Stage Gate Oversight – Functional Reference Model

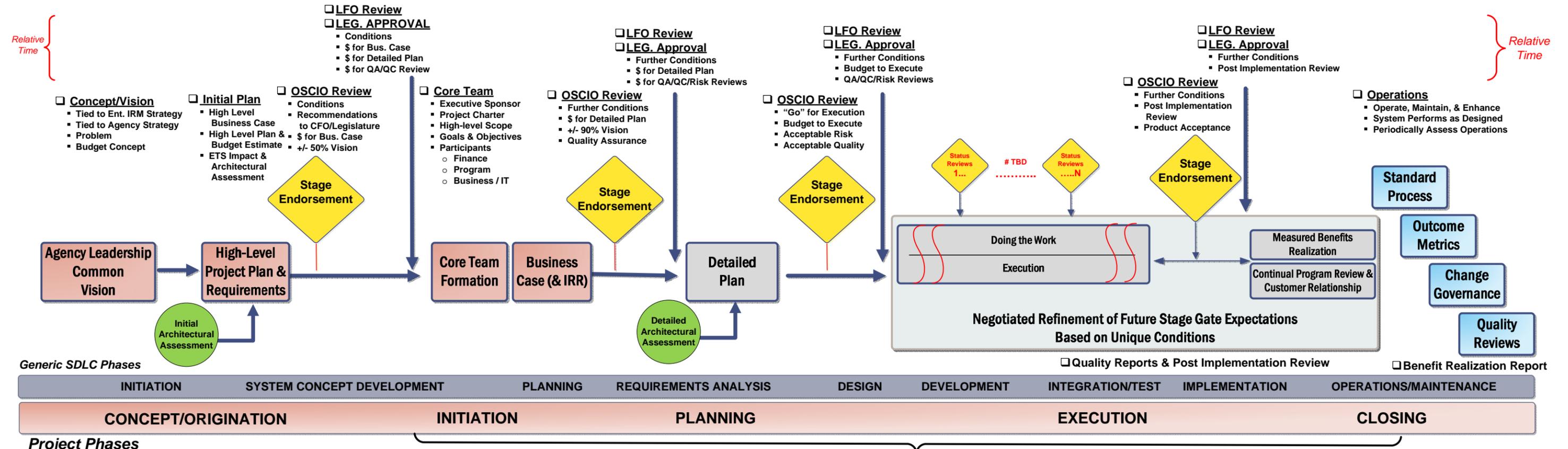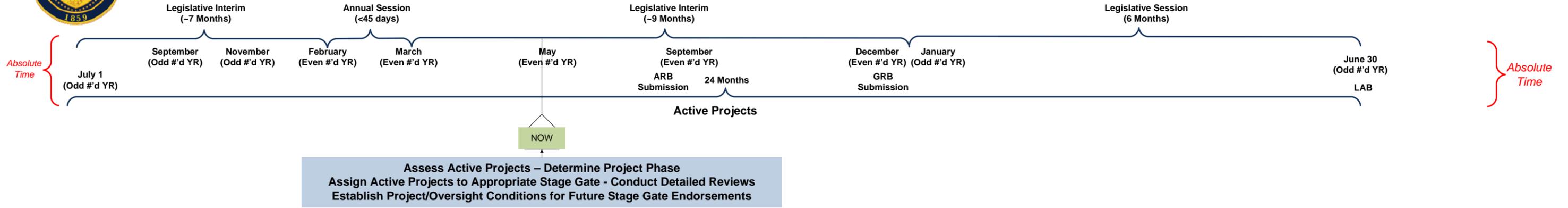## Office of the Governor
Direction & Oversight

Chief Operating Office
Enterprise Direction

Legislature
Direction & Oversight

Statewide Initiatives	Chief Financial Office	Enterprise Leadership Team		Improving Government	Chief Human Resource Office	Communications
	Budget Development & Oversight	Unified Vision & Oversight		Operational Streamlining & Effectiveness	Resource Development & Oversight	

Office of the State CIO

Security Program	Geospatial Program	Enterprise Portfolio Management	Enterprise Strategy	Enterprise Asset Management	Broadband Wireless	Public Safety Interoperability
Objectives & Oversight	Objectives & Oversight		Enterprise Business Intelligence		Development & Oversight	Development & Oversight

