



# Royalty Shares Specifications

## PBS – Distribution of Cable Royalty Funds

January 6, 2022

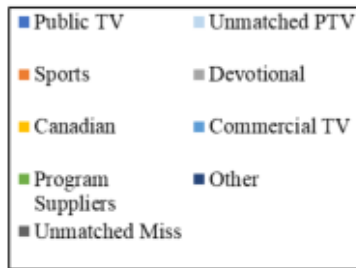
# Current Specification

- LHS: Royalties per subscriber
- RHS: Non-sports claimant mins \* [Pre/During/Post WGN Removal]  
US sports claimant mins \* [Pre/During/Post WGN Removal]  
Canadian sports claimant mins \* [Pre/During/Post WGN Removal]
- Controls: Measure of total mins  
1(CSO minimum fee payer)  
Time-varying regression constant

# Decisions to Make

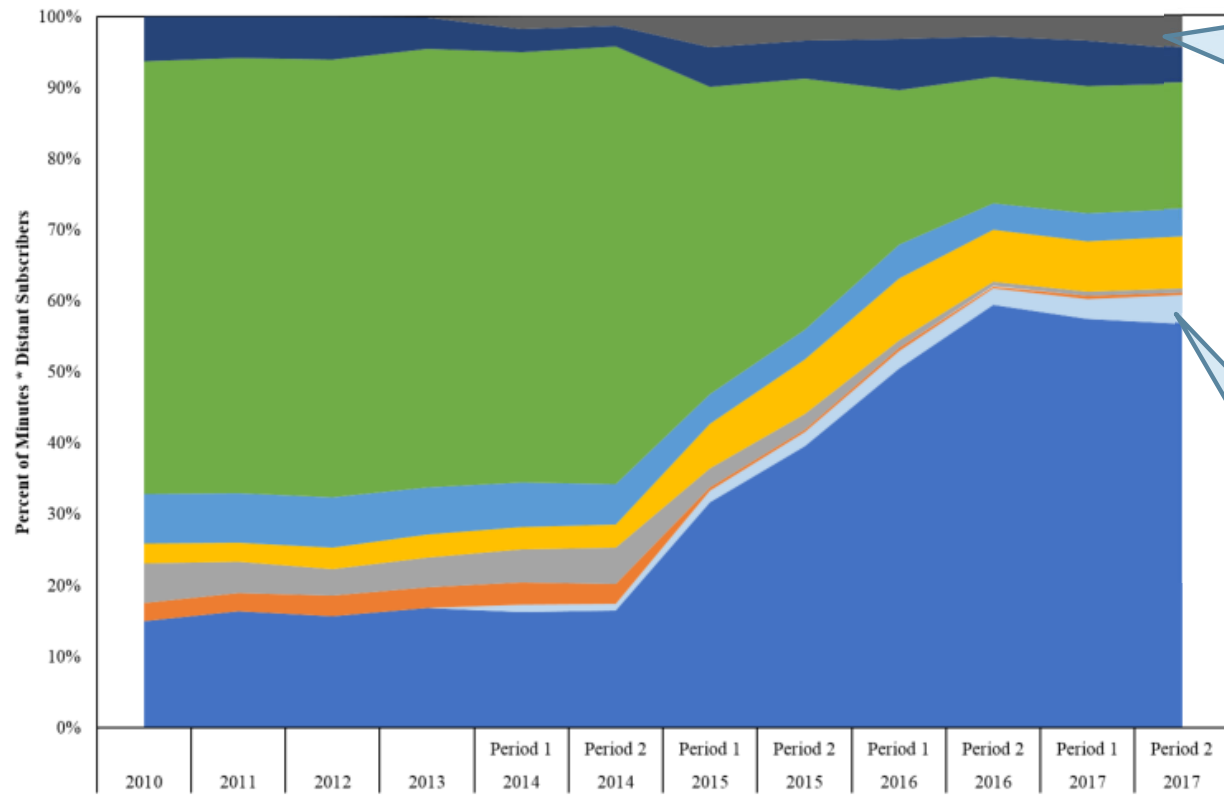
- Dealing with unmatched minutes
  - Baseline: Claimant mins excludes unmatched, # permitted signals includes unmatched
  - Only consider signals with content data
  - Improve CDC-RedBee match
  - Predict claimant content of unmatched
- Accounting for Daylight Savings
  - # permitted mins vs. total expected mins
- Time periods
  - Currently based on breaks in mins-subs: Pre (2014), During (2015-20161), Post (20162-2017) WGN removal

