific approaches for these spots would result in that some urban centers could be especially attractive for i.e. their hospital facilities; tourist attractions; higher education offer; business centers; specialized manufactures; natural settings; conventions and conferences hubs; etc.



Analyzing the cities mentioned above according to their size on area and on population we have that Rockford, Peoria + East Peoria, and Normal-Bloomington occupy the first places, followed closely by Springfield, the State capital. A quick scrutiny of their main advantages for a possible development effort towards the State decentralization takes us to consider that Rockford, not only for being the largest but also for its closeness to Chicago, and not yet in its influential metropolitan area, an also for its nearness to two main neighbor states: Iowa and Wisconsin, and potentially to Michigan and also Indiana. There are, additionally, some other facts that put Rockford

Decentralization as an Alternative The Case of Rockford Illinois

as a first option like counting with an international airport already in use.

Rockford is settled at the left side of Interstate 90 almost on its junction with Interstate 39, in Winnebago County. On the other side of I-90 there is Belvidere, an old town which served as train stop while connecting with Chicago and that was well developed as a rural center during 19th century. North to Belvidere, but with a considerably open land in between, are Poplar-Grove and Timberlane, two small settlements with no own commercial establishments.

	AREA	POP
Chicago	1	1
Rockford	2	2
Peoria,	3	3
Bloomington ₂	5	4
Springfield	4	6
Decatur	6	7
Champaign ₃	8	5
Godfrey	7	-
Belleville	9	8
Edwardsville	10	2
Moline	-	9
Quincy		10
1 incl. East Peoria 2 incl. Normal		
3 incl. Urbana		

The general proposal as first step toward Illinois decentralization is the development of a Rockford twin city for several reasons: 1) respecting Rockford as it is now taking advantage of its existing infrastructure while not upsetting its basic structures, 2) expanding the surrounding road network with the confluence of two interstates and by using a loop freeway around the two cities while connecting with the international airport, 3) distributing the future industrial development on two complementary centers according to their convenience by relation its commercial trading with the rest of the State as well as with Iowa and Wisconsin. The new twin city, to be called Newrock and located on Boone County, will be formed with the conjunction of four districts: Belvidere, Poplar-Grove, Timberlane and Central District; this last of new creation to act as the epicenter and environmental binder. Central District will embrace city's downtown which will be included in a square of one mile per side (green on the figure), and this will be the strongest link with Chicago in terms of trade and passengers through main roads and fast train. The general intention of this Downtown

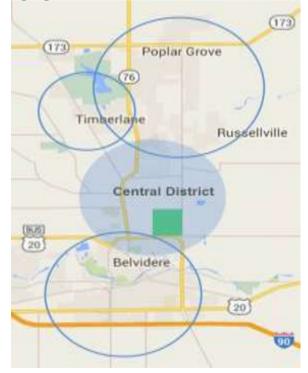
area design is to provide it with the most advanced



technology together with everything needed to make it smart, livable, friendly, accessible, beautiful and sustainable on its three poles: economy, ecology and society.

NEWROCK' S DOWNTOWN DESIGN

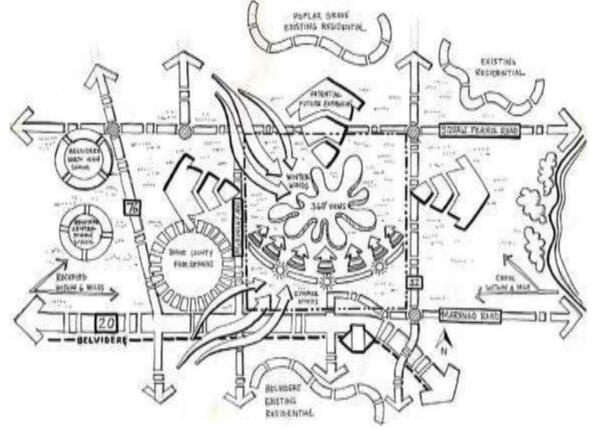
The following proposal of640-acre downtown area was developed by students Jacob Petty, Jarret Dewitt, Adam Tregoning and Yumeng Sun for the SIU Master of Architecture's 551 Comprehensive Studio during the fall semester of 2016. The proposal provides a variety of spaces intended to work together and complementarily with Rockford's existing downtown fabric. The contemporary concept outlines an assortment of uses that would highlight the ideals of the downtown.



