



Combined Communications Network

**2015**

**Business Plan**



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## **Introduction**

The Combined Communications Network (CCN) Business Plan will explain what our business offers, how its finances work, and how our customer needs are met.

This document will be updated yearly with new financial numbers and changes to the business model.

## **Our Business**

### **CCN Vision:**

The CCN is an innovative first responder communication enterprise organization and regional leader.

### **CCN Mission:**

As stewards of public resources, the CCN manages and delivers interoperable, safe, standardized, and flexible communications for first responder use with regional partners and serving and protecting communities through the sustainment of next generation communication technologies using lean business practices, standards-based decision making, value-based strategic objectives and the use of integrated business systems.

### **Guiding Principles:**

- Financial stewardship and stability
- Innovative and livable communities
- Excellent public service
- Balanced service delivery
- Operational excellence
- Increased Service value for our neighbor agencies and communities
- Reduced operational costs and risks
- Increased reliability for service over a larger geographical area

## **Goals and Objectives**

### **Goal 1: Establish an information based decision making process**

The CCN Executive Director will provide the CCN Executive Board with the background documentation and metrics necessary for making informed decisions on issues impacting the CCN, its partners and stakeholders. The CCN's Cooperative Governance Agreement (CGA), Business Strategic Plan, Business Analytics, and Executive Board Policies serve as the foundational documents and processes that ensure the CCN operations are sustained in an efficient, cost-effective, and mutually agreeable manner for all parties.

### **Goal 2: Sustain CCN service effectiveness**

The CCN Executive Board will continuously seek innovative administrative structures and processes that support lean principles and sustainable business standards to ensure a consistent approach in addressing first responder community needs through a comprehensive and integrated business plan.

### **Goal 3: Ensure CCN financial stewardship and performance measurement**

The CCN Business Strategic Plan contains a financial structure that provides for accountability, effective management through application of best business practices and performance measurement. These include but are not limited to: State Auditor requirements per Revised Code of Washington (RCW) rules, Government Accounting Standards Board (GASB) requirements, Generally Acceptable Accounting Principles (GAAP), Total Cost of Ownership (TCO), Original Equipment Manufacturer (OEM) standard and Balanced Scorecard. The Plan will also support business analytics, activity-based cost allocation models, and long term financial forecasting.

### **Goal 4: System sustainment**

Focused on the first responder community, the CCN will ensure standards based policies and procedures following OEM certified network designs, engineering best-practices, and OEM sustainment programs, such as:

- Preventive and predictive maintenance processes
- Long-range system upgrade and enhancement planning
- Allocate costs relative to upgrades, replacement, maintenance, growth, expansion and contraction of the SCWCS

### **Goal 5: Develop collaboration**

The CCN will provide a high degree of leadership and planning to include a commitment and investment in the sustainability of the CCN's Single County-wide Communication System (SCWCS). Develop an operable and interoperable framework for mutual aid and emergency operations by participating with regional and statewide committees. The CCN will participate in developing integrated system operating procedures for first responders and regional partners

that provide mutual aid support during emergency operations. The CCN will use the SCWCS to provide Two-Way Standards-Based Sharing and Standards-Based System sharing through system integration or interconnectivity. The CCN shall participate in regular comprehensive region-wide training and exercises to validate the effectiveness of the overall SCWCS functionality.

## **Leadership Framework**

Our greatest resource is our staff. The CCN is committed to develop, nurture, and evolve an engaged workforce supporting the framework for our mission.

The CCN recognizes that in an ever changing economic environment it must anticipate and adjust to technology changes and advancements to remain competitive and relevant. Guided by the CCN vision and mission statements to ensure success, the CCN will provide the leadership needed focused on innovation to build and sustain a robust communications network serving the community.

The CCN provides services and products that deliver a uniform high-quality first responder communications system called the Single County-Wide Communications System (SCWCS).



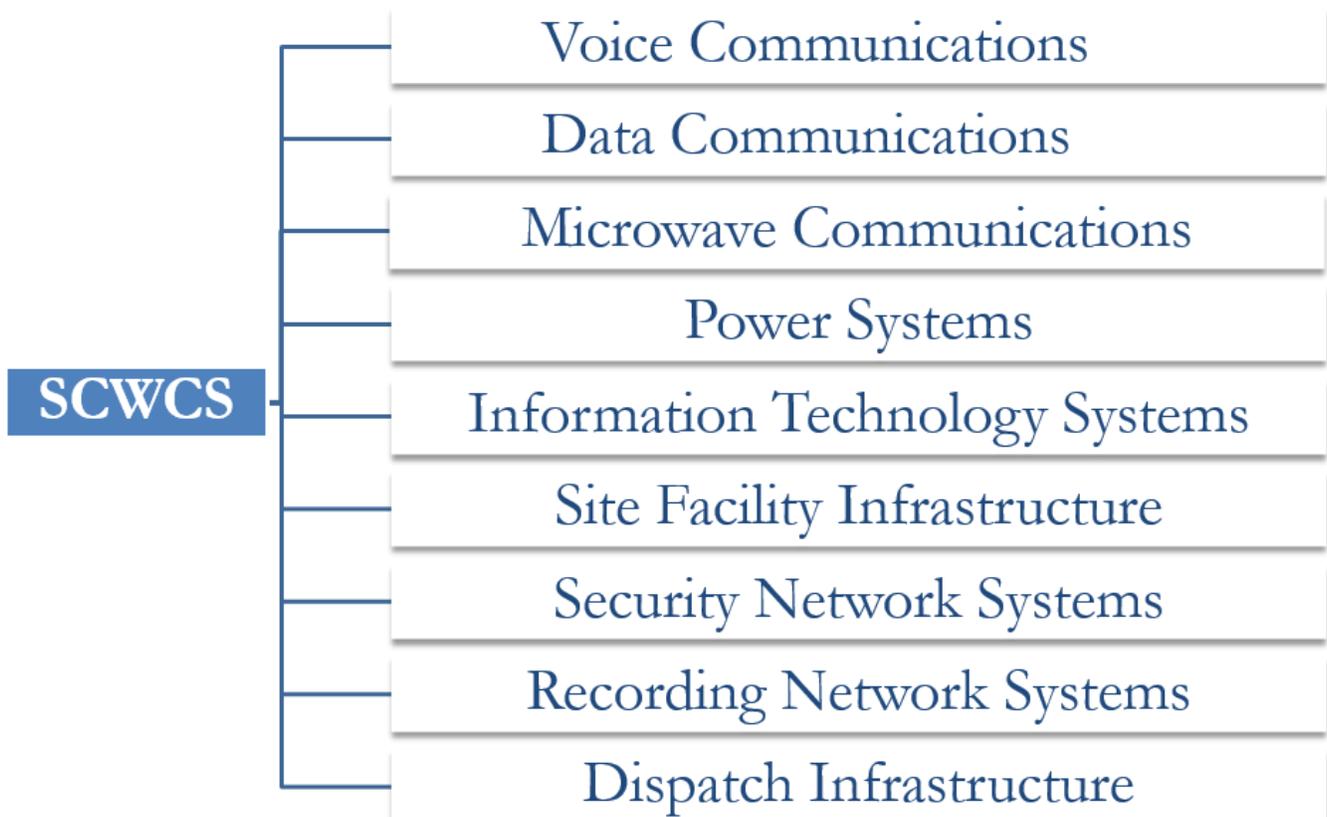
### **Key value of the CCN:**

- Sustains a robust communications network to meet operational requirements for first-responders to support communities
- Sustains regional operable and interoperable communications
- Provides for cost sharing of operations, maintenance and sustainment through economies of scale
- Provides opportunities for centralized services to customers

## Products and Services

The CCN procures, maintains and provides services a variety of equipment to support emergency communication services, E-911, transportation, ambulance, and other emergency response and recovery communications.

The Single County-wide Communications Systems (SCWCS) consists of the major components that are resilient and redundant required to support first responder communications for agencies that use the SCWCS through the Combined Communications Network (CCN) enterprise. The systems that the CCN operates, maintains, and sustains include the following:



These systems are dynamic and will be enhanced over time. Specific details regarding the SCWCS can be obtained from SCWCS management as required.

The objective of the SCWCS is to meet the operational requirements of the joint venture partners and their customers, while achieving the vision of the Homeland Security Interoperability Continuum at the highest level for the region.

