



CASE STUDY

EGS & Associates

Smart Lighting. Smarter Leadership.
Transforming Cities Across Mexico.



EGS & Associates, headquartered in South Texas, specializes in developing infrastructure projects across multiple cities in Mexico. As part of a municipal modernization initiative, EGS sought to replace outdated public lighting infrastructure with an IoT-enabled smart light solution.

ClearStack Advisory was brought in as an independent Virtual CIO and Virtual CTO partner to evaluate, vet, and operationalize a solution.

“We brought Chris in to elevate and modernize our IT environment, leveraging his extensive CIO expertise to strengthen our infrastructure and align our technology strategy with business objectives. In addition, we rely on his CTO-level insight to help define and drive the technical requirements for our municipal smartlight initiatives throughout our territories in Mexico. Chris brings a rare blend of strategic vision and hands-on experience that continues to deliver real value to our organization.

— Antonio Olivares, CEO, EGS & Associates

THE CHALLENGE

Many municipalities throughout Mexico still rely on aging lighting infrastructure. These fragmented systems often:

- ✗ Lack centralized control
- ✗ Consume unnecessary power due to inefficient hardware
- ✗ Require manual maintenance checks with limited visibility
- ✗ Create safety issues when lighting fails without immediate detection

EGS NEEDED A PARTNER WHO COULD:

- ✓ Independently evaluate IoT smart lighting vendors
- ✓ Provide technical oversight without vendor bias
- ✓ Plan infrastructure for deployments across multiple cities
- ✓ Guide long-term scalability, cybersecurity, and data governance

CLEARSTACK ADVISORY'S ROLE

ClearStack stepped into a dual advisory leadership role.



FRACTIONAL CIO

Ensuring the solution aligned with business goals and operational impact



FRACTIONAL CTO

Evaluating technology platforms, designing architecture, and defining implementation strategy

KEY RESPONSIBILITIES

- ✓ Market research across multiple smart lighting IoT providers
- ✓ Evaluated cloud and edge-based control systems
- ✓ Solution testing for reliability, communication, and scalability
- ✓ Guided pricing, quoting models, and contract structuring
- ✓ Created documentation, proposals, and materials for city bids

Also streamlined internal back-office processes including quoting, cost modeling, vendor coordination, and contract reviews.

TECHNOLOGY EVALUATION AND SOLUTION VETTING

ClearStack led an extensive platform assessment, identifying the best fit across multiple categories:



Infrastructure requirements

Minimum components needed in the field



Communication model

Cellular, LoRaWAN, Wi-Fi, or hybrid



Energy monitoring

Ability to track consumption per pole



Adaptive lighting

Scheduling, automation, and brightness control



Integration model

Compatibility with cloud dashboards and APIs

THE WINNING SOLUTION

ClearStack recommended and validated an IoT smart light solution that:

- ✓ Required minimal infrastructure upgrades
- ✓ Supported pole-by-pole monitoring
- ✓ Allowed cloud-based scheduling and analytics
- ✓ Offered energy consumption reporting and remote diagnostics
- ✓ Enabled faster deployment and easier training for municipal staff

Unlike alternative solutions that required significant retrofitting, the selected platform focused on rapid adoption and operational simplicity.

BENEFITS OF IoT SMART LIGHTING



Remote lighting control – activate or adjust lights centrally



Pole monitoring – detect outages in real-time, reducing manual checks



Operational efficiency – reduce truck rolls and site visits



Data-driven maintenance – identify issues before failure occurs



Energy optimization – track usage, reduce waste, and prove ROI to city councils



Public safety improvement – better lighting means safer streets for residents

BUSINESS IMPACT

EGS entered the municipal proposal phase with a validated, low-friction smart lighting solution, accurate cost and deployment models, documented technical requirements, and a strong narrative around energy savings and modernization.

TANGIBLE OUTCOMES

- ✓ Reduced procurement time by eliminating unfit solutions early
- ✓ Accelerated proposal development with ready-to-use contract language
- ✓ Increased confidence from municipal stakeholders based on solution maturity
- ✓ Improved internal efficiency through better documentation and quoting processes



WHY CLEARSTACK ADVISORY MADE THE DIFFERENCE

Typical MSPs or IT vendors focus on selling products. ClearStack takes a leadership-first approach, functioning as the client's technology advocate.

- ✓ Vendor-agnostic evaluation
- ✓ Executive-level technology strategy
- ✓ Hands-on solution testing and validation
- ✓ Document and proposal support



EGS did not just get a solution.
They got a partner.



CONCLUSION

EGS & Associates needed more than technology — they needed leadership.

ClearStack Advisory delivered a vetted IoT smart lighting strategy that minimized risk, reduced infrastructure requirements, and strengthened proposal confidence.

Through fractional CIO and fractional CTO leadership, ClearStack guided both the technical decision-making and the business strategy behind the deployment.

The result: a scalable, modern smart lighting solution ready to transform cities across Mexico.



Let leadership
guide the technology.

If your organization needs independent technology leadership to evaluate, implement, or operationalize a solution, ClearStack Advisory is ready to help.