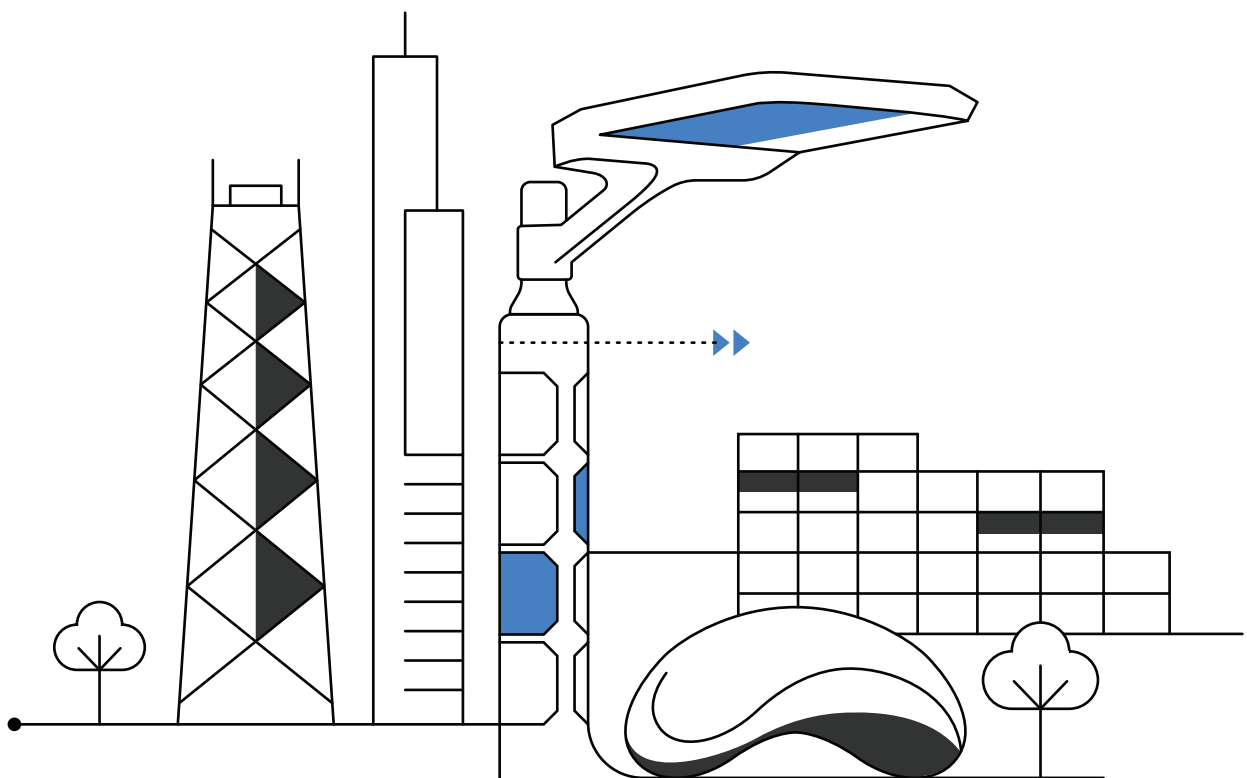

Joliet, Meet iLamp Illinois



Prepared for:
Joliet, Illinois



Joliet, Meet iLamp

iLamp is a smart streetlight proven to reduce crime and save lives, self powered and self sufficient, iLamp is easy to install, robust and reliable. iLamp is always on, immune to power cuts and grid outages, providing a sustainable energy solution. When everything else goes down, iLamp stays up.

But it's more than just a light, it's a power source, a community asset, and a step towards energy independence. Resistant to sand, snow, dirt, water, and floods, its innovative cylindrical solar panel cleans itself, ensuring continuous power generation in any environment.

As a modular system iLamp is a platform for innovation, enabling developers to create plug and play modules that use iLamp's sensors and communications for advanced functionalities.

Each module pays for its space and resources used, creating a marketplace of capabilities. Software developers can submit apps to the iLamp App Store, leveraging its onboard senses to deliver services ranging from environmental monitoring to public safety.

Each iLamp is a mass rolled out miniature microgrid, generating reliable, resilient, sustainable energy exactly where it's needed.

