

Minneapolis Street Lighting System

Existing 40,700 Street Lights

- 5,000 Ornamental Low Level
- 7,000 Shoebox, 30' & 40'
- 1,800 Parkway
- 25,000 Wood Pole (streets and alleys)
- 1,200 MnDOT/County/Private



August 7, 2007



Past lighting in Minneapolis



August 7, 2007

Issues, concerns and desires

Feedback by numerous people has identified the following street lighting issues, concerns and desires:

- Internal unclear practice regarding the existing process that challenges staff on keeping street lighting consistent.
- Many occurrences of independent initiatives have led to lighting installations that are somewhat excessive.
- Some residential areas that are lacking light or have very limited lighting.
- Desire to provide better lighting in activity areas.
- Safety concerns related to crime prevention.
- The existing process to gaining support to install ornamental lights, especially in neighborhoods, has been bogged down with a petitioning and assessment process that can last 2 years before any street lights are recognized.
- There is a need to provide technical efficiencies and sustainability within the street light fixtures. Fixture light output efficiency provides benefits by the minimizing night sky glow, light pollution and light glare.
- Funding has been the main deterrent for why more ornamental street lighting systems are not installed to this point.

Objectives

The Policy & Program objectives are:

- Maximizes the quality, sustainability, and visibility of the street lighting system
- Contributes to added comfort and safety for pedestrians, bicyclists, transit users, and motorists
- Creates a consistent and cohesive lighting system based on place-type characteristics
- Provides pole and fixture options that are aesthetically pleasing and high quality
- Provides clear guidance on expected installation methods, procedures and maintenance service levels
- Creates a system that is cost efficient, easy to operate, and maintainable
- Addresses costs to the City's capital, maintenance and operating budgets

Benefits of New Policy & Program

The policy and program intend to provide positive social, economic and equitable benefits to residents, businesses and the transportation users by:

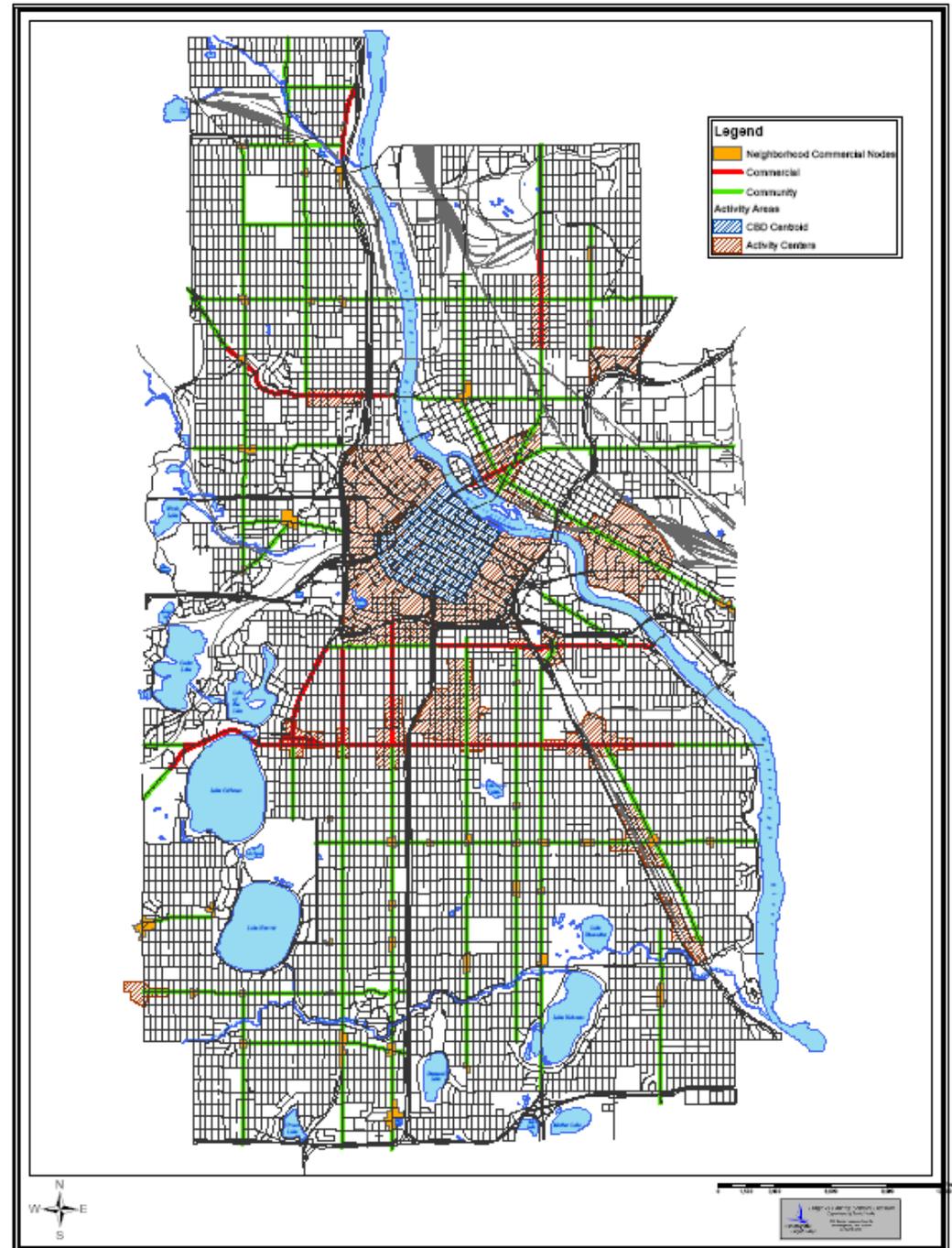
- Safer walk-able and bike-able community
- Prevention of crime and aiding in police protection
- Encouraging businesses patronizing during the night time hours
- Encouraging community growth
- Reducing night time traffic crashes
- Improving technological advancements for reducing energy consumption.
- Improving street light operations and maintenance service levels
- Finally the street lighting policy simplifies installation, operations and maintenance processes providing benefits to the residents and business owners through:
 - Creating an equitable funding mechanism where the City users as a whole contribute
 - Elimination of the petition process thus reducing time before installation
 - Systematic scheduled installation process that is based on prioritized lighting needs rather than requests
 - Prevent inconsistencies through defined visibility criteria and focused style choices.

