Technology Services Board

Quarterly Meeting
June 14, 2022
9:00 a.m. – 11:00 a.m.
## Agenda

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>LEAD</th>
<th>PURPOSE</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome and Introductions</td>
<td>Bill Kehoe</td>
<td>Introductions</td>
<td>9:00</td>
</tr>
<tr>
<td>Review and Approve Minutes from March 22 Meeting</td>
<td>Bill Kehoe</td>
<td>Approval</td>
<td>9:05</td>
</tr>
<tr>
<td>Program Update - State Board for Community &amp; Technical Colleges - ctcLink</td>
<td>Rich Tomsinski</td>
<td>Lessons learned from the program</td>
<td>9:10</td>
</tr>
<tr>
<td>Technology Business Management (TBM) Program Reporting</td>
<td>Cammy Webster, Stephanie Roe</td>
<td>Review of program and demo</td>
<td>9:40</td>
</tr>
<tr>
<td>Sharing IT Project Best Practices and Lessons Learned: Budget and Resource Management</td>
<td>Richelle Glascock</td>
<td>Discussion and Board feedback</td>
<td>10:10</td>
</tr>
<tr>
<td>Strategic Initiatives/Lightning Round</td>
<td>Robin Shen, Nick Stowe, Bill Kehoe</td>
<td>Quick updates on the initiatives</td>
<td>10:40</td>
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<tr>
<td>Public Comment</td>
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<td></td>
<td>10:55</td>
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## Current TSB Members

### Industry Members
- Butch Leonardson – Retired CIO
- Paul Moulton – Retired CIO
- Tanya Kumar – T-Mobile USA

### Legislative Members
- Rep. David Hackney – House D
- Sen. Joe Nguyen – Senate D

### Executive Branch (Agency Directors)
- Bill Kehoe – State CIO & Chair
- David Danner – UTC
- Tracy Guerin – DRS
- Vikki Smith – DOR

### Other Government
- Viggo Forde – Snohomish County

### Vacancies:
- Senate Representative
- Labor Union Representative

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**Members present**

**Members absent**
Approve 03/22/2022 Minutes
Washington State Board for Community and Technical Colleges (SBCTC)  

c.tcLink Project

Technology Services Board Meeting  
June 14, 2022

- Jan Yoshiwara – SBCTC Executive Director and ctcLink Executive Sponsor  
- Grant Rodeheaver – SBCTC Deputy Executive Director of IT and ctcLink Project Sponsor  
- Christy Campbell – SBCTC Chief Technology Officer, ctcLink Program  
- Paul Giebel – Quality Assurance, Partner and COO at Moran Technology Consulting
ctcLink Project Evolution 2008 - 2022

**Project Planning & Pilot Go-Live**
- ERP Readiness Assessment
- Project Kickoff
- Strategic Technology Plan
- Legislature approves ERP funding (May)
- ctcLink Pilot Go-Live

**Project Re-Planning**
- Gartner Independent Verification/Validation
- Remediation Project 2016
- Remediation Sign-off
- New Project Director hired, Re-planning activities begin
- Implementation Partner Bankruptcy, Lawsuit, Settlement

**ctcLink Project Relaunch**
- Updated Investment Plan Approved
- PROJECT RE-LAUNCH
- DG2 Pilot College Upgrade & College/SBCTC go-live
- DG3 6 colleges go live
- DG4 7 colleges go live
- DG5 8 colleges go live
- DG6 9 colleges go live
- Project Closeout (June)
## ctcLink Project Schedule – Restart to Completion

### Timeline at Project Restart – March 2018

<table>
<thead>
<tr>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
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</thead>
</table>

**Deployment Group 2**
- Implementation Phase – March 2018
- GHANE Mar 2018
- **Begin initiation phase March 2018**
- **Public status reports Jan 2019**
- **Deployment Oct 2018**

**Deployment Group 3**
- Implementation Phase – Feb 2019
- GHANE Feb 2019
- **Begin initiation phase Feb 2018**
- **Public status reports Dec 2018**

**Deployment Group 4**
- Implementation Phase – Nov 2019
- GHANE 2020
- **Begin initiation phase July 2019**
- **Public status reports March 2020**

