

#### **Summary of Qualifications**















When multi-million-dollar projects are on the line every detail counts. Since 2002, we have been helping contractors, owners and agencies save time and money with proven leadership for construction management. Our program and project management, cost engineering, scheduling, estimating and claims resolution give visibility to keep projects and profitability on track, and to ensure peace of mind.

#### **Our Qualifications**

Experience	With over 20 years experience supporting complex projects for clients such as Port of Long Beach, LA World Airports, LA Metro, Caltrans, LA County Dept of Public Works, Houston Airport System and Dallas-Fort Worth Airport, we are familiar with the unique challenges and nuances of complex transportation projects from conception through post construction closeout.
Expertise	Experts with variety of backgrounds and certifications, including PE, PMP, PSP, PMI-SP, PMI-RMP, CCP and Six Sigma.
Diversity	Federal, state and local certifications for SBE, DBE, WBE, WOSB, LBE and LSBE.
Presence	Headquarters in California, with programs in Washington, Arizona, Colorado, Florida, New York, New Jersey, Tennessee and Texas

#### **Our Services**

Program & Project Services	Planning & Scheduling	Cost Controls	Risk Management & Claims Avoidance	Executive Reporting & Dashboards
<ul> <li>Construction Management</li> <li>Scope Management</li> <li>Environmental Reviews, Permitting</li> <li>Contract Compliance</li> </ul>	<ul> <li>CPM Scheduling</li> <li>Project Planning</li> <li>Time Impact Analysis</li> <li>4D &amp; 5D Scheduling &amp; Modeling</li> </ul>	<ul> <li>Program and Project Budgets</li> <li>Cost Forecasting</li> <li>Earned Value Management</li> <li>Estimating</li> </ul>	<ul> <li>Claims Preparation</li> <li>Management of Change</li> <li>Schedule Risk Analysis</li> <li>Time Impact Analysis</li> </ul>	<ul> <li>Dashboards for Complex Projects</li> <li>Integrating Systems and Data</li> <li>Power BI</li> <li>Training for Project Teams</li> </ul>

#### TRANSPORTATION PROJECTS

Connecting Us to the World

\$35B

Project Value Consulta





#### Pier B On-Dock Rail Support Facility

Owner: Port of Long Beach

(POLB)

Project Value: \$1.6 billion

## CM Solutions is providing a full range of project controls support services, including scheduling, estimating, PMIS administration, and dashboarding.

This project will double the size of the existing Pier B rail yard and enhance capacity, speeding deliveries across the entire national supply chain, easing congestion and lessening environmental impacts. It will dramatically streamline rail operations and minimize the increase in truck trips as cargo volume grows.

#### Mickey Leland International Terminal Redevelopment

Owner: Houston Airport System Project Value: \$350 million

# CM Solutions is providing reporting, planning and scheduling services to the general contractor. Our team corrected a problematic schedule to meet the owner's approval, and was instrumental in developing a time impact analysis for a significant change order.

This new 11-gate concourse is a landmark project under IAH Terminal Redevelopment Program (ITRP) and involves integrating existing terminals and expanding the Federal Inspection Services (FIS) facility.

### Terminal Cores & APM Interface

Owner: Los Angeles World Airports (LAWA)

Project Value: \$336 million

# CMS supported both the owner/CM firm and general contractor through collaborative scheduling services. Construction involved complex areas including IT rooms built to stringent LAWA specifications, and coordinating procurement and installation accordingly.

The Terminal Cores and Automated People Mover (APM) Interface Project provided multiple terminal improvements, as well as a new terminal 5.5, at LAX that integrated terminals to the new APM system.

## Consolidated Rent-A-Car (ConRAC)

Owner: Los Angeles World

Airports (LAX)

Project Value: \$1.6 billion

## CMS provided project controls management and scheduling support, including the baseline schedule, contractor schedule reviews, monthly reporting, time impact analysis and risk management.

The largest of its kind in the world once open, ConRAC brings rental car agencies into one location. It includes on-site fueling stations, maintenance areas, parking, and an interface with the new Automated People Mover. The project earned LEED Gold Certification.

