



Project Delivery Performance Improvement

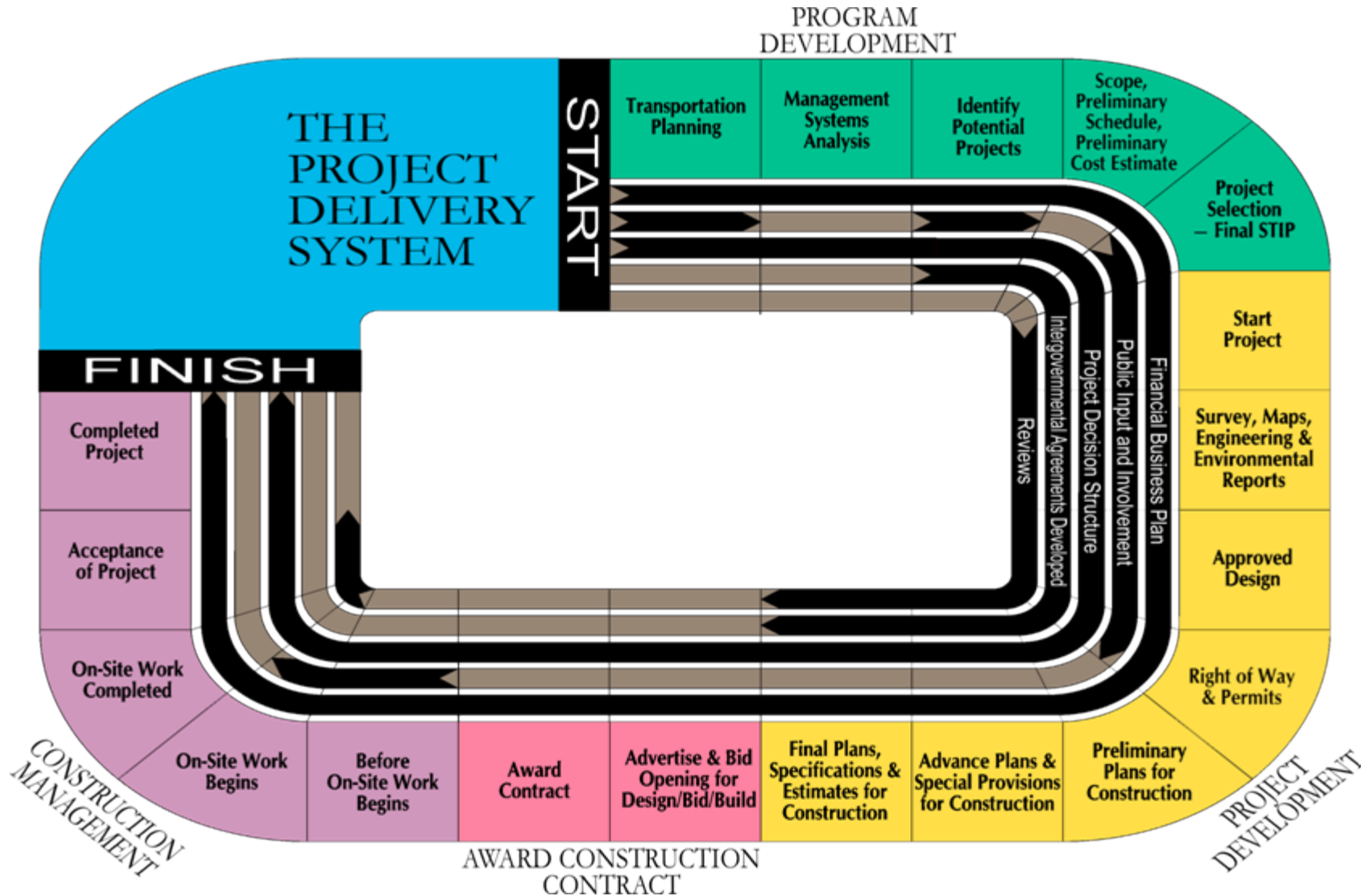
Report to the
Oregon Transportation Commission

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Construction
Construction Management – Phase 5

