

# OSCEOLA COUNTY (FLORIDA) ROADWAY & BRIDGE BUNDLING PROGRAM

In 2000, Osceola County, FL, was faced with the challenge of delivering a large-scale design and construction program funded by newly adopted impact fees. The program required the concurrent construction of 9–11 major roadway projects with an additional 7 being completed in design each calendar year. Less than 7 years into the program, by using traditional design–bid–build delivery, they were 18 projects behind schedule. Designs were as much as 200% over budget, and there were over \$5 million in change orders. Eighteen projects were in varying stages of design, and none were ready for construction.

In 2007, a newly appointed administration tried an innovative approach. Despite concerns from many due to unfamiliarity with alternative contracting methods, they decided to use a construction-manager-at-risk (CMR) program to deliver the projects. CMR differs from construction manager/general contractor (CM/GC), mainly in the area of self-performance. As practiced in Osceola County, CMR prohibited the construction manager (CM) from self-performing any work. CM/GC, as practiced by many states, requires the CM to self-perform at least 30% of the work. Another difference in the way that Osceola County conducted the program was that there was no independent cost estimator (ICE). Instead, they relied on highly trained and experienced internal construction staff. It was noted that the program could have been improved had they acquired an ICE. An ICE may have provided more credibility in justifying to the Board of County Commission that the prices received from the CM were in line with low-bid prices.

To deliver the CM/GC program, Osceola County issued six requests for proposal (RFPs) for CMs to deliver 11 major roadway projects, including 13 bridges. By using qualifications-based selections, they chose six CMs. The 11 projects were in various stages of planning, permitting, and design. The County divided the work



This bridge interchange at the John Young Parkway and Osceola Parkway in Florida is 1 of 11 projects completed under a roadway/bridge bundling CM/GC contract, saving the County tremendous time and money (*Public Roads*, Winter 2018 edition, Atkins/Peters).

amongst these CMs, matching the type of work to the strengths of each CM. The CMs worked with the designers to produce efficient construction drawings. Instead of reviews at major milestones, the team met weekly to review plans as they were conceived and drawn. This allowed the CM to be actively involved in maintenance of traffic (MOT) and construction phasing, eliminating wasted efforts by the design team. In addition, costs were discussed early and throughout the design process, giving the County and the designers real-time information instead of waiting for plans to be completed and bid. In many cases, Osceola County used a guaranteed maximum price (GMP). GMPs were priced as each early work package was developed. Projects were built in “mini” or “mini” GMPs. Instead of waiting for the entire project to be completed and clear for permitting, right-of-way, and utilities, segments of the projects were constructed as soon as they were ready, greatly accelerating the projects. This also led to reduced costs as the “mini” phases were broken out into

**Name of Agency:** Osceola County (Florida)

**Location:** Countywide

**Project Delivery Method:** Construction Manager/General Contractor

**Procurement Method:** Qualifications-Based Selection

**Total Project Cost:** \$350-million program (11 projects with 13 bridges)

**Funding Source:** 100% locally funded through impact fees

**Construction Schedule:** Eleven major roadway projects were to be in construction within the first year.

**Project Website:** <http://www.osceola.org/agencies-departments/public-works/road-construction-projects/construction-manager-at-risk-projects>

## SUMMARY

Program Goals	Projects were bundled in a CM/GC program to speed up delivery and save money.
Bridge Selection Criteria	Bridges were part of roadway projects.
Delivery and Procurement Method	Construction Manager/General Contractor (CM/GC) – Qualifications-Based Selection
Funding Sources, Financing Strategy	100% locally funded through impact fees
Environmental, Right-of-Way, and Utility Considerations	CMs were involved in planning and design to minimize impacts to the environment, right-of-way, and utilities. CM was the lead for all utility coordination efforts. Projects were built in “mini” phases. Instead of waiting for the entire project to be completed and clear for permitting, right-of-way, and utilities, segments of the projects were constructed as soon as they were ready, greatly accelerating the projects.
Risks	The risk was shared between the owner, designer, and construction manager. All entities worked together to ensure the designs were constructible and within budget. Due to the fact that plans were less detailed, overruns were budgeted for instead of relying on errors and omission claims.
Owner Management/Quality Assurance	The construction engineering inspection (CEI) firm was hired by the owner. The CM included the CEI in the plan reviews and development to ensure constructability. The role of the CEI during construction was reduced. The CM manages the general contractors and the CEI ensures quality.
Stakeholder Communication	The Osceola County administration completed an intensive training effort to educate the design firms and contracting community about the benefits of CMGC. Once chosen, the CM was responsible for communication with the affected community.

very specific work types, allowing contractors who usually participate as sub-contractors to bid the work directly.

Within the first year, the 11 major roadway projects were all ready to begin construction, achieving 55 times the production rate of the previous 5 years. In the first year of construction, approximately \$350 million was spent. There was \$105 million of savings due to innovations from the CM/GC process—a reduction of 23%. In addition, 9 out of every 10 construction dollars were distributed to local contractors, boosting the local economy during a depression.

The use of CM/GC in Osceola County helped deliver a major program with a very aggressive schedule. Through collaboration of county staff, design teams, and a construction manager and hand-selected subcontractors, innovative solutions were found to quickly advance design and construction of 13 bridges in 11 major roadway projects, saving both time and money. The use of CM/GC was a huge success as it advanced projects that were stagnant under the traditional design–bid–build methodology.



**Osceola, FL - 7 Major Groundbreakings in 1<sup>st</sup> Year**

*“The results were that within 1 year, 11 major roadway segments were ready to begin construction, achieving 55 times the production rate at 20% under budget.”*

- NCHRP 787

Osceola County, FL, Construction Manager/General Contractor (CM/GC) Program.

