

The Next Generation of Radio

The Value Proposition of Radio in a Connected World

https://nabanet.com/project/the-value-proposition-of-radio-in-a-connected-world/

AGENDA

Radio and Audio Environment Today

Listeners and what they're listening on

HD Radio Roll out in North America

Progress in Mexico and Canada...more to come

Radio in the Connected World - HD Radio & IP Audio: the Battle for the Dashboard

- The Analog-Digital Continuum
- Metadata
- Next Steps

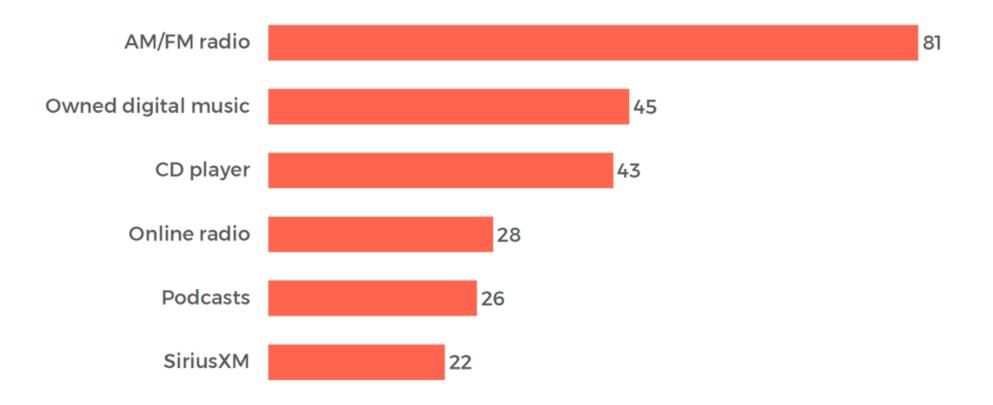




Audio Sources Currently Ever Used in Car

BASE: U.S. AGE 18+ AND HAS DRIVEN/RIDDEN IN CAR IN LAST MONTH; 89%

% USING AUDIO SOURCE IN CAR









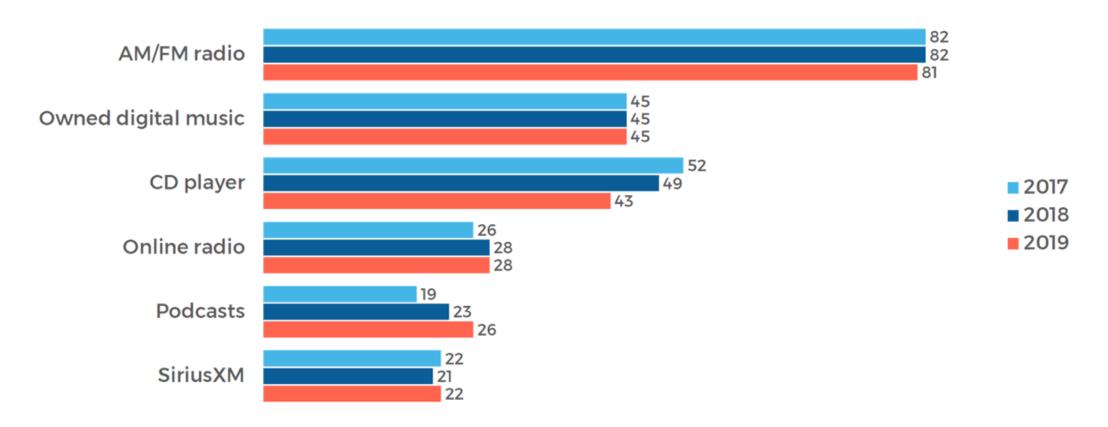




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Media Pyramid 2019



Total

		TS 2018
	HD Radio (12%)	13%
Total	Smartwatch (13%)	11%
N = 50,652	Podcasts¹ (21%)	23%
11 - 00,002	Connected Car (25%)	24%
	Satellite Radio ³ (26%)	25%
	Smart Speakers (27%)	21%
	MP3 Player (31%)	35%
	Video Games¹ (43%)	44%
