

9. Infrastructure

The infrastructure sector covers a wide spectrum of services, especially those concerning water, sewer, power lines, streets, sidewalks, and highway and mass transportation systems. Infrastructure can shape the social and economic welfare of residents within any locality. Investments made to public infrastructure can clearly influence land use and development patterns, the general economic environment and quality of life issues. However, managing public infrastructure can be a complex process for any neighborhood organization to handle. At the monthly neighborhood meetings in Lansdowne, many residents complained about the state of their local infrastructure and the SWOT analysis (see chapter 4.3) strongly conveyed that it is seen as a major weakness of the community. Many point out that the lack of streetlights and open sidewalks, improper signage, and poor street conditions has lessen the level of security and protection the city can provide for its residents. Moreover, excessive flooding and poor drainage, which is caused by an inadequate sewer system, presents other problems for the Lansdowne area. This chapter is interested in establishing ways to improve the livability of Lansdowne as it relates to infrastructure problems. A list of programs has been identified below to address some of the problems and concerns that residents have identified in the neighborhood meetings. Each program provides direction in terms of what is required to improve and expand the local road and street conditions and rehabilitate the city's sewer and water facilities. This chapter also addresses other public facilities or infrastructure improvements necessary for industrial and commercial activity

Programs:

- 1. Traffic Calming**
- 2. Public Utility and Maintenance**
- 3. Improving Mass Transit System**
- 4. Street Improvement and Construction**
- 5. Sewage Upgrade and Expansion**

3.1 Traffic Calming

Program Description:

The traffic-calming program will implement signage throughout the neighborhood. Residents will be involved in identifying and generating a list of areas where signage is needed. The department of public works will put up signs according to priority.

Rationale:

Traffic appears to be a problem in Lansdowne and throughout East St. Louis. Residents expressed concerns pertaining to the speed and volume of traffic in residential areas. Speeding, lack of signage and pedestrian walkways are vital issues that need to be addressed in this neighborhood. The program would help to curtail some of these problems by establishing stop signs, speed bumps, and pedestrian walkways along neighborhood streets. No parking signs will be implemented to increase safety and flow of traffic on narrow streets. The program would improve the quality and safety of neighborhood streets.

Model Programs:

There are two programs to use as examples for signage implementation. The Boston Street Project was a \$15 million project was completed in the summer of 1998 in a former industrial area near Baltimore's Inner Harbor. Baltimore City planners and Public Works engineers asked for citizen input for the design of the street. The City initially proposed it as a high-speed highway, but as an end result, the street was completed offering four lanes of traffic, on street parking, brick sidewalks, and wheelchair accessible pedestrian crossings. The second is the Buckman Heights Project in Portland, OR. The project provided new affordable housing while disrupting existing infrastructure and adjacent uses. New bike lanes and routes were created. Head-in parking was added to narrow the street, slow traffic, and create a pedestrian buffer to increase safety within the neighborhood. The duration of development lasted from September 1997 through July 1998 and helped improve the underutilized existing infrastructure.

Potential Participating Agencies:

- ?? Lansdowne Steering Committee
- ?? East St. Louis Police Department

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- ?? East. St. Louis Department of Public Works
- ?? East St. Louis City Council

Technical Assistance Providers:

- ?? Department of Public Works
- ?? NTAC

Activities:

1. Form a subcommittee to focus on infrastructure issues in the neighborhood.
2. Appoint residents to aid in the identification of areas in need of signage and the creation of a list to prioritize these areas for implementation. NTAC and ESLARP can assist in creating maps showing these locations.
3. Submit a formal list to the City of East St. Louis, Department of Public.
4. The Department of public works will then be in charge of putting up new signs in these areas.
5. Follow up and put pressure on the city till the desired changes are implemented, by making phone calls and addressing city council as a group.
6. Once changes has been implemented the local traffic conditions should be assessed again within these trouble spots and those areas still experiencing speeding issues should be considered for future speed bump implementation or other interventions that will solve the problem.

