

Multicast Host Exhibit (ATSC 1.0)
WUPV(TV), Ashland, VA (Fac ID 10897)

Gray Television Licensee, LLC (“Gray”), licensee of digital full power television station WUPV(TV), Ashland, VA (Fac ID 10897) (“Station”), hereby submits this Host Exhibit as required by the November 16, 2023 Public Notice announcing the Next Gen TV Multicast licensing rules had taken effect (DA 23-1086). The Station broadcasts its multicast streams using the ATSC 1.0 standard, with no ATSC 3.0 simulcast as described below.¹

As approved in its Modification to License (Next Gen), granted on April 7, 2022 (File No. 185201), the Station operates using the ATSC 3.0 standard. The Station’s primary programming stream is simulcast in the ATSC 1.0 standard on WWBT, Richmond, VA (FID 30833). Because of ATSC 1.0 capacity constraints, the Station is not able to air its multicast streams on the same channel as its primary ATSC 1.0 simulcast signal.

The Station broadcast four multicast streams prior to its transition to ATSC 3.0. In order to avoid the loss of the Station’s over-the-air non-primary multicast streams to ATSC 1.0 viewers, Gray entered into agreements with the ATSC 1.0 Hosting Stations to broadcast those streams using those Host Station’s ATSC 1.0 facilities. As part of this same arrangement, Gray provides the ATSC 1.0 Hosting Stations with capacity as ATSC 3.0 guest stations on the Station’s ATSC 3.0 facility.

WUPV’s multicast streams air in ATSC 1.0 as follows:

Channel position	Stream	ATSC 1.0 Host Station	Host RF Channel	Resolution	Simulcast Y/N
65.2	Bounce TV	WTVR-TV	23	480i	N
65.3	Grit	WRLH-TV	24	480i	N
65.4	Laff	WRIC-TV	28	480i	N
65.5	Start TV	WRIC-TV	28	480i	N

If WUPV were broadcasting in ATSC 1.0 via its own facilities, it would be able to broadcast its primary and multicast streams. However, following the Station’s transition to the ATSC 3.0 standard, the hosting arrangements with the ATSC 1.0 Hosting Stations have allowed Gray to continue offering these multicast streams in the Richmond-Petersburg DMA. Due to capacity and other constraints, the Station is not able to simulcast an ATSC 3.0 version of its multicast streams.

In order to continue to alleviate any viewer confusion, the Licensee confirms that the PSIP (virtual) channel for each of the Station’s programming streams will remain unchanged and will continue to be identified to viewers as being associated with WUPV.

As shown in the attached coverage map, 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. Further, as demonstrated in its original STA filing, no more than 1.2% of the population within the Richmond DMA lost access to WUPV’s multicast programming as a result of the simulcast arrangement. The majority of the population

¹ The Station has been broadcasting its multicast streams on host stations pursuant to STA. See File Nos. 185201, 214222. Note: WUPV’s most recent STA expired on Nov. 29, 2023. Licensee attempted to timely file this license modification. Due to a glitch with the license application, FCC staff advised licensee not to file until it could be resolved.

Multicast Host Exhibit (ATSC 1.0)
WUPV(TV), Ashland, VA (Fac ID 10897)

that is no longer able to receive the multicast streams from WUPV were located in another DMA or were able to receive the programming from another station. All multicast signals will continue to meet the community of license coverage requirements. A summary of the service area coverage of the hosted multicast streams is provided below:

Channel position	Stream	Host Station	Service Area Coverage (Total)	Service Area Coverage (In DMA)	Service Area Coverage (With Alternate Service)	Service Area Coverage (With Alternate Service/In DMA)
65.2	Bounce TV	WTVR-TV	84.9%	98.1%	98.4%	99.0%
65.3	Grit	WRLH-TV	88.7%	98.6%	99.0%	99.2%
65.4	Laff	WRIC-TV	90.4%	98.8%	99.1%	99.4%
65.5	Start TV	WRIC-TV	90.4%	98.8%	n/a	98.8%

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 also aired 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.²

Gray understands that it is the sole party responsible for ensuring compliance with all statutory and regulatory requirements with regards to the Station's non-primary multicast streams, including the Commission's rules regarding political broadcasting, children's programming, equal employment opportunities, captioning, public inspection file, indecency, sponsorship identification, station identification, contests, the CALM Act, and the Emergency Alert System.

