

REQUEST FOR SPECIAL TEMPORARY AUTHORITY (MULTICAST HOSTS)

Gray Television Licensee, LLC (“Gray”), licensee of digital full power television station WUPV(TV), Ashland, VA (Fac ID 10897) (“WUPV”), hereby submits this amended request for special temporary authority to host WUPV’s ATSC 1.0-formatted multicast channels on television stations other than WUPV’s primary ATSC 1.0 simulcast host to allow WUPV to serve over-the-air viewers in the Richmond-Petersburg DMA. Specifically, Gray is requesting authorization to allow WUPV’s non-primary programming streams (multicast streams) to be aired in an ATSC 1.0 format, with no ATSC 3.0 simulcast, as follows:

Stream	Host Station
65.2 (Bounce TV)	WTVR-TV
65.3 (Grit)	WRLH-TV
65.4 (Laff)	WRIC-TV
65.5 (Start TV)	WRIC-TV

Gray requests that for purposes of enforcement and application of the Commission’s rules, WUPV be treated as if it is airing the multicast streams over the facilities of the aforementioned stations and be the responsible party under the Act and Commission rules and regulations akin to the manner that the Commission treats ATSC 1.0 primary simulcast streams under the Next Gen TV rules.

Concurrently herewith, Gray is submitting an application for WUPV to voluntarily convert to the ATSC 3.0 transmission standard beginning on April 11, 2022 (the “WUPV Next Gen App”). Under the transition plan for the Richmond-Petersburg DMA (in which WUPV is located), WUPV will host its own ATSC 3.0-formatted primary channel along with the ATSC 3.0-formatted primary channels of WLRH-TV, WTVR-TV, WWBT(TV), and WRIC-TV. WUPV’s ATSC 1.0-formatted primary channel will be hosted by Gray-owned WWBT(TV). WUPV also transmits four ATSC 1.0-formatted multicast channels. Because of ATSC 1.0 capacity limitations, WUPV does not have sufficient bandwidth capacity to host WUPV’s multicast channels in ATSC 1.0, and those channels would be hosted as follows: Bounce TV (WTVR-TV), Grit (WRLH-TV), Laff and Start TV (WRIC-TV). Gray will indemnify the licensee of the host stations with respect to the content of the hosted multicast channels and will be responsible for the multicast channels’ compliance with all applicable laws and regulations. To avoid viewer confusion, each of WUPV’s current multicast channels would retain its existing PSIP major/minor channel numbers.

Due to ATSC 3.0 capacity and other constraints attendant with the multi-station and multi-market coordination needed for successful ATSC 3.0 deployment across the country, it is not feasible for WUPV to simulcast an ATSC 3.0 version of its multicast streams without unduly minimizing, if not largely eliminating, the benefits to the public and the participating stations of transitioning to ATSC 3.0. Simulcasting those streams in ATSC 3.0 would reduce capacity available to NextGen stations for offering consumers the improved services that ATSC 3.0 enables. The types of services and improvements that would be precluded would include enhanced video featuring High Dynamic Range, Wide Color Gamut and High Frame Rate, immersive and multiple audio channels using Dolby AC-4, Advanced Emergency Alerting and Information functions as part of a broadcast receiver application, and non-real time interactive data delivery. Each of these requires a portion of the ATSC 3.0 capacity that would be unavailable were Gray to carry multicast program streams as the ATSC 3.0 host for stations in the Richmond-Petersburg market.

Furthermore, significant additional engineering work and more equipment would be required to simulcast WUPV's multicast streams in ATSC 3.0 and ATSC 1.0 formats. Obtaining, installing, and testing that equipment would, at minimum, delay rollout of ATSC 3.0 in the Richmond-Petersburg market.