❑ Idea
- Tied to Strategy
- Problem
- Budget Concept

❑ Core Team
- Executive Sponsor
- Project Charter
- High-level Scope
- Goals & Objectives
- Participants
  - Finance
  - Program
  - Business / IT

❑ Plan
- Timeframe
- Activities
- Tech. Req.
- Arch. Req.
- Communicate
  - Customers
  - Stakeholders
  - Experts

❑ OSCIO Review
- Conditions
- $ for Bus. Case
- 50% Vision

❑ OSCIO Review
- Further Conditions
- $ for Detailed Plan
- 90% Vision
- Quality Assurance

❑ OSCIO Review
- "Go" for Execution
- Budget to Execute
- Acceptable Risk
- Acceptable Quality

❑ Specifications
- Hardware / Comm.
- Executable Software
- Developed & Tested
- Outcomes to Req.
- User Acceptance
- Operational System

❑ OSCIO Review
- Product Acceptance
- Benefits Realization

❑ Operations
- Operate, Maintain, & Enhance
- System Performs as Designed
- Periodically Assess Operations

Enterprise Services
Utility & Shared Services

Customer Utility Boards

Architectural Assessment

Leadership Common Vision → **Core Team Formation** → **High-Level Project Plan & Requirements** → Stage Endorsement → **Business Case (& IRR)** → Stage Endorsement → **Detailed Plan** → Stage Endorsement →

Doing the Work / Execution → **Measured Benefits Realization** ↔ **Continual Program Review & Customer Relationship** → Stage Endorsement

Negotiated Refinement of Future Stage Gate Expectations Based on Unique Conditions

- Standard Process
- Outcome Metrics
- Change Governance
- Quality Reviews

❑ Financial Perspective
- Outcome to Achieve
- When to Achieve
- Value Captured
- Measure of Value

❑ Design Tradeoffs
- COTS vs Custom
- Incremental vs Big-Bang
- Process / Schedule
- Resource

❑ Quality Reports   ❑ Benefit Realization Report

PMBOK Stages

ORIGINATION	INITIATION	------- PLANNING -------	EXECUTION	------ MONITORING ------	CLOSE-OUT

❑ Concept
- Agency Request Budget
- Requirements
- Assumptions
- Tie to Enterprise Strategy
- Tie to Agency Strategy
- Tie to Agency Business Plan
- Business Opportunity
- Alternatives
- Staffing plan
- Executive sponsorship

❑ Project Charter
- Affected parties
- Stakeholders
- Assumptions
- Constraints

❑ Project Plan
- Charter
- Org Chart
- issue resolution
- Training
- Risk Management

❑ Communications Plan
- Objectives / Goals
- Infrastructure
- Meeting/Rpt Schedule
- Principles
- Website

❑ Change Management
- Framework
- Organization
- Issue management
- Readiness

❑ Business Case

❑ Detailed Project Plan
- Project Governance
- Project Team
- Communication Plan
- Change Management Plan
- PMBOK Plans
- Risk Assessment (QA)
- Requirements
- RFP (if needed)
- Refined Business Case
- Implementation Packet
- Detailed Estimates
- Roles / Responsibilities
- Business Process Analysis
- Fit Analysis
- Prototype Design
- Functional Testing

Execution
❑ Development Request
❑ Module Configuration
❑ Unit Test Plan
❑ Status Report
❑ Development Migration
❑ Securities Matrix
❑ Customization
❑ Business Process Test

Monitoring
❑ Migration Plan
❑ Integration Test
❑ Acceptance Test
❑ Final Conversion
❑ End User Training
❑ Migrate to Production

❑ User acceptance
❑ Implementation
❑ User training
❑ User manual
❑ Operations manual

Close-out
❑ Monitor Production
❑ Functional Support
❑ Technical Support
❑ Follow-on Training

-------------- Requirements Traceability Matrix --------------

Enterprise Technology Services
Utility Computing & Networking

Technology

Asset Management

Goods & Services

Human Resource

Strategic Technology Office

Public Safety	Human Services	Natural Resources	Education	Architecture & Design		Transportation & Economic Development	Administration & Business Services
Outcome Area	Outcome Area	Outcome Area	Outcome Area	Project Management	Business Analysis System Architecture	Outcome Area	Outcome Area

Stage Gate Review Process
Scenario 1 – Active Projects (v1.0)

Legislative Interim (~7 Months)
Annual Session (<45 days)
Legislative Interim (~9 Months)
Legislative Session (6 Months)