## 700 P25 Phase II Voice System

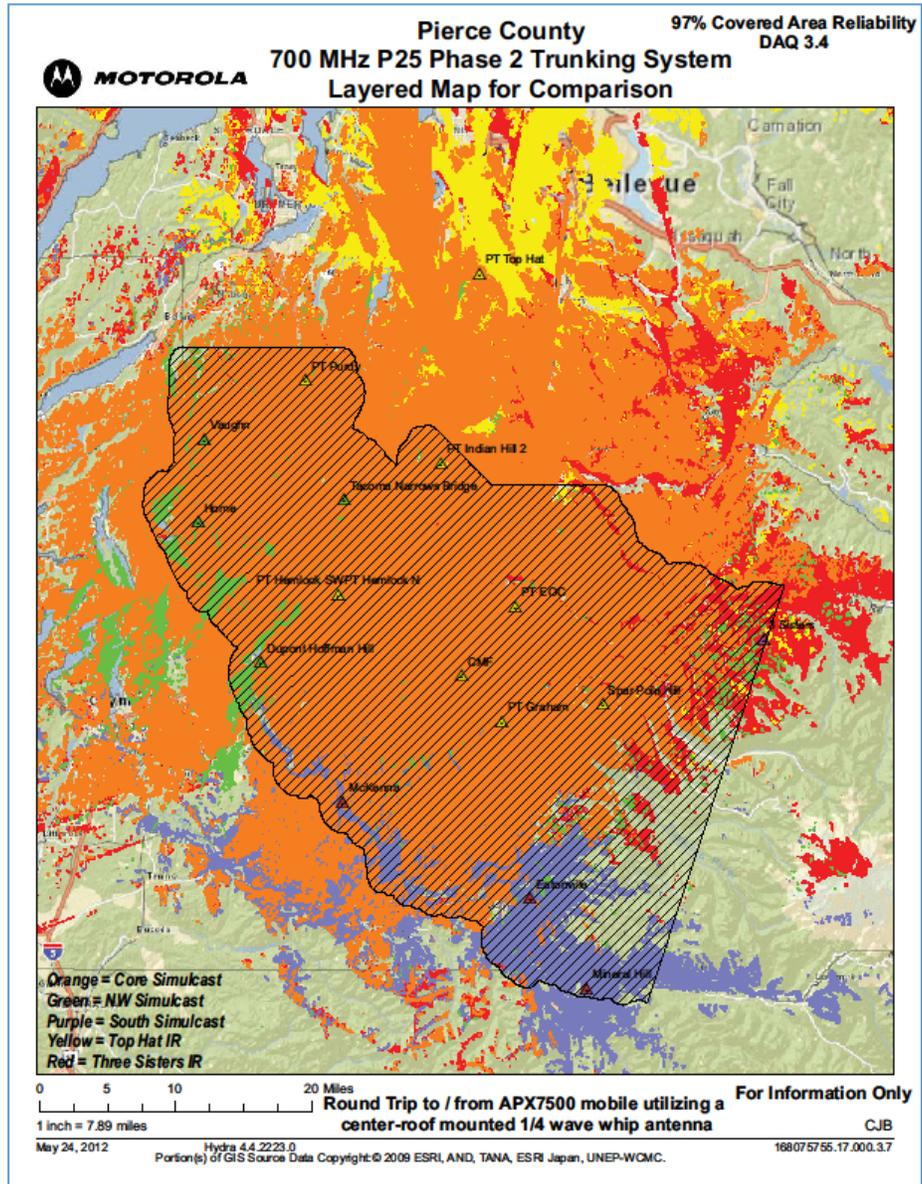
For day-to-day first responder communications the SCWCS provides a county-wide interoperable 700 MHz P25 radio system. This system consists of many subsystems that are all connected into a single master site. The master site is seismically rated, highly secure with redundant power systems during major disasters.

**Main Simulcast (Orange)** The main sub-system consists of 6 remote sites throughout the metropolitan areas of Pierce County providing coverage within the high population areas of Pierce County, the I-5 corridor into King and Thurston Counties.

**West Simulcast (Green)** The west sub-system consists of 4 remote sites throughout the northwest areas of Pierce County providing coverage within the rural population areas of west Pierce County along the Key Peninsula, City of Gig Harbor, and Kitsap and Mason Counties.

**South Simulcast (Purple)** The south sub-system consists of 3 remote sites throughout southeast Pierce County providing coverage within the southeast areas within the rural population of south Pierce County, the National Park Service, and into Lewis County.

**Two Multicast Sites (Red and Yellow)** In addition to the main, south, and west simulcast systems, there are two independent sites located in the Cascade Mountain range and in King County that further enhance coverage throughout the region. These enhanced coverage areas include Pierce County, King County, Snohomish County, Lewis County, Thurston County, and most of the major transportation corridors within those counties.



## **DISPATCH LOCATIONS**

There are six dispatch sites that are integrated into the SCWCS and two dispatch sites that are connected through an Inter RF Sub-System Interface (ISSI) connection.

- 1) Pierce Transit
- 2) SS911 35<sup>th</sup> Street Branch
- 3) SS911 Fife Branch
- 4) SS911 West Pierce Fire Branch
- 5) SS911 Records Branch
- 6) Pierce County Emergency Management
- 7) SS911 Puyallup Branch through an Inter RF Sub-System Interface (ISSI) connection making SCWCS radio resources available.
- 8) SS911 Tacoma Fire Branch through an Inter RF Sub-System Interface (ISSI) connection making SCWCS radio resources available.

## **UHF CAD/AVL DATA SYSTEM**

The UHF simulcast system consists of 6 remote sites throughout Pierce and King County providing coverage within the high population areas of Pierce and King Counties, the major transportation corridors, and the rural areas of Pierce, King, Kitsap, Thurston, and Snohomish Counties.

## **VHF HWY 410 SIMULCAST AND NON-SIMULCAST SYSTEM**

The VHF 410 System consists of 3 remote sites throughout the Highway 410 corridor of Pierce County providing coverage within the rural population areas of Pierce County between the City of Buckley and Crystal Mountain Ski Resort.

A VHF simulcast system provides coverage along Hwy 410 from Enumclaw east past Crystal Mountain. This hilly, mountainous terrain is difficult to cover with 700 MHz and therefore VHF coverage has been provided to enhance law enforcement and fire communications.

## **RECORDING SYSTEM**

The Recording System is a digital and analog recording network throughout all the dispatch centers. The recording system is integrated into multiple communication networks, CAD, CAD/AVL, and administrative and 911 phone systems.

## **BROADBAND MICROWAVE SYSTEM**

The Broadband Microwave System consists of 42 microwave units located at 23 sites throughout Pierce and King Counties. The broadband microwave provides redundant loop-protected connectivity between all the SCWCS remote, prime, and master sites.

## **COMMUNICATION FACILITIES**

A communication facility supports the RF infrastructure of the SCWCS such as:

- Communications Tower
- Shelter
- Backup Generator
- DC Power Systems
- Security Fencing and Lighting
- Fuel Inventory
- Lightning Suppression
- Associated equipment such as antennas, microwave dishes, etc.

## **Financial**

*Reference to Washington State Code RCW 39.34 Interlocal Cooperation Act. The Cooperative Governance Agreement authorizes an establishment for the use of a joint venture.*

### **Financial Philosophy**

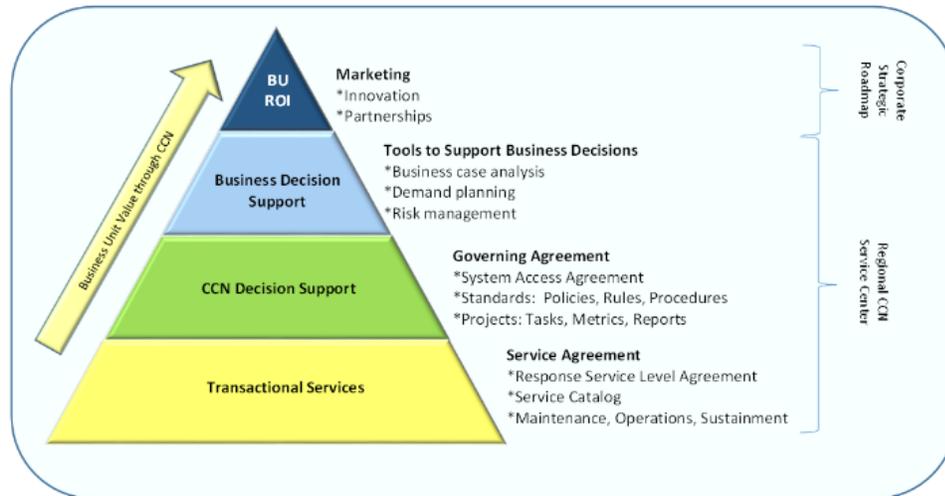
CCN's business philosophy is to operate, maintain and sustain the business and operation of the CCN and maintenance and sustainment of the SCWCS. We understand that our customers have unique needs that must be met. Given this understanding, our financial approach is:

- Meet Need - To meet our customers' needs at the lowest long-term cost
- Provide Reserves - To only generate enough revenues to cover sustainment
- Lean Processes - To operate, maintain and sustain at a minimum cost for services

### **Financial Planning Process**

Regular review and scanning of the marketplace will help the CCN enterprise stay current and anticipate project demand and regulatory or community mandates. Along with standard maintenance and sustaining the organization, there will be a need to enhance or create net new functionality and processes. This queue of work will be prioritized with input from key stakeholders, executive board, and customer advisory groups.

- Assess the business environment
- Confirm the business vision and objectives
- Identify the types of resources needed to achieve these objectives
- Quantify the amount of resource (labor, equipment, materials)
- Calculate the total cost of each type of resource
- Summarize the costs to create a budget
- Identify any risks and issues



## Fiscal Policies

CCN will use generally accepted accounting principles and methods in accounting for all revenues and expenses related to its business. CCN will follow all applicable accounting and fiscal policies established by the Pierce County Budget and Finance Department, County Code, Pierce Transit and state and federal laws related to its business and accounting.