## I-10 HOV Lanes and Bridge Widening

Owner: Caltrans District 7 Project Value: \$91 million

## CMS performed schedule analysis, evaluation and presentations of multiple delay events, which allowed the contractor to successfully negotiate a time extension of 291 days (30.3% increase).

This project added an HOV lane to the congested I-10 freeway through Baldwin Park & West Covina, including bridge improvements at overpasses.

Project Name	Project Type	Project Description	Owner/ Agency	Project Value	Project Dates
POLB Pier B On-Dock Rail Support Facility	Ports, Rail	CMS is providing a full range of project controls support services, including scheduling, estimating, PMIS administration, and dashboarding.  This project will double the size of the existing Pier B rail yard and enhance capacity, speeding deliveries across the entire national supply chain, easing congestion and lessening environmental impacts. It will dramatically streamline rail operations and minimize the increase in truck trips as cargo volume grows.	Port of Long Beach (POLB)	\$1.6B	2024- Present
Port Program Dashboards & Reporting	Ports, Dashboards & Reporting	The Port engaged CMS to develop dashboards to improve reporting for their 10-year, \$2.2 billion program.  CMS is developing dashboards to track KPIs and visualize status of the various projects. Our team is reviewing the existing reporting resources, establishing efficient data connections, and designing comprehensive dashboards.	Port of Long Beach (POLB)	\$2.2B	2024- Present
Amar Road Complete Street Project	Street Improvements, Roadways/ Highways	The project develops Amar Road in Bassett (San Gabriel Valley) into a complete street by landscaping, resurfacing the street and installing new curbs, sidewalks, medians and wayfinding signage.  The CMS project manager is overseeing the scope, quality, cost and schedule; proactively managing risks through pre-design, traffic studies, and conceptual planning.	LA County Dept of Public Works (LACDPW)	\$21.5M	2024- Present
Airfield & Terminal Modernization Project (ATMP)	Roadways/ Highways, Airports, Dashboards & Reporting	CMS developed dashboards to track KPIs and visualize the upcoming construction schedule. Our team collected mixed sources of data and designed visuals incorporating cost, risk, schedule, XBE (diverse business entities), contracts and schedule progress.  One of the most important transportation projects to the success of the 2028 Olympics, this project focuses on roadway, terminal and airfield improvements that help reduce airport-related congestion.	Los Angeles World Airports (LAWA)	\$1B	2023- Present
Culvert Replacement at Las Tunas Drive	Roadways/ Highways	Project involves replacing a timber culvert with a concrete culvert and reconstructing the roadway, along with sidewalk and curb ramp improvements.  CMS is managing the scope, quality, cost, schedule and risks through pre-design, planning and construction.	LA County Dept of Public Works (LACDPW)	\$4M	2023- Present
Chatsworth - Lake Manor Drive Et Al.	Roadways/ Highways	This project includes resurfacing 1.9 miles of residential roads, along with parkway and curb ramp upgrades, and traffic signal relocation.  CMS is managing the scope, quality, cost, schedule and risks through pre-design, planning and construction.	LA County Dept of Public Works (LACDPW)	\$4.4M	2023- Present
Mickey Leland International Terminal, Houston, TX	Airport Terminals	This new 11-gate concourse is a landmark project under IAH Terminal Redevelopment Program (ITRP) and involves integrating existing terminals and expanding the Federal Inspection Services facility.  CMS provides reporting, planning and scheduling services to the general contractor. Our team corrected a problematic schedule to meet the owner's approval, and was instrumental in developing a time impact analysis for a significant change order.	Houston Airport System	\$350M	2022- Present