Absolute Time

July 1 (Odd #'d YR)
September (Odd #'d YR)
November (Odd #'d YR)
February (Even #'d YR)
March (Even #'d YR)
May (Even #'d YR)
September (Even #'d YR) — ARB Submission — 24 Months
December (Even #'d YR) / January (Odd #'d YR) — GRB Submission
June 30 (Odd #'d YR) — LAB

Absolute Time

Active Projects

NOW

Assess Active Projects – Determine Project Phase
Assign Active Projects to Appropriate Stage Gate - Conduct Detailed Reviews
Establish Project/Oversight Conditions for Future Stage Gate Endorsements

Relative Time

❑ **LFO Review**
❑ **LEG. APPROVAL**
- Conditions
- $ for Bus. Case
- $ for Detailed Plan
- $ for QA/QC Review

❑ **LFO Review**
❑ **LEG. Approval**
- Further Conditions
- $ for Detailed Plan
- $ for QA/QC/Risk Reviews

❑ **LFO Review**
❑ **LEG. Approval**
- Further Conditions
- Budget to Execute
- QA/QC/Risk Reviews

❑ **LFO Review**
❑ **LEG. Approval**
- Further Conditions
- Post Implementation Review

Relative Time

❑ **Concept/Vision**
- Tied to Ent. IRM Strategy
- Tied to Agency Strategy
- Problem
- Budget Concept

❑ **Initial Plan**
- High Level Business Case
- High Level Plan & Budget Estimate
- ETS Impact & Architectural Assessment

❑ **OSCIO Review**
- Conditions
- Recommendations to CFO/Legislature
- $ for Bus. Case
- +/- 50% Vision

❑ **Core Team**
- Executive Sponsor
- Project Charter
- High-level Scope
- Goals & Objectives
- Participants
  o Finance
  o Program
  o Business / IT

❑ **OSCIO Review**
- Further Conditions
- $ for Detailed Plan
- +/- 90% Vision
- Quality Assurance

❑ **OSCIO Review**
- "Go" for Execution
- Budget to Execute
- Acceptable Risk
- Acceptable Quality

❑ **OSCIO Review**
- Further Conditions
- Post Implementation Review
- Product Acceptance

❑ **Operations**
- Operate, Maintain, & Enhance
- System Performs as Designed
- Periodically Assess Operations

Stage Endorsement
Stage Endorsement
Stage Endorsement
Stage Endorsement

Status Reviews 1...   # TBD   Status Reviews ......N

Agency Leadership Common Vision → **High-Level Project Plan & Requirements** → **Core Team Formation** — **Business Case (& IRR)** → **Detailed Plan** → **Doing the Work / Execution**

Initial Architectural Assessment

Detailed Architectural Assessment

Measured Benefits Realization
Continual Program Review & Customer Relationship

Negotiated Refinement of Future Stage Gate Expectations Based on Unique Conditions

Standard Process
Outcome Metrics
Change Governance
Quality Reviews

Generic SDLC Phases

❑ Quality Reports & Post Implementation Review
❑ Benefit Realization Report

INITIATION	SYSTEM CONCEPT DEVELOPMENT	PLANNING	REQUIREMENTS ANALYSIS	DESIGN	DEVELOPMENT	INTEGRATION/TEST	IMPLEMENTATION	OPERATIONS/MAINTENANCE

CONCEPT/ORIGINATION	INITIATION	PLANNING	EXECUTION	CLOSING

Project Phases

MONITORING AND CONTROLLING

Minimum Documents/ Artifacts

❑ **Initial Plan**
- High Level Business Case
- High Level Risk Assessment
- High Level Plan/Budget Estimate
- ETS Impact & Architectural Assessment

❑ **Business Case & Foundational Project Management/Procurement Documentation**
- A Project charter.
- A detailed business case.
- A scope statement that broadly defines the distinguishing characteristics of the Project.
- Project budget and schedule estimate.
- Project risk assessment.
- Solution Requirements
- Procurement Statements of Work
  - Project Management
  - Quality Assurance
  - Design, Development & Implementation
- Any other documentation deemed necessary by the State CIO or LFO.