	Smart TV (54%)	51%
	Streaming Audio ¹ (59%)	61%
	Radio/Music Apps (65%)	66%
	Connect Phone to Car (68%)	65%
	Tablet (69%)	70%
	Streaming Video¹ (70%)	69%
	Social Media (85%)	86%
AM/FM Radio ^{2*} (91%)		
	Smartphone (91%)	90%
	TV/Video ^{2*} (95%)	95%
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Brand Pyramid 2019



Total

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Total

N = 50,652

TuneIn (6%) Spotify (12%) Shazam* (13%) Snapchat (14%) iHeartRadio (17%) Linkedin (17%) Hulu^^** (18%) Pinterest (18%) Pandora** (20%) Twitter (22%) SiriusXM³ (26%) Amazon Prime Video (30%) Instagram (31%) Home Station Stream (42%) YouTube (48%)

Netflix (55%)

Facebook (71%)

AM/FM Radio^{2*} (91%)

All weekly use unless noted 21+ hour per day 3 Paid & trial users *Any Platform/Device **Excluding Canada ^Downloaded ^*Includes Live TV

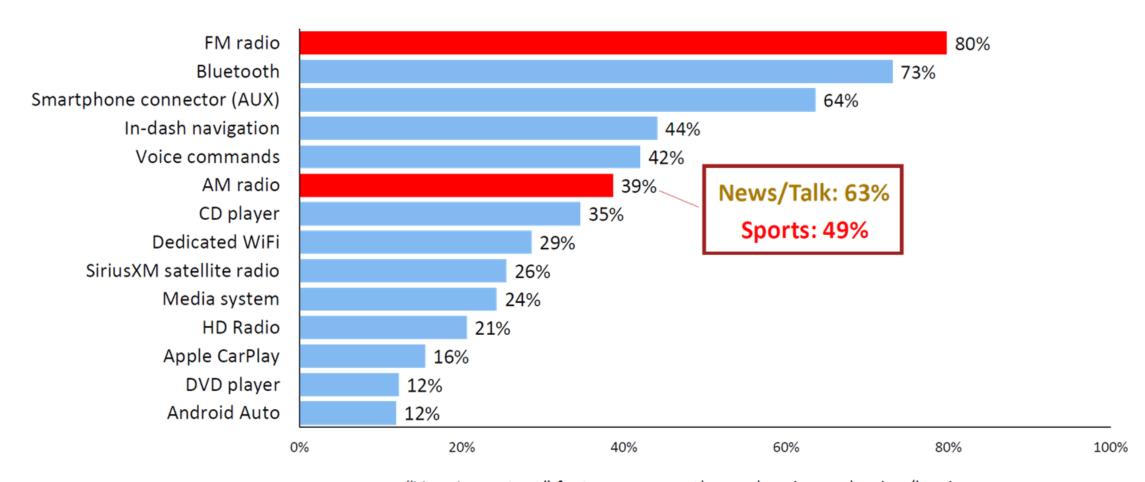
52%

74%

92%

NABA

FM Radio Leads the List of Most Important New Car Features, Followed by Bluetooth and Auxiliary Jack to Connect Smartphones

