

Washington State Patrol



NARROWBANDING PROJECT **~ STATUS UPDATE ~**

Joint Transportation Committee - May 14, 2014

Service With Humility





Purpose and Scope

Purpose:

Convert WSP statewide radio system to narrowband operation to meet the Federal Communications Commission (FCC) mandate for 12.5Khz operation.

Scope:

Convert existing WSP dispatch or "Area" frequencies to P25 conventional operation.

Convert existing Interoperability frequencies to narrowband analog operation.

Connect the WSP system to the Federal Integrated Wireless Network P25 trunked radio system.

Replace obsolete and no longer supported WSP dispatch consoles and logging recorders.

Replace all WSP VHF mobile and portable radios with multi-band radios.



Budget Execution

Authorizing Document	Dollar Amount
Total Motorola Contract Value	\$30,216,846
Radio Purchases (2,703 units)	\$13,859,675
Other Equipment: Master site, 700 Mhz system, Consoles, etc.	\$10,707,877
Services (Project Management, Installation, Other Labor)	\$5,344,036
Training	\$305,258
Other Project Requirements: Microwave, Site Improvements, Power and Grounding Upgrades, Tower Improvements	\$10,299,716
Remaining Budget	\$583,438
Total Project Value	\$41,100,000



Project Timeline

11/12/2012 - 3/14/2014
Preliminary Project Activities

11/12/2012 - 4/9/2014
700 MHz Site Installation

6/1/2014 - 11/1/2015
District Cutovers

6/1/2014 - 8/1/2014
Yakima

8/1/2014 - 10/1/2014
Vancouver

10/1/2014 - 12/31/2014
Spokane

1/1/2015 - 3/1/2015
Tacoma

3/1/2015 - 5/1/2015
Bellevue

5/1/2015 - 7/1/2015
Bremerton

7/1/2015 - 9/1/2015
Wenatchee

9/1/2015 - 11/1/2015
Marysville

11/1/2015
FCC Compliance

Today



Project Status

Within Budget

Project completion scheduled for November 3, 2015.

P25 Conventional mode

- Operational in 3 of 8 Districts (Yakima, Spokane, Vancouver)

700MHz trunking

- 4 site - 4 channel simulcast cell (Seattle Area)
- 2 site - 4 channel simulcast cell (Tacoma Area)
- 2 - 4 channel repeater sites
- All equipment has been installed and the Coverage Acceptance Test has been completed.

VHF trunking

- IWN Interzone Link completed
- Capacity study completed
- Preparing to cut over WSP District 3 (Yakima, Kennewick, Walla Walla Autonomous Patrol Areas (APAs)) to trunking operation.



Issues and Mitigation Strategies

Coverage complaints

- WSP technicians are conducting detailed coverage surveys using sophisticated test equipment. This data is then used to guide system changes to reduce or eliminate dead spots on a prioritized basis. Examples are provided on the next slides.

Dropdown menus on the consoles for conventional resources

- WSP has initiated a change order that will eliminate the dropdown menus. Time to implement is 90 days.

Interoperability with VHF conventional users in trunked areas

- Several options are being explored. This requirement, and the proposed solution, will vary based on the primary area of operation.