The proposed multicast arrangements will serve the public interest by enabling most current over-the-air viewers to continue to have access to WUPV's multicast streams. The service contours of the respective ATSC 1.0 hosts cover a majority of WUPV's current service area population:

Stream	Host Station	Service Area Coverage
65.2 (Bounce TV)	WTVR-TV	84.9%
65.3 (Grit)	WRLH-TV	88.7%
65.4 (Laff)	WRIC-TV	90.4%
65.5 (Start TV)	WRIC-TV	90.4%

See attached engineering exhibit. Although the coverage on these host stations is below the 95 percent threshold required for expedited processing, the Bureau has previously authorized Next Gen TV stations to utilize a 1.0 multicast host whose coverage is less than 95 percent of its original 1.0 coverage area in order to preserve programming during the transition.¹ In the pending *Second ATSC 3.0 FNPRM*, the Commission tentatively concluded that a Next Gen TV station may utilize a multicast host that covers less than 95 percent of its original coverage area, so long as the multicast host is within the same DMA and covers the Next Gen TV station's community of license.² Each of the proposed host stations meets this standard.

Absent the arrangement with these stations, all over-the-air viewers would lose access to WUPV's multicast streams. Additionally, the arrangements will preserve access to those WUPV multicast streams for viewers who are receiving them via MVPDs. Gray has provided the requisite notice to MVPDs regarding relocation of WUPV's primary ATSC 1.0 stream and its non-primary multicast streams. Gray will work with all impacted MVPDs to ensure that they continue to receive a good quality signal of the non-primary multicast streams, whether that be over-the-air or via alternate delivery methods. WUPV is also airing public service announcements to inform viewers of its upcoming transition and of the need for viewers to rescan their televisions after the transition date in order to maintain over-the-air access to WUPV's program streams in the current format.³

In its *Second FNPRM*, the Commission recognized that its "existing rules do not address the licensing of multicast streams" but that "a Next Gen TV broadcaster that has converted or is seeking to convert its facility to 3.0 can seek special temporary authority (STA) to air 1.0 multicast streams on a host station."⁴ As the Commission further explained, "these STAs permit a guest multicast stream to be treated as if it

¹ See e.g., Letter from Barbara A. Kreisman, Chief, Video Division, Media Bureau, to Gray Television Licensee, LLC (rel. Dec. 1, 2021) (on file at LMS File No. 0000169771); Letter from Barbara A. Kreisman, Chief, Video Division, Media Bureau, to Hearst Stations Inc. (rel. June 14, 2021) (on file at LMS File No. 0000146558).

² *Authorizing Permissive Use of the "Next Generation" Broadcast Television Standard*, Second Further Notice of Proposed Rulemaking, GN Docket No. 16-142, FCC 21-116, para. 32 (rel. Nov. 5, 2021) ("Second FNPRM").

³ See 47 C.F.R. § 73.3801(g).

⁴ Second FNPRM ¶ 6.

originated from the Next Gen TV broadcaster's facility, as opposed to the host station's facility, for purposes of the Commission's rules and the Communications Act."⁵

Consistent with the FCC's proposal in the Second FNPRM, Gray's use of multiple ATSC 1.0 hosts will allow it to maintain existing service to viewers without burdening any party. Gray acknowledges that the use of multiple ATSC 1.0 hosts does not create any new carriage rights for its multicast streams. Gray seeks the Commission's recognition of its proposed multi-host arrangements simply to provide needed clarity: (1) that the hosting arrangements do not implicate the broadcast ownership rules, and (2) that WUPV, as the originator of each multicast stream at issue, is "responsible for regulatory compliance regarding the multicast stream being aired on a host station."⁶

Finally, Gray notes that WUPV fulfills all of its children's programming requirements by airing core E/I programming on WUPV's primary stream. WUPV does not, and does not intend to, rely on any programming broadcast on its multicast streams for compliance with the Commission's children's programming requirements. As such, neither WUPV's compliance with the Commission's Children's Television Programming requirements nor viewers' access to the station's required core programming will be affected by the relocation of WUPV's multicast signals as proposed herein.

For the reasons set forth above, the Commission should grant forthwith Gray's request for Special Temporary Authority, to the extent required, to broadcast its ATSC 1.0-formatted multicast channels via the facilities of WTVR-TV, WRLH-TV, and WRIC-TV after WUPV converts its broadcast transmission to the Next Gen TV standard.