**Deployment Group 5**
- Implementation Phase – Mar 2020
- GHANE TTD
- **Begin initiation phase March 2019**
- **Public status reports Nov 2019**

**Deployment Group 6**
- Implementation Phase – Nov 2020
- GHANE TTD
- **Begin initiation phase March 2020**
- **Public status reports Nov 2021**

### Contingency Deployment

- DG2 (5 NW)
  - Clerk SBCTC
  - Spokane (2)
  - Yakima

- DG2 (5 NW)
  - Cassadilla
  - Lower Columbia
  - Olympic
  - Peninsular
  - Pierce (2)

- DG4 (7 total)
  - Centralia
  - Edmonds
  - Highline
  - Seattle (3)
  - Woodinville Valley

- DG5 (7 total)
  - Bellingham
  - Big Bend
  - Erotist
  - Grays Harbor
  - Green River
  - South King
  - Whatcom

- DG6 (9 total)
  - Bates
  - Coleman
  - Columbia Basin
  - Lake Washington
  - Renton
  - Insull
  - South Puget Sound
  - Valla Valley
  - Yamosha Valley

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### Final Executed Schedule – May 2022

**Deployment Group 2**
- Implementation Phase – March 2018
- GHANE Mar 2018
- **Begin initiation phase Feb 2018**
- **Public status reports Dec 2018**

**Deployment Group 3**
- Implementation Phase – Feb 2019
- GHANE Feb 2019
- **Begin initiation phase March 2018**
- **Public status reports Jan 2019**

**Deployment Group 4**
- Implementation Phase – Nov 2019
- GHANE 2020
- **Begin initiation phase July 2019**
- **Public status reports March 2020**

**Deployment Group 5**
- Implementation Phase – May 2020
- GHANE TTD
- **Begin initiation phase March 2019**
- **Public status reports Nov 2021**

**Deployment Group 6**
- Implementation Phase – Nov 2020
- GHANE TTD
- **Begin initiation phase March 2020**
- **Public status reports Dec 2021**

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**DG6**
- Feb 22, 2022
- Columbia Basin
- Valla Valley

**DG8**
- April 22, 2022
- South King
- South Puget Sound
- Yamosha Valley
Success Factors for Enterprise Projects

- Scope Specificity
- Legacy System Remediation
- Enterprise Architecture
- Scheduling
- PMO Maturity
- Program Budgeting
- Resource Planning
- Test Planning
- QA / IV&V
- Vendor Management
- Governance & Sponsorship
- Performance Measures
- Transformation Methodology
- Procurement & Contracting
- Stakeholder Engagement
# Top Recommendations Based on Lessons Learned

<table>
<thead>
<tr>
<th>Leadership, Governance, Project Controls</th>
<th>Vendor Management</th>
<th>Managing Change (OCM), Training, Communications</th>
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<tbody>
<tr>
<td>• Project director with similar project experience required (industry, size, and budget)</td>
<td>• Due to unique circumstances, ctcLink was managed internally after 2018 restart</td>
<td>• College customer buy-in, partnership and ownership of local project is key</td>
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<tr>
<td>• Strong governance model with system-wide representation</td>
<td>• Assign a PM within the agency PMO to manage vendor: contractors, invoicing, quality of deliverables</td>
<td>• Coordinate OCM trainings, knowledge-sharing sessions for PMs, Exec Sponsors, Change Leaders</td>
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<tr>
<td>• Agency PMO with qualified staff</td>
<td>• Actively partner with vendors and hold them accountable to deliver per the contract/SOW</td>
<td>• Ensure an adequately resourced, professionally developed training program</td>
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<td>• Manage scope and ownership centrally</td>
<td></td>
<td>• Centralize and standardize communications; communicate project changes early, frequently</td>
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<tr>
<td>• Continuous improvement</td>
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<tr>
<td>• Practice Implementation/Go-Live</td>
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Happy College Customers and End-Users

More than 90% of students agree/strongly agree they were able to do what they needed in ctcLink. ~ DG3 college student survey