Washington State Patrol APX/ESD Log

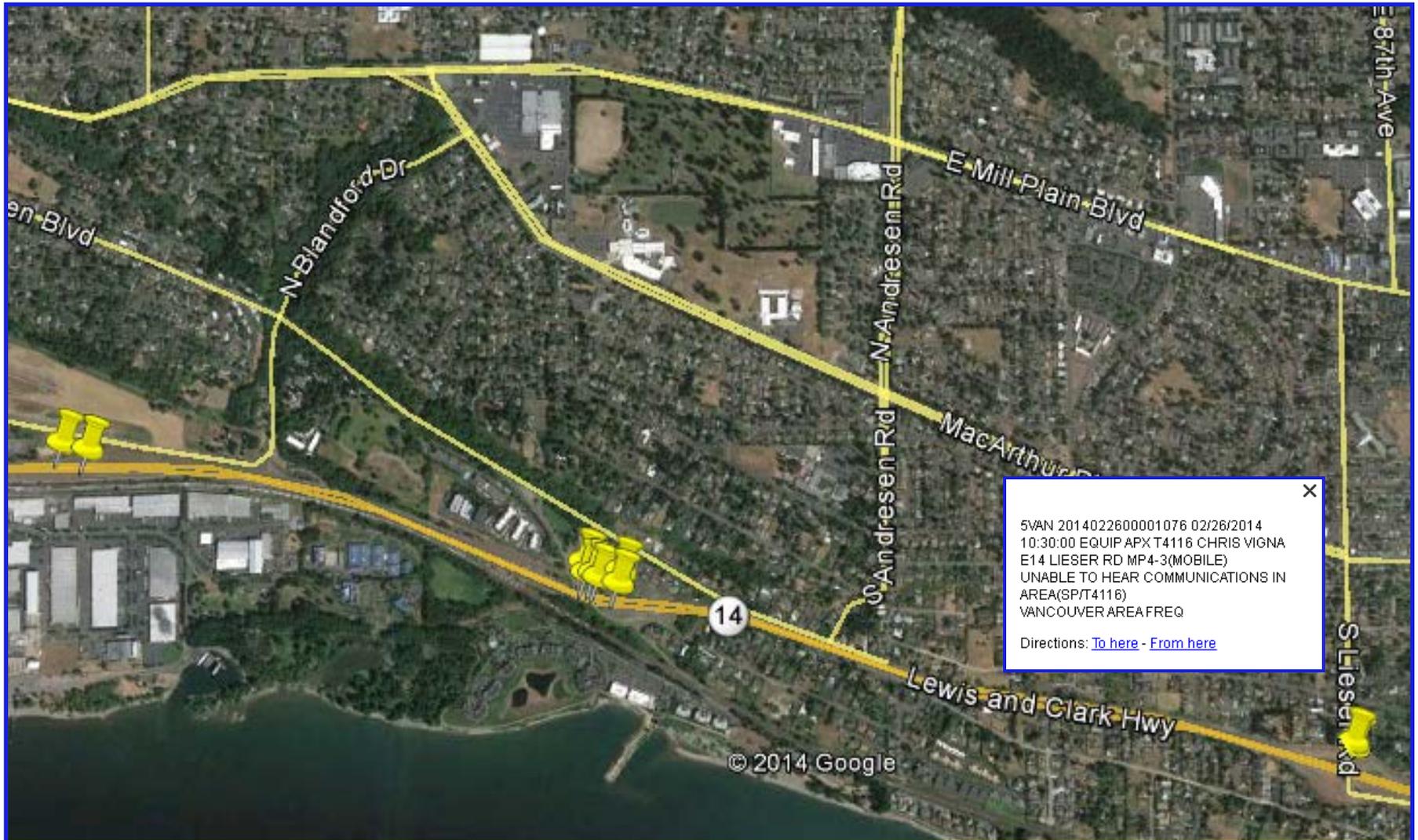
Start Date: 06/30/2013
End Date: 07/06/2013
District(s): 3, 4, 5, Other

District	Area	Incident Number	Incident Date	Incident	Disp.	Primary Unit	Location
4							
	401	2013070100001927	07/01/2013 14:44:26	EQUIP ON AREA	APX	530 JOSEPH B PASS	W290 STATE LINE MP18
	401	2013070400000770	07/04/2013 07:59:07	EQUIP 530 UNABLE TO TRANSMIT ON PORTABLE	APX	530 JOSEPH B PASS	W90 SHERMAN MP281-7
5							
	SCHE	2013070100003113	07/01/2013 21:19:17	EQUIP PER 700 DEAD ZONE 700 CAN HEAR RADIO BUT RADIO ONLY HEAR CLICKS	APX	700 MELODY C KRENELKA	NW LOUISIANA AVE / NW CHAMBER OF COMMERCE WAY
	SVAN	2013070200000881	07/02/2013 08:48:12	EQUIP RECVNG RADIO TRF ON PORTABLE NO TRF RECVD ON MOBILE RADIO	APX	908 NICHOLAS A JENNINGS	W14 SR205
	SVAN	2013070300000927	07/03/2013 08:52:00	TSP 551 - CAN'T HEAR RADIO ON VANCOUVER AREA REPEATER - STOPPED 1031 FEET FROM EX10 SIGN - RADIO SELECTED SKAMANIA REPEATER AND 551 COULD HEAR RADIO FINE ON THAT	A, APX	551 JEFFREY HEATH	W14 MP11
	SVAN	2013070300002959	07/03/2013 18:24:58	EQUIP NOT ABLE TO HEAR RADIO	APX	490 GORDON J GRUENDELL	S5 MP18
	SKEL	2013070300003311	07/03/2013 20:09:29	EQUIP NO RADIO RECEPTION AT SC77	APX	1132 ALEXIS A TONISSEN	S5 MP44
	SVAN	2013070400000410	07/04/2013 05:30:00	EQUIP ATTEMPTED TO SIGN IN SERVICE TWICE ON PORTABLE RADIO HEARD THE SIGN IN ALL THREE TIMES / ANSWERED ALL THREE TIMES 186 ONLY HEARD THE LAST TIME	APX	186 GLEN L HOBBS	186'S RESIDENCE
	SKEL	2013070400003117	07/04/2013 18:58:37	EQUIP NOT ABLE HEAR RADIO BROKEN SIGNAL	APX	792 JASON G MARCH	S5 MP45
Other							
	PCW	2013070300000981	07/03/2013 09:08:41	EQUIP TOP OF RAMP ADVG RADIO IS GARBLED	APX	974 SCOTT P BARLOW	N5 MILLPLAIN