Required Resources:

- ?? Lansdowne Steering Committee
- ?? Residents

Funding Needs:

- ?? Stop Signs - \$500 per intersection
- ?? Speed Bumps - \$1000 per speed bump
- ?? School Crossing -\$100 per sign
- ?? No Parking Signs - \$100 per sign

Potential Funding Sources:

?? Illinois FIRST

?? City of East St. Louis

Timeline:

This program could start as soon as the Lansdowne Steering Committee and residents generate a list. It should not take more than 4-5 months to implement.

3.2 Public Utility and Maintenance

Program Description:

This program encompasses an effort to implement new street lighting throughout the Lansdowne neighborhood. It also includes an initiative to provide tree-trimming services by the City of East St. Louis that will assist in eliminating trees that are in close proximity to power lines.

Rationale:

There is a lack of street lighting throughout the Lansdowne neighborhood, a concern that is repeatedly voiced by residents. The current condition of the lighting is scarce and insufficient. Another issue is the abundance of overgrown trees around utility lines that has generated many power outages during bad weather. The program would increase public/personal safety by increasing visibility through new lighting. Regulated tree trimming would reduce the cost of power line damage and inconvenience of residents.

Model Programs:

The Stella-Mann Neighborhood Project in Tucson, AZ experienced infrastructure improvements in 1999. These improvements were part of a Back to Basics policy initiative to keep current and attract new residents to this neighborhood located near the City's center. Some of the improvements included street lighting, median landscaping, speed humps, and sidewalk projects.

Potential Participating Agencies:

?? Lansdowne Steering Committee

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- ?? City of East St. Louis
- ?? Department of Public Works
- ?? AMEREN (Power company)

Technical Assistance:

- ?? AMERON
- ?? NTAC/ESLARP

Activities:

1. Form a subcommittee to focus on infrastructure issues in the neighborhood.
2. Survey residents where there has been a constant problem with power outages due to overgrown trees. The residential areas would need to be appraised by committee members to determine where insufficient street lighting is located. Maps to be created by NTAC and ESLARP
3. Create a list of broken street lamps for replacement and request this replacement from AMEREN.
4. The City of East St. Louis has to assess the cost of new street lighting throughout the city. IT is important that LSC facilitate information about their needs to the city
5. The City will decide on the placement of street lighting based on priority (e.g., main arterials, collectors), therefore LSC must stay involved in the process and advocate the needs of Lansdowne
6. AMEREN Power Company will be in charge of tree trimming trees around power lines, while the City will be in charge of trimming and up keeping current trees on a yearly basis. LSC must put pressure on AMEREN as well as the city to ensure that the upkeep is completed in a timely fashion.

Required Resources:

- ?? Lansdowne Steering Committee
- ?? Public Works
- ?? AMERON Power Company

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Funding Needs:

?? Street Lighting Lamps and Poles

Potential Funding Sources:

?? City of East St. Louis

?? Illinois First

?? Enterprise Community

?? Community Development Block Grants (CDBG)

?? Highway User Revenue Funds (HURF)

Timeline:

The replacement of defect lighting and tree trimming can be implemented immediately. It would continue annually on a seasonal basis. The new street lighting can begin as soon as the cost has been assessed and funding has become available. Advocating Lansdowne's needs with the city should begin immediately and continue till the needed improvements have been achieved.

3.3 Improving the Mass Transit System

Program Description:

This program incorporates the implementation of new bus shelters and bus-stop signage in areas along bus routes in Lansdowne.

Rationale:

There is currently a lack of bus shelters and bus stop signs in the Lansdowne neighborhood. It is hard for residents to identify bus stops location and bus routes. There is no protection from bad weather at the bus stops. The program would create bus shelters that will house schedules and bus routes. The shelters will also provide external protection for waiting passengers from rain, snow, sun, wind, etc.

