



# ***MaxxCasting Value Proposition***

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**Harris Broadcast**  
*Deliver the moment™*

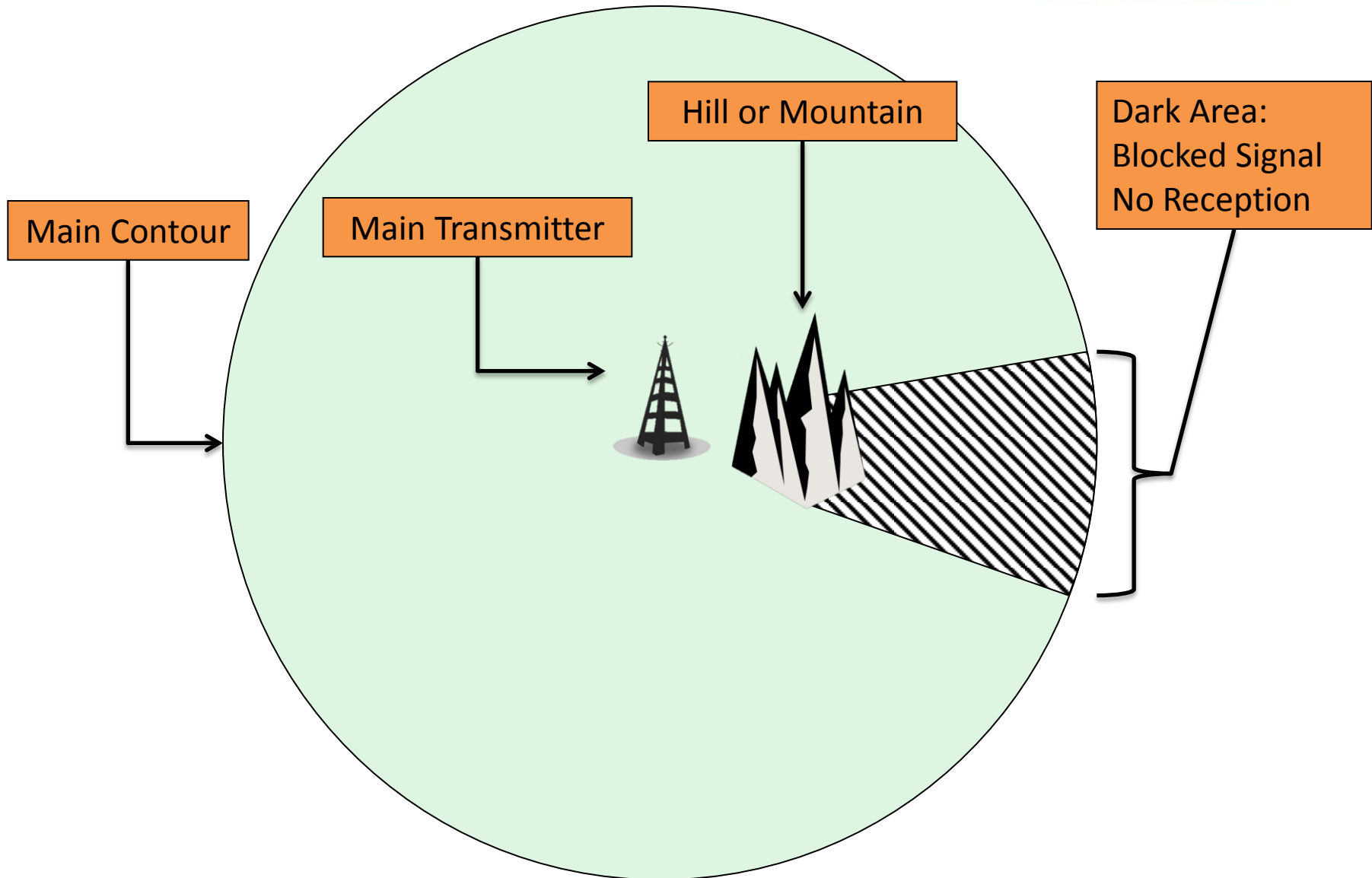
# ***What is MaxxCasting™ ?***

- Historically, broadcasters have used single booster sites with relatively high antenna heights to fill in areas where their main signal is blocked by terrain.
- While the single site, tall tower booster does fill in the terrain blocked area, it can often create interference with the main signal in areas that are covered by both the main and booster signals.