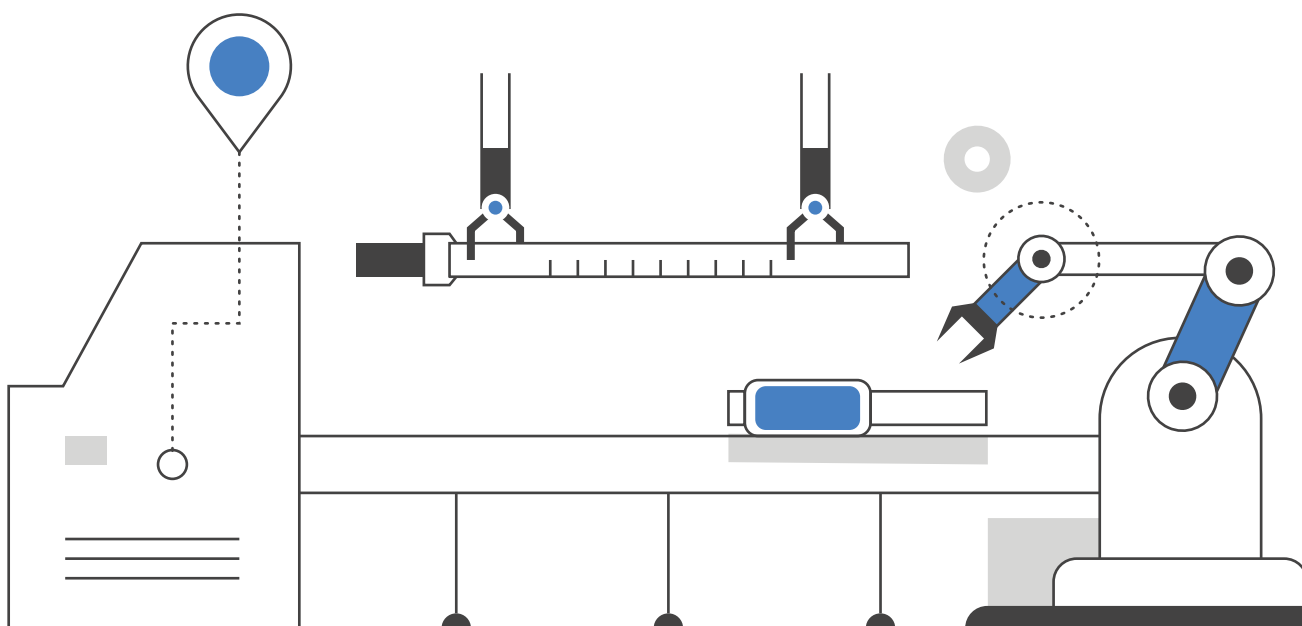
Modules are billed for the power and onboard services such as data transmission and sensor access, creating an ecosystem where energy and functionality come together seamlessly. With this proven smart streetlight solution, iLamp Illinois is uniquely positioned to address the broader challenges faced by Joliet.

