

CREST

EMERGENCY
COMMUNICATIONS

ANNUAL REPORT 2021



EXCEPTIONAL PERFORMANCE IN COMPLEX TIMES

2021 SAW A 70% INCREASE IN TRANSMISSIONS DURING WHICH THE CREST NETWORK PERFORMED SEAMLESSLY

Historic events continued to influence and shape our lives in 2021. Coronavirus variants, atmospheric rivers, fires and heat domes, along with global supply chain disruptions all contributed to a roller coaster of social and economic impacts that reverberated across the Capital Region, and around the world.

Much of the weight of these turbulent times fell on CREST's user agencies, our region's first responders and public service personnel, who faced increased workloads and more complex work environments. With our new P25 system fully operational, CREST proudly supported these essential workers with the best tools possible, and consistently delivered quality service when they needed it most.

CREST handled more transmissions in this twelve-month period than in our organization's twenty-year history, and the system responded seamlessly 24/7. Transmissions on the CREST system increased by almost 70 per cent, while the percentage of busy signals decreased. This surge in network utilization was a testament to the performance strength, reliability, and enhanced capacity capabilities of the CREST system, and a reflection of the extraordinary dedication and resilience of our region's emergency services personnel.

Our goal to establish communications towers in the Pacific Rim area and also at Channel Ridge on Saltspring Island was accomplished this year thanks to partnership agreements with Rogers' cellular division. These co-location arrangements will see the extension of the P25 system to Port Renfrew delivering crucial public safety communications along this well-travelled corridor, and will address gaps in coverage for first responders working on north Saltspring. These co-location installations are expected to complete by the end of 2022, and will yield considerable savings for CREST.

With the P25 CREST system fully operational, and with the rise of climate-related natural disasters, the Board undertook a feasibility study and explored options for a post-seismic public safety building in which to consolidate the region's critical, public safety communications technology and infrastructure. The existing vulnerability of CREST's public safety assets was identified by the Board as the number one risk during the 2020 strategic planning retreat.

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In the fall of this year, following a comprehensive review and the establishment of a Task Force to guide the project, CREST entered into an agreement to purchase land in the City of Langford, a central location to optimize both connectivity to the CREST system, and access to major transportation arterials.

In the spring of 2022, CREST Shareholders will consider the financing, design and construction of a purpose-built, post-disaster, public safety building. CREST's user agencies support the organization's recognition that securing and protecting the region's public safety assets will ensure that first responder personnel can deliver uninterrupted, critical life-safety services during a major emergency or natural disaster.

There is a culture of pride and service at CREST, and our team responded this year to make life easier and safer for those working on the frontline. Of their many contributions, one example speaks volumes. The CREST team reached out to one of the SICC dispatchers who operates from her wheelchair, and for whom the critical foot pedals that control the push-to-talk function presented a challenge. CREST engineers designed an interface circuit that works with a desk microphone assembly creating a desktop push-to-talk button making this dispatcher's work much easier and more enjoyable. The response from this dedicated frontline worker: 'This is fabulous! I love it!'

On behalf of the entire CREST Board, we offer gratitude to our CREST employees for their consistent professionalism, their ingenuity and for showing up every day, 24 hours a day, to safeguard the integrity of the CREST system for our user agencies.

In closing, we also recognize our Directors for their commitments of time and energy, and for their leadership as public safety stewards and champions dedicated to the provision of quality emergency telecommunications services for the Capital Region.



Tim Morrison,
Chair of the Board



Gordon Horth,
General Manager



ABOUT CREST

On behalf of its shareholders, CREST provides and maintains emergency communications equipment and infrastructure for more than 50 first responder and public service agencies throughout the Capital Region, an area that spans the Territories of the Coast and Strait Salish and Nuu-chah-nulth peoples. In the delivery of essential public safety services to all citizens, CREST's Board of Directors and CREST employees proudly recognize the First Nations' governments across the region.

CREST is incorporated under the BC Business Corporations Act and regulated by the Emergency Communications Corporations Act. It is a private emergency communications not-for-profit corporation owned by its shareholders and governed by a 20-member Board of Directors, nominated by CREST shareholders. CREST's secure emergency telecommunications system responds directly to the region's unique island geography and strengthens the Capital Region's ability to be self-reliant in the event of a natural disaster.

OUR MISSION AND VISION

MISSION: CREST provides effective emergency communications for the safety of our communities

VISION: CREST is a recognized leader in public safety communications: responsive, resilient, connected.