- Geo-Broadcast Solutions (“GBS”) has developed the MaxxCasting System that combines radio and cellular technology to enable FM Broadcasters using boosters to enhance their signals by reducing multipath interference between the main and booster transmissions through the use of a cluster of low to the ground, high power, highly directionalized synchrocast booster sites.
- GBS is working in partnership with Harris Corporation and NPR Labs to provide the MaxxCasting design and related equipment for broadcasters to improve existing booster problems.
- The use of multiple boosters to broadcast the same content as the main is permitted by the FCC.
- GBS has filed for a patent on the MaxxCasting System.

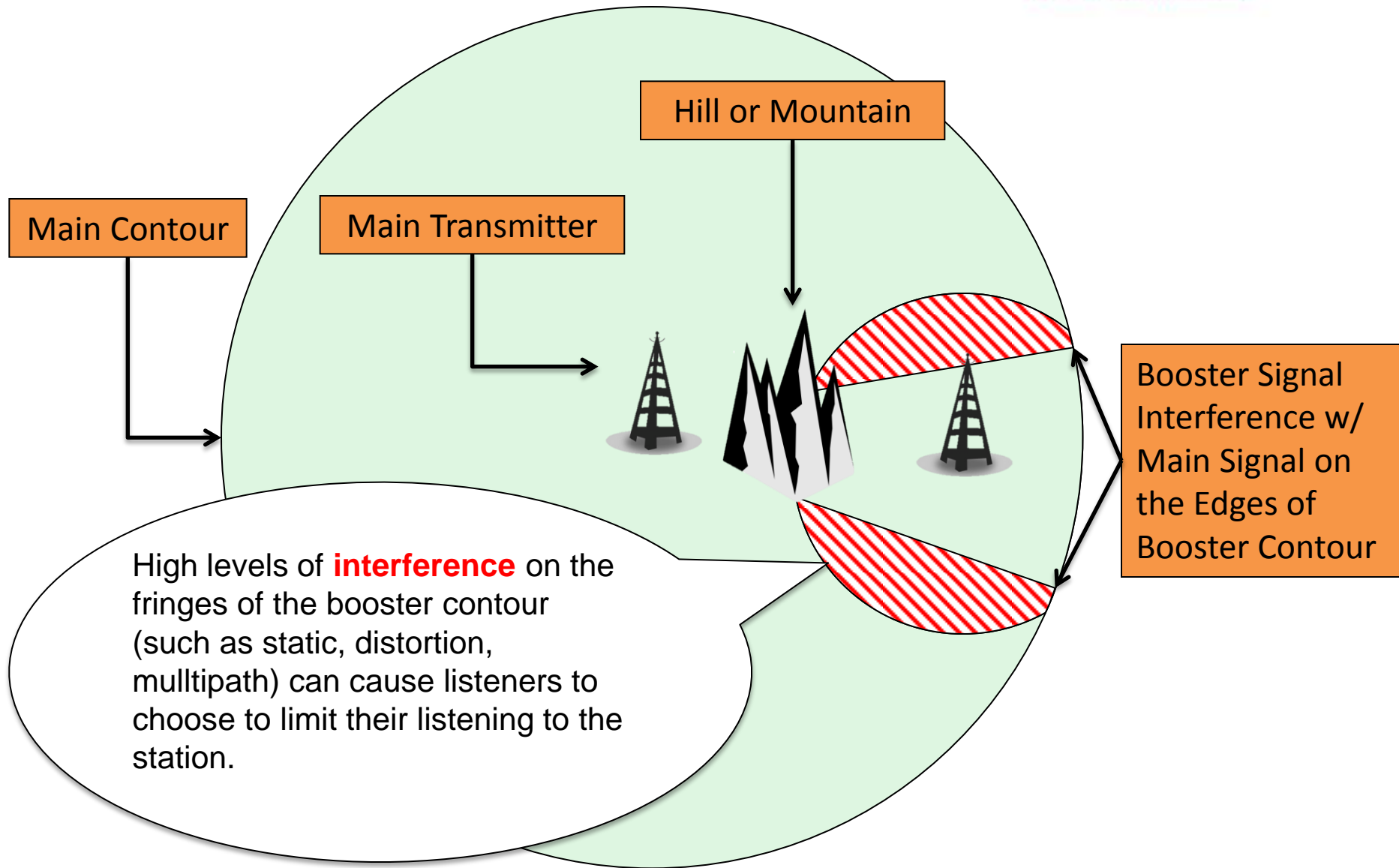
# Why MaxxCasting™ ?