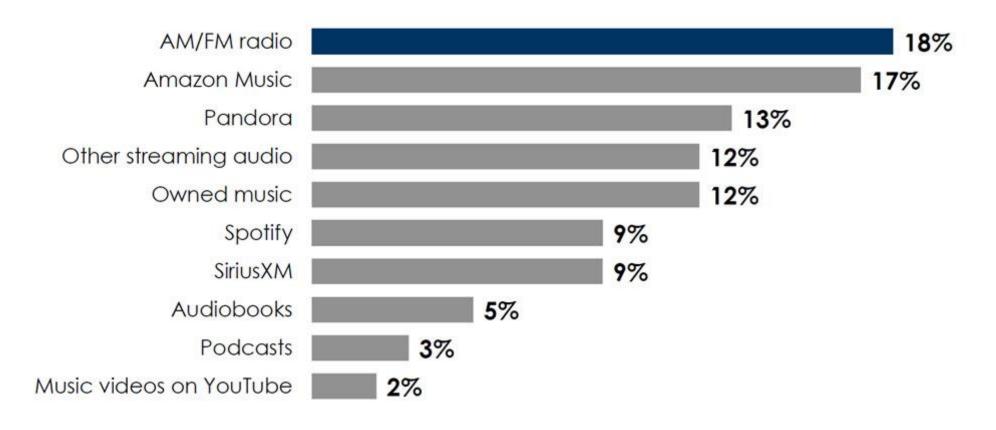


"Very Important" features among those planning on buying/leasing (or already bought) a new vehicle in 2019 (9% of all respondents)



AM/FM radio and Amazon Music lead in smart speaker audience share

Share of listening on the smart speaker device among persons 13+

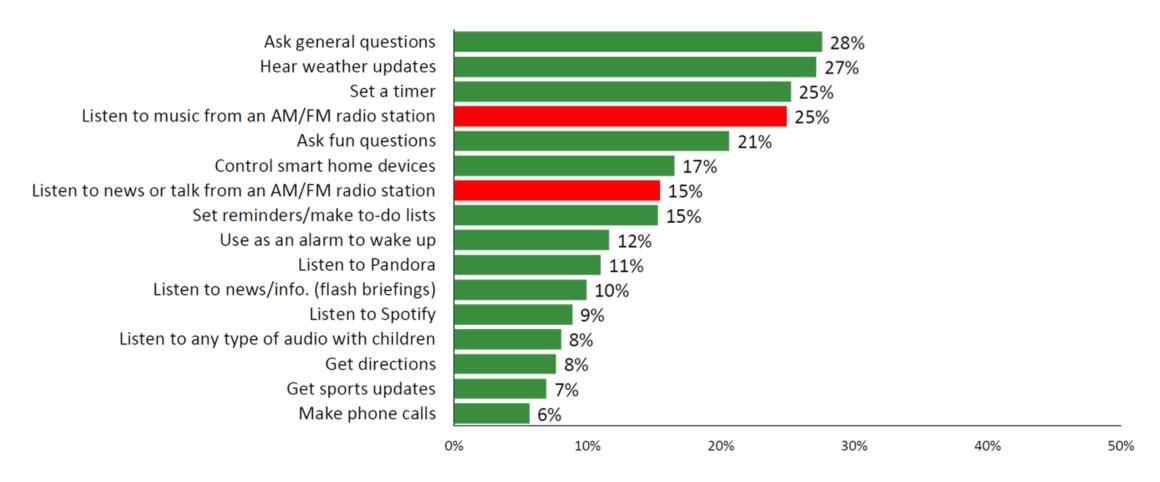


How to read: Among persons 13+, 18% of listening on the smart speaker in Q2 2019 is to AM/FM radio.





One-Fourth Frequently Listen to Music From AM/FM Radio on Their Smart Speaker(s); AM/FM News/Talk Listening Is Also a Frequent Use



% of smart speaker owners who "frequently" use their device(s) in each way (most mentioned uses; 6% or more)



