



Safety First, Service Always



REVIEW OF 2020-2021 ICEBREAKING SEASON

October 26th, 2021



2020-2021 Season Review



- Introduce USCG personnel
- Introduce CCG personnel
- Ice Coverage
- Ice Breaking Operations
 - USCG
 - CCG
- Lessons Learned

USCG D9 Prevention Staff



- **Captain Kevin Floyd – Chief, Prevention Division**
 - (216) 902-6046
- **Lt Commander Greg Batchelder – Chief, WWM**
 - (216) 902-6064
- **Mr. Brian Smicklas– Icebreaking Supervisor**
 - (216) 902-6065
- **Lt Jason Radcliffe– Waterway Operations**
 - (216) 902-6060
- **Lt Junior Grade Annabelle Gagnon– Cutter Operations**
 - (216) 902-6066

Canadian Ice Office and ROC staff



- **Yannick Poirier—Regional Operation Center Acting Superintendent**
 - (514) 283-0530
- **Isabelle Pelchat—Icebreaking Superintendent**
 - (514) 378-1641
- **John Bartley and Amy Barnes- Ice Operations Officers**
 - (514) 283-2784 / 1 (855) 209-1976
- **Ice Specialist Officer**
 - 1 (855) 201-0086 / (514) 283-1752

Ice Coverage 2020-2021



02 FEB Coal Shovel Commences

14 MAR Coal Shovel Concludes

November

December

January

February

March

April

May

Extended Navigation

Winter Navigation

Spring Breakout

21 DEC Taconite Commences

26 MAR Taconite Concludes

Ice Coverage 1972-2021

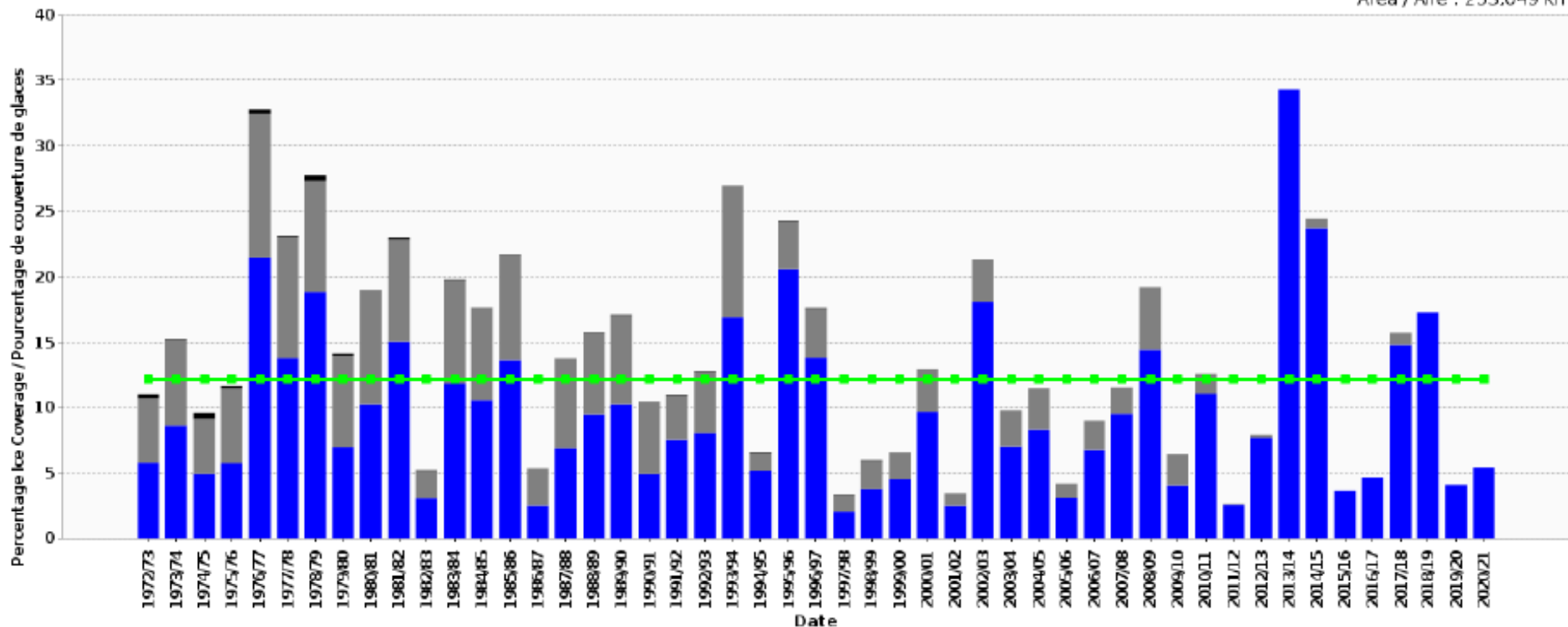


Historical Total Accumulated Ice Coverage (TAC) for the weeks 1105-0611, seasons:1972/73-2020/21

Total accumulé de la couverture des glaces historique (TAC) pour les semaines 1105-0611, saisons:1972/73-2020/21