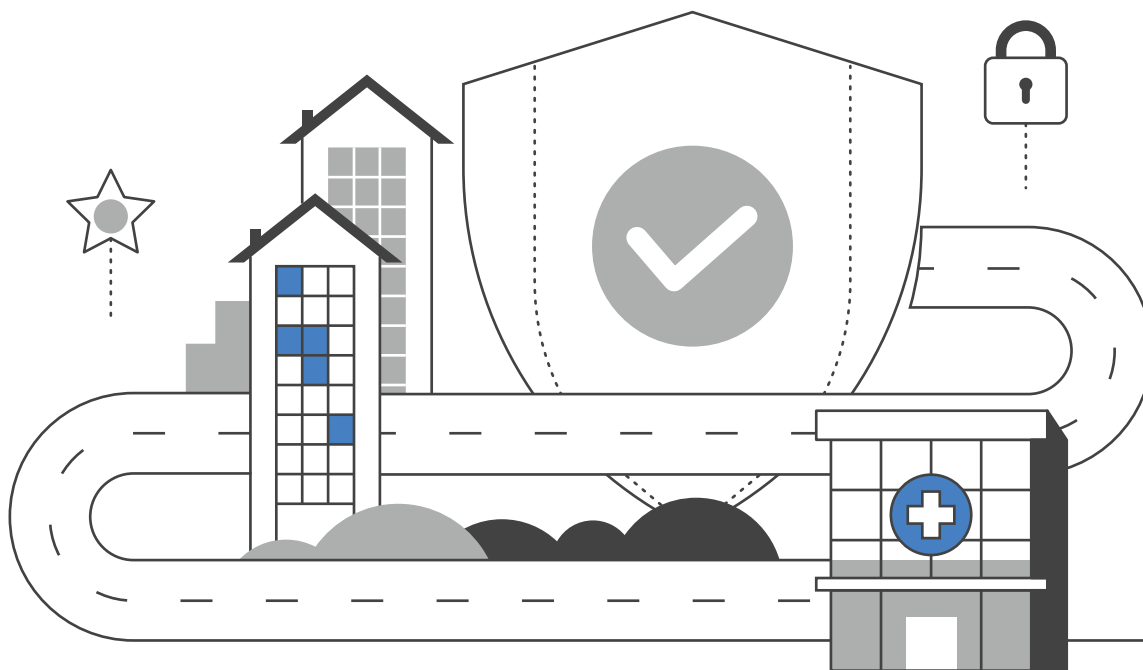
With the potential to reduce crime, improve safety, increase house prices and create economic opportunities, iLamp fosters a positive feedback loop of community benefits. Its partnerships with diverse local stakeholders such as property developers, public works contractors, community leaders, and local consultants, ensure that each iLamp is a perfect fit for the community it serves, enhancing the vibrancy and sustainability of cities around the globe.



iLamp is constructed in local Micro Factories, iLamp Illinois provides the blueprint to develop these microfactories, creating local jobs and fostering economic growth at a local level.

Designed to produce high mix, low volume lamps, allow for the customisation of streetlights that fit the specific requirements of each community. This flexibility ensures that iLamps are not just functional but also align with the unique character and needs of Joliet.





Joliet Crime Reduction

In Joliet, crime rates remain a pressing issue—with a violent crime rate of 511 incidents per 100,000 people and property crimes still high at 1,019 incidents per 100,000 people—implementing the iLamp solution could have a transformative impact on public safety. iLamp, certified by the Enhanced Lighting Standard, is designed to reduce crime by up to 40%, making it an effective tool for tackling Joliet's crime challenges.

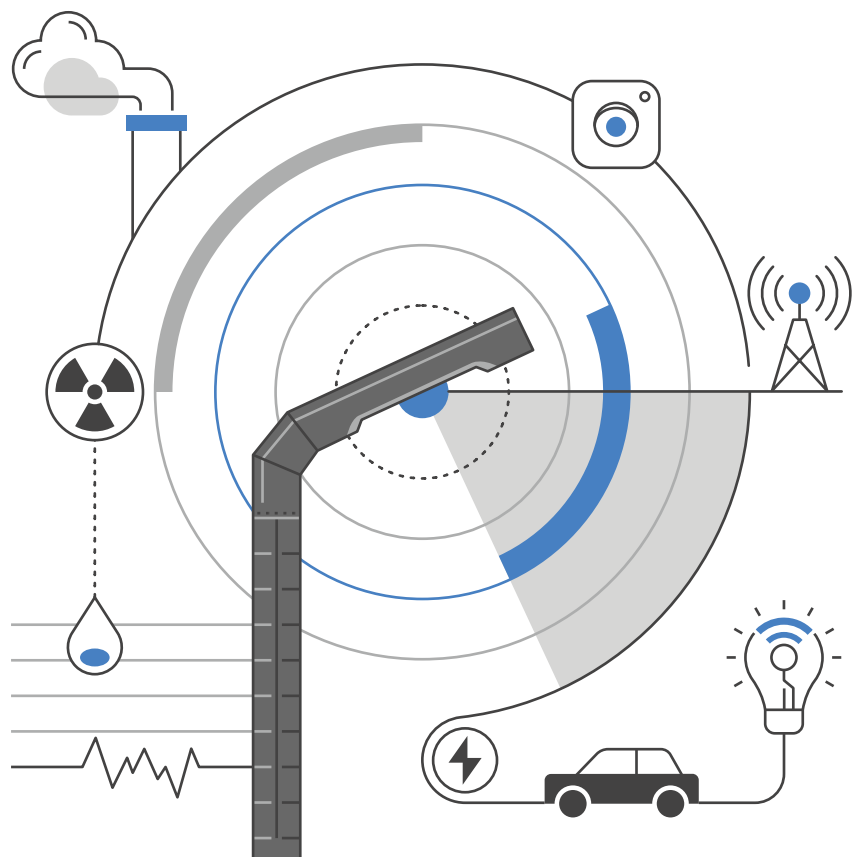
Enhanced street lighting is one of the most effective strategies for reducing crime, especially in poorly lit areas where property crimes such as theft (797.1 per 100,000) and burglary (122.2 per 100,000) are prevalent. Studies show that better-lit streets deter criminal activity, as increased visibility reduces the cover for offenders and makes it easier for law enforcement and surveillance systems like CCTV to function effectively.