HD RADIO AND THE BATTLE FOR THE DASHBOARD



RADIO NOW SHARES THE DASH WITH A MYRIAD OF COMPETITORS





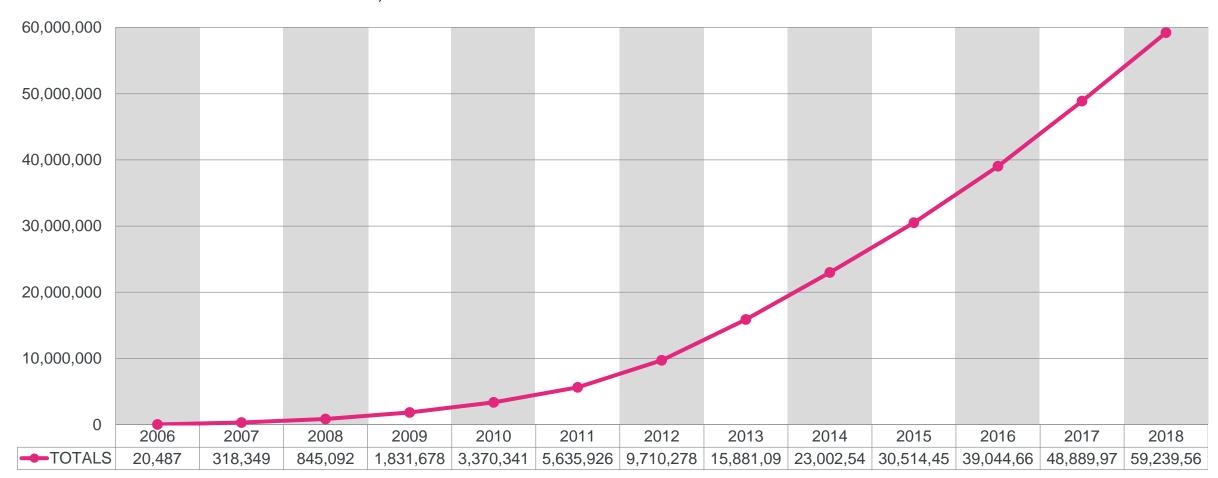


HD RADIO BY THE NUMBERS



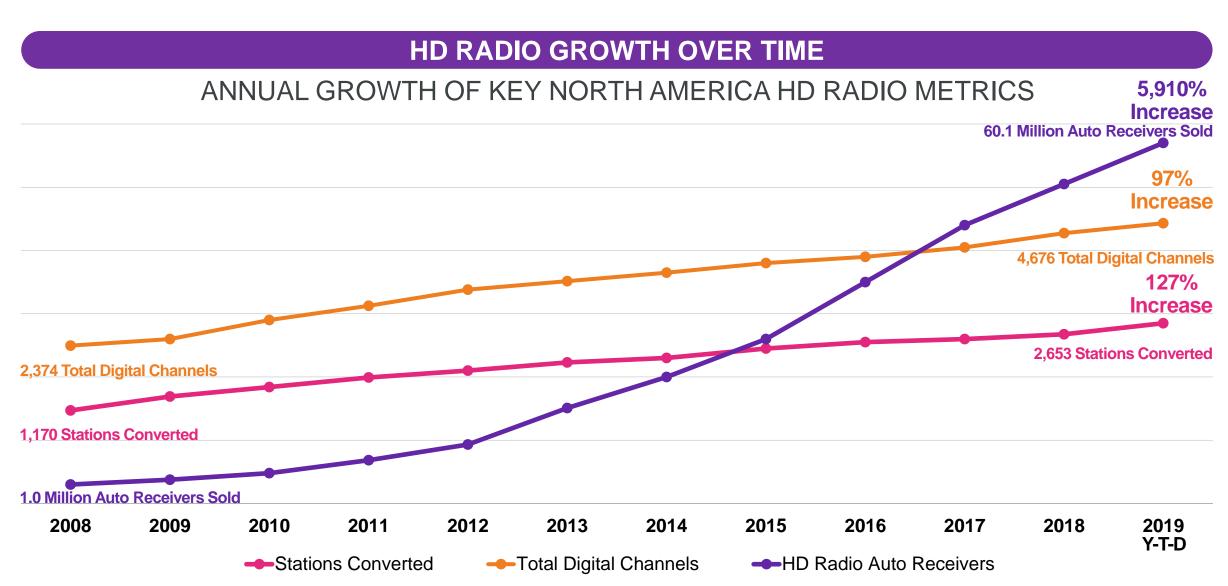
TOTAL HD RADIO RECEIVER GROWTH OVER TIME