- A Project management plan (or separate plans) that includes but is not limited to the following sections:
  - Governance, Oversight and Accountability
  - Change/Scope Management
  - Schedule Management
  - Project Staffing
  - Project Procurement Management
  - Risk and Issue Management
  - Quality Management
  - Budget Management
  - Communication
  - Change Leadership
- Independent Risk Assessment and QC Reviews

❑ **Design, Development, Implementation Documentation**
- Copy of Executed Contracts & Amendments
- Updated IRR/Business Case for rebaseline of scope, schedule or budget
- Updated Foundational Project Management Documents (as needed/appropriate)
- Project Status Reports & Risks Logs (scope, schedule, budget, risks)
- Independent Quality Management Plan, QC Reviews, IV&V Reports
- Monthly and Quarterly QA Risk Assessment and Status Reports
- End of Phase Project Lessons Learned Reports
- Contingency Plans, "Off Ramp" Plans, Fall Back Strategy, etc.
- Other Documentation To be determined by State CIO and LFO with advice/ recommendations from the Agency & QA contractor
  - Dependent on Build vs. Buy (COTS, GOTS, Transfer, SaaS, etc.)
  - Dependent on Systems Development Lifecycle Methodology
    - e.g. Waterfall, Iterative, Spiral, Agile, Rational Unified Process, etc.
  - Dependent on Procurement and Hosting, Maintenance and Support Strategy
  - Dependent on other factors deemed relevant by the State CIO or LFO

❑ **Closing Documentation**
- Post Implementation Reviews
- Closeout/Lessons Learned Reports
- Benefits Realization Reports
- Other documentation deemed relevant by the State CIO or LFO

* OSCIO – Office of the State CIO
* ETS – DAS Enterprise Technology Services Division
* CFO – DAS Chief Financial Office
* LFO – Oregon Legislative Fiscal Office
* ARB – Agency Request Budget
* GRB - Governor's Recommended Budget
* LAB – Legislatively Adopted Budget

Preliminary Quality Assurance Services
Initial Risk Assessment & Quality Control Review by QA Contractor

Ongoing Risk Assessment, Quality Control Review & Quality Management Oversight Services through Project Closing

Independent Verification and Validation

Stage Gate Review Process
Scenario 2 – Concepts/Projects Proposed During Biennium of Execution (v1.0)

Absolute Time

Legislative Interim (~7 Months)
Annual Session (<45 days)
Legislative Interim (~9 Months)
Legislative Session (6 Months)

July 1 (Odd #'d YR)
September (Odd #'d YR)
November (Odd #'d YR)
February (Even #'d YR)
March (Even #'d YR)
May (Even #'d YR)
September (Even #'d YR) — ARB Submission
24 Months
December (Even #'d YR) — GRB Submission
January (Odd #'d YR)
June 30 (Odd #'d YR) LAB

Absolute Time

Project proposed during Biennium of Execution

Agency
- Business & Technology Planning
- High Level Project Planning & Business Case Development
- Detailed Project Planning (3-6 months)
- Procurement (6 - 12 months)
- Project Execution & Closing *(Note: Could be a multi-biennial Project)*

OSCIO & DAS ETS
- Conduct IT Investment Review Provide Recommendations to State CIO
- **Preliminary Quality Assurance & Ongoing Quality Management Oversight Services**
- Assess ETS Impact & Architecture Alignment
- IT Investment Review and Approval Process
- Architecture Assessment & Alignment

Relative Time

☐ **LFO Review**
☐ **LEG. APPROVAL**
- Conditions
- $ for Bus. Case
- $ for Detailed Plan
- $ for QA/QC Review

☐ **Concept/Vision**
- Tied to Ent. IRM Strategy
- Tied to Agency Strategy
- Problem
- Budget Concept

☐ **Initial Plan**
- High Level Business Case
- High Level Plan & Budget Estimate
- ETS Impact & Architectural Assessment

☐ **OSCIO Review**
- Conditions
- Recommendations to CFO/Legislature
- $ for Bus. Case
- +/- 50% Vision

Stage Endorsement

☐ **Core Team**
- Executive Sponsor
- Project Charter
- High-level Scope
- Goals & Objectives
- Participants
  - Finance
  - Program
  - Business / IT

☐ **OSCIO Review**
- Further Conditions
- $ for Detailed Plan
- +/- 90% Vision
- Quality Assurance

Stage Endorsement

☐ **LFO Review**
☐ **LEG. Approval**
- Further Conditions
- $ for Detailed Plan
- $ for QA/QC/Risk Reviews

☐ **OSCIO Review**
- "Go" for Execution
- Budget to Execute
- Acceptable Risk
- Acceptable Quality