Project Name	Project Type	Project Description	Owner/ Agency	Project Value	Project Dates
Florence Neighborhood Mobility (AHSC)	Roadways/ Highways	This project involves resurfacing roads, sidewalk repairs, curb ramp upgrades, lighting and landscaping, and installation of a bike boulevard.  CMS is managing the scope, quality, cost, schedule and risks through pre-design, planning and construction.	LA County Dept of Public Works (LACDPW)	\$5.6M	2023- Present
East La Mirada - Imperial Highway Improvements	Roadways/ Highways, Site Infrastructure	Project involves multiple road improvements in East La Mirada (unincorporated Los Angeles County) including resurfacing major roads, reconstruction of a median with drought-tolerant landscaping, drainage improvements, and a bikeway.  CMS is providing project management services, leading multi-disciplinary teams through a comprehensive process in pre-design, and through	LA County Dept of Public Works (LACDPW)	\$8.5M	2023- Present
Secondary Sewer Renewal Program	Roadways/ Highways, Wastewater, Sanitation	planning and construction.  This project involves a series of projects to correct structural deficiencies in the sewer collection system, and involves replacing or rehabilitating sections of sewer pipes throughout the City of Los Angeles.  CMS provided project planning and scheduling services, including developing and the baseline schedule, and monthly schedule updates, cost loading, and change management.	City of Los Angeles, CA	\$2.2M	2022- Present
Environmental Compliance & Sustainability Support Services	Rail, Sustainable/ Green Project	Metro's Environmental Compliance and Sustainability department manages various projects and programs to help minimize environmental impacts from the design, construction, operation and maintenance of capital projects.  CMS provides support for contract admin, cost controls and strategic planning and creative design.	LA Metro	Multi- million	2019- Present
Automated People Mover (APM)	Airport Rail	The APM is a 2.25-mile elevated train system with six stations. It will greatly reduce congestion around the terminals by connecting the LAX airport to the LA Metro train system, in addition to parking and rental car facilities.  CMS consultants and partners provide scheduling, cost engineering and contract admin services.	Los Angeles World Airports (LAWA)	\$2B	2016- Present
Airport Capital Improvement Program	Airports	This program includes projects under the Landside Access Modernization Program, the West Gates of Tom Bradley International Terminal, other new buildings, and multiple rehabilitation/improvements for terminals, runways, and utility projects.  CMS provides scheduling, cost engineering, estimating and contract compliance support for projects from the conceptual design and engineering phases through to closeout.	Los Angeles World Airports (LAWA)	\$30B	2016- Present
East Los Angeles - Cesar E. Chavez Avenue Improvements Project	Roadways/ Highways, Site Infrastructure	The project primarily involved resurfacing 1.9 miles of major roadway, along with parkway improvements, curb ramp & traffic signal upgrades, and pavement resurfacing.  CMS managed the project's scope, quality, cost and schedule; mitigated risks and engaged stakeholders through completion (under budget and ahead of schedule).	LA County Dept of Public Works (LACDPW)	\$7M	2023- 2024