INCLUDES OEM, AUTO AFTERMARKET AND HOME/PORTABLE UNITS









HD RADIO BY THE NUMBERS



Over 60.1 million HD Radio-equipped cars on the road in North America

+ Over 3.8 million consumer HD Radio home and portable receivers

= Over 63.9 million HD Radio receivers in U.S., Canada & Mexico

HD Radio U.S. auto penetration well over 20% in the top 10 DMAs:

1 New York: **35.5%**

2 Los Angeles: **32.4%**

3 Chicago: **22.2**%

4 Philadelphia: 22.9%

5 Dallas: **21.3**%

6 Washington, DC: 23.5%

7 Houston: **22.2%**

8 San Francisco: 29.2%

9 Boston: **27.8**%

10 Atlanta: **20.7**%

HD RADIO NORTH AMERICA ROLLOUT



NORTH AMERICA ROLLOUT

Adopted - Approved

Experimental Approval

U.S. Totals Stations On-Air: 2,257

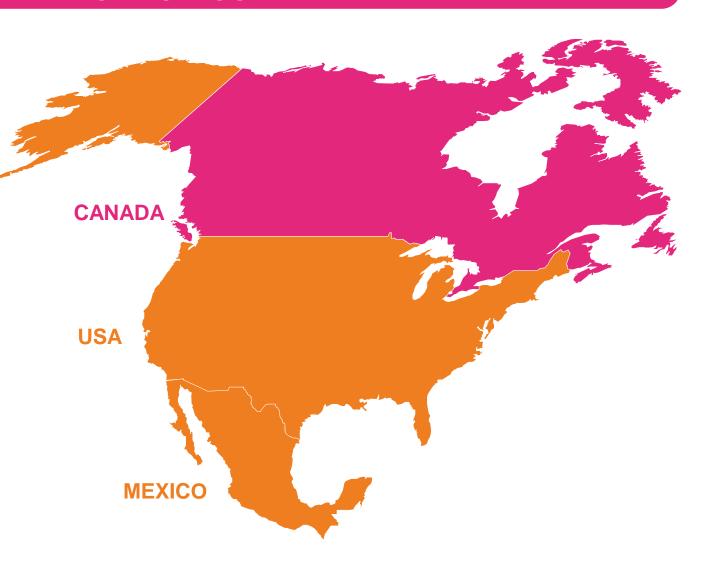
Total Digital Channels On-Air: 4,432

Mexico Totals Stations On-Air: 107

Total Digital Channels On-Air: 174

Canada Totals Stations On-Air: 30

Total Digital Channels On-Air: 75



Analog – Digital Continuum



NABA Recommendations:

- Adopt static RDS as minimum
- Adopt Hybrid IBOC
 - https://nabanet.com/project/north-american-digital-radio-standard
- Help define criteria for all-digital migration decision
- Regular licenses (not experimental) for all-digital transmission
- Adopt best-practice use of metadata
 - http://www.nab.org/innovation/digitalDashboard.asp



Non-Broadcast Content











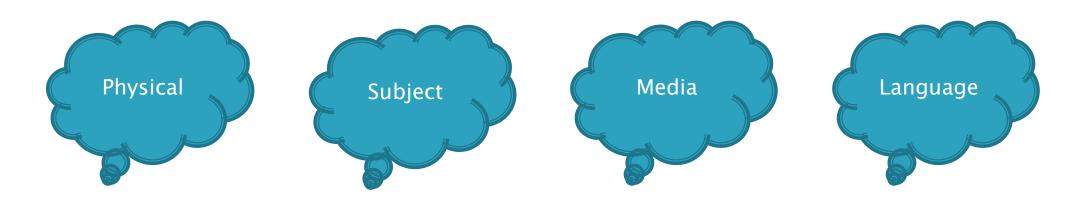
Listener Experience Curation - Timeliness - Quality - Metadata



NABA Recommendations:

 Offer station/network content through as many paths as possible while emphasizing over-the-air content

Proximity and Listener Affiliation



NABA Recommendations:

- Spoken word mix of local, regional, national, international to best serve listeners
- As many media technologies as possible for largest combination of listeners with an emphasis on over-the-air



Hybrid Radio

Broadcast + Internet



NABA Recommendations:

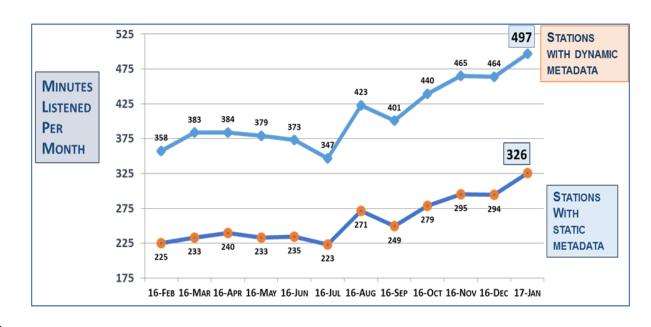
- Support internet-based content for hybrid (over-the-air plus internet) radio receivers, encourage automakers to add the technology



Metadata Focus

NABA Recommendations:

- Create Once Play Everywhere (COPE)
- Adopt at least static, but better dynamic
- Experiment with dynamic for best refresh rate
- Adopt best-practice use of metadata
 - http://www.nab.org/innovation/digitalDashboard.asp
- Experiment with use cases to understand benefit

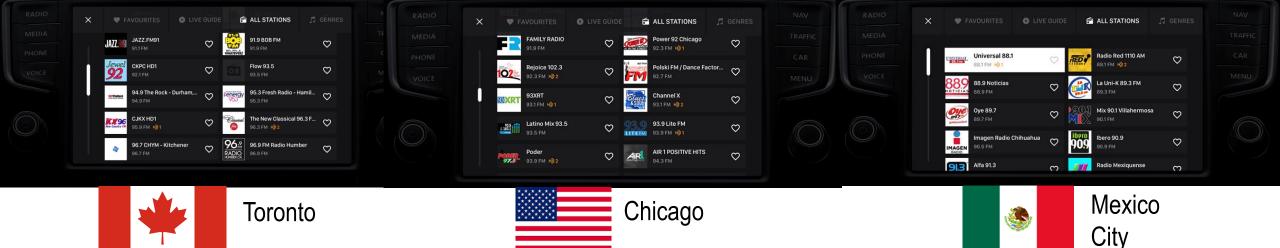




Combined Broadcast & IP

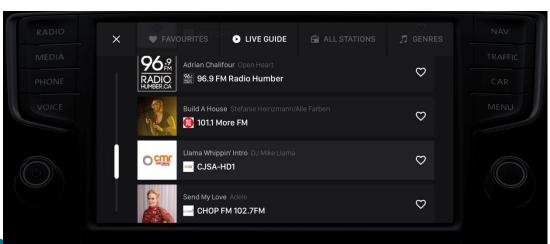
- Broadcast & IP = Rich Engagement
- Broadcast & IP = Enhanced Discovery
- Broadcast & IP = Live Guide
- Broadcast & IP = Enhanced Revenue Opportunities





Enhanced Discovery

Live Guide



Rich Engagement





The Bottom Line



NABA Recommendations:

- Consider all recommendations of document
- Station/network conduct SWOT (Strengths, Weaknesses, Opportunities and Threats) and Benefit/Cost analysis
- Industry associations reach out to automakers for primary placement of radio in head units
- AM express concern to automakers removing AM from electric/hybrid vehicles
- Consider best approach to audience measurement for each technology



What is NABA Doing Next?

Finding consensus among the broadcast community in North America to preserve radio's prominence in the automotive dashboard

- Defining the Requirements for Radio/Audio in the Car Dashboard
- Defining Common Requirements for Hybrid radio
- Defining Common Requirements for Metadata

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