We had decades to create process improvements around Legacy. We need to continue to work together as a consortium with patience and persistence to improve ctcLink in the same manner. Together we can engage and prioritize the work to further develop and improve ctcLink for our state’s students and college communities. ~ DG4 College PM

Apart from being a more organized system, ctcLink adds a handful of benefits, including a mobile app... It’s a stark contrast from our current system! ~ Everett Community College student

The SBCTC project team leadership was exemplary; a remarkable turnaround from the prior team and outside vendor. ~ DG6 College PM

We benefited tremendously from being in the last deployment group! SBCTC continued to improve the processes after each deployment, incorporating the feedback and suggestions. We appreciate the strong support and continual improvement. ~ DG6 College

I love ctcLink! I’ve always loved it. ~ DG5 College PM who had worked at one of the pilot colleges during go-live
Technology Business Management Program

Cammy Webster
Stephanie Roe

Technology Services Board
June 14, 2022
What is Technology Business Management?

WHAT - Technology Business Management (TBM) is a discipline that establishes a common language between IT, finance and business to improve outcomes by connecting business value to technology investments.

WHY –
RCW 43.105.054 Section 2(f)
Supported by OCIO Policy 113
Funded by OCIO Allocation

HOW –
Methodology that uses an industry standardized taxonomy to map technology assets and resources to business outcomes.
TBM in the State of Washington

Milestones & Maturity Roadmap

2012 TBM Start
• Started program

2016 Program Reboot
• Adopted standards
• Application portfolio

2017 RCW KPIs
• Report by Cost Pool
• Report by IT Tower

2019/2020 Additional Portfolio data
• Major IT Project & technology budgets
• Infrastructure portfolio

2022/2023 Maturity Activities
• Application Total Cost of Ownership (TCO)
• Business Capabilities
• Position to support Cloud/FinOps

Agency Scorecard

1. Cost Pool
   • 100%
   • 100+ agencies

2. IT Tower
   • 100%
   • 58 of 58 agencies

3. App TCO
   • 55%
   • 12 of targeted 22 top agencies

4. Business
   • 9%
   • 2 of targeted 22 top agencies
Where does the Technology Services Board (TSB) fit in?

01 Standards and policies
TSB - Review and approve
TBM - Incorporate into TBM Program

02 Service improvements and cost efficiency
TSB - Consider ways to promote strategic investments that result in service improvements and cost efficiency
TBM - Maturity roadmap targets top 22 agencies to gain additional insights

03 Data
TSB - Understand what exists
TBM - What else do you want to see?
IT Project Best Practices and Lessons Learned

Budget and Resource Management
Richelle Glascock

Technology Services Board
June 14, 2022
Poor planning will yield predictable results

Such as:
• Cost overruns
• Schedule overruns
• Staff turnover
• Low product quality
• Additional funding requests
• Low stakeholder adoption

For discussion: How else does inadequate budgeting manifest in your experience?
When budgets lack...what’s missing?

Project design errors; unclear ________.
- Mission, vision, and values
- Objectives
- Approach
- Planned outputs

Inadequate risk management
- Insufficient analysis of risks
- Poor risk response planning
- Not planning for contingency and risk reserve

Estimation errors
- Unrealistic expectations of employee / contractor availability, assuming 100% availability
- Forgetting about holidays and vacation
- Ignoring historical data
- Underestimating costs / sticker shock

Poorly defined or uncontrolled scope
- Underestimating complexity
- Identifying late requirements
- Inadequate stakeholder management

Execution failures
- Starting with an incomplete team
- Poor resource coordination
- Lack of essential skills and technology
- Inadequate employee motivation and communication
- Ineffective project execution plan
- Absence of tools or methods to standardize and evaluate employee / contractor performance
How can OCIO and TSB help agencies budget better?

- Provide common examples and guidance for using historical data to properly estimate (and combat sticker shock).
- Provide clear evaluation and direction during decision package consultations.
- Provide workshops and resources for educating budget analysts and project managers.