Stage Endorsement

☐ **LFO Review**
☐ **LEG. Approval**
- Further Conditions
- Budget to Execute
- QA/QC/Risk Reviews

☐ **LFO Review**
☐ **LEG. Approval**
- Further Conditions
- Post Implementation Review

☐ **OSCIO Review**
- Further Conditions
- Post Implementation Review
- Product Acceptance

☐ **Operations**
- Operate, Maintain, & Enhance
- System Performs as Designed
- Periodically Assess Operations

Stage Endorsement

Process flow boxes
- Agency Leadership Common Vision
- High-Level Project Plan & Requirements
- Initial Architectural Assessment
- Core Team Formation
- Business Case (& IRR)
- Detailed Architectural Assessment
- Detailed Plan
- Status Reviews 1... # TBD Status Reviews .....N
- Doing the Work / Execution
- Measured Benefits Realization
- Continual Program Review & Customer Relationship
- **Negotiated Refinement of Future Stage Gate Expectations Based on Unique Conditions**
- Standard Process
- Outcome Metrics
- Change Governance
- Quality Reviews

☐ Quality Reports & Post Implementation Review
☐ Benefit Realization Report

Generic SDLC Phases
| INITIATION | SYSTEM CONCEPT DEVELOPMENT | REQUIREMENTS ANALYSIS | DESIGN | DEVELOPMENT | INTEGRATION/TEST | IMPLEMENTATION | OPERATIONS/MAINTENANCE |

Project Phases
| CONCEPT/ORIGINATION | INITIATION | PLANNING | EXECUTION | CLOSING |

MONITORING AND CONTROLLING

Minimum Documents/Artifacts

☐ **Initial Plan**
- High Level Business Case
- High Level Risk Assessment
- High Level Plan/Budget Estimate
- ETS Impact & Architectural Assessment

☐ **Business Case & Foundational Project Management/Procurement Documentation**
- A Project charter.
- A detailed business case.
- A scope statement that broadly defines the distinguishing characteristics of the Project.
- Project budget and schedule estimate.
- Project risk assessment.
- Solution Requirements
- Procurement Statements of Work
  - Project Management
  - Quality Assurance
  - Design, Development & Implementation
- Any other documentation deemed necessary by the State CIO or LFO.
- A Project management plan (or separate plans) that includes but is not limited to the following sections:
  - Governance, Oversight and Accountability
  - Change/Scope Management
  - Schedule Management
  - Project Staffing
  - Project Procurement Management
  - Risk and Issue Management
  - Quality Management
  - Budget Management
  - Communication
  - Change Leadership
- Independent Risk Assessment and QC Reviews

☐ **Design, Development, Implementation Documentation**
- Copy of Executed Contracts & Amendments
- Updated IRR/Business Case for rebaseline of scope, schedule or budget
- Updated Foundational Project Management Documents (as needed/appropriate)
- Project Status Reports & Risks Logs (scope, schedule, budget, risks)
- Independent Quality Management Plan, QC Reviews, IV&V Reports
- Monthly and Quarterly QA Risk Assessment and Status Reports
- End of Phase Project Lessons Learned Reports
- Contingency Plans, "Off Ramp" Plans, Fall Back Strategy, etc.
- Other Documentation To be determined by State CIO and LFO with advice/recommendations from the Agency & QA contractor
  - Dependent on Build vs. Buy (COTS, GOTS, Transfer, SaaS, etc.)
  - Dependent on Systems Development Lifecycle Methodology
    - e.g. Waterfall, Iterative, Spiral, Agile, Rational Unified Process, etc.
  - Dependent on Procurement and Hosting, Maintenance and Support Strategy
  - Dependent on other factors deemed relevant by the State CIO or LFO

☐ **Closing Documentation**
- Post Implementation Reviews
- Closeout/Lessons Learned Reports
- Benefits Realization Reports
- Other documentation deemed relevant by the State CIO or LFO

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* ETS – DAS Enterprise Technology Services Division
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* ARB – Agency Request Budget
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Preliminary Quality Assurance Services
Initial Risk Assessment & Quality Control Review by QA Contractor

Ongoing Risk Assessment, Quality Control Review & Quality Management Oversight Services through Project Closing

Independent Verification and Validation

Stage Gate Review Process
Scenario 3 – Concepts/Projects Proposed During Biennial Budget Cycle (v1.0)

