



## Case Study: LightPointe connects buildings for Public Transportation Department in Washington State



## Case Study



## About Pierce Transit

Founded in 1979, Pierce County Public Transportation Benefit Area Corporation (Pierce Transit) is a nationally recognized leader in the public transportation industry. Pierce Transit covers 292 square miles of Pierce County with roughly 70% of the county population. Serving Washington's second largest county, Pierce Transit provides three types of service, Fixed Route, SHUTTLE paratransit and Vanpools that help get passengers to jobs, schools and appointments.



**Pierce Transit needed to connect their LAN to nearby buildings.**

## Pierce Transit's Wireless Application

Pierce Transit's main business campus expanded, adding buildings near the headquarters. This required providing employees in the new buildings with internet access and LAN connectivity cost effectively and quickly. After evaluating all options available, such as wired/fiber trenching and alternative wireless bridges, Pierce Transit selected LightPointe's AireLink 60.



**LightPointe  
AireLink 60 GHz Radio**

## LightPointe's 60 GHz wireless solution

***"We are very impressed with LightPointe's radio links, as service has not been interrupted since installation—even during heavy Pacific Northwest rain. We had four LightPointe radios installed and operating flawlessly within two days. The AireLink 60 is easy to install and has an excellent user interface, and the system's nine levels of modulation handles inclement weather beautifully. It automatically adjusts for optimum data transmission speed in real time, handling even the worst weather. I will definitely recommend LightPointe again."***

Rich Kemp  
Senior Network Engineer  
IPKeys Technologies  
(system integrator)

**LIGHTPOINTE™**  
RADIOS & LASER BRIDGES

Reliability was at the top of Pierce Transit's list of wireless requirements, since maintaining network access is essential for the organization's employees to manage a massive transit system with safety and clock-like precision for an entire city. Four LightPointe AireLink 60 SX radios were installed at Pierce Transit's main campus and satellite buildings nearby. LightPointe's innovative "lens" antenna provided a narrow beam path between the new buildings, thus enabling a highly secure point-to-point connection and eliminating the risk of radio frequency (RF) interference. The 60 GHz transmission signal also has a high level of oxygen absorption in the atmosphere, thus dramatically reducing the potential impact of leaked radiation on an adjacent radio link, a very common problem with alternative radio technologies, such as 5 GHz and 2.4 GHz solutions. With system latency less than 40 microseconds, LightPointe's AireLink 60 is ideally suited for low latency real-time applications where large files are transmitted, and high speed is required in order to maintain user/employee productivity, safety, and error free management of a large public transit system.

### LightPointe's Building Connectivity Benefits

- Fast and clean installation of 60 GHz radios within 2 days.
- No frequency/regulatory licensing costs or delays.
- Up to 1000 Mbps full duplex transmission capacity.
- Very low 40 microsecond radio latency for real-time communications.
- Superior signal security.
- Unique high gain, narrow beam lens antenna.
- Avoidance of nearby radio frequencies and congestion.
- High dynamic range.
- Low cost/fast ROI.
- Small, attractive "footprint."

### Solution:

LightPointe AireLink 60 SX  
LightPointe Communications, Inc.  
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### End Customer/User:

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