# Claimant Percent of Subscriber Mins



Notes: Claimant minutes are multiplied by the number of distant subscribers receiving the call sign in each accounting period. Expected minutes are calculated for unmatched call signs as number of minutes in the accounting period (adjusted by 60 minutes for stations observing Daylight Savings). Unmatched call signs with station type "E" are designated as "Unmatched PTV"; all others are designated as "Unmatched Miss." 2010-2014 numbers given by Crawford Report Figure 11.

Sources: CDC Subscriber Group Royalties Data; Red Bee Programming Data; CRTC Program Logs; Crawford Report.



Unmatched non-PTV is 1% of subscriber-mins in 2014, increasing to 4% in 2017

Unmatched PTV is 1% of subscriber-mins in 2014, increasing to 3% in 2017

# Reg 299: Baseline

- Controls for # permitted channels (including no-known content)

Year	Public	Sports	Devotional	Canadian	Commercial	Program Suppliers
2014	9.8%	76.1%	0.9%	1.1%	-11.1%	23.1%
2015	33.4%	10.0%	2.5%	7.7%	-10.8%	57.2%
2016	25.5%	15.4%	3.9%	7.1%	-6.6%	54.7%
2017	2.3%	30.2%	6.0%	6.2%	0.7%	54.6%
2014-2017	17.8%	33.1%	3.3%	5.5%	-7.0%	47.3%

Note: To construct 2014-2017 average, yearly shares are weighted by total base fund royalties (base plus excess from minimum fees) collected in that year.

- Issue: Omitted group contains substantial claimant data, bringing down precision and coefficients

# Reg 314: Only Content Data, # Signals

- Controls for # known-content permitted signals

Year	Public	Sports	Devotional	Canadian	Commercial	Program Suppliers
2014	25.4%	36.8%	1.2%	4.3%	5.7%	26.6%
2015	47.4%	3.0%	1.3%	9.5%	3.4%	35.4%
2016	54.2%	3.5%	1.4%	8.2%	4.5%	28.3%
2017	56.3%	4.7%	1.3%	7.7%	5.8%	24.2%
2014-2017	45.7%	12.1%	1.3%	7.4%	4.9%	28.6%

Note: To construct 2014-2017 average, yearly shares are weighted by total base fund royalties (base plus excess from minimum fees) collected in that year.

- Cleanest omitted group - has least possible claimant mins
- Issue: Not standard definition of permitted signals, ignores unmatched

# Reg 293: Only Content Data, # Mins

- Controls for total mins of known-content permitted channels

Year	Public	Sports	Devotional	Canadian	Commercial	Program Suppliers
2014	25.5%	36.5%	1.2%	4.4%	5.9%	26.5%
2015	47.5%	2.9%	1.3%	9.6%	3.5%	35.3%
2016	54.3%	3.4%	1.4%	8.3%	4.5%	28.1%
2017	56.4%	4.6%	1.3%	7.7%	5.9%	24.1%
2014-2017	45.8%	12.0%	1.3%	7.5%	4.9%	28.5%

Note: To construct 2014-2017 average, yearly shares are weighted by total base fund royalties (base plus excess from minimum fees) collected in that year.

- Similar results to mins – difference stems from Daylight Savings

# Reg 315: Better RedBee Match

- Controls for total mins of known-content permitted channels
- Assign RedBee data to simulcast stations, even if exactly match CDC call sign (e.g. WUNC-DT is also matched to WUNC-HD / -LD / -CD)

Year	Public	Sports	Devotional	Canadian	Commercial	Program Suppliers
2014	25.4%	37.0%	1.1%	4.4%	5.6%	26.5%
2015	47.5%	2.9%	1.3%	9.5%	3.4%	35.4%
2016	54.1%	3.4%	1.4%	8.3%	4.5%	28.2%
2017	56.1%	4.6%	1.4%	7.7%	5.9%	24.2%
2014-2017	45.6%	12.1%	1.3%	7.5%	4.8%	28.6%

Note: To construct 2014-2017 average, yearly shares are weighted by total base fund royalties (base plus excess from minimum fees) collected in that year.