Absolute Time

Agency/ETS Review/Planning
- April 30 (Even #'d YR)
- May 31 (Even #'d YR)

Agency Submission of ARB to CFO/OSCIO
- August 1 (Even #'d YR)
- September 1 (Even #'d YR)

Governor's Submission of GRB to Legislature
- December (Even #'d YR)

Legislative Session (LAB)
- Jan/February (Odd #'d YR)

Legislative Interim
- September (Odd #'d YR)
- November (Odd #'d YR)

Annual Session (<45 days)
- February (Even #'d YR)
- March (Even #'d YR)
- May (Even #'d YR)

Legislative Interim
- September (Even #'d YR)
- December (Even #'d YR)

Legislative Session (6 Months)
- January (Odd #'d YR)

MARCH (Even #'d YR)

15 Months

JUNE 30 (Odd #'d YR)

July 1 (Odd #'d YR)

24 Months

JUNE 30 (Odd #'d YR)

Absolute Time

Project proposed during biennial budget cycle

Biennium Boundary

Biennium of Execution

Agency

- Business & Technology Planning
- High Level Project Planning & Business Case Development
- Budget Development & Recommendation (ARB & GRB)
- Budget Review & Approval (LAB)
- Detailed Project Planning (3-6 months)
- Procurement (6 - 12 months)
- Project Execution & Closing *(Note: Could be a multi-biennial Project)*

OSCIO & DAS ETS

- Conduct IT Investment Review Provide Recommendations to CFO/Governor's Office
- Preliminary Quality Assurance & Ongoing Quality Management Oversight Services
- IT Investment Review and Approval Process
- Architecture Assessment & Alignment

Relative Time

Assess ETS Impact & Architecture Alignment

☐ **Concept/Vision**
- Tied to Ent. IRM Strategy
- Tied to Agency Strategy
- Problem
- Budget Concept

☐ **Initial Plan**
- High Level Business Case
- High Level Plan/Policy Option Package
- ETS Impact & Architectural Assessment

☐ **OSCIO Review**
- Conditions
- Recommendations to CFO/Governor
- $ for Bus. Case
- +/- 50% Vision

☐ **LFO Review**
☐ **LEG. APPROVAL**
- Conditions
- $ for Bus. Case
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- $ for QA/QC Review

☐ **Core Team**
- Executive Sponsor
- Project Charter
- High-level Scope
- Goals & Objectives
- Participants
  o Finance
  o Program
  o Business / IT

☐ **OSCIO Review**
- Further Conditions
- $ for Detailed Plan
- +/- 90% Vision
- Quality Assurance

☐ **LFO Review**
☐ **LEG. Approval**
- Further Conditions
- $ for Detailed Plan
- $ for QA/QC/Risk Reviews

☐ **OSCIO Review**
- "Go" for Execution
- Budget to Execute
- Acceptable Risk
- Acceptable Quality

☐ **LFO Review**
☐ **LEG. Approval**
- Further Conditions
- Budget to Execute
- QA/QC/Risk Reviews

☐ **OSCIO Review**
- Further Conditions
- Post Implementation Review
- Product Acceptance

☐ **LFO Review**
☐ **LEG. Approval**
- Further Conditions
- Post Implementation Review

☐ **Operations**
- Operate, Maintain, & Enhance
- System Performs as Designed
- Periodically Assess Operations

Relative Time

Stage Endorsement (multiple)

Status Reviews 1... # TBD .... Status Reviews .....N

Agency Leadership Common Vision → **High-Level Project Plan & Requirements**

Initial Architectural Assessment

Core Team Formation → **Business Case (& IRR)** → **Detailed Plan**

Detailed Architectural Assessment

Doing the Work / Execution

Negotiated Refinement of Future Stage Gate Expectations Based on Unique Conditions

Measured Benefits Realization

Continual Program Review & Customer Relationship

☐ Quality Reports & Post Implementation Review

☐ Benefit Realization Report

Standard Process
Outcome Metrics
Change Governance
Quality Reviews

Generic SDLC Phases

| INITIATION | SYSTEM CONCEPT DEVELOPMENT | REQUIREMENTS ANALYSIS | DESIGN | DEVELOPMENT | INTEGRATION/TEST | IMPLEMENTATION | OPERATIONS/MAINTENANCE |