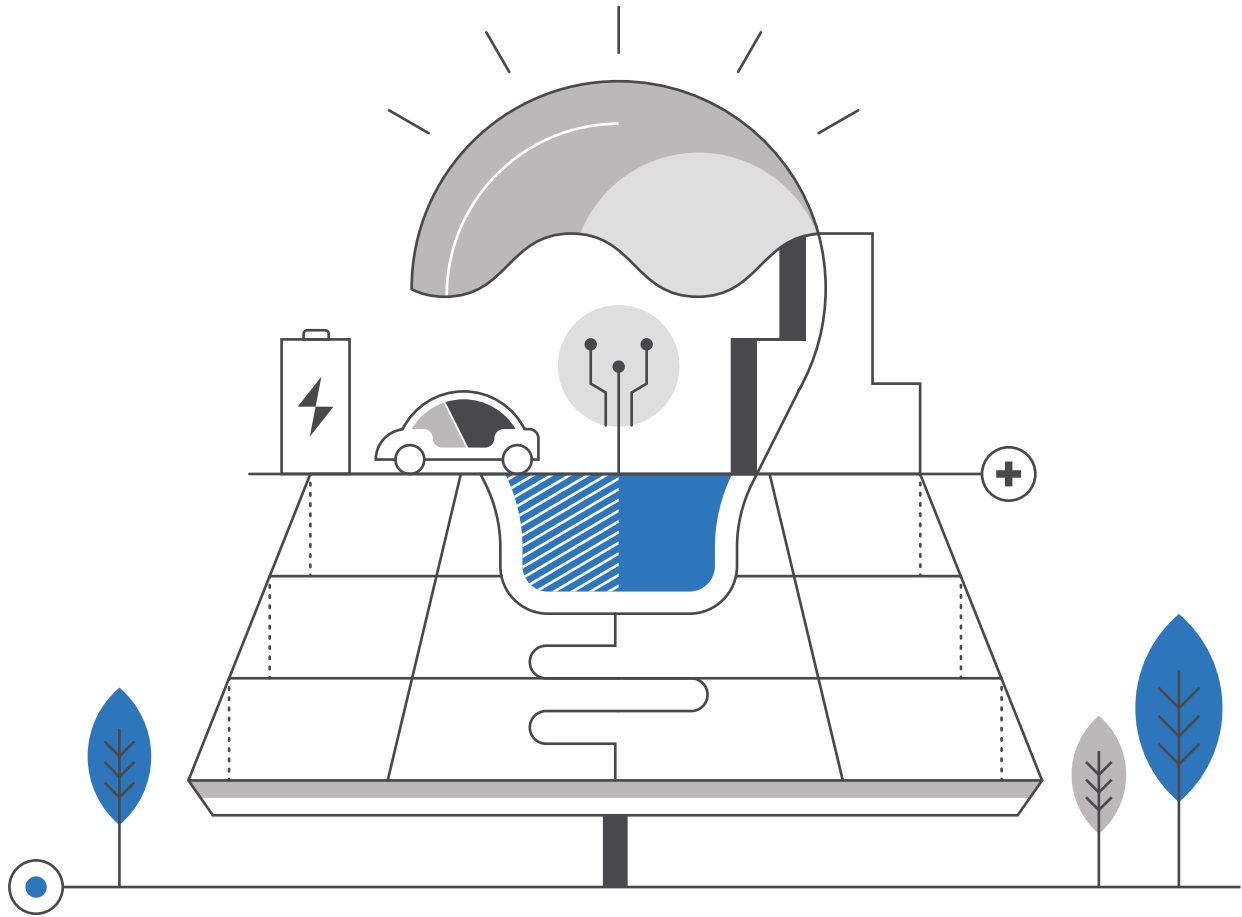
By enhancing street lighting, iLamp reduces crimes such as burglary, theft, and assault, making neighborhoods safer. Joliet's current violent crime rate of 511 per 100,000 people