- Only improves matching on a few channels, so slight differences

# Reg 316: Assign all “E” mins to PTV

- Controls for total mins of known-content permitted channels
- Assign all expected mins for CDC-defined educational stations to PTV, do not use Redbee for PTV

Year	Public	Sports	Devotional	Canadian	Commercial	Program Suppliers
2014	24.9%	37.3%	1.2%	4.3%	6.2%	26.0%
2015	47.3%	3.3%	1.4%	9.7%	3.8%	34.6%
2016	54.0%	3.7%	1.4%	8.5%	4.9%	27.5%
2017	56.7%	4.8%	1.4%	7.9%	6.3%	22.9%
2014-2017	45.6%	12.4%	1.3%	7.6%	5.3%	27.8%

Note: To construct 2014-2017 average, yearly shares are weighted by total base fund royalties (base plus excess from minimum fees) collected in that year.

- Not much change on PTV, increases commercial

# Reg 317: Both Changes

- Controls for total mins of known-content permitted channels
- Better RedBee match, adjust all “E” mins to PTV

Year	Public	Sports	Devotional	Canadian	Commercial	Program Suppliers
2014	25.3%	36.7%	1.2%	4.4%	6.5%	26.0%
2015	47.5%	3.1%	1.4%	9.7%	4.0%	34.4%
2016	54.2%	3.5%	1.4%	8.5%	5.1%	27.2%
2017	56.9%	4.5%	1.3%	7.9%	6.5%	22.8%
2014-2017	45.8%	12.1%	1.3%	7.6%	5.5%	27.7%

Note: To construct 2014-2017 average, yearly shares are weighted by total base fund royalties (base plus excess from minimum fees) collected in that year.

# Reg 306: Better RedBee Match

- Controls for # permitted channels (including no-known content)
- Assign RedBee data to simulcast stations, even if exactly match CDC call sign (e.g. WUNC-DT is also matched to WUNC-HD / -LD / -CD)

Year	Public	Sports	Devotional	Canadian	Commercial	Program Suppliers
2014	12.1%	70.8%	1.0%	1.6%	-9.2%	23.7%
2015	36.7%	8.3%	2.2%	8.1%	-7.8%	52.5%
2016	33.8%	12.0%	3.2%	7.4%	-3.4%	47.1%
2017	22.2%	20.7%	4.2%	6.8%	2.8%	43.3%
2014-2017	26.2%	28.1%	2.6%	6.0%	-4.4%	41.6%

Note: To construct 2014-2017 average, yearly shares are weighted by total base fund royalties (base plus excess from minimum fees) collected in that year.

# Reg 308: Assign all “E” mins to PTV

- Controls for # permitted channels (including no-known content)
- Assign all expected mins for CDC-defined educational stations to PTV, do not use Redbee for PTV

Year	Public	Sports	Devotional	Canadian	Commercial	Program Suppliers
2014	18.7%	54.0%	1.1%	2.8%	-1.4%	24.7%
2015	43.8%	5.2%	1.7%	8.9%	-0.7%	41.0%
2016	47.9%	6.5%	2.0%	7.9%	2.0%	33.8%
2017	47.7%	9.3%	2.2%	7.3%	4.9%	28.6%
2014-2017	39.4%	18.9%	1.8%	6.7%	1.2%	32.0%

Note: To construct 2014-2017 average, yearly shares are weighted by total base fund royalties (base plus excess from minimum fees) collected in that year.

- Closes more of the mins gap, better results

# Reg 310: Both Changes

- Controls for # permitted channels (including no-known content)
- Better RedBee match, adjust all “E” mins to PTV

Year	Public	Sports	Devotional	Canadian	Commercial	Program Suppliers
2014	21.2%	48.6%	1.1%	3.4%	0.7%	25.0%
2015	45.7%	4.2%	1.6%	9.1%	1.0%	38.4%
2016	50.9%	5.2%	1.8%	8.1%	3.1%	31.0%
2017	52.0%	7.2%	1.8%	7.5%	5.5%	26.0%
2014-2017	42.3%	16.4%	1.6%	7.0%	2.6%	30.1%

Note: To construct 2014-2017 average, yearly shares are weighted by total base fund royalties (base plus excess from minimum fees) collected in that year.

- Commercial remains insignificant