## Funding Model

CCN uses a business model where revenues and reserves cover all expenses as they occur. Borrowing money to conduct business is discouraged and not anticipated.

## Full Cost of Services

CCN's business model is based on full cost accounting for all expenses associated with providing the products and services. Direct non-joint costs will be borne by the users. To determine the correct rates for the products and services we provide, it is important to allocate costs to the products and services provided. An analysis of these costs is shown in Appendix A.

The full costs include, but are not limited to:

- Overhead costs of the program and department
- Taxes and transfers
- Debt service
- Labor and benefits
- Supplies, materials and parts
- Fuel
- Fuel equipment maintenance, operation, preservation and improvement
- Service equipment used to perform work
- Equipment capital purchases
- Licenses to operate facilities and equipment
- Other costs associated with conducting business
- Customer direct costs will be directly charged to the customers with a markup for overhead.

## Financial Stability and Sustainability

CCN's business model assumes continuous work meeting the service and product needs of the SCWCS for at least the next 25 years. As such, business decisions will be made with a focus on meeting customer needs at the lowest long-term cost.

Ongoing evaluation of current business processes and potential best practice changes will create change management opportunities. Performing changes in an agile and iterative manner will reduce risk, provide low impact course corrections, and limit required retraction.



Industry mandates, and competitiveness is established using:

- Standards
- Certifications
- Credentials

The CCN will invest in these areas to provide the level of expertise required to operate the organization and achieve its Vision.

## Budget Planning

An annual budget will be adopted by the Executive Board.

A six year costs and revenues forecast will guide appropriate adjustments to the business model used by the CCN.

Documented business needs supported by a business case evaluation of the most cost effective method of meeting those needs, will guide decisions when addressing customer expectations.

CCN will advocate for sustainable equipment that supports long-term objectives considering all costs, including the initial purchase, maintenance and operation costs, salvage value, and impact to the environment and society.

## Fiscal Agent Responsibilities

Pierce County will serve as the Fiscal Agent for the CCN. The Fiscal agent will provide financial services to the CCN to include but not limited to; bill and collect revenues, process payments for expenditures, administer reserve accounts, develop annual budgets and produce financial statements. The Fiscal Agent will account for all CCN resources as a separate legal entity within its own set of accounts.

## Financial Reserves

Adequate reserves will be maintained to meet CCN's cash requirements. These reserves will include cash for the following business needs:

**Operating Reserve:** Maintain a minimum of 2 months average of budgeted operating expenses.

**Capital Reserve:** The reserve will provide funding for replacement costs, equipment renewal, or other capital needs to sustain the level of service required. The CCN will determine the monthly amount charged to the customer. This capital reserve will be reviewed annually and funded through system access fees (Appendix B).

### **System Access Fee Allocation**

Rates for services will be set each year prior to development of the next year’s budget. The rates set annually will include:

- Operations costs to support the OEM vendor requirements to be a certified network that includes required system reliability and robustness (99.999% uptime.)
- Maintenance costs that include total cost of ownership.
- Sustainment costs for hardware and software and equipment for their useful life.

The System Access Fee Allocation is shown in Appendix A.

### **System Access Fee Setting Plan**

Fees for products and services are reviewed annually and set as a monthly fee based on the cost of providing the products and services.

### **Cost of Services Provided to CCN**

The administrative and overhead transfers and costs allocated to equipment and services provided by Pierce Transit and Pierce County shall be based on the reasonably estimated costs for the services consumed by the CCN.

Approved expenditures incurred by Pierce Transit or Pierce County necessary to support operations of the joint venture including, but not limited to, the purchase of materials, supplies, parts, staff time, etc. will be reimbursed to the joint venture members.

## **SCWCS Standards**

### **System Overview**

The Single County Wide Communications Systems (SCWCS) is comprised of several technical subsystems that make up the mission critical communications for Pierce County/Transit and other customers. The radio subsystems include 700 MHz, APCO P25 Phase 2 (TDMA) compliant digital trunked radio system with Analog VHF Voice, UHF Data, and paging technologies. This can also include, but not limited to, the following subsystems: Subscriber, Microwave, Fiber, Networking, Dispatch, Recording, Security, Wireless Data, Spectrum Assets, and supporting Facilities which provide mission-critical, communications to first responder agencies and life-safety communications to transit operations serving the citizens and community of Pierce County and surrounding region. The Aviat broadband microwave backhaul network is used for interconnection of communications facilities throughout King, Pierce, and Thurston counties.

The SCWCS is expected to provide a high degree of reliability in its daily use, regardless of time of day, season, and weather conditions – for the service life of the system.

The CCN has designed the SCWCS to meet OEM standards and best engineering practices. Below, are a few of the standards the CCN operates to sustain the SCWCS.

## **System Reliability**

### **Grade of Service (GOS)**

The Single County Wide Communications Systems (SCWCS) leadership has adopted a talk group provisioning plan for all participating user agencies that, based upon trunked system capacity modeling at the time of, should provide a Grade of Service (GOS) of 1% during a busy loading period with no greater than 1 second of queued call (channel grant) time.

### **Future Capacity Planning**

As the system grows and additional users are added to the system the GOS must be maintained. Additional components and subsystems that are added onto the SCWCS will impact capacity and GOS of the SCWCS. Therefore, a calculated future loading analysis must be obtained from the system vendor(s) prior to adding any components, or subsystems.

### **Quality of Service (QOS)**

SCWCS is designed to provide a selection of call features and capabilities that can be customized on a per subscriber basis. When properly managed, these serve to increase the quality of communications based on feature sets and assigned priorities in both lightly and heavily loaded call conditions. The SCWCS has inherent redundancy design implemented by complementary combinations of hardware, software and topology.

### **Annual Experienced Downtime**

Notwithstanding unforeseen event (acts of God, force majeure, etc.), the SCWCS transport system has been designed and engineered for constant availability and 99.999% reliability. This translates into an annual experienced outage of approximately five (5) minutes per year. Current Factory Network Equipment (FNE) and transport equipment has the capability to electronically record and compile statistical information on the experienced outages over time. CCN shall retain, review and report downtime for all SCWCS subsystems on a regular basis.

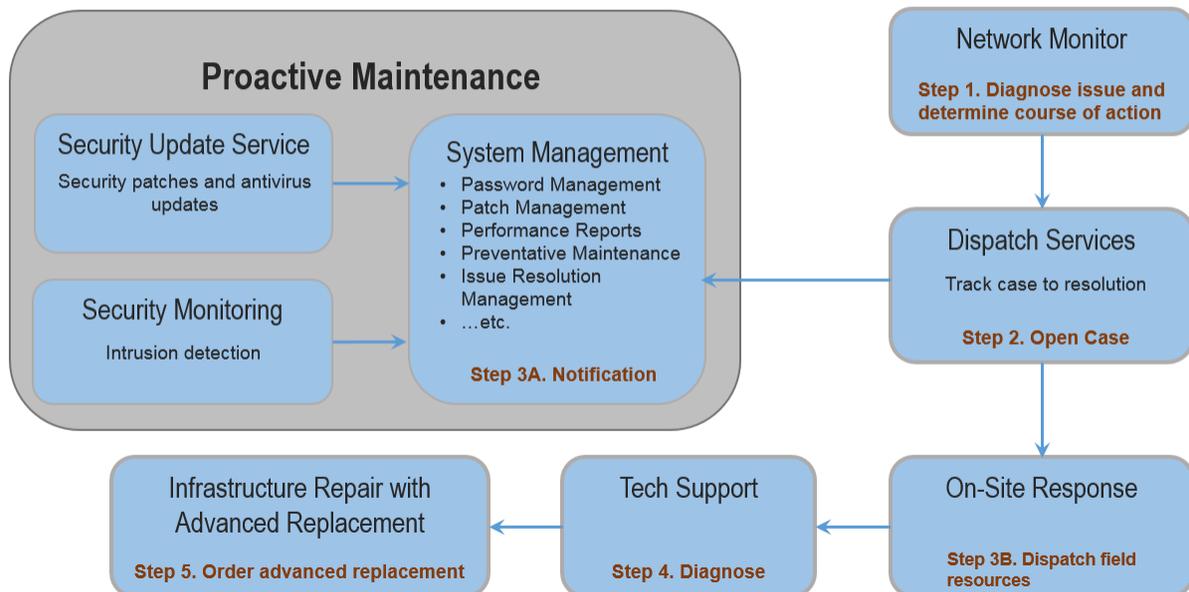
### **SCWCS Service Sustainment**

- Contracted OEM for initial services to maintain the SCWCS to ensure compliance with CCN standards and provide proactive maintenance through processes such as:
- Perform detailed program analysis with OEM vendor for network administration, system and technical services.
  - **System Upgrades** include a complete lifecycle package of hardware, software, and implementation services to maintain and sustain the ASTRO 25 system.
  - **Security Monitoring and Update Service** protects against system vulnerabilities that may compromise network security and threaten exposure of confidential information.