BOARD OF DIRECTORS

Stephen Anderson

BC Transit

Niall Paltiel

Central Saanich

Dean Jantzen

Colwood

Jeri Grant

CRD – Juan de Fuca

Charles Nash

CRD – Salt Spring Island

Rob Reeleder

CRD – Southern Gulf Islands

Bradley Cameron

Emergency Health
Services Commission

Tim Morrison

Esquimalt

Karel Roessingh

Highlands

Lillian Szpak

Langford

Kyara Kahakauwila

Metchosin

Murray Weisenberger

North Saanich

Esther Paterson

Oak Bay

Brian Sims

Province of BC

Mac Richards

RCMP

Karen Harper

Saanich

Chad Rintoul

Sidney

Megan McMath

Sooke

Sharmarke Dubow

Victoria

David Screech

View Royal

FINANCE COMMITTEE**Director Esther Paterson**

Oak Bay (Chair)

Director Rob Reeleder

Southern Gulf Islands

Director Karel Roessingh

Highlands

Director Kyara Kahakauwila

Metchosin

Director Murray Weisenberger

North Saanich

GOVERNANCE COMMITTEE**Director Chad Rintoul**

Sidney (Chair)

Director Kyara Kahakauwila

Metchosin

Director Tim Morrison

Esquimalt

Director Karel Roessingh

Highlands

Director Murray Weisenberger

North Saanich

Director Dean Jantzen

Colwood



STRATEGIC PLAN 2020- 2025

Ensuring optimal performance of the P25 network and continued fiscal sustainability underly CREST's strategic priorities.

The full CREST Strategic Plan can be read [here](#).