Project Name	Project Type	Project Description	Owner/ Agency	Project Value	Project Dates
Willowbrook Neighborhood Improvements	Community Engagement, Safety, Street Improvements, Roadways/ Highways, Wayfinding	This project enhanced safety and mobility for pedestrians, bicyclists and bus riders around key destinations including Martin Luther King Jr. medical complex, Rosa Parks Metro Station and Mona Park. CM Solution's project manager led this project from procurement through construction completion, including awarding the construction contracts, managing submittals, and overseeing construction. We also organized community outreach information meetings.	LA County Dept of Public Works (LACDPW)	\$7.8M	2023- 2024
Monroe Interchange Project (Utilities)	Bridges, Roadways/ Highways, Natural Gas Distribution	This project involved gas utility relocation for the Monroe Street interchange project.  CMS provided a Class 5 estimate for the proposed utility construction scope of work and provided risk analysis with contingencies on the high and low end. CMS also developed a template for Class 5 estimates to use with future projects.	So Cal Gas (SCG)	\$3.1M	2023- 2024
DFW Terminal Expansion Project	Airport Facilities	CMS maintained the contractor's schedule, incorporating costs into the schedule and monitoring field progress. We performed schedule analysis and prepared status reports.  This project is part of DFW's ongoing DFW Forward \$9B Capital Improvement Plan (CIP) to modernize, redevelop and expand the airport's infrastructure, technologies and assets.	DFW Airport	\$550M	2022- 2024
Underground & Above Ground Storage Tank Installations - better title?	Rail, Public Transit	LA Metro's environmental services division reviews all capital and maintenance projects for hazardous or contaminating substances, and ensures compliance with all environmental laws.  The CMS project manager oversaw and reviewed environmental compliance for underground and above ground storage tank installations along transit corridors.	LA Metro	Multi- million	2022- 2024
I-95 Express Lanes	Claims, Roadways/ Highways	The I-95 Express Lanes reconstruction project included milling, resurfacing, widening, restriping, new ramps, and various other work along 9 miles of the I-95 in Florida.  CMS supported a subcontractor with forensic scheduling services to determine impacts to the baseline schedule.	Florida Dept of Transport- ation (FDOT)	\$457M	2021- 2024
Terminal Cores & APM Interface	Airports	This project provides multiple terminal improvements at LAX that integrate existing terminals to the new Automated People Mover (APM) system.  CMS supported both the owner/CM firm and general contractor through collaborative scheduling services.	Los Angeles World Airports (LAWA)	\$336M	2018- 2024
Consolidated Rent-A- Car Facility (ConRAC)	Airport Facilities	The largest of its kind in the world once open, the ConRAC facility brings rental car agencies into one location. It includes on-site fueling stations, maintenance areas, parking, and an interface with the new Automated People Mover. The project earned LEED Gold Certification.  CMS provided project controls management and scheduling support, including the baseline schedule, contractor schedule reviews, monthly reporting, time impact analysis and risk management.	Los Angeles World Airports (LAWA)	\$1.6B	2017- 2023

Project Name	Project Type	Project Description	Owner/ Agency	Project Value	Project Dates
Van Nuys Airport Runway Reconstruction and Repair	Airports, Runways	This project involved upgrades to the 2 main runways of one of the busiest general aviation airports in the US.  CMS worked closely with the project team and contractors to build a highly detailed schedule, including an hour-by-hour schedule that was used to complete work during the night and two 56-hour closures for the longer, main runway.	Los Angeles World Airports (LAWA)	\$19.1M	2021- 2022
Bus Yard Facilities for Airport	Airports, Bus Yards	This project relocated the airport's bus yard facilities to a new location, in addition to construction of a new 4,000 sq. ft. building and accommodation for over 50 electric buses and 20 new EV charging stations.  CMS provided scheduling and planning services for this facility.	Los Angeles World Airports (LAWA)	\$15.3M	2020- 2022
LAX Receiving Station RS-X	Airport Utilities, Electric	The new receiving station was a collaboration between Los Angeles World Airports and the City of LA Department of Water and Power and included high voltage duct banks and a connection to LADWP substation equipment.  CMS provided scheduling and cost engineering support for the project.	Los Angeles World Airports (LAWA)	\$112M	2020- 2022
Airport Police Facility	Airport Facilities	This 160,000 sq. ft. facility consolidates operations from eight locations under one roof and includes a shooting range, dog kennels and suspect processing area. It earned LEED Gold Certification.  CMS staff provided scheduling review services for the project, including time impact analyses and risk mitigation.	Los Angeles World Airports (LAWA)	\$216M	2020- 2022
Diverse Business Development & Engagement	Airports, Diverse Business, Community Engagement	The Airport manages programs to support business inclusivity, local jobs and social responsibility in the community. These programs help contractors meet their contract inclusivity goals and engage small and disadvantaged businesses on airport projects.  CMS staff developed systems to help contractors navigate the owner/agency systems, and to improve monitoring of contractor inclusivity goals. They also supported community outreach activities.	Los Angeles World Airports (LAWA)	n/a	2019- 2022
Inclusivity Software Projects	Airports, Software Implement- ation	The airport's Business, Jobs, and Social Responsibility group supports capital projects by monitoring local workforce and diversity requirements required by the contracts.  CMS's services included cloud services software assessment, selection and implementation, and business intelligence dashboards to provide accurate insight into the status of contractors' diversity requirements.	Los Angeles World Airports (LAWA)	n/a	2019- 2021
Willows Road Bridge Scour	Bridges, Roadways/ Highways	To meet federal bridge requirements, this project installed monitoring instruments to measure sediment level erosion counter measures at the Willows Road bridge over Viejas Creek.  CMS provided a time impact analysis to evaluate time delays due to various re-designs and other activities.	San Diego County Public Works	\$6.5M	2021