- The service delivers increased network availability, reduces maintenance costs, and optimizes use of technical resources. All updates, upgrades and patches will be pre-tested and validated for HP and Microsoft compatibility to minimize system interruptions.
- **Network Monitoring** 24 x 7 x 365 provides real-time network performance and stability monitoring and event detection predicting maintenance and service requirements and trends.
  - **Dispatch Service** ensures that local, trained and qualified CCN technicians will arrive at the customer's location to diagnose and restore the communications network 24 x 7 x 365.
  - **System Management** is the central coordination hub for all included issue resolution groups from the customer, to the network monitoring center, to the factory, to system engineering, etc. Deployment of additional Motorola resources are coordinated through System Management and system services are provided, such as:
    - Password management
    - Patch management
    - Performance reports
    - Preventative maintenance
    - Issue Resolution management
    - Etc.
  - **On-Site Response Coverage** is performed by trained and qualified CCN technicians backed by centralized Motorola resources and provide rapid system restoration.
  - **Technical Support** provides remote telephone support 24 x 7 x 365 specializing in diagnosis and resolution of system issues. A system lab is used to simulate and test and access to Motorola Development Engineering provides support for complex technical issues.
  - **Infrastructure Repair with Advanced Replacement** provides maximum preparedness in the event of infrastructure equipment replacement requirements and minimizes service disruption through a stock of OEM Field Replaceable Units or spare parts.
- The CCN growth strategy is to transition OEM contracted services to internal services as the organization develops and matures.

The CCN provides sustainable services to the SCWCS in order to meet the OEM standards through the following CCN Maintenance Process:

## CCN Maintenance Process



### Service to Customers

The CCN will have a Customer Service Agreement that affords the customers opportunities to access a catalogue of Customer Driven Services with the CCN, such as:

#### Technical Services

- Design
- Installation
- Maintenance
- Subscriber
  - Preventive Maintenance
  - On-demand Repairs
  - Software and Firmware updates
- Speed Measuring Devices
  - Preventive Maintenance
  - On-demand Repairs
  - Certification

#### Business Services

- Project Management
- Equipment Replacement Fund
- Benchmark and Statistical Analysis
- Lifecycle Cost Management

## Project Management Philosophy

The CCN will follow the Project Management Institute (PMI©) PMBOK methodology to ensure project and change is successfully implemented and risk exposure is minimized. Any change will be ushered with appropriate documentation and buy-in by the relevant leadership, teams developed to remove any talent gaps, and budget, scope, and timelines carefully monitored and controlled.

The integration of project management processes into the operations, maintenance, and sustainment activities will result in seamless deployments and handoffs from the project team. The CCN, under the

Knowledge Areas	Project Management Process Groups				
	Initiating Process Group	Planning Process Group	Executing Process Group	Monitoring & Controlling Process Group	Closing Process Group
Project Integration Management	Develop Project Charter	Develop Project Management Plan	Direct and Manage Project Execution	Monitoring and Control Project Work Perform Integrated Change Control	Close Project or Phase
Project Scope Management		Plan Scope Management Collect Requirements Define Scope Create WBS		Validate Scope Control Scope	
Project Time Management		Plan Schedule Management Define Activities Sequence Activities Estimate Activity Resources Estimate Activity Durations Develop Schedule		Control Schedule	
Project Cost Management		Plan Cost Management Estimate Costs Determine Budget		Control Costs	
Project Quality Management		Plan Quality Management	Perform Quality Assurance	Control Quality	
Project Human Resource Management		Plan Human Resource Management	Acquire Project Team Develop Project Team Manage Project Team		
Project Communications Management		Plan Communications Management	Manage Communications	Control Communications	
Project Risk Management		Plan Risk Management Identify Risks Perform Qualitative Risk Analysis Perform Quantitative Risk Analysis Plan Risk Responses		Control Risks	
Project Procurement Management		Plan Procurement Management	Conduct Procurements	Control Procurements	Close Procurements
Project Stakeholder Management	Identify Stakeholders	Plan Stakeholder Management	Manage Stakeholder Engagement	Control Stakeholder Engagement	

leadership of PC and PT will combine both organizations' extensive experience with project management to create a Project Management Office (PMO) that will guide, coach and mentor staff. They will instill accountability within the entire project team to take ownership for project success as defined by leadership using Specific, Measureable, Achievable, Realistic, and Time-based (SMART) goals.

The process followed will include the knowledge areas and process groups from PMI and include best practices and industry guidelines, see the table below.

## **Risk Management / Insurance**

CCN currently pays for general liability “insurance” through the County Risk Management Department. The county is self-insured, so annual premiums are established by the Risk Management Department.

### **Repair and Replacement of Damaged Equipment**

If equipment is damaged or lost by someone other than county staff, Risk Management will cover the cost of repair and pursue recovering expenses.

If equipment is damaged or lost by county staff and can be repaired, then Risk Management will cover the cost of repairs from the Self-Insurance Fund.

## Strengths, Weaknesses, Opportunities, Threats (SWOT) Analysis

STRENGTHS		OPPORTUNITIES	
1	Adaptable to change (continuous change management is ongoing)	9	Local and extended community is supportive
2	Complementary skillset and infrastructure in PT and PC	10	Market potential exists and can provide additional external funding
3	Aggregating complementary accreditation programs in PT and PC	11	Staffing and other resources can be tapped from partner agencies
4	Executive and Policy support	12	Knowledge transfer for regional approach
5	Cross-agency collaborative culture exists	13	Regional political integrity inherent with legislative influence
6	Adaptable and innovative	14	Decisions made with collaboration and broad group knowledge-base
7	Culture of treating all customers equitably	15	Cross-sharing of ideas from a diverse and experienced talent pool
8	Leverages leading edge technologies with appropriate risk	16	Developing robust and sustainable complementary technical skillset
WEAKNESSES		THREATS	
17	Current workload surpasses staffing capacity	21	Federal unfunded mandates may be adversely impactful to ongoing operations
18	Offices and resources are siloed and geographically disparate	22	State and local unfunded mandates may be adversely impactful to ongoing operations
19	Business processes are in early development phases	23	Part of CCN revenue streams are cyclical and unpredictable
20	Long-term customer relationships are not yet mature and need significant attention in the near-term	24	Business environment is highly influenced by the political climate
		25	Changing customer-base from original independent customer-bases
		26	Priorities may change with election cycles and subsequent political structure

## Organization and Staffing

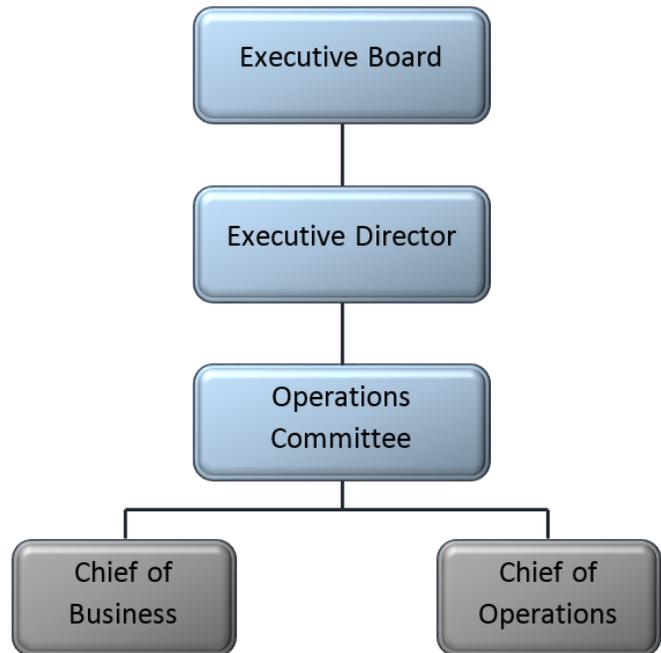
### Oversight

CCN operates under the direction of the CCN Executive Board comprised of Pierce Transit Chief Executive Officer (or designee), the Pierce Transit Chair of the Transit Board (or designee), the Pierce County Executive (or designee,) and the Pierce County Council Chair (or designee).

### Daily Operations and Management

Operations and management is led by CCN Operations Committee with oversight of the Executive Director.

Daily operations and management will be carried out by the CCN Chief of Operations and the CCN Chief of Business with oversight of the CCN Executive Director.



### Training and Development

A talented and engaged workforce supports and sustains the organization's operations. Training opportunities and appropriate technology will support the objective of providing effective maintenance and repair using efficient, lean, and environmentally sound practices.

Each position in the organization will maintain a training plan consisting of:

- Human Resources required training
- Safety training
- Project management training
- Emergency Response (NIMS) training
- Technical training
- Professional development training
- Certification training

CCN management regularly, but not less than annually, reviews each employee's performance, goals, and training and development needs by working with the employee to determine and approve training needed to meet their job requirements and the mission of the CCN.

# **Asset Management**

## **Service Equipment Asset Management**

The equipment used to meet customer needs at the lowest long-term cost includes:

- Setting levels of service with customer;
- A systematic measurement of equipment condition;
- A thorough inventory;
- A model for determining when to replace equipment at the point of lowest cost in the lifecycle of the equipment;
- A method for recording equipment use;
- Accounting of all costs for each piece of equipment;
- A method of assessing risk and maintaining equipment to account for the proper risk; and
- Performance measure to provide resource management tools.