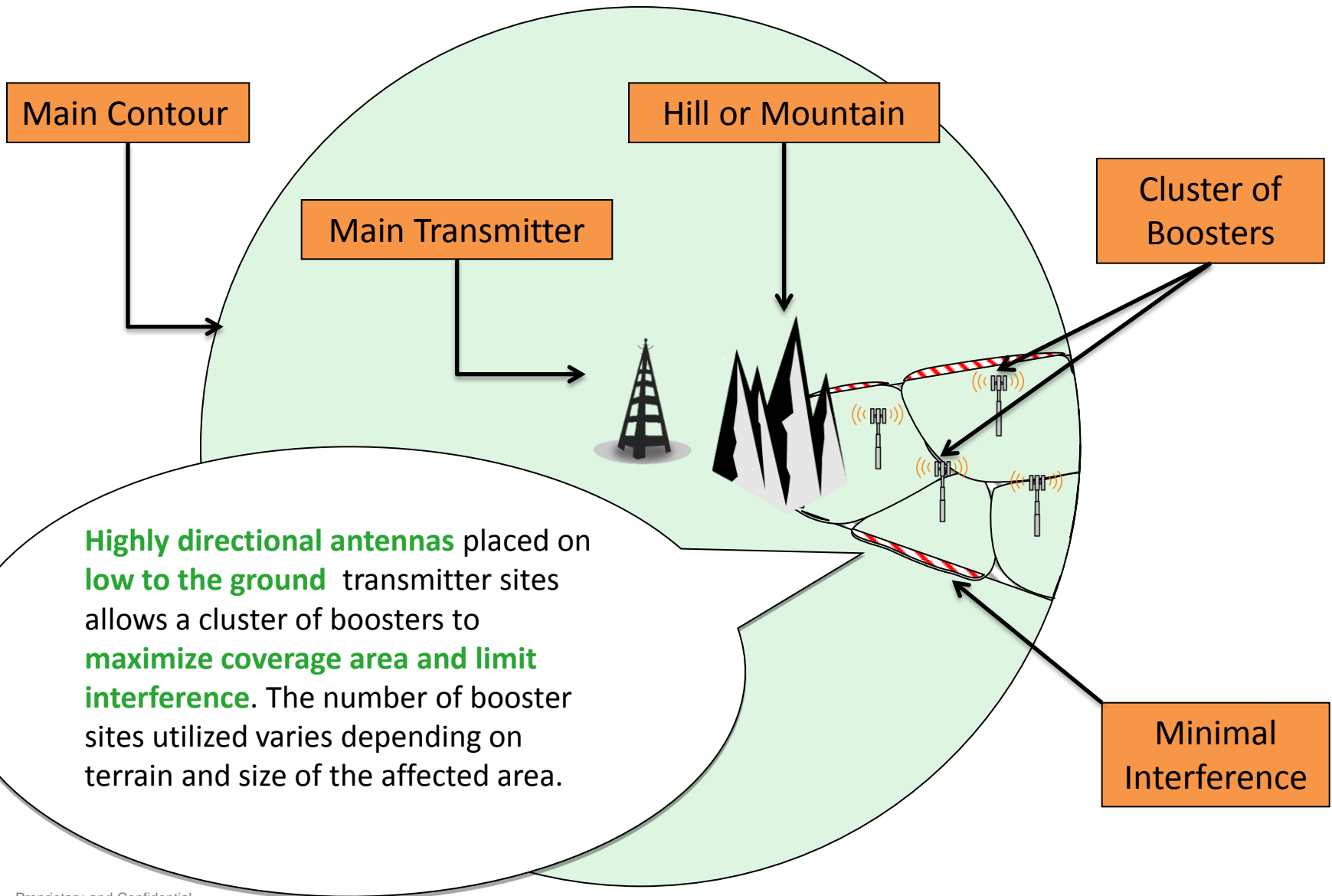
- MaxxCasting is a proprietary system developed by Geo- Broadcast Solutions and Harris specifically for the expansion of FM signal coverage
- The system, that uses clusters of lower to the ground transmitter sites rather than the single “tall tower” boosters used in traditional booster designs, has been extensively tested using the FCC Experimental Authority Process.
- The MaxxCasting system has also been refined using proprietary listener studies performed by NPR Labs and Ellyn Sheffield at Towson State University, a renowned expert in audio sciences to determine listener tolerance to “multipath interference”. These tests are used as a basis to design the most efficient and clean booster systems available.
- After three years of development and extensive testing, the proprietary MaxxCasting system takes the guesswork out of the booster design process and allows for a much greater precision in determining:
  1. Height above average terrain for the booster sites
  2. Power ratios among the main transmitter site and the booster sites
  3. GBS based timing differentials
  4. The number of booster sites needed
  5. Distance between the booster sites