⁵ *Id.*

⁶ *Id.* ¶ 11.

Engineering Statement

WUPV Ashland, VA
Non-Primary Multicast Stream Coverage Comparison
prepared for
Gray Television Licensee, LLC

This statement, prepared on behalf of *Gray Television Licensee, LLC*, provides a comparison of noise limited coverage contour (“NLSC”) coverage corresponding to the non-primary multicast streams of digital television station WUPV, Facility ID 10897, Ashland, VA. WUPV is seeking authorization to convert its existing broadcast facility to ATSC 3.0 transmission. The WUPV primary programming stream will be carried in ATSC 1.0 format by station WWBT (Ch. 10, Fac ID 30833, Richmond VA). This statement supports a request for Special Temporary Authority to allow WUPV’s non-primary multicast streams to be aired in ATSC 1.0 format by certain other television stations.

Gray proposes that WUPV’s non-primary multicast streams be carried in ATSC 1.0 format by a combination of several other participating stations in the same market. These streams will be hosted as follows.

Non-Primary Multicast Stream	Host Station
65.2 Bounce TV	WTVR-TV Ch. 23 Fac ID 57832 Richmond VA
65.3 Grit	WRLH-TV Ch. 24 Fac ID 412 Richmond, VA
65.4 Laff	WRIC-TV Ch. 28 Fac ID 74416 Petersburg, VA
65.5 Start TV	WRIC-TV Ch. 28 Fac ID 74416 Petersburg, VA

Coverage contour comparison maps are attached that depict the NLSC of WUPV and the various ATSC 1.0 host stations. Population counts of each station are provided along with the corresponding percentage of NLSC population match and loss.

The WUPV non-primary multicast stream associated with virtual channel number 65.2 (Bounce TV) is to be carried in ATSC 1.0 on WTVR-TV. An NLSC comparison of WUPV and WTVR-TV is provided in Figure 1, showing considerable overlap. The population detail is provided below, showing that 84.9 percent of the population within WUPV’s NLSC is within that of WTVR-TV, representing a 15.1 percent loss.

**WUPV and WTVR-TV Non-Primary Multicast Stream Comparison
 (Figure 1)**

Non-Primary Multicast Comparison Noise Limited Service Contour	Population (2020 census)
WUPV Ch. 8 Total: (Proposed ATSC 3.0)	2,137,267
WTVR-TV Ch. 23 Total: (ATSC 1.0 Multicast Host)	1,931,974
Common Area Population:	1,814,968
Match of WUPV Total:	84.9%
WUPV Multicast Loss:	15.1%

The WUPV non-primary multicast stream associated with virtual channel number 65.3 (Grit) is to be carried in ATSC 1.0 on WRLH-TV. An NLSC comparison of WUPV and WRLH-TV is provided in Figure 2, showing considerable overlap. The population detail below shows that 88.7 percent of the population within WUPV’s NLSC is within that of WRLH-TV, representing an 11.3 percent loss.

**WUPV and WRLH-TV Non-Primary Multicast Stream Comparison
 (Figure 2)**

Non-Primary Multicast Comparison Noise Limited Service Contour	Population (2020 census)
WUPV Ch. 8 Total: (Proposed ATSC 3.0)	2,137,267
WRLH-TV Ch. 24 Total: (ATSC 1.0 Multicast Host)	2,133,838
Common Area Population:	1,895,241
Match of WUPV Total:	88.7%
WUPV Multicast Loss:	11.3%

Finally, the WUPV non-primary multicast streams associated with virtual channel numbers 65.4 (Laff) and 65.5 (Start TV) are to be carried in ATSC 1.0 on WRIC-TV. An NLSC comparison of WUPV and WRIC-TV is provided in Figure 3, showing substantial overlap. As detailed below, 90.4 percent of the population within WUPV’s NLSC is within that of WRIC-TV, representing a 9.6 percent loss.