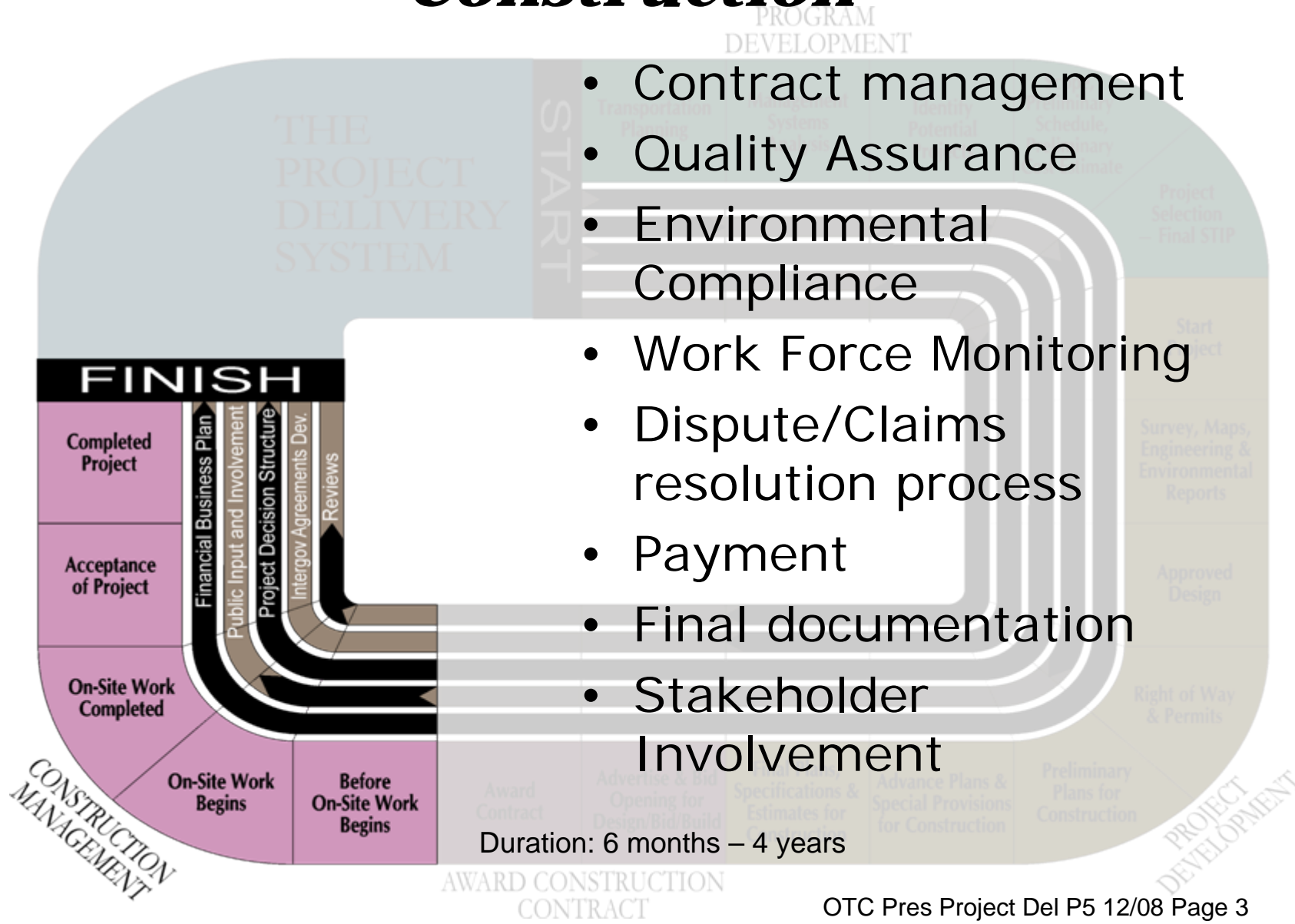


Project Delivery Process





Construction





Construction Begins

- Contractor supplies materials and performs work according to contract and plans for construction
- Agency makes sure the contractor completes work as contracted



Contract Management Project Manager

- What they do
 - Project Manager assigned to administer each contract
 - Assure compliance with contract requirements
 - Manage contract within construction authorization
 - Negotiate changes as necessary
 - Communicate with stakeholders



Contract Management Inspectors / Testers

- What they do
 - Inspectors assigned to monitor and document progress
 - Monitor quality, quantity, workmanship
 - Central Materials Lab – AASHTO
Materials Reference Library - Certified
 - Materials staff monitor quality of materials



Quality Assurance/Quality Control (QA/QC)

- All test equipment and lab facilities certified by ODOT Central Lab
- All testing technicians certified by ODOT Construction QA Unit
- Contractor provides Quality Control testing at specified frequencies.
- ODOT Region Construction QA staff verify contractor results on random basis.



