

**BWA WISPA Vendor Survey Qs By The Carmel Group Q1 2017**

Q9 How many full-time employees work for your CBP/ISP/WISP company? (Check one, please, and if you answer “more than 300,” please let us know what number.)

Q10 Of that number of employees above, please estimate by percentages the type of employees your company employs? (So that the total percentage sum of all the reasons below equals 100%, and if you answer “other,” please describe that “other” job.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q12 How long has your company been providing products and/or services to the Competitive Broadband Provider (CBP)/ISP/WISP business? (Please select one and if you answer “Longer”, please tell us how much longer in the next below that.)

Q13 If you know by percentage, among the following types of your end-users, into which segments do operators deploy your products and services? (So that the total adds up to 100%)

Q15 What percentage growth in your company’s sales as a vendor of CBP/WISP-related products and services would you estimate occurred in the past three years? (Please select one and if you answer “More than 100%,” please tell us what %.)

Q16 What percentage growth in your company’s sales as a vendor for the CBP/WISP industry do you estimate will occur in the next three years, i.e., between now and year-end 2019? (Please select one and if you answer “More than 100%,” please tell us what %.)

Q17 As a core part of today’s CBP/WISP industry, on a scale of 1-10 (ten being very positive and optimistic based upon your business and knowledge of factors influencing it), how would you rate your company’s optimism level for growth between now and five years from now, i.e., at year-end 2021? (Check one number, please.)

Q18 What type(s) of improvements will your vendor technology offer to the CBP/WISP industry in the next three years? (Check each that applies and if you select “Other,” please describe that “Other” improvement.)

Q19 What products and/or services and in what percentages of your overall company sales does your company provide to the Competitive Broadband Provider (CBP)/WISP community? (So that the whole adds up to 100%, and if you select “Other,” please describe that “Other” product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q21 Which of the following (and by what percentages if you check one or both) would you use to describe your company’s products and services for the CBP/WISP community? (So that the total for both equals 100%.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q22 Which of the following would you use to describe your company’s products and services for the CBP/WISP community?

Q23 What kinds of hardware products and services do you market and sell as a CBP/WISP vendor? (Please select each that applies and if you select “Other,” please describe that “Other” hardware product/service.)

Q24 As a CPB/WISP hardware vendor, what percentage(s) of the following products/services/solutions do you offer for point-to-point licensed needs? (Please select each that applies so that the total for all equals

100%.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q26 As a CPB/WISP hardware vendor, what percentage(s) of the following products/services/solutions do you offer for point-to-point unlicensed needs? (Please select each that applies so that the total for all equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q28 As a CPB/WISP hardware vendor, what percentage(s) of the following products/services/solutions do you offer for point-to-multipoint licensed needs? (Please select each that applies so that the total for all equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q30 As a CPB/WISP hardware vendor, what percentage(s) of the following products/services/solutions do you offer for point-to-multipoint unlicensed needs? (Please select each that applies so that the total for all equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q32 As a CPB/WISP hardware vendor, what percentage(s) of the following products/services/solutions of the following do you offer for 802.11n WiFi needs? (Please select each that applies so that the total for all equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q34 As a CPB/WISP hardware vendor, what percentage(s) of the following products/services/solutions do you offer for 802.11ac WiFi needs? (Please select each that applies so that the total equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q36 As a CPB/WISP hardware vendor, please provide an approximate total number of your company's radio hardware devices that are deployed globally in the Competitive Broadband Provider (CPB) industry (e.g., backhaul, access point, CPE, and home routers)? (Please select which applies and if you select "Number more than 5,000,000," please tell us that number.)

Q37 As a CPB/WISP hardware vendor, please provide an approximate number of your company's accessories hardware devices that are deployed in the Competitive Broadband Provider (CPB) industry (e.g., antennas, POE, mounts, shields, enclosures)? (Please select which applies and if you select "Number more than 5,000,000," please tell us that number.)

Q38 As a hardware vendor, in what percentages among the following do your devices service these protocols? (Please select each that applies so that the total for all equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q40 As a hardware vendor, what percentage(s) of your total vendor portfolio is made of the types of licensed spectra below? (So that all of the licensed uses equal 100%. If you select "Other," please describe that "Other" Ghz.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q42 As a hardware vendor, what percentage(s) of your total vendor portfolio is made up of unlicensed spectra below? (So that all of the unlicensed uses equal 100%. If you select "Other," please describe that "Other" Ghz.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q44 As a hardware vendor, what percentage(s) of each of the following form factors for wireless devices have you sold in the last year? (Please select each that applies so that the total for all equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q46 As a software vendor, which of the following kinds of software products and services do you market and sell as a CBP/WISP vendor? (Please select each that applies and if you select "Other," please describe that "Other" hardware product/service.)