Lighting Areas

Three lighting areas

- Central Business District Centroid
- Pedestrian Areas
- Residential Areas

Initial Example Map



August 7, 2007

Visibility Criteria

Lighting Quality and Visibility Criteria

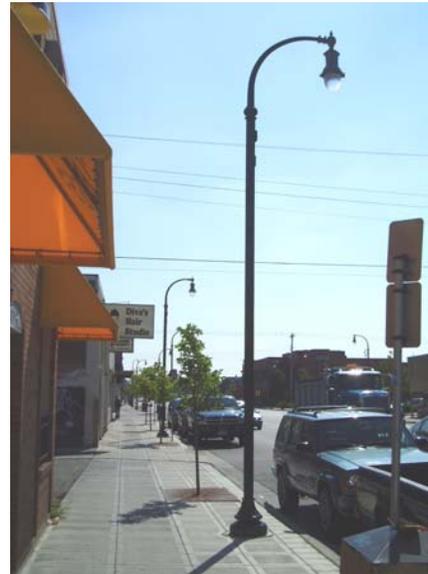
- Footcandles (amount of light)
- Uniformity (difference in bright to dark spots)
- Veiling Luminance (glare)

Recommendations - Lighting Types

- **CBD Centroid**
 - High/Low Mix
 - 20' Pendants

- **Pedestrian Areas**
 - High/Low Mix
 - 20' Pendants

- **Residential Areas**
 - 15' Mid-level
 - 20' Pendants



August 7, 2007

Prioritization of Installation

The process for installing street lighting will be priority driven. The priorities that will be considered (in no particular order) are:

- Part of street reconstruction projects
- Areas without any lighting
- Areas with lighting not meeting City standards
- Areas with deteriorated lighting systems
- Pedestrian Crashes
- Bicycle Crashes
- Bicycle Corridors
- People Density (Population and Employment Density)
- Safety/Security/Crime
- Activity Centers
- Traffic Volumes
- Geographic balance

Funding Approach

Funding Strategies

- **General Fund:** continue to use for maintenance
- **Assessments:** continues for existing installed systems until assessment ends or 30 year life, whichever is sooner
- **Street Light Fee (start in 2009) :**
 - Operations
 - \$2.5million/year for electricity costs
 - New Capital
 - \$4 million/year for CBD/Pedestrian areas over 20 years
 - \$9.5 million/year for Residential areas over 30 years

Community Meetings

Dates and Locations

- Thursday, Sept 6, 2007—City Hall Room 220 (downtown)
- Tuesday, Sept. 11, 2007---Powderhorn Park (SE quadrant)
- Wednesday, Sept. 12, 2007—Harrison Park (NW)
- Tuesday, Sept. 18, 2007—Lynnhurst Park (SW)
- Wednesday, Sept. 19, 2007—Creekview Park (NW)
- Thursday, Sept. 20, 2007—Waite Park (NE)
- Tuesday, Sept. 25, 2007—Nokomis Community Center (SE)
- Wednesday, Sept. 26, 2007—Van Cleve Park (NE)
- Thursday, Sept. 27, 2007—Kenwood Park (SW)

Next Steps

- September 2007 -- Community Meetings
- Late October 2007 -- Council Street Lighting Policy & Program Adoption
- Late 2007 – Council Adopts Charter and Ordinance Changes related to the Policy & Program
- 2008 -- Begin implementation steps
- 2008 – City Council adopts the Ordinances changes related to funding
- 2009 -- Begin Street Light Fee billing and payments