**WUPV and WRIC-TV Non-Primary Multicast Stream Comparison
 (Figure 3)**

Non-Primary Multicast Comparison Noise Limited Service Contour	Population (2020 census)
WUPV Ch. 8 Total: (Proposed ATSC 3.0)	2,137,267
WRIC-TV Ch. 24 Total: (ATSC 1.0 Multicast Host)	2,190,829
Common Area Population:	1,931,361
Match of WUPV Total:	90.4%
WUPV Multicast Loss:	9.6%

List of Attachments

- Figure 1 WUPV with ATSC 1.0 Host Station WTVR-TV
- Figure 2 WUPV with ATSC 1.0 Host Station WRLH-TV
- Figure 3 WUPV with ATSC 1.0 Host Station WRIC-TV

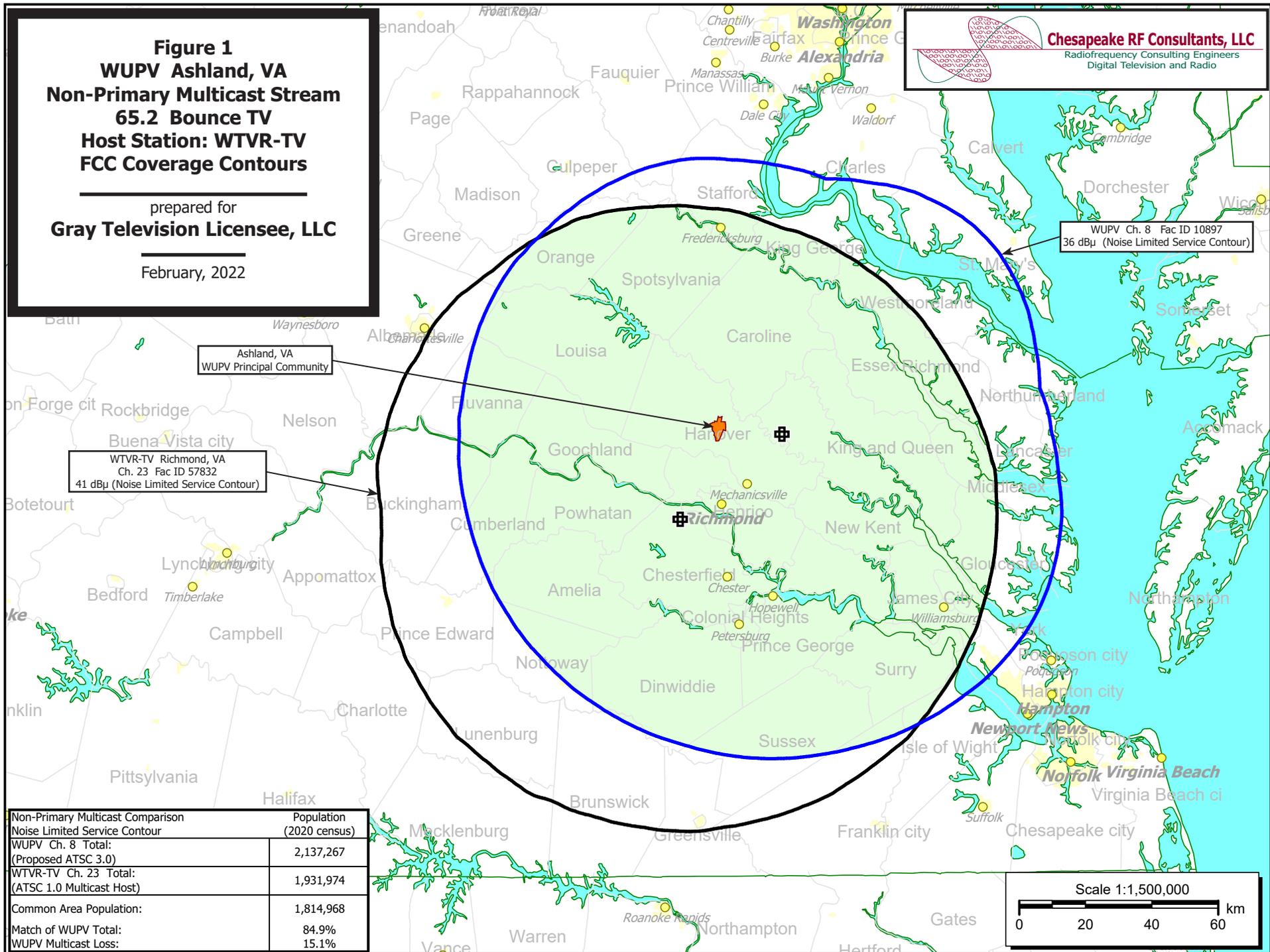
Chesapeake RF Consultants, LLC

Joseph M. Davis, P.E. February 10, 2022
 207 Old Dominion Road Yorktown, VA 23692 703-650-9600

Figure 1
WUPV Ashland, VA
Non-Primary Multicast Stream
65.2 Bounce TV
Host Station: WTVR-TV
FCC Coverage Contours

prepared for
Gray Television Licensee, LLC

February, 2022



Ashland, VA
WUPV Principal Community

WTVR-TV Richmond, VA
Ch. 23 Fac ID 57832