The Station 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.

² See 47 C.F.R. § 73.3801(g).

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

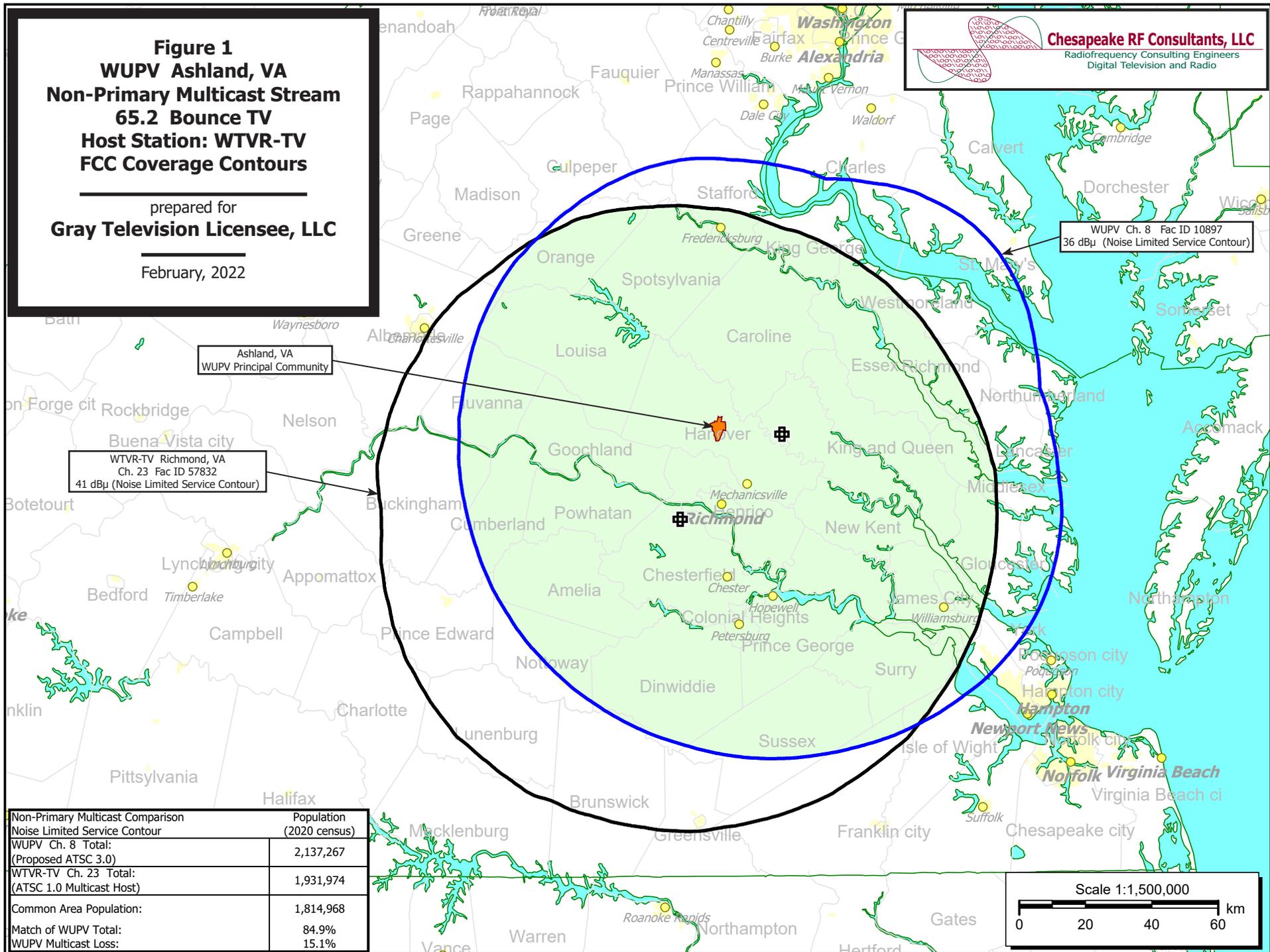
Chesapeake RF Consultants, LLC

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)