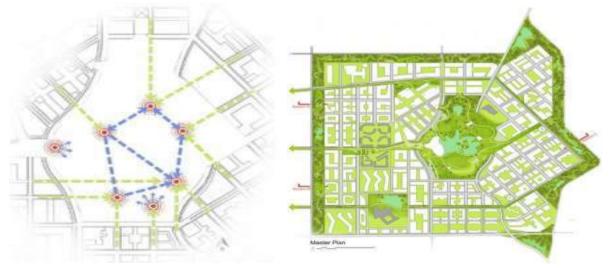
These uses include: a) Housing in a diversity of densities according to specific zones. It is expected for downtown area to be surrounded progressively by mainly housing areas for this downtown housing is fairly short on its

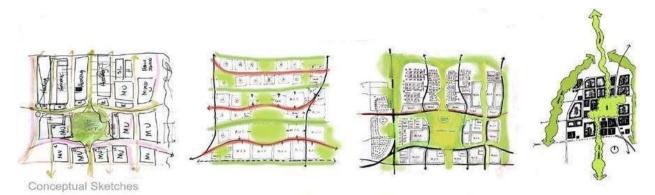
Decentralization as an Alternative The Case of Rockford Illinois

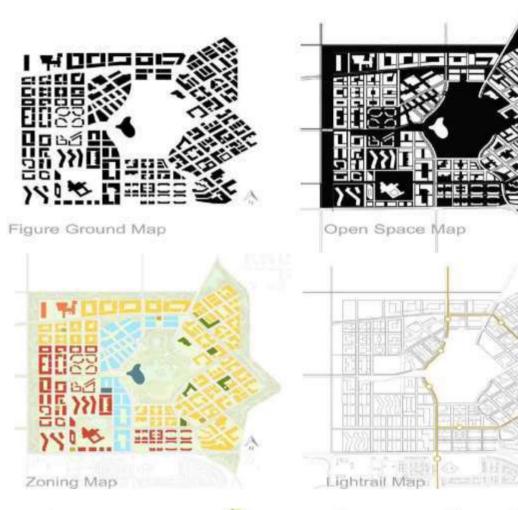
percentage; b) Offices and other working areas (including Conference Center, mix use housing and retail); c) Retail on diverse layouts (not shared by other uses); d) Central Park; e) Hotels, 300 keys (4 units 100,000 ft² each); f) Community Center + Train Station; g) Seniorliving community; h) Child Care center; i) Hospital; j) Health Clinic; k) Public Library; l) Recreation Center + activity outdoor areas; m) Police Substation; n) Fire Substation; and o) Parking garages (5 units 40,000 ft² each). Currently there are two Elementary Schools at Belvidere (Lincoln and Washington) as well as two Middle Schools and two High Schools together with an Endeavor High School. There are also two cemeteries and a large golf course club, for what they are not included on the usage program.



After having done an exhaustive site analysis and knowing all the variables affecting the case and the surrounding context composition a site diagram served as the first graphic approach to the problem, where important considerations were observed and first decisions were taken. It includes traffic, sun incidence, prevailing winds, and other surrounding factors affecting directly the site.Then, several conceptual sketches were produced in order to organize the information and the possibilities for a proper solution.









Journal of Architecture and Construction V1• I2 • 2018



Section A



Section B



Section C

The master plan for the proposed urban development project uses several design strategies to promote a healthy, walkable, and built environment. The design of the master plan was developed on the principles of Green Urbanism and urban Smart Growth. The proposal uses several mediums to provide the pedestrian with a walkable urban fabric. Greenway connections, green-belts, light rail systems, and street typologies all promote a pedestrian friendly downtown. The greenway/green-belt system provides the pedestrian with an uninterrupted circulation route throughout the city while the loop system will define the downtown area and provide space for amenities that help create a healthier lifestyle.Mobility was another leading factor that moved the proposal toward more fluid and natural open spaces. Knowing that this central area will be surrounded by mainly housing zones in the near future, the inclusion of a dense and well-defined green belt along the perimeter was another strong premise.

The proposal was additionally designed with planned expansion in mind. By strategically locating program elements such as retail, residential, and mixed-use in specific areas, we anticipate to utilize urban expansion in a beneficial manner. The residential district was located to the south and west in an effort to connect to existing communities. The business/mixed-use district was placed to the east with the intention of using the existing environmental corridor as a tool to reduce expansion in that direction. Retail is provided in a central district along residential zones and major thoroughfares to best provide access for the downtown area.

For the Central Park solution it was considered the Parc de la Villette designed by Bernard Tschumi. This is a park of roughly 140 acres located in Paris. Tschumi's approach when designing was to create a system of spots, or destinations that would create a very formal grid. Within that structured grid would lay a very organic trail system, which emphasized movement throughout the entire park. The design of this new Central Park derived from a similar idea. The dispersed "points" were a consequence of vantage points from high traffic areas illustrated in the diagram below. A main trail would then surround the outer edge of the park while still interacting with all points. These points vary in activity depending on the location in the park. Areas such as open fields hold pavilions and playgrounds while other sectors of the park may include a cultural center and an amphitheater.