Quality Assurance/Quality Control (QA/QC)

- Discrepancies must be investigated and resolved
- Dispute resolution testing by Central Lab
- Fabrication Inspection at plant
- Central Lab provides specialized materials testing
- Construction Section provides specialized support



Contract Management

Other roles in Construction

- Office staff to coordinate documentation and process payment
- Construction Section provides support and statewide consistency.



Environmental Compliance

- Require contractor submittal of plans prior to starting work.
- Inspectors monitor compliance to plans and permits daily.
- Region Environmental Coordinators review progress and provide assistance regularly.
- Regulatory Agencies visit projects occasionally.



Work Force Monitoring

- Review Contractor submitted payrolls for compliance to prevailing wage monthly.
- Track progress of Contractor in meeting:
 - Workforce diversity goals
 - DBE Participation goals
 - Apprenticeship goals



Contract Management

- Delegated Change Order Authority
 - Project Manager
\$100,000 & 14 Days
 - Area Manager
\$250,000 & 30 Days
 - Region Manager
\$250,000 & 30 Days
 - Contract Administration
Engineer/Chief Engineer
Anything above



Contract Management

- Delegated overrun in Authorization Authorities
 - Project Manager
None
 - Area Manager
\$250,000
 - Region Manager
\$500,000
 - Oregon Transportation Commission
Unlimited



Change Order Process

(Approximately 1500 per year)

- PM Identifies need for Contract Change Order (CCO)
- PM develops details of CCO with Engineer of Record and Contractor
- PM negotiates cost of CCO
- PM gets necessary approvals for CCO
- PM executes CCO



Payment

- Monthly Estimate by 8th of each month
- Progress Payment to Prime by 23rd of each month
- All payments require Quality/Quantity documentation
- Price Adjustments made for:
 - Non-specification materials
 - Changed work
 - Incentive/Disincentives
 - Material price escalation (Steel, fuel, asphalt)
- Retainage of 2.5% held until final acceptance



Dispute/Claims Resolution Process

- PM performs initial evaluation/resolution of any dispute
- Use Third Party Neutral (Non-Binding)
- Claim Process:
 - PM Review
 - Region Level Review
 - Agency Level Review
 - Arbitration (Less than \$25,000)
 - Claim Review Board
 - Litigation



Final Documentation & Acceptance

- On site work completed
- Acceptance of Project
- Completed Project
- Contact with Motor Carrier on any restrictions



Construction Program Risks

- Material Price Escalation
- Changing Field Conditions
- Material Availability
- Variability in Materials & Workmanship
- Outsourcing Construction Engineering



Stakeholder Involvement

- Daily communication with Contractor by PM staff.
- Frequent communications with effected local agencies and local businesses.
- Frequent communications with effected residences.
- Regular contact with impacted regulatory agencies.
- Regular contact with impacted utilities and rail road.
- Monthly meetings with Industry to work global issues.



Costs

Phase	Modernization	Bridge	Preservation	Safety/Ops
Planning	9.1%	5.2%	0.4%	3.0%
Design	9.1%	5.4%	6.7%	13.0%
RoW / Utility Relocation	3.4%	1.3%	1.6%	4.5%
Bid & Award	0.1%	0.1%	0.2%	0.8%
Construction Engineering	6.7%	6.7%	6.1%	9.1%
Construction	71.6%	81.3%	85.0%	69.6%
Total (%)	100.0%	100.0%	100.0%	100.0%



Key Performance Measures

- #20 Jobs from Construction Spending
(2004 - 10,000 2007 – 12,500)
- #22 Construction Timeliness
(2004 - 77% 2007 – 69%)
- #23 Construction on Budget
(2006 – 73% 2007 – 48%)
- #24 Certified Businesses
(2004 – 11.3% 2007 – 12.9%)



Other Construction Program Measures

- Volume of Contractor Payments
(2002 – \$251 mil. 2007 - \$520 mil)
- Unsettled Claims
(2002 - \$27 mil. 2007 - \$15 mil)
- % Authorization Expended
(2002 – 103.5% 2007 – 99.8%)
- % Construction Engineering
(2002 – 7.8% 2007 – 8.1%)



Continuous Improvements

- Technician Certification Program
- Inspector Certification Program
- PM Training for ODOT & Consultants
- Web Based Contract Payment System
- Contractor Evaluations
- Change Order Database
- Statewide Leadership Team



Discussion