# Partially Blocked Signal



# Problem: Interference w/ Main Signal





# ***MaxxCasting benefit to stations***

## **Additional Listeners Reached**

Increased ad revenue by being able to broadcast ads to more listeners

## **Access to new clients**

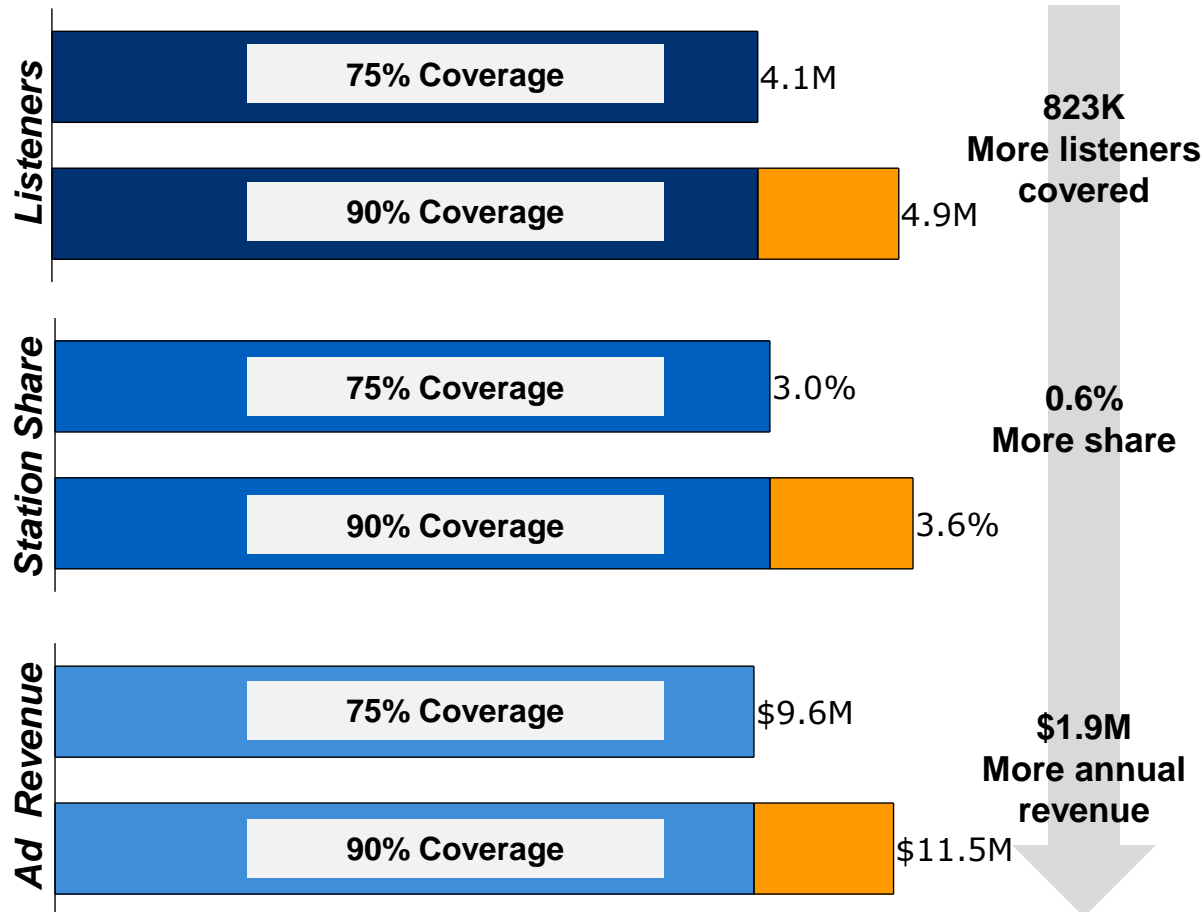
Improvement in broadcast area to cover locations of potential new advertisers