Q47 As a CPB/WISP software vendor, what percentage(s) of the following products/services/solutions do you offer for point-to-point licensed needs? (Please select each that applies so that the total for all equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q49 As a CPB/WISP software vendor, what percentage(s) of the following solutions do you offer for point-to-point unlicensed needs? (Please select each that applies so that the total for all equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q51 As a CPB/WISP software vendor, what percentage(s) of the following products/services/solutions do you offer for point-to-multipoint licensed needs? (Please select each that applies so that the total for all equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q53 As a CPB/WISP software vendor, what percentage(s) of the following products/services/solutions do you offer for point-to-multipoint unlicensed needs?(Please select each that applies so that the total for all equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q55 As a CPB/WISP software vendor, what percentage(s) of the following products/services/solutions do you offer for 802.11n WiFi needs? (Please select each that applies so that the total for all equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q57 As a CPB/WISP software vendor, what percentage(s) of the following products/services/solutions do you offer for 802.11ac WiFi needs? (Please select each that applies so that the total for all equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q58 As a CBP/WISP software vendor, how many networks (That are managed by your software for an operator) are deployed as part of your company's system? (Check a box below or, if you answer "More than 200," please fill in that number below.)

Q59 As a software vendor, what percentage(s) of your total vendor portfolio is made up of licensed spectra? (So than all of the licensed equals 100%. If you select "Other," please describe that "Other" Ghz.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q61 As a software vendor, what percentage(s) of your total vendor portfolio is made up of unlicensed spectrum? (So than all of the unlicensed equals 100%. If you select "Other," please describe that "Other" Ghz.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q63 As a software vendor, in what percentage(s) among the following do your devices service these protocols? (So that the total of all equals 100%. If you select "Other," please describe that "Other" protocol.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q65 As a software vendor, what percentage of each of the following form factors for wireless devices have you sold in the last year (So that the total of all equals 100%. If you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q67 What kinds of hardware products and services do you market and sell as a CPB/WISP vendor? (Please select each that applies and if you select "Other," please describe that "Other" hardware product/service.)

Q68 As a CPB/WISP hardware vendor, what percentage(s) of the following products/services/solutions do you offer for point-to-point licensed needs? (Please select each that applies so that the total for all equals 100%.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q70 As a CPB/WISP hardware vendor, what percentage(s) of the following products/services/solutions do you offer for point-to-point unlicensed needs? (Please select each that applies so that the total for all equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q72 As a CPB/WISP hardware vendor, what percentage(s) of the following products/services/solutions do you offer for point-to-multipoint licensed needs? (Please select each that applies so that the total for all equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q74 As a CPB/WISP hardware vendor, what percentage(s) of the following products/services/solutions do you offer for point-to-multipoint unlicensed needs? (Please select each that applies so that the total for all equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q76 As a CPB/WISP hardware vendor, what percentage(s) of the following products/services/solutions of the following do you offer for 802.11n WiFi needs? (Please select each that applies so that the total for all equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q78 As a CPB/WISP hardware vendor, what percentage(s) of the following products/services/solutions do you offer for 802.11ac WiFi needs? (Please select each that applies so that the total equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q80 As a CPB/WISP hardware vendor, please provide an approximate total number of your company's radio hardware devices that are deployed globally in the Competitive Broadband Provider (CPB) industry (e.g., backhaul, access point, CPE, and home routers)? (Please select which applies and if you select "Number more than 5,000,000," please tell us that number.)

Q81 As a CPB/WISP hardware vendor, please provide an approximate number of your company's accessories hardware devices that are deployed in the Competitive Broadband Provider (CPB) industry (e.g., antennas, POE, mounts, shields, enclosures)? (Please select which applies and if you select "Number more than 5,000,000," please tell us that number.)

Q82 As a hardware vendor, in what percentages among the following do your devices service these protocols? (Please select each that applies so that the total for all equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q84 As a hardware vendor, what percentage(s) of your total vendor portfolio is made of the types of licensed spectra below? (So that all of the licensed uses equal 100%. If you select "Other," please describe that "Other" Ghz.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q86 As a hardware vendor, what percentage(s) of your total vendor portfolio is made up of unlicensed spectra below? (So that all of the unlicensed uses equal 100%. If you select "Other," please describe that "Other" Ghz.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q88 As a hardware vendor, what percentage(s) of each of the following form factors for wireless devices have you sold in the last year? (Please select each that applies so that the total for all equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q90 As a software vendor, which of the following kinds of software products and services do you market and sell as a CBP/WISP vendor? (Please select each that applies and if you select "Other," please describe that "Other" hardware product/service.)

Q91 As a CPB/WISP software vendor, what percentage(s) of the following products/services/solutions do you offer for point-to-point licensed needs? (Please select each that applies so that the total for all equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

Q93 As a CPB/WISP software vendor, what percentage(s) of the following solutions do you offer for point-to-point unlicensed needs? (Please select each that applies so that the total for all equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)

**Q95 As a CPB/WISP software vendor, what percentage(s) of the following products/services/solutions do you offer for point-to-multipoint licensed needs? (Please select each that applies so that the total for all equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)**

**Q97 As a CPB/WISP software vendor, what percentage(s) of the following products/services/solutions do you offer for point-to-multipoint unlicensed needs?(Please select each that applies so that the total for all equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)**

**Q99 As a CPB/WISP software vendor, what percentage(s) of the following products/services/solutions do you offer for 802.11n WiFi needs? (Please select each that applies so that the total for all equals 100%, and if you select "Other," please describe that "Other" hardware product/service.) (Note that you must either skip this question entirely or answer so that the combined total equals 100%, otherwise you can not advance to the next page.)**