## **Facilities Asset Management**

The delivery of products and services requires adequate facilities for CCN to perform work. Whether facilities are owned, leased or rented, the full cost of operating a facility is assumed in the CCN cost model. Maintaining and operating these facilities impact the long-term cost of providing services.

Facility Asset Management is as important for CCN as is the asset management related to the equipment itself. To account for all costs of delivering services at the lowest long-term cost, the facilities which CCN operate will be carefully managed.

Facilities owned by CCN will be managed through the CCN and member agency staff. The facilities asset management system will have the following elements:

- Proposed level of service;
- A method of measuring the facility condition compared to this level of service;
- An inventory of elements of the facilities;
- A model for determining when to replace facility elements at the point of lowest cost in the lifecycle of the element;
- A method for recording facility element user, as appropriate;
- Accounting of all costs for elements of the facility;
- A method of assessing risk and maintaining facilities to account for the proper risk; and
- Performance measures to provide resource management tools.

## **Major Processes**

Implementation processes using a sequence of activities provides for the delivery of products and services. By recognizing and understanding these processes, new employees will understand how to effectively deliver these products and services, and recognize processes improvement opportunities for gained efficiency, effectiveness and economy.

The processes used in delivering products and services are:

- Business Case Evaluations
- To determine what, if any, products and services best accomplish the work, and
- To determine the best method to acquire products and services (in-house or contracted)
- Procurement of Equipment
- Equipment modifications the customer needs to accomplish their work
- Procurement and delivery of parts and supplies
- Preventive maintenance
- Product sustainment
- Repairs
- Equipment disposal
- Facility maintenance and operations
- Asset management systems
- Business planning
- Project management

The processes used in delivering technical services are:

- Equipment modifications the customer needs to accomplish their work
- Procurement and delivery of parts and supplies
- Preventative maintenance
- Repairs
- Facility maintenance and operations
- Business planning
- Project management

## Appendix A. System Access Fee Allocation

The fee allocation or rate structure is developed to include the complete inventory and customer asset. These include:

- Remaining useful life
- Engineering description
- Location of the asset(s)
- Physical ratings, characteristics and conditions
- As-built documentation
- Warranties
- Replacement costs using current day values
- Operating cost
- Usage statistics establishing equitable distribution

The table below represents a snapshot summary of current day cost of service or rate allocation.

### **AGENCY SYSTEM ACCESS RATE ALLOCATION**

*(Names have been substituted for confidentiality)*

Row Labels	QUANTITY	Annual Cost Allocation- infrastructure	CCN Maintenance Budget	TOTAL	Monthly Total
<b>FAITH</b>	1400	\$769,530	\$325,279	\$1,094,808	\$91,234
ABB4	84	\$31,873	\$19,517	\$51,390	\$4,283
ACB21	18	\$2,665	\$4,182	\$6,848	\$571
ACC1	40	\$24,432	\$9,294	\$33,726	\$2,811
ATOPA	39	\$23,822	\$9,061	\$32,883	\$2,740
BIRTH171	17	\$10,384	\$3,950	\$14,334	\$1,194
BUFA	2	\$1,222	\$465	\$1,686	\$141
CAD12	25	\$15,270	\$5,809	\$21,079	\$1,757
DEEP1	20	\$7,589	\$4,647	\$12,236	\$1,020
HAPO101	53	\$32,373	\$12,314	\$44,687	\$3,724
HEART100	20	\$12,216	\$4,647	\$16,863	\$1,405
JULIE100	86	\$52,530	\$19,981	\$72,511	\$6,043
KISS120	71	\$43,368	\$16,496	\$59,864	\$4,989
LOVE900	121	\$73,908	\$28,113	\$102,021	\$8,502
MANA	12	\$7,330	\$2,788	\$10,118	\$843
MEDO	24	\$14,659	\$5,576	\$20,236	\$1,686
OHENE	152	\$92,843	\$35,316	\$128,159	\$10,680
OKUSIE1	42	\$25,654	\$9,758	\$35,412	\$2,951
PHAN	164	\$62,229	\$38,104	\$100,333	\$8,361

Row Labels	QUANTITY	Annual Cost Allocation – infrastructure	CCN Maintenance Budget	TOTAL	Monthly Total
POPO143	33	\$20,157	\$7,667	\$27,824	\$2,319
POZO	66	\$25,043	\$15,335	\$40,378	\$3,365
ROSE21	218	\$133,157	\$50,651	\$183,807	\$15,317
SOC230	37	\$22,600	\$8,597	\$31,197	\$2,600
SUN404	56	\$34,205	\$13,011	\$47,217	\$3,935
INTEGRITY	1112	\$473,666	\$258,364	\$732,031	\$61,003
HEAV210	146	\$62,190	\$33,922	\$96,112	\$8,009
OHEMAA	738	\$314,358	\$171,468	\$485,826	\$40,486
SHA	228	\$97,119	\$52,974	\$150,093	\$12,508
<b>HONESTY</b>	1792	\$766,497	\$416,357	\$1,182,854	\$98,571
AB1	10	\$6,108	\$2,323	\$8,432	\$703
AB2	14	\$8,551	\$3,253	\$11,804	\$984
ADWOA	4	\$1,518	\$929	\$2,447	\$204
AKUA	1400	\$531,224	\$325,279	\$856,502	\$71,375
AMA	2	\$759	\$465	\$1,224	\$102
AMANDA	3	\$1,832	\$697	\$2,529	\$211
EM120	19	\$11,605	\$4,414	\$16,020	\$1,335
EMILY	2	\$759	\$465	\$1,224	\$102
GABBY	20	\$12,216	\$4,647	\$16,863	\$1,405
JCS2020	11	\$6,719	\$2,556	\$9,275	\$773
KWAKU	2	\$759	\$465	\$1,224	\$102
KWAME	4	\$1,518	\$929	\$2,447	\$204
OBOLO	25	\$15,270	\$5,809	\$21,079	\$1,757
OWURA	2	\$759	\$465	\$1,224	\$102
POKUA	51	\$31,151	\$11,849	\$43,001	\$3,583
POL203	174	\$106,281	\$40,428	\$146,709	\$12,226
THEA101	4	\$2,443	\$929	\$3,373	\$281
TIWAA	43	\$26,265	\$9,991	\$36,256	\$3,021
YAA	2	\$759	\$465	\$1,224	\$102
<b>Grand Total</b>	<b>4304</b>	<b>\$2,009,692</b>	<b>\$1,000,000</b>	<b>\$3,009,692</b>	<b>\$250,808</b>

## **Appendix B. Accumulated Capital Reserve**

### **6 Year Projection for Infrastructure Replacement with 2.3% AGR**

<b>System</b>	<b>YR2016</b>	<b>YR2017</b>	<b>YR2018</b>	<b>YR2019</b>	<b>YR2020</b>	<b>YR2021</b>
<b>700 SYSTEM</b>	<b>\$1,743,253</b>	<b>\$1,783,348</b>	<b>\$1,824,365</b>	<b>\$1,866,325</b>	<b>\$1,909,251</b>	<b>\$1,953,164</b>
DC Power Systems)	\$98,255	\$100,515	\$102,826	\$105,191	\$107,611	\$110,086
Generator 24/7/365 Operation	\$10,370	\$10,608	\$10,852	\$11,102	\$11,357	\$11,618
Generator Backup Only	\$26,080	\$26,680	\$27,294	\$27,922	\$28,564	\$29,221
Infrastructure Supporting Equipment	\$50,414	\$51,573	\$52,759	\$53,973	\$55,214	\$56,484
Infrastructure System	\$1,200,492	\$1,228,103	\$1,256,349	\$1,285,245	\$1,314,806	\$1,345,046
Transmitting Building	\$88,752	\$90,793	\$92,882	\$95,018	\$97,203	\$99,439
Transmitting Building HVAC	\$362	\$370	\$379	\$387	\$396	\$405
Transmitting Infrastructure)	\$170,467	\$174,387	\$178,398	\$182,501	\$186,699	\$190,993
Transmitting Tower)	\$98,063	\$100,318	\$102,625	\$104,986	\$107,400	\$109,871
<b>UHF DATA</b>	<b>\$134,056</b>	<b>\$137,139</b>	<b>\$140,293</b>	<b>\$143,520</b>	<b>\$146,821</b>	<b>\$150,198</b>
Infrastructure Supporting Equipment	\$6,073	\$6,213	\$6,356	\$6,502	\$6,652	\$6,805
Infrastructure System	\$125,652	\$128,542	\$131,498	\$134,523	\$137,617	\$140,782
Transmitting Infrastructure	\$2,330	\$2,384	\$2,439	\$2,495	\$2,552	\$2,611
<b>VHF 410</b>	<b>\$132,384</b>	<b>\$135,429</b>	<b>\$138,543</b>	<b>\$141,730</b>	<b>\$144,990</b>	<b>\$148,324</b>
DC Power Systems)	\$31,924	\$32,658	\$33,410	\$34,178	\$34,964	\$35,768
Infrastructure Supporting Equipment	\$265	\$271	\$277	\$284	\$290	\$297
Infrastructure System)	\$99,636	\$101,927	\$104,272	\$106,670	\$109,123	\$111,633
Transmitting Building)	\$219	\$224	\$229	\$234	\$240	\$245
Transmitting Tower)	\$340	\$348	\$356	\$364	\$372	\$381
<b>Annual Contribution to Reserve</b>	<b>\$2,009,692</b>	<b>\$2,055,915</b>	<b>\$2,103,201</b>	<b>\$2,151,575</b>	<b>\$2,201,061</b>	<b>\$2,251,686</b>
<b>Cumulative Reserve Balance</b>	<b>\$2,009,692</b>	<b>\$4,065,608</b>	<b>\$6,168,809</b>	<b>\$8,320,384</b>	<b>\$10,521,446</b>	<b>\$12,773,131</b>