There is also a pocket park system that was designed to be the interstitial route between greenways and pedestrian promoted pathways. These planned pocket parks will offer a break along the busy street system and allow for further engagement on a community level.

The green-way system provides the pedestrian an uninterrupted circulation route with throughout the city. All greenway spaces include recreational, leisure, reflection, preservation, community connection, and transportation; however, certain regions will adopt specific needs for that area. For example, the residential greenway was developed for community interaction and engagement. The space provides play grounds, fixed seating areas, circulation paths, and open space for mixed-use to help to provide a diverse and strong community/neighborhood.

THE GREEN-WAY SYSTEM ON DIFFERENT SECTIONS OF THE MASTER PLAN

The movement for a green urban development, as some exemplar cities have made around the world, provides with a special attraction for both, residents of the area and guests from townships around as well as from other origins as visitors. Green-way systems have proved to be a very successful option for offering sound as

well as thermal buffers, together with attractive leisure spaces for social recreational and enriching life. Contemporary downtowns are much more than what they used to be not many years ago when they were intended as town nucleus for concentrating affluence, reference, markets, services, jobs, and general control. The design bases of this multifarious downtown area are slanted towards satisfying much more than its own in-bound needs to extend its benefits to the surrounding neighborhoods, the connection with Rockford as twin cities, the important link with Chicago, the contact with neighbor states' main cities and, of course, to spark the indispensable development of Illinois as a rather decentralized state.

CONCLUSIONS

This new urban center named Newrock is a fresh and innovative proposal that addresses several relevant aspects. It relies on the existence of Rockford, the second city of Illinois on size and population, with all the advantages that it means, to settle at 13 miles of distance. Including it there is outlined a freeway loop around the two of them as twin cities and connecting them with the existing international airport and interstate network of highways. Newrock's downtown is within a new district that also includes existing settlements as the city of Belvidere and the towns of Poplar Grove and Timberlane, what grants stability of rooted locations. But the real contributions of this project come with its conceptual idea of the downtown design and its extended projections to a more balanced population and workforce distribution around the whole State. The downtown design comes from a Green Urbanism principle which includes a central park, a green-way system and strong connections to the surroundings through wooded roads and a perimeter green belt. It also relies on urban Smart Growth, a theory of urban planning transportation which proposes and to concentrate growth in compact and walkable centers to avoid dispersion. It also encourages high density land uses, with public transport and including adequate routes for cyclists, neighborhood schools, complete streets and mixed use development with a variety of housing opportunities.

Besides its own inner benefits, this project aims to act as the starting of many others, seeking for a more balanced and decentralized State distribution by starting moving a spread-out network of growing robust development.

REFERENCES

- [1] Tocqueville, A. de. *A History of Decentralization* Archived 2013-05-11 at the Wayback Machine., Earth Institute of Columbia University website, accessed October 4, 2015.
- [2] U.S. Census Bureau, Population Division. Estimates of Resident Population Change and Rankings: July 1, 2014 to July 1, 2015 - United States -- Metropolitan Statistical Area; and for Puerto Rico 2015 Population Estimates. Retrieved May 29, 2016.
- [3] Rodriguez, Alex (January 26, 2014). *Chicago Takes on the World*. Chicago Tribune (Sec. 1 p. 15).
- [4] U.S. Metro Economies. *GMP and Employment* 2014-2016. Global Insight. 2015. p. 15.
- [5] Rasmussen, Patty. *Strength in Diversity*. Siteselection.com. Retrieved March 7, 2015.
- [6] Exhibitorhost.com. http://exhibitorhost.com/illinois Retrieved October 17, 2015.
- [7] American Community Survey (ACS) of U.S., The. Census Bureau, 2015 Data Release. California Department of Finance.Retrieved

November 2015.https://www.census.gov/programssurveys/acs/news/datareleases/2015/release.html 3.

- [8] Site Selection Magazine Archives. 2016. http://siteselection.com/cc/texas/ Retrieved October 10, 2015.
- [9] City of Galena, The. http://www.cityofgalena.org/en/our_community /galena_history/ Retrieved Oct 6, 2015.
- [10] Historical Development of Industry and Manufacturing in Illinois, The. *Illinois Periodicals Online* (IPO), a digital imaging project at the Northern Illinois University Libraries funded by the Illinois State Library. http://www.lib.niu.edu/1999/iht639941.html Retrieved October 6, 2015.
- [11] Wildcat Roar, The. A Fallen City is Easily Overlooked. March 26, 2013. Retrieved Nov 2, 2015.https://www.thewildcatroar.com/features/ 2013/03/26/a-fallen-city-is-easily-overlooked/
- [12] National Civic League, The. *The All-America City Award*. https://www.nationalcivicleague.org/americacity-award/ Retrieved October 11, 2015.