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Caltrans I-10 Whitewater Bridge Repairs	Bridges	The Whitewater Bridge replacement in Riverside County involved construction of CIDH piling and rock slope protection. Project ran in two phases to allow for rainy season flows to be diverted away from work areas.  CMS provided project planning and scheduling services. Specific activities included developing	Caltrans	Multi- million	2020- 2021
		and issuing baseline schedule, project narrative document, project cost loading, monthly updates, and change management.			
Harbor Department Administration Building Complex	Ports	Project involved demolition of the former Harbor Department Administration Building complex.  CMS prepared the baseline schedule according to project specifications, as well as monthly updates throughout the project.	Port of Long Beach (POLB)	\$3.1M	2020- 2021
I-10 HOV Lanes and Bridge Widening	Claims, Roadways/ Highways	This project added an HOV lane to the congested I-10 freeway through Baldwin Park and West Covina, including bridge improvements at the overpasses.	Caltrans	\$91M	2018- 2021
		CMS performed schedule analysis, evaluation and presentations of multiple delay events, which allowed the contractor to successfully negotiate a time extension of 291 days (30.3% increase).			
Taxiway P	Airports	CMS provided planning and scheduling services for this airside improvement project.	Los Angeles World Airports (LAWA)	Multi- million	2018- 2021
LAX Economy Parking Facility	Airport Facilities, Parking	This project involved construction of a new 4,300-stall parking structure for the airport, along with new drop-off/pick-up locations and short- and long-term parking options.  CMS provided the baseline schedule, reviewed contractors' schedules, and prepared monthly updates and reports. A 4D schedule was prepared to effectively communicate project status to the airport's executive management.	Los Angeles World Airports (LAWA)	\$300M	2018- 2021
West Gates at Tom Bradley International Terminal	Airport Terminals	The West Gates project is a new state-of-the-art 12-gate concourse connected to the Tom Bradley International Terminal by two underground passageways, and earned the LEED Gold certification.  CMS provided scheduling and cost engineering support, including monthly cost reconciliations, status reports, risk management support and field scheduling updates.	Los Angeles World Airports (LAWA)	\$1.73B	2016- 2021
I-15 Widen Lanes and Bridges	Claims, Roadways/ Highways	This project involved widening the State Highway I-15 through the City of Victorville, including widening bridges and ramp improvements.  CMS performed schedule analysis, evaluation and presentation of multiple delay events, allowing the contractor to successfully negotiate a 106-day time extension.	Caltrans	\$70M	2019- 2020
Crenshaw/LAX Transit Corridor and Southwest Yard Maintenance Facility	Rail	Project involved an 8.5-mile light rail line with 8 stations and the Southwestern Yard Maintenance Facility.  CMS provided cost estimating services for conceptual and budget planning, design optimization and constructability, value engineering, economic evaluations, procurement and contract administration support, change orders and contract claims.	LA Metro	\$2B	2016- 2017

Project Name	Project Type	Project Description	Owner/ Agency	Project Value	Project Dates
LAX 5th Feeder	Airport Utilities, Electric	The utilities' 5th feeder was built to meet the airport's need for increased capacity and reliability to support the coming modernization projects. It involved new electrical duct banks and firewater and domestic water lines.  CMS developed the fully resource and cost loaded baseline schedule for the four-phased approach, and provided monthly schedule updates.	Los Angeles World Airports (LAWA)	\$20M	2014- 2016
Queensway Southbound Ramps J & K Over Scenic Harbor Drive	Claims, Roadways/ Highways	CMS performed forensic analysis, created historical baseline and as-built schedule files incorporating multiple delay issues. We evaluated impacts and project delays and prepared a Time Impact Schedule Analysis. This was used to effectively secure a 185 working day contract time extension for the contractor.	LA County Dept of Public Works (LACDPW)	\$3.8M	2009- 2011