End of Report

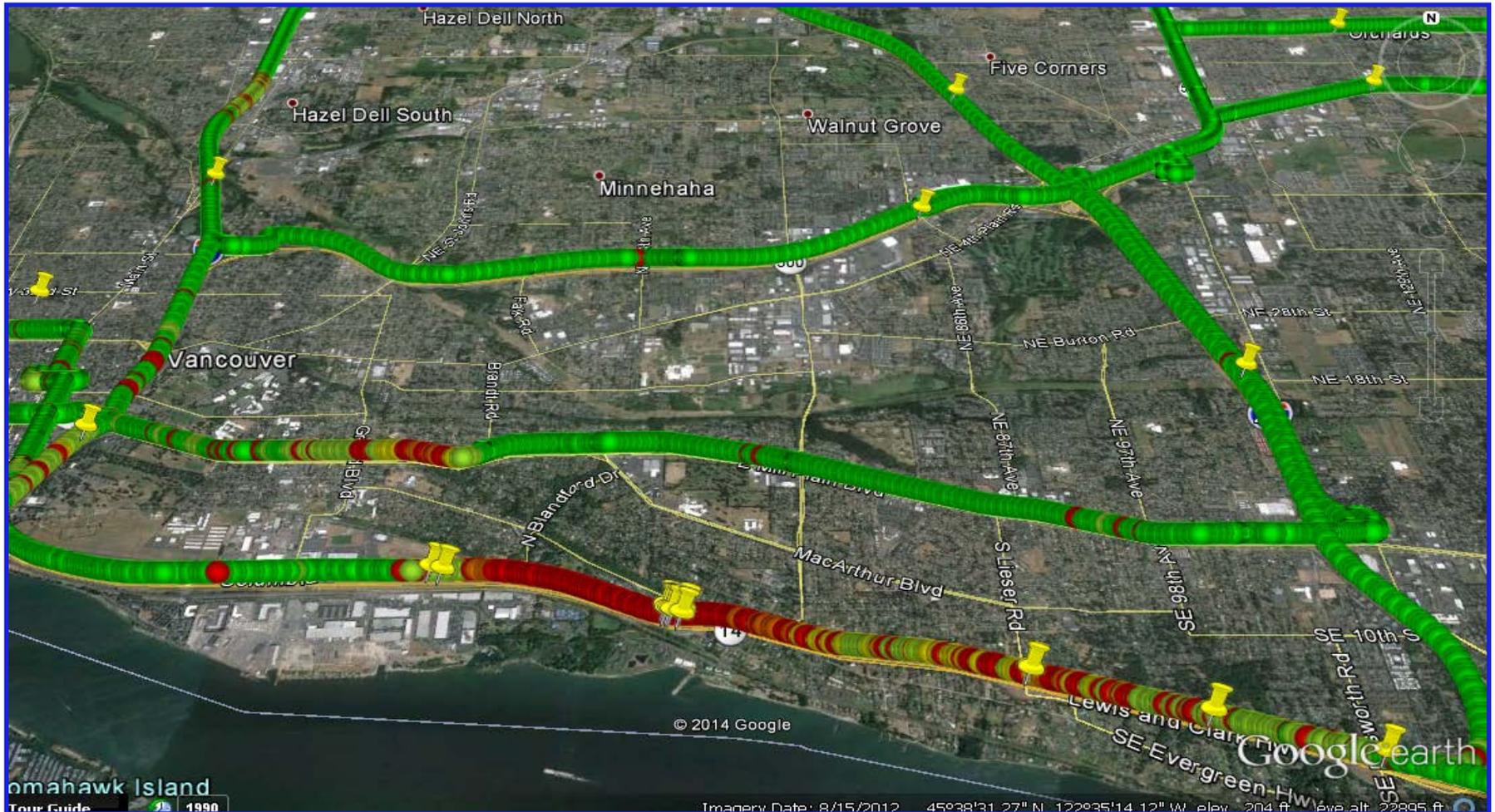


APX CAD Log Complaints on Google Earth Map





Actual survey data is converted to a KMZ file format. This allows the data to be displayed in Google Earth with the complaint areas overlaid. This allows evaluation of the complaint to see if the issue is coverage related.





P25 Conventional Goldendale Area

On the P25 conventional system, users must know which site to call in on so communications can answer them from the correct site.





Questions?

Presenters:

- *Assistant Chief Shawn Berry*
- *Mark Vetsch - Electronic Services*

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