41 dBμ (Noise Limited Service Contour)

WUPV Ch. 8 Fac ID 10897
36 dBμ (Noise Limited Service Contour)

Non-Primary Multicast Comparison		Population (2020 census)
Noise Limited Service Contour		
WUPV Ch. 8 Total: (Proposed ATSC 3.0)		2,137,267
WTVR-TV Ch. 23 Total: (ATSC 1.0 Multicast Host)		1,931,974
Common Area Population:		1,814,968
Match of WUPV Total:		84.9%
WUPV Multicast Loss:		15.1%

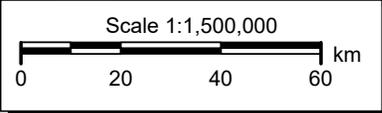
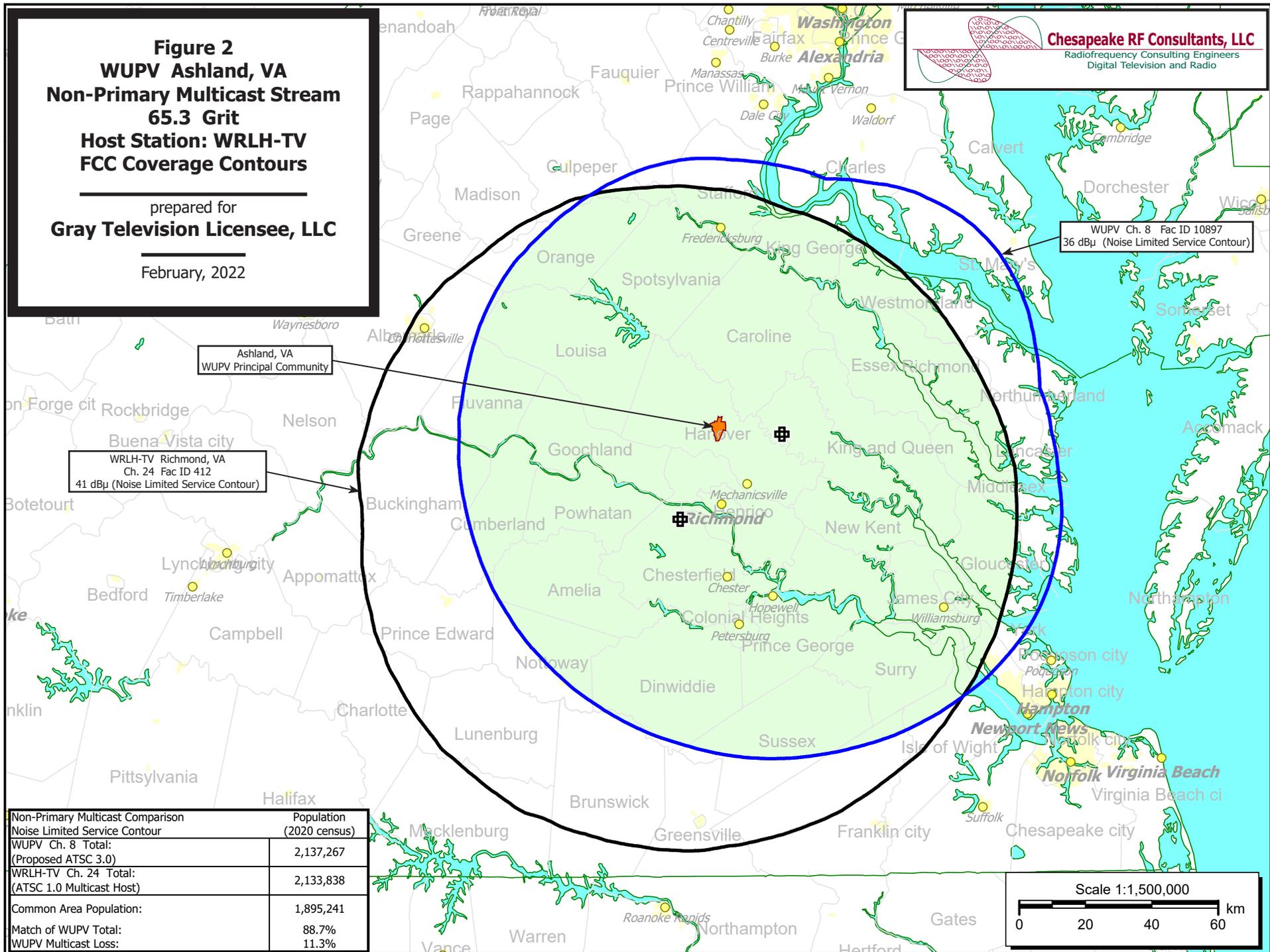