For discussion: What strategies should we consider for improving project budget and resource planning accuracy?
Available resources

Whitepapers do exist:
• Estimating for Project Managers
• Project Budgeting
• Project Budget Planning
• Investment Planning
• Technology Budget Tips/Tricks

And key services:
• Project Management Professionals (PMPs)
• Oversight consultant consultation and expertise
• OFM budget analysts assigned

For discussion: What tools or resources or formats can we provide that people will use?
Strategic Initiatives/Lightning Round

Robin Shen
Nick Stowe
Bill Kehoe

Technology Services Board
June 14, 2022
# Enterprise Cloud Computing Program Update

## Program Approach
- Adopt Agile approach, and set up the virtual team
- Use different vendors to drive program deliverables

## Governance
- Cloud Capability Model Analysis (Reference Architecture)
- Azure Enterprise Landing Zone
- AWS Control Tower

## Transformation
- Set up the training and readiness sub-committee according to Cloud Transition Taskforce Report
- Pilot Community of Practice

## Brokerage
- Cloud Service Brokerage definition and resource preparation

<table>
<thead>
<tr>
<th>Task</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Approach</td>
<td><img src="checkmark.png" alt="Executed" /></td>
</tr>
<tr>
<td>Governance</td>
<td><img src="yellow-circle.png" alt="In Progress" /></td>
</tr>
<tr>
<td>Transformation</td>
<td><img src="blue-circle.png" alt="Planned" /></td>
</tr>
<tr>
<td>Brokerage</td>
<td><img src="checkmark.png" alt="Executed" /></td>
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Open Data Program Update

Strategic Update
- Hired full time Open Data Program Manager
- Moved program to Strategy & Management, Enterprise Architecture
- Retaining partnership with Data Protection & Privacy
- Drive enterprise data management

Collection Management
- Partnership with WA State Library
- Low value dataset removal
- Metadata improvement
- Dataset standardization
- User interface overhaul
- Single Sign On

Program Management
- Metrics and analytics performance reporting dashboard
- Open Data Advisory Group formalization
- Strategic partnerships with GIS, Access Washington, Results Washington, Office of Equity, national open data workgroup

Outreach & Empowerment
- Consultation and outreach with data publishers and users
- OCIO Policy 187, Open Data Plan update
- Use feedback to make data.wa.gov the open data sharing method of choice

Executed  In Progress  Planned
GOAL #1  Efficient & Effective Government

OBJECTIVES
- Advance digital government.
- Reduce barriers to access.
- Improve customer experience across channels.
- Expand integration between systems.

ENTERPRISE INITIATIVES
- Complete migration to cloud-based shared email service.
- Fully implement Enterprise M355 licensing approach.
- Implement One Washington.
- Increase access to broadband across state.
- Continue development of Master Person Index and Integrated Eligibility (MHS Coalition).

Proposed
- Develop a nationwide data management and integration solution.

GOAL #2  Accountable IT Management

OBJECTIVES
- Promote reuse with increased visibility into IT assets.
- Reduce technical debt.
- Align portfolio to statewide architecture.
- Improve project out comes with better practices.
- Support value-based analysis of IT spend.

ENTERPRISE INITIATIVES
- In progress or Planned
- Implement an enterprise workforce development strategy.
- Improve support for re-mote work.
- Maintain a competitive classification and compensation structure.

GOAL #3  IT Workforce

OBJECTIVES
- Support a diverse, resilient workforce.
- Implement an enterprise workforce development strategy.
- Improve support for re-mote work.
- Maintain a competitive classification and compensation structure.

ENTERPRISE INITIATIVES
- In progress or Planned
- Develop a workforce training plan for cloud adoption.
- Create an organizational change management strategy and training plan to address new technology adoption.
- Increase availability of communities of practice.

Proposed
- Develop an enterprise data management and integration strategy.
- Assess state network in support of cloud strategy.
- Identify components and tools that can be standardized or shared across agencies.

GOAL #4  Enterprise Architecture

OBJECTIVES
- Advance adoption of modern, cloud-based technologies.
- Support use of common, shared technologies across agencies.
- Align with VA Government service domains.

ENTERPRISE INITIATIVES
- In progress or Planned
- Establish Enterprise Cloud Computing Program.
- Update enterprise identity management strategy.
- Develop state’s enterprise architecture framework.
- Create shared hazards data sharing platform.
- Implement IPv6 across the enterprise.

