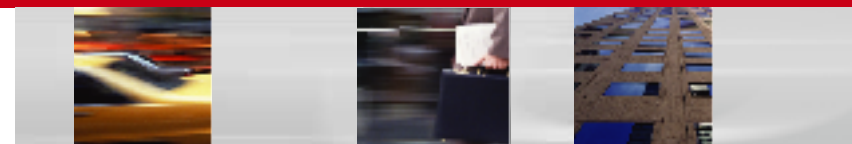# WLAN Customer Scenarios

Market Segments, Assumptions, and Recommended Solutions*

MARKETS	CUSTOMER ASSUMPTIONS				RECOMMENDED SOLUTIONS											
	Square Footage	Laptops	Mobile Devices	Fixed Devices	WS5100**	WS2000	ES3000	AP300	AP4131	CB1000	LA5030	AirBeam SAFE Licenses	SEMM	MSP	Nomadix USG II	Nomadix HSG
Enterprise																
Headquarters	300,000	600	100	0	2	0	5	70	0	0	600	700	1	1	1	0
Branch Office	20,000	50	20	0	0	2	1	8	0	0	50	70	1	0	0	0
Vertical Markets																
Retail																
Headquarters	250,000	600	100	0	2	0	5	70	0	0	600	700	1	1	1	0
Store	3,000	0	20	10	0	1	0	2	0	10	0	20	0	0	0	0
Healthcare																
Hospital	600,000	200	100	10	3	0	8	100	0	10	200	300	1	0	1	0
Transportation & Logistics																
Large Depot	1,000,000	0	400	20	4	0	12	167	0	20	0	400	0	1	0	0
Main Office	300,000	200	100	0	2	0	4	50	0	0	200	300	0	0	0	0
Small Depot to Main Office	3,000	0	20	10	0	1	1	2	2	10	0	20	0	0	1	0
Education																
University (Large Building)	150,000	500	200	0	2	0	5	70	0	0	500	700	0	1	1	0
School, College (Small Building)	5,000	100	50	0	1	0	2	15	0	0	100	150	0	0	1	0
Financial Services																
Headquarters	250,000	600	500	0	3	0	8	110	0	0	600	1100	0	1	1	0
Branch Office	3,000	30	20	0	0	1	1	5	0	0	30	50	1	0	0	0
Manufacturing																
Headquarters	300,000	600	100	0	0	1	1	3	0	0	30	50	1	1	0	0
Large Plant	1,000,000	0	400	20	4	0	12	167	0	20	0	400	1	1	0	0
Government																
Headquarters	300,000	60	10	0	2	0	5	70	0	0	600	700	1	1	0	0
Small-Medium Enterprise																
Multi-Site Headquarters	150,000	200	300	10	2	0	4	50	0	10	200	500	1	1	1	0
Multi-Site Branch Office	3,000	30	20	0	0	1	0	5	0	0	50	50	0	0	0	0
Single Site	60,000	80	20	10	0	2	1	10	0	10	80	100	0	0	1	0
HotSpots																
Large (e.g. Hotel)	200,000	100	0	0	2	0	3	33	0	0	100	0	0	0	1	0
Small (e.g.	3,000	20	0	0	0	1	0	2	0	0	0	0	0	0	0	1

Deployment Calculations:

- 2 WS5100 Wireless Switches (one primary, one backup) for every 48 Access Points in an enterprise environment.

- 1 ES3000 per 170 watts of POE.

- 1 Access Point with an omni directional dipole antenna per 50,000 square feet for 11Mbps throughput, or per 384,000 square feet for 1Mbps throughput.

- 1 AP per 10 to 15 laptops.

- 1 AP per 6 to 11 Wireless VOIP devices with a maximum of 6 concurrent calls.

- 1 AP per 15 to 30 handheld devices (depending on the throughput of the devices).

- 1 AirBEAM safe client license per laptop or mobile device.

Disclaimer: The WLAN Customer Scenarios depicts sample solutions. Actual solutions will vary, depending on the customer's specific requirements.

* For detailed configuration parameters and downloads, go to: http://www.symbol.com/wireless

** Redundant WS5100 standby units are recommended for customers who need high availability. The numbers shown here do not include redundant switches.