Potential Participating Agencies:

?? Lansdowne Steering Committee

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?? BI-STATE Development Agency

?? City of East St. Louis

Technical Assistance:

?? U of I Design and Planning students

?? NTAC

Activities:

1. Work in the subcommittee with focus on infrastructure to address the problems regarding Mass Transit.
2. Obtain a copy of the official bus routes in the Lansdowne area from BI-STATE
3. Work with residents involved in LSC to assess how bus stops and routes have changed in the Lansdowne area and what future changes are desired.
4. The City of East St. Louis must determine whether designated stops are owned by the city, county, or private parties after bus stops and routes have been identified.
5. The City must contact the private property owners if their property is needed to house shelters and install proper signage and provide compensation to property owners if a portion of their land is utilized for the project.
6. The BI-State would implement bus signs at all stops in the neighborhood and place bus shelter at the appropriate stops, depending on priority.
7. Encourage more residents to use the mass transit system and thereby be able to convince BI-STATE to improve and expand service in Lansdowne.

Required Resources:

?? Lansdowne Steering Committee

?? Corporation from BI-STATE

Funding Needs:

?? Bus Stop Signs

?? Bus Shelters

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Potential Funding Sources:

?? Illinois FIRST

Timeline:

Bus stop signage could be implemented as soon as the areas have been identified. The process for bus shelter implementation would begin when there is sufficient funding and compliance with property owners.

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Sources:

- ?? Boston Street Project (source: http://www.bh-ba.com/boston_street.html)
- ?? Buckman Heights Project (source: <http://www.livable.org/awards/buckman.html>)
- ?? Stella-Mann Neighborhood Project (source: <http://www.ci.tucson.az.us/cns/stella-mann.html>)

3.4 Street/Sidewalk Improvement and Construction

Program Description:

This program will provide the guidelines and physical plan for the reconstruction of streets and sidewalks in the Lansdowne area.

Rationale:

The condition of streets and sidewalks are seen as an important concern in the Lansdowne community. For many years, many of the city's streets have deteriorated due to a shrinking tax base and widespread abandonment. According to the neighborhood condition survey (Chapter 3.2), most of the area's street/sidewalks were rated as being in "poor" condition and serious need of repair and maintenance (*see table below*). Much of the pavement is aged and many streets have large potholes and cracks. Many streets are lacking median lines to separate two-way traffic. Consequently, these problems interfere with the quality of driving and can cause considerable damage to automobiles. Furthermore, sidewalks are helpful in providing manageable walkways for pedestrians. Maintaining good streets and sidewalks help to efficiently maximize the mobility of people and goods within and through the Lansdowne area. Therefore, designing a program that is responsible to perform minor/major repairs and upgrades to the city's streets/sidewalk would improve the overall quality and condition of the neighborhood.

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| Perceived Street/Sidewalk Condition | Frequency | Percent | Valid Percent |
|--|------------------|----------------|----------------------|
| Good | 3 | 5.5 | 5.7 |
| Fair | 7 | 12.7 | 13.2 |
| Poor | 42 | 76.4 | 79.2 |
| No Opinion | 1 | 1.8 | 1.9 |
| Valid Cases | 53 | 96.4 | 100.0 |
| Missing | 2 | 3.6 | |
| Total | 55 | 100.0 | |

Model Program:

There are many communities who are concerned about the design and construction management of their streets. One of the most visible models being utilized by many communities is a pavement management program. This program would be a continuous, year-round public service that involves regularly scheduled inspection of asphalt surfaces. This program can potentially help Public Works officials keep a current inventory on the conditions of Lansdowne's street system. Consequently, in order to extend the life of pavement structures, maintenance and repairs need to be scheduled and performed (e.g., routine patching and crack sealing operations) before the surface falls to a fair condition. The Bureau of Transportation Statistics (BTS) National Transportation Library has a very comprehensive Pavement Management Manual on its website. The Metropolitan Area Planning Council in Boston developed the manual. The manual covers a five-step process that communities can utilize in overseeing the maintenance and repair over their roadways. The manual also provides case studies concerning how communities are able to improve their road conditions and reduce pavement maintenance costs. The manual can be obtained from <http://ntl.bts.gov/DOCS/pave.html>. In addition, another model program from the City of Portland, *Report on New Standards for Residential Streets*, covers a program that maintains curbed and non-curbed hard surface streets. The source can also be obtained online at http://www.trans.ci.portland.or.us/Street_Construction.html.