CREST HAS MEASURABLE GOALS IN FOUR KEY AREAS

GOAL 1

Confidence of
Shareholders
and User Agency
Organizations

GOAL 2

Public Safety
Service
Excellence

GOAL 3

Organizational
Effectiveness

GOAL 4

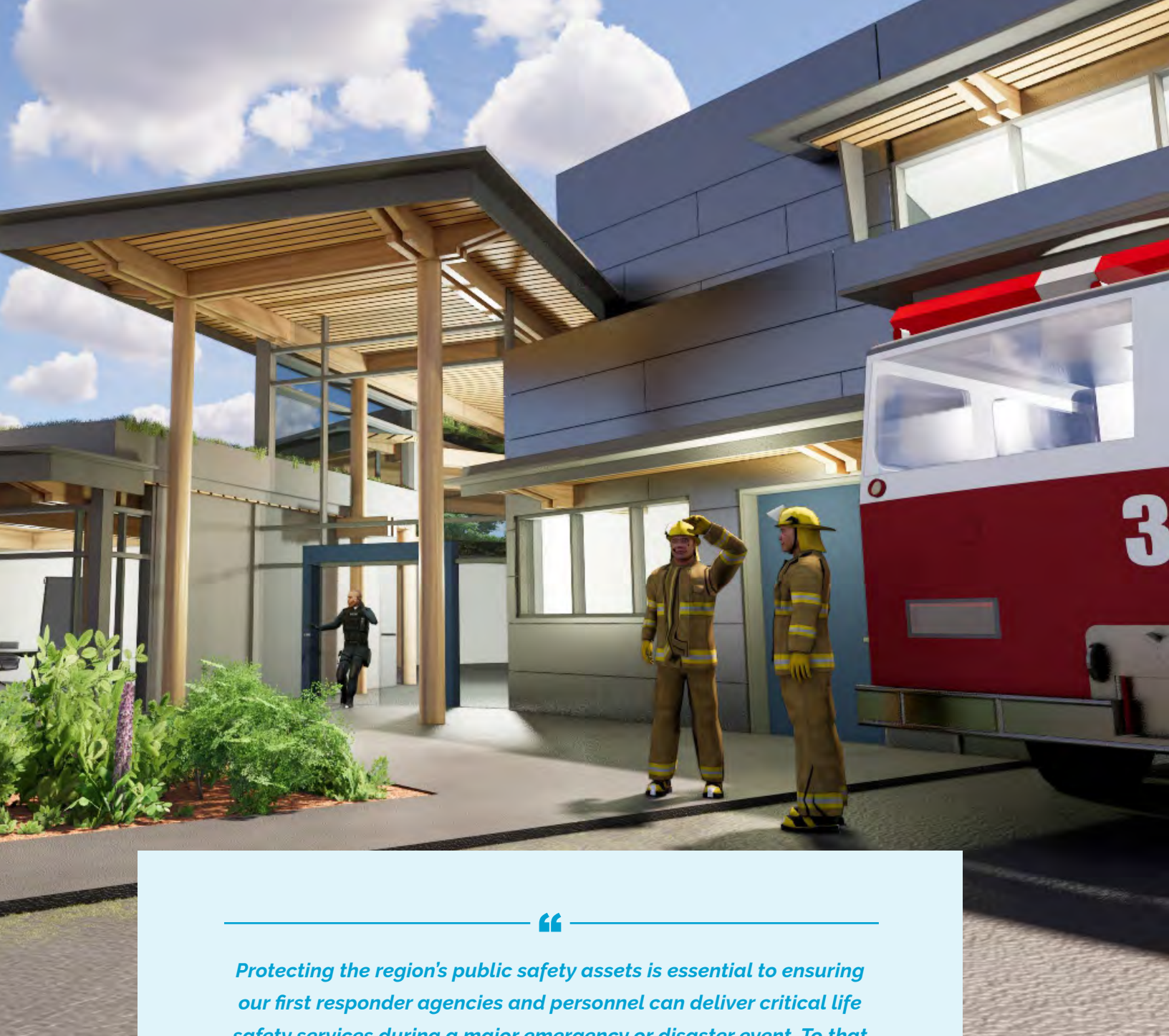
Financial
Performance



PLANNING UNDERWAY FOR POST-DISASTER PUBLIC SAFETY BUILDING

With the successful completion of the system-wide upgrade in 2020 on time and on budget, CREST's Board of Directors directed staff to explore options to address the existing vulnerability of the organization's infrastructure and technology in the event of a major disaster.

Currently, CREST's operations, infrastructure and master site are located in separate locations, and only the master site is in a post-seismic structure. The Board identified the exposure of CREST's critical infrastructure as the number one risk facing the organization. CREST entered into an agreement to purchase a .94-acre parcel in Langford due its central location to regional CREST infrastructure and its proximity to main transportation arterials. The proposed CREST public safety building will meet the current and future needs for an essential service agency that supports the region's emergency responders and public service agencies.



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Protecting the region's public safety assets is essential to ensuring our first responder agencies and personnel can deliver critical life safety services during a major emergency or disaster event. To that end, the CREST system is the foundation to our success. Having our telecommunications infrastructure located in a purpose-built, post-disaster building is simply an emergency management best practice. This project is a strategic investment and will benefit the region and its residents for many years to come.

Michael Burgess
Fire Chief, Saanich Fire Department

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FINANCIAL HIGHLIGHTS

	2019	2020	2021
Revenue	\$ 11,718,300	\$ 7,798,130	\$ 9,196,981
Direct operating expenses	2,949,925	2,967,057	2,908,710
Other expenses			
Amortization	3,373,968	3,551,812	2,963,688
Interest expense	1,016,910	1,010,809	967,878
Total expenses	7,340,803	7,529,678	6,840,276
Excess of revenue over expenses	4,377,497	268,452	2,356,705
Surplus, beginning of year	8,332,029	12,709,526	12,977,978
Surplus, end of year	12,709,526	12,977,978	15,334,683

CREST is funded through user fees paid by the agencies using the system. Their fees are based on the geographic size of the area they serve, its population, the number of radios required, and radio traffic. In addition, the Capital Regional District contracts with CREST to provide an emergency communications system for the region. This collaborative shareholder model ensures that each shareholder has an equitable voice in public safety decision making.

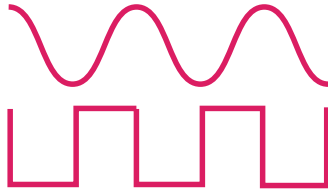
CREST user agencies, faced with the ongoing health pandemic and extreme weather events, experienced increased workplace demands in 2021 resulting in a historic number of calls on the CREST system. With the additional capacity, the P25 system responded seamlessly and reduced busies on the system at peak demand times by a factor of 2.

P25 TECHNOLOGY PERFORMANCE METRICS

Tracking of the new P25 digital network commenced November 2020.

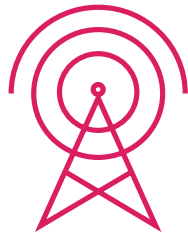
	2020	2021
Total Transmissions	6,333,875	10,386,160
Radios in Service	2,834	2,926
Average Calls per Hour	723	1,185
1 Busy For Every	8,468	16,356 calls
System Availability	99.9980%	99.9984%

CREST P25 NETWORK



All 50 CREST user agencies – more than 3,000 public safety and public service employees – are operating on the digital P25 network and experiencing performance improvements.

30 transmission towers and more than 60 in-vehicle repeaters



30%
increased
capacity



Almost 3,000 radios programmed



When Rogers cellular division secured the go ahead to expand cellular service on the west coast (from Shirley to Port Renfrew), CREST decided to expand on an existing partnership to piggyback on their new infrastructure (power and towers) along Highway 14. This partnership will result in P25 system coverage for this busy corridor in 2022, and lead to considerable infrastructure savings for CREST. The same arrangement with Rogers will also enhance coverage for North Saltspring on a new site coming online in 2022.