## Appendix C. Facilities List

### Pierce County Separately Owned/Leased Facilities:

Site Name	Location	Bldg	Tower	Generator	Lessee	Land Owner/ Lessor
Mineral Hill Remote site (S)	46°44'36.65" N 122°10'05.47" W				X	TPU
Purdy Prime (W) and Remote site (M)	14515 54 <sup>th</sup> avenue NW Gig Harbor, 98332				N/A	Pierce County
DuPont Remote repeater (W)	1650 Forman Road, Lakewood, WA.	X	X	X	X	City of DuPont
Home Remote repeater (W)	17782 16 <sup>th</sup> St KP S Lakebay WA 98394	X		X	X	SBA
Vaughn Remote repeater (W)	17500 80 <sup>th</sup> St KP N Vaughn WA 98394	X		X	X	Verizon
T N B Remote Repeater (W)	47°15'54.29" N 122°32'51.49" W		X		N/A	WSDOT
CMF Prime (M)	4812 196 <sup>th</sup> Street East Spanaway WA 98387	X	X	X	N/A	Pierce County
Graham Hill Remote repeater (M)	25016 Meridian Graham WA 98338	X	X		N/A	Pierce County
Spar Pole Remote repeater (M)	47°02'51.39" N 122°08'38.85" W	X		X	X	Crown Hancock
Eatonville Prime (S)	46008 Alder Cutoff Road Eatonville WA 98328	X	X	X	N/A	Pierce County
McKenna Remote repeater (S)	346 <sup>th</sup> Street S and highway 507 Roy WA 98580	X		X	X	CTI
3 Sisters IR	47°07'00.35" N 121°53'33.59" W	X	X	X	N/A	Pierce County
SS911 Dispatch	2415 South 35 <sup>th</sup> Street Tacoma, WA 98409	X	X	X	N/A	Pierce County
DEM / Master site	2501 So. 35 <sup>th</sup> Street, suite D Tacoma, WA 98409	X		X	N/A	Pierce County

**Pierce Transit Separately Owned/Leased Facilities:**

Site Name	Location	Bldg	Tower	Generator	Lessee	Land Owner/Lessor
Purdy Prime (W)	14515 54 <sup>th</sup> avenue NW Gig Harbor, 98332	X	X	X	N/A	Pierce County
Puyallup Remote repeater (M)	110 39 <sup>th</sup> Ave SE Puyallup WA 98374	X	X		N/A	City of Puyallup
Hemlock Remote repeater (M)	10101 Hemlock Avenue Lakewood, WA	X		X	X	Lakewood WATER Dist.
Graham Hill Remote repeater (M)	25016 Meridian Graham WA 98338			X	N/A	Pierce County
Indian Hill Remote repeater (M)	4819 37 <sup>th</sup> Ave NE Tacoma WA 98422			X	X	PRC/CTI
Purdy Remote repeater (M)	14515 54 <sup>th</sup> avenue NW Gig Harbor, 98332	X	X	X	N/A	Pierce County
Top Hat IR Site	206 SW 112 <sup>th</sup> Street, Seattle WA 98146				X	King County
Pierce Transit (Dispatch-Building 5)	3701 96 <sup>th</sup> Street Southwest Lakewood, WA 98499	X		X	N/A	Transit
Pierce Transit (Building 4)	3701 96 <sup>th</sup> Street Southwest Lakewood, WA 98499	X	X	X	N/A	Transit

## **Appendix D. Glossary**

Acronym	
ANSI	American National Standards Institute
APCO	Association of Public Safety Communication Officials
ASK	Advanced System Key
CAD/AVL	Computer Aided Dispatch / Automatic Vehicle Locator
CAI	Common Air Interface
CCN	Combined Communications Network Enterprise
CEN	Customer Enterprise Network
CGA	Cooperative Governance Agreement
CJIS	Criminal Justice Information System
DAQ	Delivered Audio Quality
DSR	Dynamic System Resilience
FAA	Federal Aviation Administration
FCC	Federal Communications Commission
FDMA	Frequency Division Multiple Access
FNE	Fixed Network Equipment
FTA	Federal Transit Administration
GASB	Government Accounting Standards Board
GOS	Grade of Service
HVAC	Heating, Ventilation, Air Conditioning
ID	Identification
IP	Internet Protocol
ISSI	Inter Sub System Interface
MOU	Memorandum of Understanding
MTBF	Mean Time Between Failures
MTTR	Mean Time to Repair
NM	Network Management
OEM	Original Equipment Manufacturer
POC	Point of Contact
PPM	Preventive and Predictive Maintenance
PTT	Push-To-Talk
RCM	
RF	Radio Frequency
SAA	System Access Agreement
SCWCS	Single County Wide Communications System
SLA	Service Level Agreement
SNMP	Simple Network Management Protocol
SPU	Subscriber Programming Unit

SSI	Sensitive Security Information
TCO	Total Cost of Ownership
TDMA	Time Division Multiple Access
TIA	Telecommunications Industry Association
UEM	Universal Event Manager
UHF	Ultra High Frequency
VHF	Very High Frequency

## **Appendix E. Definitions**

<b>Term</b>	<b>Description</b>
Access Charges	Charges applied to customers of the Single County-Wide Communication System (SCWCS) through System Access Agreements (SAA) to recover administration, operating, maintenance, capital replacement and depreciation costs of the SCWCS infrastructure/sub-systems.
Agreement	The Cooperative Governance Agreement, as set out in this document, and as amended from time to time.
Beneficial Use	When Customer first uses the SCWCS or a Subsystem for operational purposes (excluding training or testing).
Beta Period	The time period between this executed agreement and the cutover for beneficial use by the Customer having sustained Operational use of the SCWCS as declared by the CCN.
Bonds	Collectively, bonds, notes or other evidences of borrowing issued by either Party to provide interim and/or permanent financing and thereafter, to finance or refinance SCWCS equipment, completion, expansion and other capital improvements essential to establish and maintain the SCWCS.
Business Plan	A plan that defines the organizational structure and operational activities of the overall business of the Combined Communications Network (CCN) Enterprise.
Capital Contribution	Each Party that Party's percentage multiplied by the principal of and interest on Bonds, as the same shall become due and payable and administrative expenses with respect to Bonds.
Certified Network	A network configuration that has been tested within the manufacturer labs and guaranteed by the manufacturer Product Group(s) to provide stable performance and that meets or exceeds applicable performance standards (e.g. Project 25, Phase II). The manufacturer has selected its standard configuration, and highly recommends it to the customer. If a customer chooses to deviate from the manufacturer standard/certified configuration, the manufacturer cannot be held accountable for the performance and/or stability of the network.
Code Plug	The software programmed in a Sub-Subscriber that controls the Sub-Subscriber's functions and communication capabilities.
Combined Communications Network Enterprise	Represents a Pierce County Enterprise agency formed to exercise the intent of the Interlocal Agreement pursuant to Ch. 39.34 RCW and this Agreement by the Parties: All authorized costs and activities relating to the administration, design, development, acquisition and installation of the SCWCS and equipment that interfaces with the SCWCS; the Enterprise agency that provides the overall management (system administration, maintenance, operations, and replacement) on behalf of the system owners (Pierce Transit and Pierce County), as established in the Agreement. This includes but not limited to the following Sub-systems: Radio Sub-system,

Term	Description
	Microwave Sub-system, Fiber Sub-system, Networking Sub-System, Dispatch Sub-systems, Recording Sub-systems, Security Sub-Systems, Wireless Data Sub-systems, Spectrum Assets and supporting Facilities that comprise the SCWCS.
Criminal Justice Information System	A division of the <a href="#">United States Federal Bureau of Investigation</a> (FBI). The CJIS was established in February 1992 and it is the largest division in the FBI. The Parties of this Agreement have established the CJIS protocols for its personnel background security verification.
Customers	Any user(s) or agency(s) that receive access to the SCWCS for their operational needs, or services of the Combined Communications Network Enterprise. This can mean, but not limited to, a person, group, organization, a general government agency (i.e. local, state, or federal), a first responder agency, jurisdiction, or other entities that request to have a System Access Agreement (SAA) or Customer Service Agreement (CSA) with the CCN.
Customer Advisory Committee	The Advisory Committee formed pursuant to Article #15 of this Agreement. The Advisory Committee is responsible for recommending operational requirements, and for providing inclusive input ensuring optimal communication services of the CCN. Under the direction and supervision of the CCN Deputy Director, the Customer Advisory Committee has the responsibility for management of their individual agency communication requirements and provides valuable input toward the development of SCWCS requirements, procedures and policies under the direction and guidance of the CCN Deputy Director.
Customer Service Agreement	The Agreement describing user and CCN responsibilities and requirements supporting quality and efficient services.
Customers	A user(s) that receive services of the Combined Communications Network. This can mean a person, group, organization, agency, jurisdiction, or other entities that request to have a System Access Agreement (SAA) or Customer Service Agreement (CSA) with the CCN.
Cyber Security	Also known as IT Security is information security as applied to computers and networks. Cyber Security is critically important with today's advanced communications technologies use of IP-based private networks. The field covers all the processes and mechanisms by which computer-based equipment, information and services are protected from unintended or unauthorized access, change or destruction. Computer security also includes protection from unplanned events and natural disasters.
Designated Representative	The person, as selected by each customer agency by his or her Executive designee to fulfill the primary or alternate Customer Advisory Committee membership role or others committees as established by the CCN.
Disaster	Any unplanned interruption of SCWCS operations, which materially affects CCN's ability to provide communication services to SCWCS Customers.