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Potential Participating Agencies:

- ?? Lansdowne Steering Committee
- ?? City of East St. Louis
- ?? Public Works

Technical Assistance:

- ?? Public Works Department
- ?? NTAC

Activities:

1. The Infrastructure sub-committee should work to develop an inventory for road/sidewalk construction (i.e., listing of streets names, the conditions of streets). It will be helpful for the sub-committee to work with other participating organizations in developing standards for road/sidewalk construction for residential and commercial areas.
2. The committee should also prioritize street repair to determine which improvements are most important and form a list of locations in the neighborhood where desired improvements should be made.
3. The sub-committee should develop a budget for estimated costs and prepare a formal request to the potential funding sources.
4. Public Works Operations can be an definite resource to the steering committee because they can provide engineers who are specialize in designing and coordinating of capital improvement projects located within the public right-of-way as well as the maintenance of streets, curbs, gutters, sidewalks, storm drains, and sewers. They can possibly review conditions and inspect development-related projects to insure that improvements are constructed based on sound engineering principals and in the best interest of the City of East St. Louis.
5. The City of East St. Louis will have be involved throughout the process for budgetary reasons and to ensure that the project is implemented.

Potential Funding Sources:

- ?? Illinois FIRST
- ?? East St. Louis Enterprise Community

Timeline:

This is a long-term project; therefore, it will take up a couple of years to implement the program activities fully.

3.5 Sewage Upgrade and Expansion

Program Description:

This program will oversee the upgrade and/or reconstruction of the current sewage system and establish plans to allow for expansion with the current site to support future development and growth projects in the area.

Rationale:

Upgrading the sewage system is a major concern in East St. Louis. Sewers help to transport rainwater and wastewater from the city. Currently, many of the local pipes and lines are aging and undersized. As a result, the lack of basic infrastructure has led to flooding and poor sewage drainage and sanitation practices. Establishing a program to address these concerns will help to expand the capacity of the present system to transport more rain and wastewater from the city. It would also give support to more development in commercial and residential areas in the city.

Model Program:

The Wastewater Treatment Division in Kings County, Washington has created a plan to construct a new treatment plant as well as made plans to upgrade its existing sewage treatment systems in the southern and western part of the service area. The plan was created to build the extra capacity the county's needed to meet the demand of population growth. The Wastewater Treatment Division website (<http://dnr.metrokc.gov/wtd/rwsp/rwsp.htm>) has resourceful information regarding their county's regional wastewater services plan for improving their

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wastewater services and provided examples of well-designed facilities that have been built there as well as in other reasons.

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Potential Participating Agencies:

- ?? Lansdowne Steering Committee
- ?? City of East St. Louis
- ?? Public Works Department
- ?? Illinois-American Water Company

Technical Assistance:

- ?? Public Works Department
- ?? City of East St. Louis
- ?? Illinois-American Water Company
- ?? NTAC

Activities:

1. The Infrastructure sub-committee should work closely with the Public Works Department and City of East St. Louis to do an internal assessment of the sewage system. Problem areas will need to be inspected and resident concerns should be documented, as well. The Public Works Department should communicate to the Lansdowne committee of what services will be required and the estimated cost for implementing these services.
2. Illinois-American Water Company may have personnel who can provide some level of expertise and consultation on in what needs to be done to handle a sewage system upgrade within the area.
3. The sub-committee should make a request of sewer repairs to the Public Work Department and plan to present their proposal to potential funding partners. Dates for scheduled repair work to accommodate construction projects should be secured.

Potential Funding Sources

- ?? Illinois FIRST
- ?? Enterprise Community

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Timeline:

This is a long-term project; therefore, it will take up several years to implement the program activities fully. It is however important to initiate the first steps in the process within a shorter timeframe of 1-2 years.