Project Phases

| CONCEPT/ORIGINATION | INITIATION | PLANNING | EXECUTION | CLOSING |

MONITORING AND CONTROLLING

Minimum Documents/Artifacts

☐ **Initial Plan**
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  - Dependent on Procurement and Hosting, Maintenance and Support Strategy
  - Dependent on other factors deemed relevant by the State CIO or LFO

☐ **Closing Documentation**
- Post Implementation Reviews
- Closeout/Lessons Learned Reports
- Benefits Realization Reports
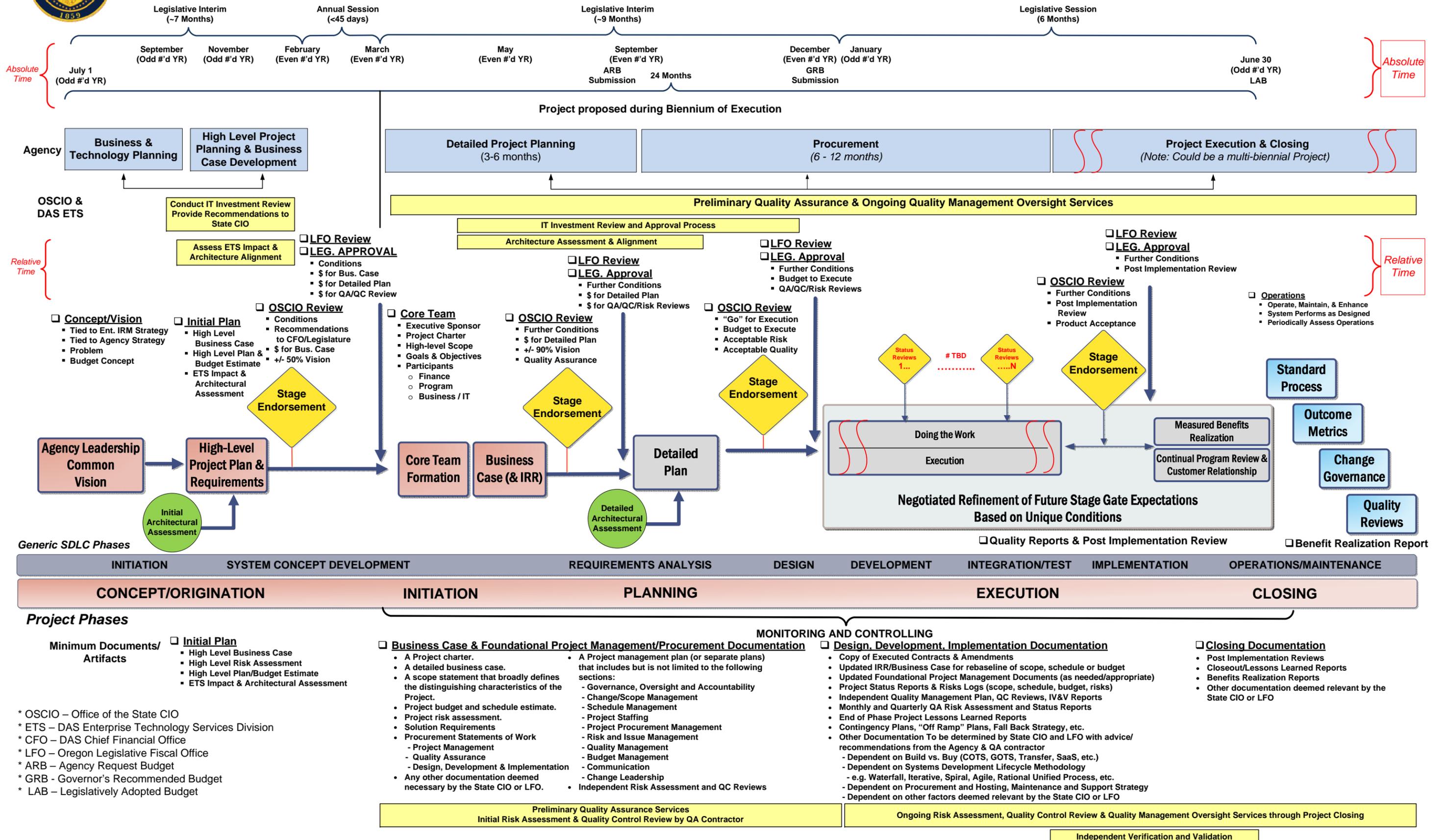- Other documentation deemed relevant by the State CIO or LFO