Proposed
- Develop an enterprise data management and integration strategy.
- Assess state network in support of cloud strategy.
- Identify components and tools that can be standardized or shared across agencies.

GOAL #5  Security & Privacy

OBJECTIVES
- Invest in proactive cyber solutions and practices.
- Recruit and develop cyber and privacy talent in state government.
- Deploy statewide privacy framework.
- Strengthen privacy capacity in state and local government.

ENTERPRISE INITIATIVES
- In progress or Planned
- Create a catalog of standard security services.
- Update cybersecurity incident response processes and associated policy.
- Implement a privacy framework for agencies.
- Collaborate with local government to improve practices.
- Enhance security operations and governance.

Proposed
- Develop disaster recovery practices.
- Develop cyber workforce initiative and associated measures.
## Statewide Information Technology Strategic Plan 2021-2025

### VISION
Better Government Through Technology

### MISSION
Personalize and Optimized Government

### PRINCIPLES
- Leadership
- Enterprise Focused
- Agility
- Transparency
- Data Driven

## GOALS

<table>
<thead>
<tr>
<th>GOAL #1</th>
<th>Efficient &amp; Effective Government</th>
</tr>
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</table>
| OBJECTIVES | • Advance digital government.  
| • Reduce barriers to access.  
| • Improve customer experience across channels.  
| • Expand integration between systems. |
| ENTERPRISE INITIATIVES | • Complete migration to cloud-based shared email service.  
| • Fully implement Enterprise M365 licensing approach.  
| • Implement One Washington.  
| • Increase access to broadband across state.  
| • Continue development of Master Person Index and Integrated Eligibility (MRS) Coalition.  
| Proposed | • Develop digital citizen strategy to support “one government” view.  
| • Create shared accessibility community of practice and repository.  
| • Develop a statewide data management and integration solution. |

<table>
<thead>
<tr>
<th>GOAL #2</th>
<th>Accountable IT Management</th>
</tr>
</thead>
</table>
| OBJECTIVES | • Promote reuse with increased visibility into IT assets.  
| • Reduce technical debt.  
| • Align portfolio to statewide architecture.  
| • Improve project outcomes with better practices.  
| • Support value-based analysis of IT spend. |
| ENTERPRISE INITIATIVES | • In progress or Planned  
| • Provide updated view of legacy applications and modernization needs.  
| • As part of One Washington, implement improvements to detailed technology spend data and analysis. |
| Proposed | • Design and implement enterprise configuration management strategy.  
| • Develop methods to identify business impact of IT spend to support savings or investment. |

<table>
<thead>
<tr>
<th>GOAL #3</th>
<th>IT Workforce</th>
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</table>
| OBJECTIVES | • Support a diverse, resilient workforce.  
| • Implement an enterprise workforce development strategy.  
| • Improve support for re-mote work.  
| • Maintain a competitive classification and compensation structure. |
| ENTERPRISE INITIATIVES | • In progress or Planned  
| • Develop a workforce training plan for cloud adoption.  
| • Create an organizational change management strategy and training plan to address new technology adoption.  
| • Increase availability of communities of practice. |
| Proposed | • Monitor and adjust ITPS to better support career paths and evolution of technology.  
| • Identify and implement inclusive recruitment and retention practices.  
| • Identify holistic organizational change management. |

<table>
<thead>
<tr>
<th>GOAL #4</th>
<th>Enterprise Architecture</th>
</tr>
</thead>
</table>
| OBJECTIVES | • Advance adoption of modern, cloud-based technologies.  
| • Support use of common, shared technologies across agencies.  
| • Align with IVA Government service domains. |
| ENTERPRISE INITIATIVES | • In progress or Planned  
| • Establish Enterprise Cloud Computing Program.  
| • Update enterprise identity management services. |
| Proposed | • Develop state’s enterprise architecture framework.  
| • Collaborate on shared data-sharing platform.  
| • Implement IPv6 across the enterprise. |