Term	Description
Dispatch Sub-Systems	The Dispatch Sub-System is a component of the overall SCWCS. This includes operator position work stations and other equipment that support dispatch operations. As example, this is a means of communicating from a fixed or temporary location to the SCWCS, such as a 9-1-1 Center or a Mobile Command Unit.
Dynamic System Resilience	Motorola's Astro 25 system provides compliant communications that are reliability and redundancy to maintain operations under a crisis event.
Effective Date	That date upon which the last Party (Customer) executes this Agreement.
Emergency Alert	A Project 25 industry standard feature that, when enabled, allows an eligible SCWCS Customers to transmit emergency alerts.
Emergency Reserve Funds	A fund that has been approved by the CCN Executive Board to maintain a minimum emergency reserve fund to support major unanticipated repairs due to manmade and/or natural disasters and catastrophic failures.
Enterprise Services	A business organization providing activities for which a fee is charged to internal or external users for goods or services. If an activity's principal revenue source meets any one of the following criteria, it is required to be reported as an enterprise: (1) an activity financed with debt that is secured solely by pledge of the net revenues from fees and charges for the activity; (2) laws or regulations which require that the activity's costs of providing services, including capital costs, be recovered with fees and charges, rather than with taxes or similar revenues; or (3) pricing policies which establish fees and charges designed to recover the activity's costs, including capital costs (RCW 43.82.125).
Executive Board	The governing board created pursuant to Article #9 of this Agreement. The CCN Executive Board is currently made up of the Parties of this Agreement. The Executive Board ensures that all local, state and federal regulatory requirements are met and maintained.
Exhibits	Document referred within a contract or agreement that established quantities and/or specifications for the items to be delivered under the respective contract or agreement.
Facilities	Civil components which include real estate, buildings, towers, power systems, and other associated equipment that comprise a SCWCS site and the CCN.
Fiber Sub-System	A transport component within the SCWCS. This includes fiber cables, multiplexing equipment, and other associated components that provide optical connectivity between sites.
Force Majeur	An event, circumstance, or act of a third party that is beyond a Party's reasonable control (e.g., an act of God, an act of the public enemy, an act of a government entity, strikes or other labor disturbances, hurricanes, earthquakes, fires, floods, epidemics, embargoes, war, and riots).
Information Assurance	Information operations that protect and defend information and information systems by ensuring their availability, integrity, authentication,

Term	Description
	confidentiality, and non-repudiation. This includes providing for restoration of information systems by incorporating protection, detection, and reaction capabilities.
Information Security	Sensitive Security Information (SSI) is information that, if publicly released, would be <i>detrimental to transportation security</i> , as defined by Federal regulation 49 C.F.R. Part 1520. Although SSI is not classified information, there are specific procedures for recognizing, marking, protecting, safely sharing, and destroying SSI.
Key Management Sub-Systems	Equipment and means by which radio programming and encryption keys are managed and distributed by the CCN.
Lean Management	Principles and methods to both identify and then implement the most efficient, value added way to provide government services and provide more value for tax-supported programs and services.
Majority Vote	A decision of the Executive Board by a simple majority of Members present and voting.
Members	Initially, the Parties (Pierce Transit and Pierce County).
Microwave Sub-System	The Microwave Sub-System is a transport component of the overall Combined Communications Network. This includes transceivers, dish antennas, wave guides, dehydration and pressurization equipment and other associated components that provide wireless connectivity between sites.
Network Communications Center	An Office that serves as the engine that gets things efficiently and effectively done within the CCN organization which key role is to support the SCWCS' operation and communications center, which manages the technical operation of the SCWCS on a 24/7 basis.
Network Sub-System	The Network Sub-System is a component of the overall Combined Communications Network. This includes switches, routers, servers, software, and other supporting equipment that make up components of the radio system and auxiliary alarming, reporting and data collection systems.
Non-proprietary Talkgroup	A Talk group established by the CCN for the benefit and good of several CCN Customers utilizing the SCWCS. An example of a Non-Propriety Talk group may provide mutual aid emergency communications between agencies. The CCN administration grants access to these Talk groups by proper request and with demonstrated need.
Organizational Chart	The Organizational Chart outlines the positions and titles within the hierarchy of the CCN.
P25	In 1989, the Association of Public Safety Communications Officials (APCO) defined a new standard for Public Safety communications radio systems. This standard is known as APCO Project 25 (P25). The objective for P25 radio systems provides an open platform allowing first responder to communicate with each other across manufacturer devices and infrastructure.
Physical Security	<b>Example:</b> Infrastructure hardening of critical communication infrastructure sites from threats to security such as vandalism due to copper theft.

Term	Description
	Infrastructure hardening is defined as the act of applying security to the infrastructure including but not limited to: Access Control Systems, Video Monitoring Systems, and Physical Barriers.
Presiding Officer	The Presiding Officer is an Executive Board member and is appointed by the Executive Board to serve as the acting Chair of the Executive Board. The Presiding Officer presides over meetings and conducts business as assigned by the Executive Board.
Priority Access	An assigned level of system access that determines the choice of access to the Sub-Subscriber System between two or more Sub-Subscriber Units seeking use simultaneously.
Primary Dispatch System	A communications system upon which the Customer, User, its agents, employees or assigns rely primarily when it desires or attempts the engagement of Sub-Subscriber communications or Sub-Subscriber transmissions of energy among its Sub-Subscriber units.
Program Manager	A position within the CCN that manages the PMO and ensures operational integrity of the SCWCS and CCN projects. The PM oversees multiple, related projects and their resources to achieve strategic business goals; ensures the success of all SCWCS programs, grouping related projects together to realize organizational benefits not available if they were managed separately; defines projects, assigns project managers and oversees programs such as but not limited to, lean management, analytics and overall system performance measures.
Project Management Office	An Office that serves as the engine that gets things efficiently and effectively done within the CCN organization. The PMO also serves as a home for best practices and implementation of project and program management, ensuring overall strategic success of the Parties. PMOs serve as enablers of organizational change, and are logically suited to convert the energy of ideas into the currency of competitive advantage.
Proprietary Sub-Subscriber System	A non-SCWCS Sub-Subscriber system that may be programmed into a SCWCS Customer's Sub-Subscriber for the purpose of interoperability. The CCN does support programming of non-SCWCS proprietary Sub-Subscriber systems.
Proprietary Talkgroup	A Talk group assigned exclusively to Customer(s) for use during their operational duties. This Talk group may only be shared with another Customer agency(s) upon the CCN receiving the written approval of the Customer agency that established the Talk group.
Public Safety Answering Point	A call center responsible for answering 9-1-1 calls to an emergency phone number for police, firefighting, and ambulance services. Trained telephone operators are also usually responsible for dispatching or transferring these emergency services.
Radio Sub-System	The Radio Sub-System is a component of the overall Combined Communications Network. This includes radio transmitter and receiver equipment, and supporting equipment.