and property crime rate of 1,019 per 100,000 could see a significant decline with the implementation of iLamp.

Increased lighting not only deters crime but also improves residents' perception of safety, encouraging more outdoor activities and community engagement. This can further enhance social cohesion and deter crime through increased public presence.

Research indicates that for every 1% reduction in crime, property values increase by 0.5% to 1%. In a city like Joliet, where crime influences property desirability, the installation of iLamp systems could lead to higher property values, attracting more investment and encouraging economic development.





iLamp Illinois Road Safety

iLamp offers transformative benefits for road safety in Joliet, where traffic accidents remain a significant concern. In 2022 alone, Joliet experienced 3,251 traffic accidents, involving over 6,400 vehicles, resulting in 23 driver fatalities, 820 injuries, and 2,419 incidents of property damage. iLamp's advanced lighting solutions can play a critical role in reducing these figures and making both streets and highways safer for drivers and pedestrians alike.

Pedestrian and driver fatalities are 58% more likely on unlit roads, and Joliet's accident statistics reflect the need for enhanced illumination. iLamp provides optimal lighting during low-light hours and adverse weather conditions, significantly reducing the likelihood of accidents and fatalities. In 2022, Joliet experienced 12 fatal crashes, and better street lighting

could help lower this number by improving visibility for drivers and pedestrians.

iLamp's modular camera and communication systems can monitor traffic patterns, detect potential hazards, and improve response times to accidents. By integrating with existing city safety systems, iLamp helps authorities quickly identify and address accidents, guide emergency vehicles, and manage traffic flow, reducing the chance of secondary collisions.

iLamp enhances pedestrian visibility, particularly at crosswalks, sidewalks, and public transportation stops. In 2022, Joliet saw 47 crashes involving pedestrians or bicyclists, one of which resulted in a fatality. By providing better illumination and modular cameras to monitor pedestrian movement, iLamp can help reduce the risk of such incidents, ensuring safer environments for both pedestrians and cyclists.



RELIABILITY: Continuous stable lighting performance in all conditions.



RESILIENCY: Built to withstand harsh weather and environmental challenges.



SUSTAINABILITY: Powered by renewable energy sources for long-term environmental benefits.



COST-EFFECTIVE: Maximizes savings with a high return on investment and low operational costs.



RAPID DEPLOYMENT: Quick and easy installation, minimizing disruption to communities.

The modular smart streetlighting opportunity for Joliet presents a comprehensive solution to the city's challenges in crime reduction and road safety. iLamp's Enhanced Lighting Standard certification ensures that each installation has the potential to reduce crime by up to 40% and road fatalities by 52%. With Joliet's violent crime rate of 511 per 100,000 people and property crime rate of 1,019 per 100,000 people, smart streetlighting can play a pivotal role in creating safer neighborhoods by increasing visibility and deterring criminal activity.

iLamp improves road safety by reducing accidents, fatalities, and injuries, especially in high-risk areas and during low-light conditions. In 2022, Joliet experienced 3,251 traffic accidents, 23 of which resulted in fatalities. By enhancing visibility and integrating with traffic monitoring and emergency response systems, iLamp helps prevent common collisions and ensures quicker responses to accidents, making roads safer for both drivers and pedestrians.

A preliminary cost-benefit analysis for the iLamp system shows a 1:48.88 ratio, meaning for every dollar spent, the city is estimated to save \$48.88. This conservative estimate could be even higher, depending on more refined data regarding installation and operational costs specific to Joliet.

These details are outlined in a separate document, which will be updated as additional cost information becomes available. This opportunity represents a significant return on investment for Joliet, offering long-term savings, increased safety, and improved quality of life for its residents.