<table>
<thead>
<tr>
<th>GOAL #5</th>
<th>Security &amp; Privacy</th>
</tr>
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</table>
| OBJECTIVES | • Invest in proactive cyber solutions and practices.  
| • Recruit and develop cyber and privacy talent in state government.  
| • Deploy statewide privacy framework.  
| • Strengthen privacy capacity in state and local government. |
| ENTERPRISE INITIATIVES | • In progress or Planned  
| • Create a catalog of standard security services.  
| • Update cybersecurity incident response processes and associated policy.  
| • Implement a privacy framework for agencies.  
| • Collaborate with local government to improve practices.  
| • Improve security operations and governance. |
| Proposed | • Improves disaster recovery practices.  
| • Develop cyber workforce initiatives and associated measures. |
Program Approach

The EA Program has partnered with InfoTech to implement the EA framework.

Guided Implementation approach with InfoTech allows engagement at key steps in the EA framework and engages EA expertise when needed.

**Phase 1**
- Explore the role of EA in your organization.
- Identify and prioritize stakeholders.
- Use a PESTLE analysis to identify business and technology needs.

**Phase 2**
- Prepare for stakeholder interviews.
- Discuss your EA value proposition.

**Phase 3**
- Understand the importance of EA fundamentals.
- Define the relevant EA services and their contributions to the organization.
- Measure EA effectiveness.

**Phase 4**
- Build your EA roadmap and communication plan.
- Discuss the EA role relative to agility.
- Summarize results and plan next steps.

**OUTCOMES**
- Organizational needs, challenges and strategic directions
- Business and technology trends
- Stakeholder insights
- List of business and technology drivers
- Set of EA contributions which articulate EA value
- The EA vision, mission and scope clearly defined
- Principles to guide the EA work
- Methodology to support agility and innovation
- EA operating model and governance defined
- Services, activities and tools EA is committed to provide
- EA roadmap, KPI’s, communications plan
Transform Public Service Through a Connected Government
Current State – Access Washington

- Static website with links to services
- Outdated - last update in 2012
- Not responsive to resident needs
- Lack of ownership and support model
Access Washington Traffic Declining
Vision – Integrated, Coordinated Customer Experience Across all Customer Channels
Connected Government

• Improve Access Washington to recreate a robust resident portal for Washington State.

• Implement a statewide Identity and Access Management (IAM) platform.

• Establish Enterprise Data Management Plan and key data resources and platforms.

• Establish an accessibility program in WaTech to guide the state toward improved accessibility of digital services.
Our emergency responders need to be able to communicate during crisis situations.

The SIEC was established on October 1, 2011, by Engrossed Substitute Senate Bill 5931. The SIEC works to ensure that all emergency responders, across all levels of government and across all jurisdictions can talk to each other and share data.

**Membership:**
- Chaired by the State CIO - Voting membership shall be limited to 22 members
- State agencies, county governments, state and local fire chiefs, police chiefs, and sheriffs, and state and local emergency management directors, tribal nations, and 911 call centers.

**Objectives:**
- Develop policies and make recommendations for technical standards for state wireless radio communications systems.
- Coordinate and manage the licensing and use of state designated and state-licensed radio frequencies.
- Coordinate the purchasing of all state wireless radio communications system equipment.
State Interoperability Executive Committee (SIEC)

*Our emergency responders should always be able to talk to each other during crisis situations.*

**Staff Advisory Working (SAW) Group:**
- Ensures adequate and appropriate review, input, consultation, and technical assurances for SIEC recommendations and decisions.

**Strategic Plan:**
- The Washington Statewide Communications Interoperability Plan (SCIP).
- **Goal** - Coordinated communications planning among bordering States and Canada
- **Goal** - Ongoing evaluation and endorsement of interoperable Land Mobile Radio (LMR) technology when upgrading or replacing radio systems
- **Goal** - Enhance and simplify interoperability across dissimilar mission critical voice systems

**Focus Areas:**
- Updated Bylaws
- Update Strategic Plan measuring progress in strategic goal areas.
- Convert WA Field Operations Guide (WAFOG) to an eFOG.
- Integration with FirstNet - nationwide wireless broadband network for first responders
- State of Washington WA Military Dept. to license VMed 29 statewide as an air-to ground channel for medivac operations.
Public Comment