Figure 2
WUPV Ashland, VA
Non-Primary Multicast Stream
65.3 Grit
Host Station: WRLH-TV
FCC Coverage Contours

prepared for
Gray Television Licensee, LLC

February, 2022



Ashland, VA
WUPV Principal Community

WRLH-TV Richmond, VA
Ch. 24 Fac ID 412
41 dBu (Noise Limited Service Contour)

WUPV Ch. 8 Fac ID 10897
36 dBu (Noise Limited Service Contour)

Non-Primary Multicast Comparison		Population (2020 census)
Noise Limited Service Contour		
WUPV Ch. 8 Total: (Proposed ATSC 3.0)		2,137,267
WRLH-TV Ch. 24 Total: (ATSC 1.0 Multicast Host)		2,133,838
Common Area Population:		1,895,241
Match of WUPV Total:		88.7%
WUPV Multicast Loss:		11.3%

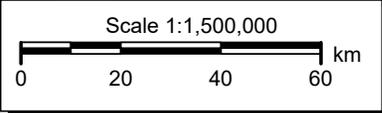
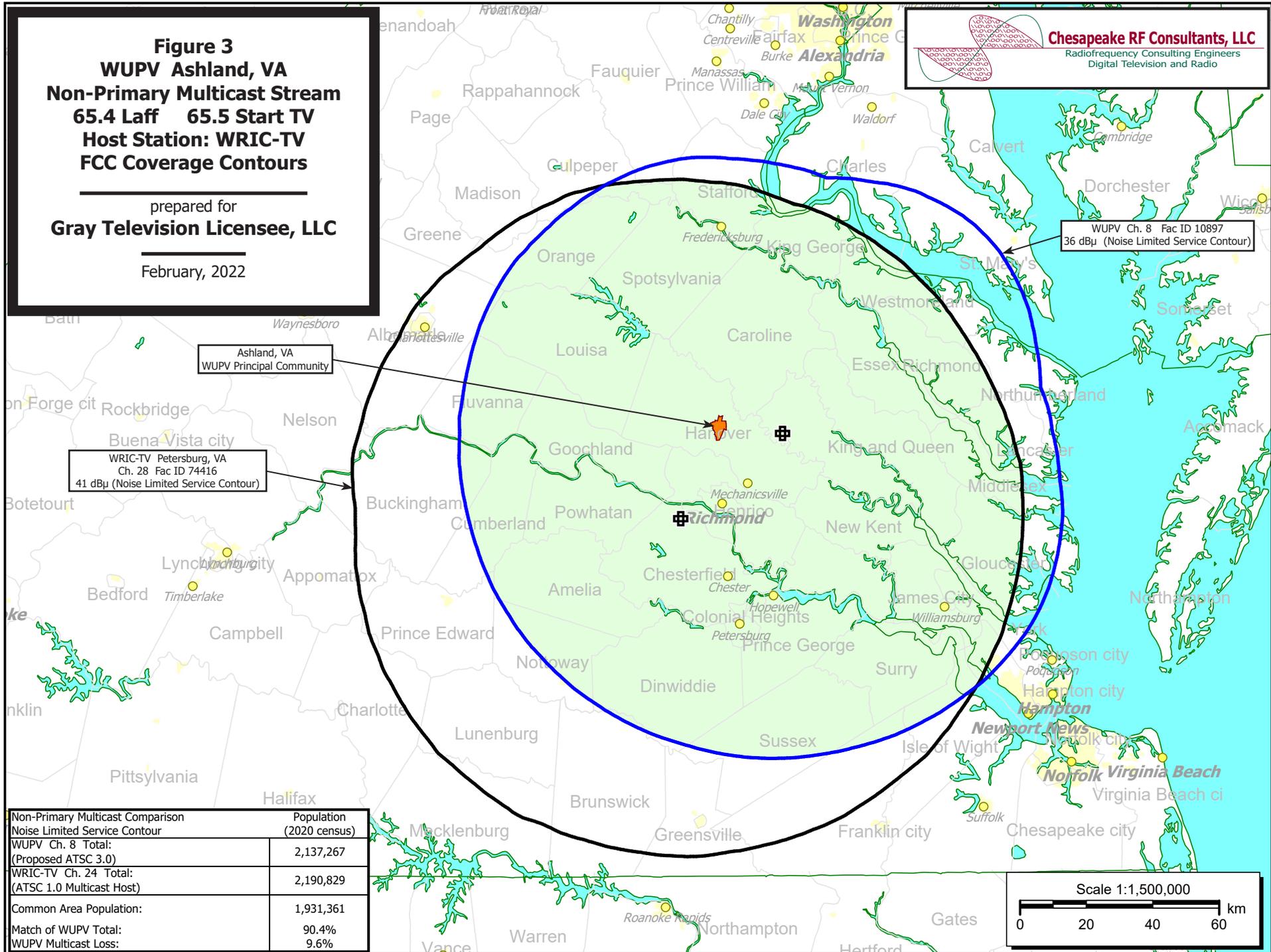


Figure 3
WUPV Ashland, VA
Non-Primary Multicast Stream
65.4 Laff 65.5 Start TV
Host Station: WRIC-TV
FCC Coverage Contours

prepared for
Gray Television Licensee, LLC

February, 2022



Ashland, VA
WUPV Principal Community

WRIC-TV Petersburg, VA
Ch. 28 Fac ID 74416
41 dBu (Noise Limited Service Contour)

WUPV Ch. 8 Fac ID 10897
36 dBu (Noise Limited Service Contour)

Non-Primary Multicast Comparison		Population (2020 census)
Noise Limited Service Contour		
WUPV Ch. 8 Total: (Proposed ATSC 3.0)		2,137,267
WRIC-TV Ch. 24 Total: (ATSC 1.0 Multicast Host)		2,190,829
Common Area Population:		1,931,361
Match of WUPV Total:		90.4%
WUPV Multicast Loss:		9.6%

