



## PORTLAND TRIMET, OREGON, USA

### THE CLIENT

The Tri-County Metropolitan Transportation District of Oregon (TriMet) is the sole provider of mass transit for the Portland Metro region of Oregon, U.S.A. With an average weekday ridership of about 322,000 passengers, they operate a fleet of 1,426 vehicles, including light rail vehicles, buses, paratransit vehicles and a range of other vehicles for maintenance and field operation.

### SITUATION

The Federal Communications Commission had given an order requiring TriMet to narrow-band their old analog 450 UHF system. As about half of the radios used on that system were being leased from the City of Portland, TriMet decided to transition to a single TriMet-owned radio system that provided them with the interoperability required to communicate with related agencies.

As well as interoperability, TriMet needed a system that would reliably support and enhance worker safety for employees across their entire network not only in emergency situations, but also in day-to-day activities. This is especially vital for Maintenance of Way staff that maintain the light rail network used by the rail vehicles, when trains are in the vicinity of their work.

### RESPONSE

TriMet's research was thorough and in-depth, and included reference checks on the various vendors being considered. After an extended process, TriMet selected INIT, a supplier of CAD/AVL Bus Dispatch Systems, to put together a P25 system to suit their requirements. Along with Tait Communications as the chosen radio supplier, INIT selected General Electric for radio architecture, Avtec for radio consoles, Exacom for communication recorders, and Cobham for bi-directional amplifiers.

"We, of course, did thorough background... and reference checks on all the various proposers, and we found that everybody that had worked with Tait in the past loved them," says A.J. O'Connor, TriMet Manager of Intelligent Transportation Systems.



PORTLAND,  
OREGON

LOCATION



TRANSPORT

EXPERTISE

### SOLUTION OVERVIEW

- ▶ 7-site P25 trunked solution,
- ▶ Powered by Tait TB9100 base stations
- ▶ Tait TM9100 mobiles and TP9100 portables
- ▶ Tait custom solution for AVL
- ▶ Avtec consoles

### BUSINESS BENEFITS

- ▶ Single radio system with agency interoperability
- ▶ Increased worker safety
- ▶ Increased productivity
- ▶ High throughput position updates



Tait was also chosen for our willingness to customize the solution. TriMet's new system incorporates a Tait custom solution for AVL, called SPDS (slotted polling data system), which provides high throughput position updates for their public transport fleet.

#### **OUTCOMES**

Transitioning to a digital system powered by Tait radios has provided TriMet with clear, crisp voice communications that give them the crucial, reliable contact they need in daily operations. Confidence in their communications system has increased, and overall productivity has also improved. "The Tait system is critical to worker safety," notes O'Connor, and gives staff the constant contact with rail control that they need to keep safe.

The new system has also improved safety for bus operators with the silent alarm feature and emergency buttons on the portable radios. Geo-location capabilities provide confidence that if someone needs help and is unable to tell dispatch where they are, dispatch staff will still be able to locate them quickly.

Having experienced the Tait consultative approach, Mr. O'Connor summed up the process of working with Tait and our resilient, reliable products and solutions, saying Tait is "small enough to provide good customer service, large enough to deliver high quality products".

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**A.J. O'Connor**

Manager of Intelligent Transportation Systems

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