USER SATISFACTION SURVEY PLANNED FOR 2022

Survey respondents in 2020 indicated a high level of satisfaction with radio features, and gave CREST Technical Support a 100% satisfaction level.

Areas for improvement highlighted opportunities for additional radio training to enhance user knowledge and capabilities. In response to the ongoing presence of the coronavirus and the associated provincial health orders, CREST developed 8 on-line user training modules and made them available to user agencies 24/7. These training aids proved invaluable to our first responders, and complemented the virtual and small-group, in-person training sessions conducted by CREST's trainer, Keith Lewis.



*I want to take a quick moment to convey my appreciation for the time Keith took earlier today to attend at our Bylaw Enforcement team departmental meeting to offer up an enhanced tutorial and to answer questions my Officers have had around the CREST system and equipment. We acknowledge that the CREST website offers excellent information for the user, however Keith was adept at providing additional detail which will be very useful for us as we rely more and more on the connectivity of the CREST system and our equipment.
Thank you to you, Keith, Taso and the rest of the CREST team!"*

Lorne Fletcher

City of Langford, Manager Community Safety and Municipal Enforcement





CREST ENGINEERS SAJJAD RAJPUT AND NATHAN EDEN



The Shirley Fire Department was inundated by calls for assistance in the back country as the remote hills were very appealing to off-road enthusiasts during the pandemic. Without radio communication, rescue missions put crews at risk.

To help, CREST engineers designed and custom-built a solar powered, repeater station that extended communication capabilities and gave the Shirley Fire Department a critical lifeline in their rescue work making it safer for them to do their jobs and speeding up access to medical facilities for injured trail users.

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We in the Capital Region are very fortunate to have our own emergency communications organization. When you are dealing with CREST, you are dealing locally with people that respond immediately, know the region and have the relationships on the ground. I can't say enough good things about the CREST team. They are smart, innovative and highly skilled. Their work supports our region's emergency responders ensuring that these brave men and women can perform their duties safely and with confidence.

Mike Hicks

Juan de Fuca Electoral Area Director

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COMMUNITY INVOLVEMENT

CREST is a proud supporter of emergency responder and public safety initiatives throughout the Capital Region.

Ongoing COVID restrictions limited large gatherings where interoperability amongst CREST user agencies has historically been very useful, such as the annual Canada Day celebrations in the capital city. While celebratory events were forced to cancel, 2021 saw incidence of civil-disobedience, protests, traffic accidents, fires and extreme weather events including a heat dome and flooding. In most cases, these events involved multiple agencies and required interoperability to manage resources safely and effectively.

COMMUNITY EVENTS AND INITIATIVES SUPPORTED

- Tour de Rock
- Emergency Preparedness Week
- Crime Stoppers
- Celebration of Frontline Workers



CREST USER AGENCIES

BC AMBULANCE SERVICE

BC CONSERVATION OFFICER SERVICE

BC TRANSIT

CANADIAN FORCES BASE

- Fire
- Police

CAPITAL REGIONAL DISTRICT

- Salt Spring Island Electoral Area – Fire
- Piers Island – Fire
- Saturna Island – Fire
- Mayne Island – Fire
- Galiano Island North – Fire
- Galiano Island South – Fire
- Southern Gulf Island Emergency Program
- Otter Point – Fire
- Pender Island – Fire
- Willis Point – Fire
- East Sooke – Fire
- Shirley – Fire
- Hazmat Team

CENTRAL SAANICH

- Fire
- Police

COLWOOD

- Bylaw Enforcement
- Fire

EMERGENCY MANAGEMENT BC (PEP)

ESQUIMALT FIRE

GREATER VICTORIA POLICE

VICTIM SERVICES

HIGHLANDS FIRE

ISLAND HEALTH

LANGFORD

- Bylaw Enforcement
- Fire

METCHOSIN FIRE

NORTH SAANICH FIRE

OAK BAY

- Fire
- Police

PARKS CANADA

PORT RENFREW FIRE

ROYAL CANADIAN MOUNTED POLICE

SAANICH

- Fire
- Police

SIDNEY FIRE

SONGHEES FIRST NATION

SOOKE

- Bylaw Enforcement
- Fire

ST. JOHN AMBULANCE

UNIVERSITY OF VICTORIA SECURITY

VICTORIA AIRPORT AUTHORITY

- Fire

VIEW ROYAL FIRE

DID YOU KNOW?

CREST complies with Health Canada's Safety Code 6 (SC6), the federal regulations that govern electromagnetic devices. CREST sites are lower emitters of electromagnetic energy than a personal cell phone, or a household microwave oven. Since only public safety users are on the CREST system, the amount of transmission air time is a fraction of the activity that commercial cell carriers generate through calls, texts, and on-line interest.