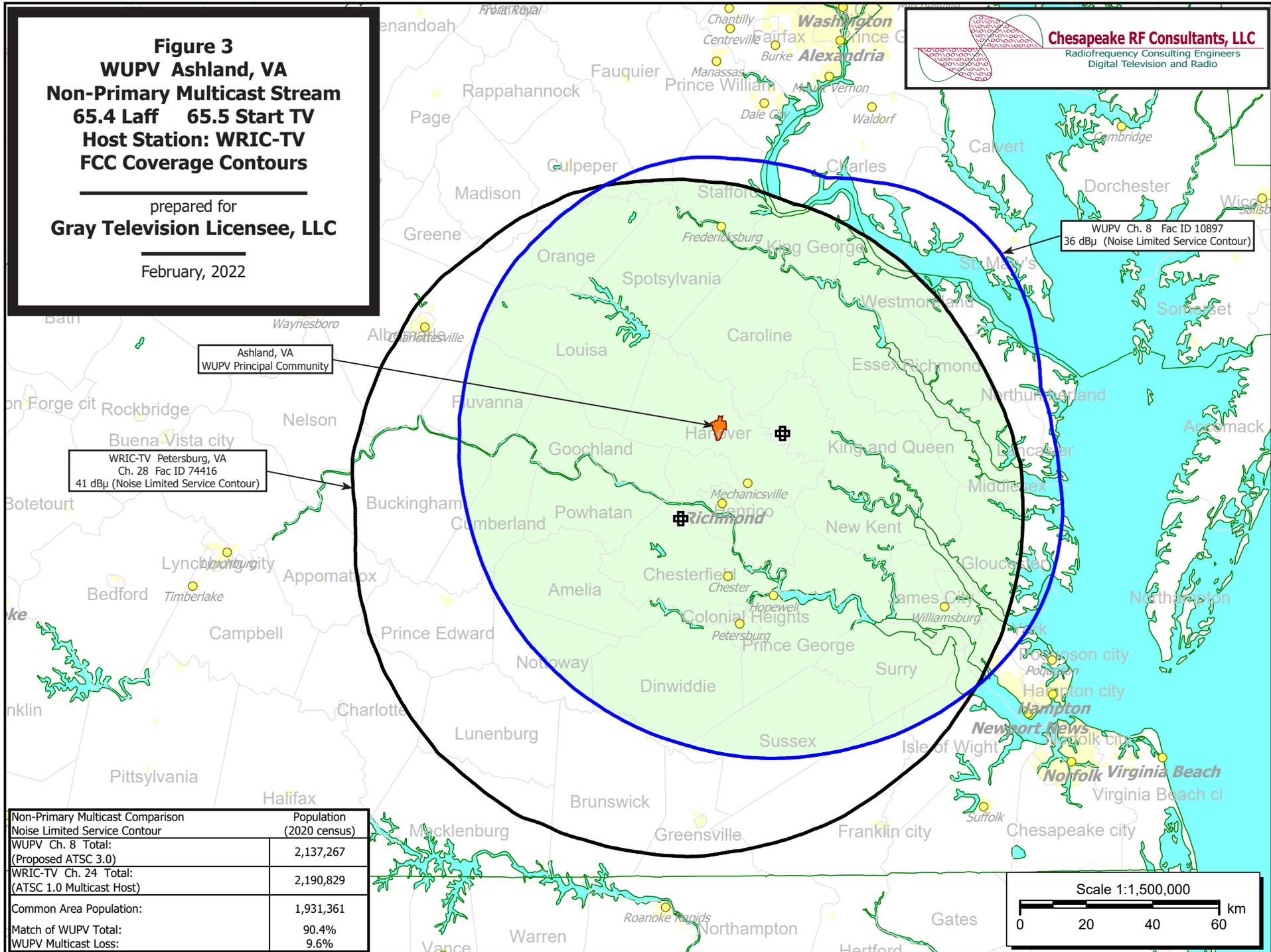
WUPV Ch. 8 Fac ID 10897
 36 dBμ (Noise Limited Service Contour)

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 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



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%