## **Competitive Advantage**

Better value offered to potential advertisers relative to other stations that don't have MaxxCasting

# Additional Listeners Reached

Based on 6.1M population in main signal area with 90% of population listening to radios (5.5M)



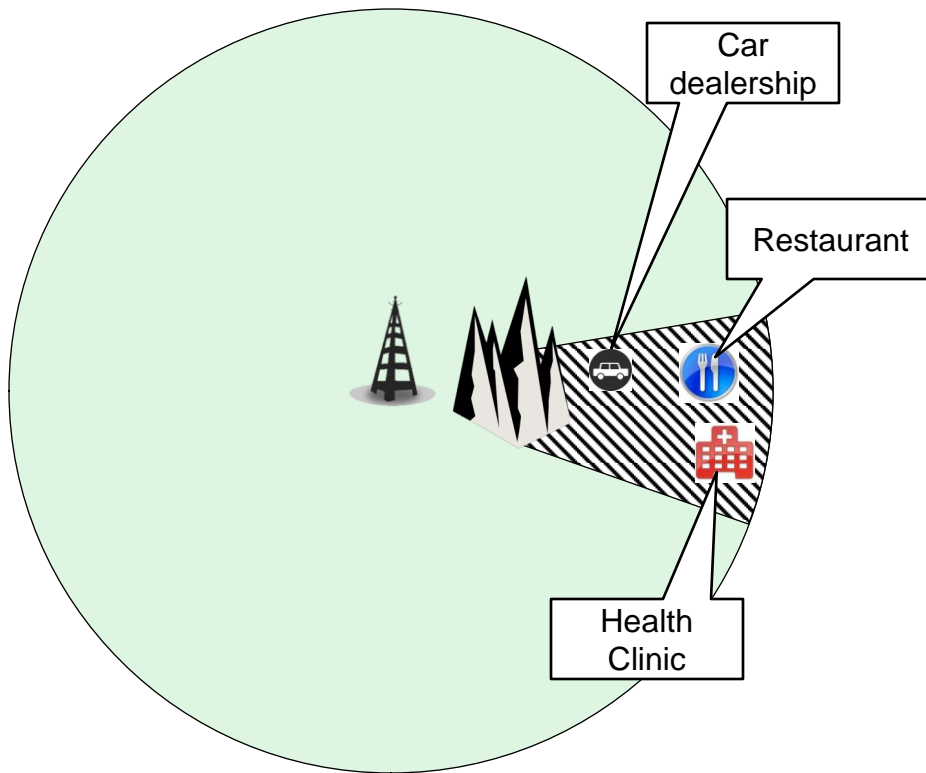
By increasing the coverage of its main signal area a station will likely:

- Increase its listeners
- Improve its ratings
- Grow its ad revenue

Note: Projections assume that new listeners reach would listen at the same rate as listeners within current coverage area  
Proprietary and Confidential



# Access to new clients



Reaching new areas could unlock potential new advertisers that previously would not have advertised with the station because of the signal did not reach their business and surrounding area

## Potential financial benefit

50 sq. miles of additional coverage through MaxxCasting reaches:

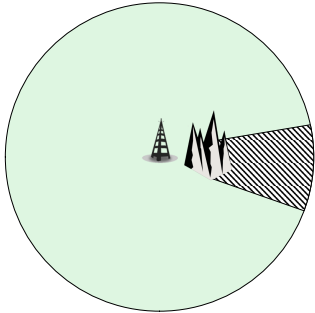
 X 5     X 20     X 10



**100 addit'l spots sold per month  
Or...  
\$40K addit'l ad revenue per month**

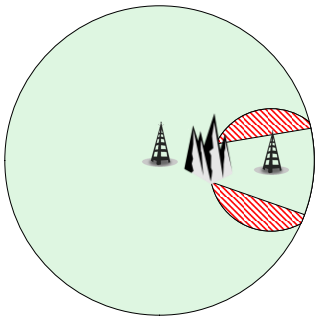
# Competitive Advantage

## Station A



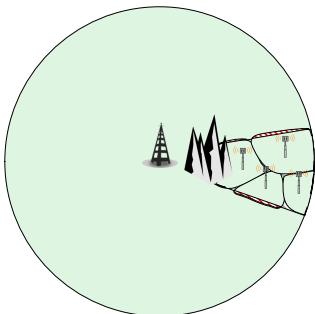
*No  
boosters*

## Station B



*Traditional  
boosters*

## Station C



*MaxxCasting*

Stations with MaxxCasting will have a competitive advantage over their peers by being able to offer:

- Better coverage across main signal area
- Little to no interruptions for listeners
- Access to more advertisers and listeners
- Minimal interference with signal

# Annual revenue impact of potential station benefits

	Normal	Maxx-casting	Difference
Radio Listener Population	5.5 M	5.5 M	
Radio Listener coverage	75%	90%	15%
Listener coverage	4.1 M	4.9 M	823K
Market share	3.0%	3.6%	0.6%
Radio revenue in market	\$320M	\$320M	0
Station Revenue	\$9.6M	\$11.5M	\$1.9M
Avg price per spot	\$274	\$308	\$34
Spots sold per year*	59,130	59,130	0
Additional spots available for sale	6,570	6,570	0
Additional spots sold to "new advertisers"		1,643	1,643
Revenue from sales to "new advertisers"		\$507K	\$507K
Total revenue increase from MaxxCasting	\$9.6M	\$12.0M	\$2.4M

Higher share due to additional listeners reached

More ads sold due to access to new clients and a competitive advantage

\* Assumes 10 spots per hour for 18 hours over 365 days (90% sold)

# Data used and key assumptions

## Main Assumptions

Station benefits projections were conducted for station in the San Francisco market with the following characteristics:

- 75% original coverage of main signal area improving to 90% with MaxxCasting
- Population of 6.1M in main signal area
- Inventory of 5,400 spots per month (10 ads per hour X 18 hours X 30 days)
- 90% of population listens to radio
- 90% of available ads sold on average
- Average rating of 0.4 for broadcasts
- \$14.0 average CPM

## Data Sources

### SNL-Kagan

- Number of stations
- Population
- Market rankings

### SQAD

- National average CPM

### RAB

- Individual market CPM

# Station payback (avg. 6 boosters)

	San Francisco	Sacramento	Jacksonville
Market Rank	Top 5	25 <sup>th</sup>	50 <sup>th</sup>
Population	6.1 M	1.9M	1.1M
Market Revenue	\$320 M	\$110 M	\$60 M
Average Share	3.0%	4.0%	5.0%
Increase in Revenues from MaxxCasting	\$2,400K	\$700K	\$350K
MC Servicing Fee	(\$25k)	(\$25k)	(\$25k)
<b>Annual Lease Cost</b>	<b>(\$80K)</b>	<b>(\$80K)</b>	<b>(\$80K)</b>
<b>Annual profit from MaxxCasting</b>	<b>\$2,295 K</b>	<b>\$595 K</b>	<b>\$245 K</b>
Equipment	\$300K	\$300K	\$300K
Installation and Site Costs	\$100K	\$100K	\$100K
Maxxcasing Fee	\$200K	\$100K	\$50K
<b>Total Cost</b>	<b>\$600K</b>	<b>\$500K</b>	<b>\$450K</b>
<b>Payback Period After Installation Year</b>	<b>&lt;1 Year</b>	<b>1 Year</b>	<b>2 Years</b>