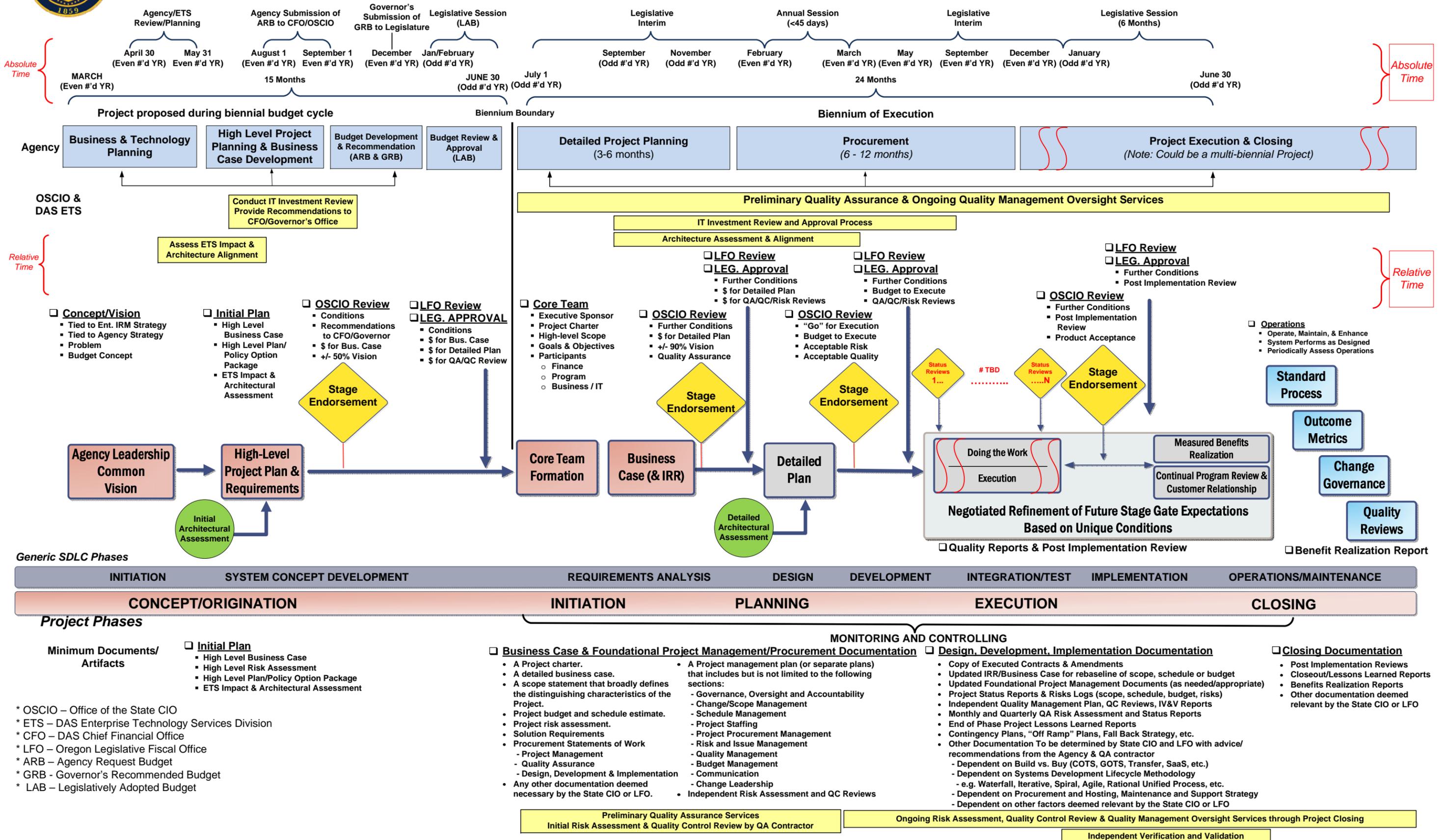
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* LFO – Oregon Legislative Fiscal Office
* ARB – Agency Request Budget
* GRB – Governor's Recommended Budget
* LAB – Legislatively Adopted Budget

Preliminary Quality Assurance Services
Initial Risk Assessment & Quality Control Review by QA Contractor

Ongoing Risk Assessment, Quality Control Review & Quality Management Oversight Services through Project Closing

Independent Verification and Validation