Term	Description
Recording Sub-System	The Recording Sub-System is a component of the overall Combined Communications Network. This includes Logging Recorder servers, Archive servers, and supporting equipment.
Security Sub-Systems	The Security Sub-System is a component of the overall Combined Communications Network that addresses policies, procedures and equipment that ensures the overall security of the SCWCS. This includes Information Security, Physical Security, Cyber Security and Personnel Background Security as outlined below.
Senior Program Manager	The Senior Program Manager represents the Customer Advisory Board interests and makes decisions on issues related to their agency's day-to-day operation and any urgent or emergency operational or repair decisions. In coordination with the Customer Advisory Council, the Senior Program Manager establishes policies, procedures, contracts, organizations, and agreements that provide the service levels as defined in the CCN Customer Service Agreement (CSA).
Service Level Agreement	The Service Level Agreement (SLA) outlines the operations and maintenance (O&M) services required for member(s) of the CCN or cooperative agencies seeking interoperable communications, with the SCWCS. An example of a cooperative agency would be WSP, having an ISSI connection or connecting other communications infrastructure to the SCWCS. Execution of the services in support within the SLA will be by qualified personnel who have Original Equipment Manufacturer (OEM) technical training and equipment to deliver required System infrastructure O&M services. Transportation, tools, materials, technical support and other items necessary to conform to the SLA are required services. The SLA applies to the member and/or cooperative agencies, and any vendors or sub-contractors engaged to fulfill the requirements of the SLA.
Service Provider	The entity under contract with the Customer to service and maintain Customer's Sub-Subscriber units.
Single County Wide Communications System	The existing SCWCS consists of all of the technical subsystems. This includes the following Sub-systems: Radio Sub-systems, Microwave Sub-systems, Fiber Sub-systems, Networking Sub-Systems, Dispatch Sub-systems, Recording Sub-systems, Security Sub-Systems, Wireless Data Sub-systems, Spectrum Assets, and supporting Facilities. This can also include (but not limited to) VHF, UHF, 700 and 800 MHz and microwave system technologies.
Site Failsafe	Site Failsafe mode occurs when the trunked simulcast remote site detects a link failure to the comparators at the trunked simulcast prime site, or the trunked simulcast prime site is not functioning properly.
Site Trunking	A site in Site trunking mode functions as a standalone trunking system and is under the control of the site or subsystem controller.
Subscriber Equipment	Portable, mobile and console equipment that is intended to operate on the SCWCS infrastructure for day-to-day intra-agency communications and/or

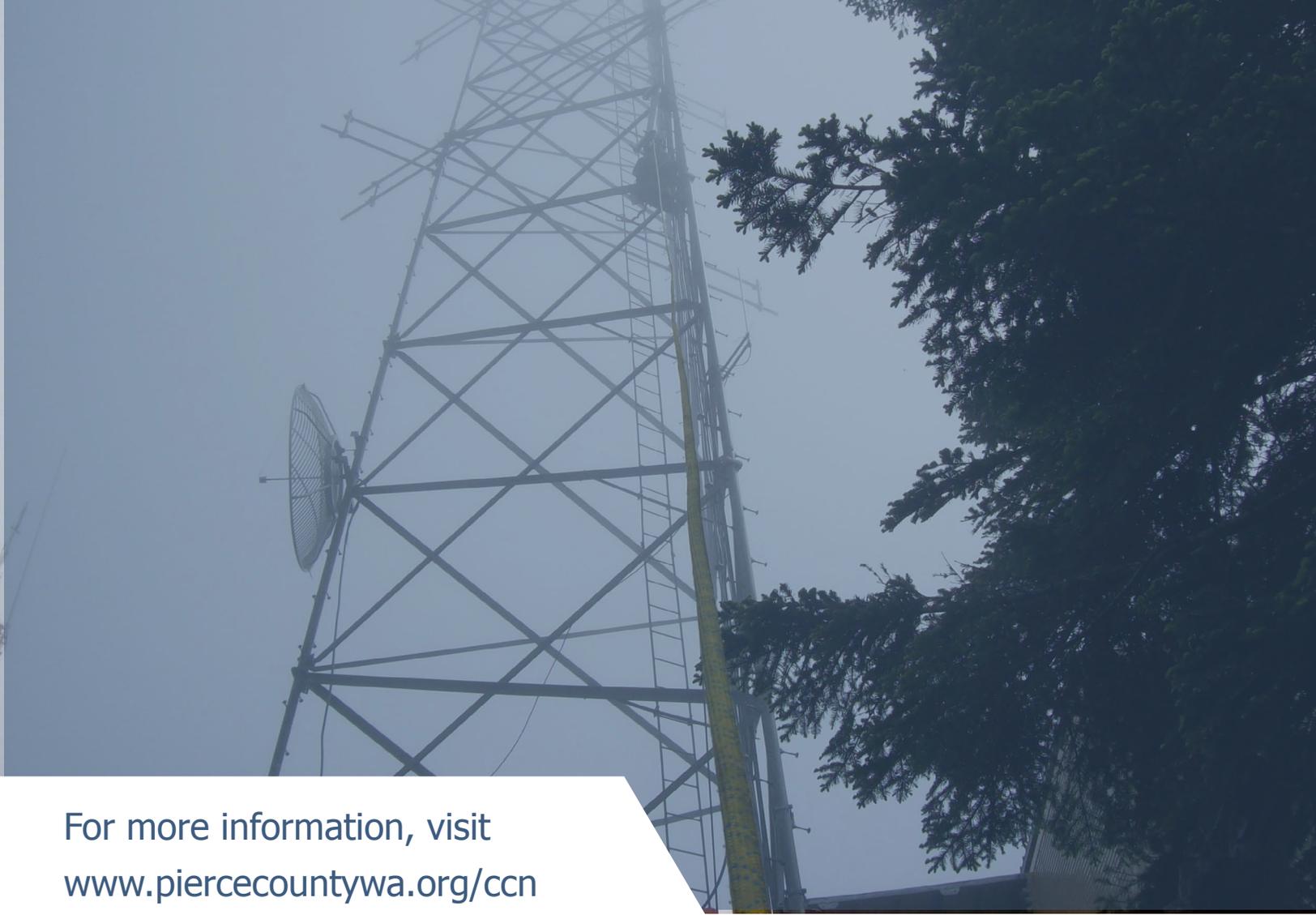
Term	Description
	inter-agency cross-jurisdictional interoperability purposes. Subscriber equipment can also include network management terminals, key management facility equipment, gateway and other assets, which are determined not to be a burden cost share in applicable Memoranda of Agreement (MoAs).
Sub-Subscriber Programming Unit	The CCN unit responsible for assignment of identification numbers; Template programming and reprogramming; all database (fleet-mapping) maintenance; and assignment of Talk groups.
Sustained Operations and Maintenance (O&M)	Declaration by the Executive Council Board that the System is ready and capable to support real-time, on-demand, emergency, and secure first responder communications.
System Access Agreement	Access to the SCWCS is provided through a System Access Agreement and any amendment(s) thereto, is conditioned upon the approval of the terms and conditions of access as outlined in (the) CCN Cooperative Governance Agreement and approval by the Executive Board.
System Administrator	Ensures operational integrity of the Single County-Wide Communication System; and provides centralized administration and system management supporting system access for all customers. Develops and recommends policies, procedures, and guidelines; identifies technologies and standards; and coordinates intergovernmental resources to facilitate communications interoperability with emphasis on improving day-to-day and mission-critical communications. The System Administrator, under the CCN, is the central point of contact for all customers concerning any and all operations of the SCWCS.
System Design	The technical design of the System.
System Management	CCN's responsibilities in the administration of SCWCS's operations and selection of the SCWCS services provided under this Agreement including, upgrades and enhancements.
System Security Information	Any information or records whose disclosure may compromise the security of the traveling public, transit employees, or transit infrastructure. SSI may include: data, documents, engineering drawings and specifications, and other records whose disclosure could increase the agency's risk of harm.
Talkgroup	A configurable, pre-programmed, voice pathway in the SCWCS by which properly programmed Sub-Subscriber can communicate with each other.
Total Cost of Ownership (TCO)	An assessment and determination of the allocation of costs between the Parties relative to upgrades, replacement, maintenance, growth and expansion or contraction of the CCN and any Party's property or assets used for the CCN. The TCO shall be utilized to account for a Party's growth or expansion of its system or assets to avoid unfairly burdening the other Party with a disproportionate cost.
Template	The Sub-Subscriber software that controls the Sub-Subscriber's Talk group functions

Term	Description
	and communication capabilities.
Template Design Unit	The CCN unit responsible for development of template that will be programmed into a SCWCS Customer's Sub-Subscriber. This includes defining a Customer's communications plan; the establishment or reuse of Talk groups; providing direction for concurrence of Talk groups between agencies, and documenting Templates for construction by the SCWCS RPU section.
Twenty Four / Seven (24x7)	24 hours per day, 7 days per week.
24 x 7 x 365	24 hours per day, 7 days per week, 365 days per year
Vulnerability Assessment and Security Plans	Communication infrastructure vulnerability assessments will provide a broader picture of the site's preparedness, as well as security risks that need to be mitigated. Security plans will help target resources and mitigation strategies toward gaps in the site's security identified by the vulnerability assessments. The information captured in the vulnerability assessments and security plans (including any mitigation strategies) can form the basis of funding priorities and improved protection of critical infrastructure.
Wide Area Trunking Operations	<b>This mode allows seamless roaming and call processing across the entirety of the SCWCS within the defined service area.</b>
Wireless Data Networks	A wireless data network is a telecommunications network that allows computers or radio communication devices to exchange data such as GPS and CAD/AVL data. The connections ( <i>network links</i> ) between networked computing devices ( <i>network nodes</i> ) are established using either cable media or wireless media. Network devices that originate, route and terminate the data are called network nodes. Nodes can include hosts such as servers and personal computers, as well as networking hardware. Two devices are networked when a process in one device is able to exchange information with a process in another device.

## **Appendix F. Business Plan Addendums**

- Accountability and Performance Measurement Plan
- Marketing Plan
- Risk Management Plan
- Customer, Partner and Stakeholder Analysis





For more information, visit  
[www.piercecountywa.org/ccn](http://www.piercecountywa.org/ccn)