Regional Great Lakes /
Régionale Grands Lacs

Area / Aire : 253.049 km²



28.12 % of data is interpolated / 28.12 % des données sont interpolées

Canadian Ice Service - Environment Canada / Service canadien des glaces - Environnement Canada

(2021-06-16 08:41 IceGraph - Canadian Ice Service/Grphe des glaces - Service canadien des glaces 2.0.7 2014/01/21)

■ Ice Coverage / couverture des glaces ■ Interpolated Data / Interpolée ■ No Data / Aucune donnée — Median / médiane 1980/81-2009/10

Ice Coverage 2020-2021



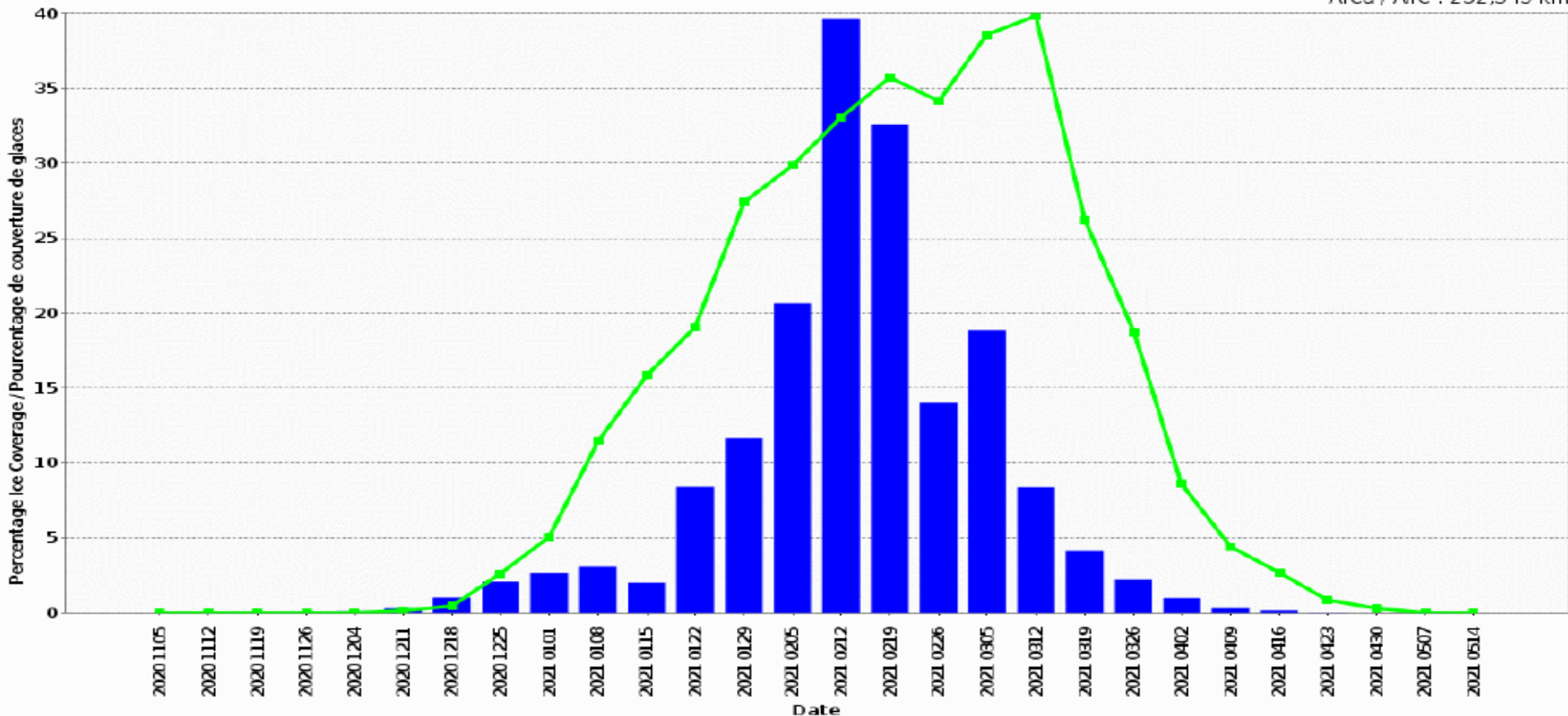
Single Season: Weekly Ice Coverage for the season 2020/21, Weeks: 1105-0514

Une saison: Couverture des glaces hebdomadaire pour la saison 2020/21, Semaines: 1105-0514



Regional Great Lakes /
Régionale Grands Lacs

Area / Aire : 252,549 km²



Ice jam



St Clair River February 3, 2021, 1120Z RCM

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Homeland
Security

United States
Coast Guard



USCG Performance Standards



	TACONITE	Coal Shovel
Search and Rescue Responses	1	0
Urgent Vessel Response Requests	0	1
Exigent Community Service Requests	1	0
Navigation Assistance Requests	100	56
Vessels Assisted (Direct)	19	50
Waterway Restrictions	0	4
Waterway Closures	0	2
Tier 1 Availability	100%	97%
Tier 2 Availability	100%	100%

Operation Taconite



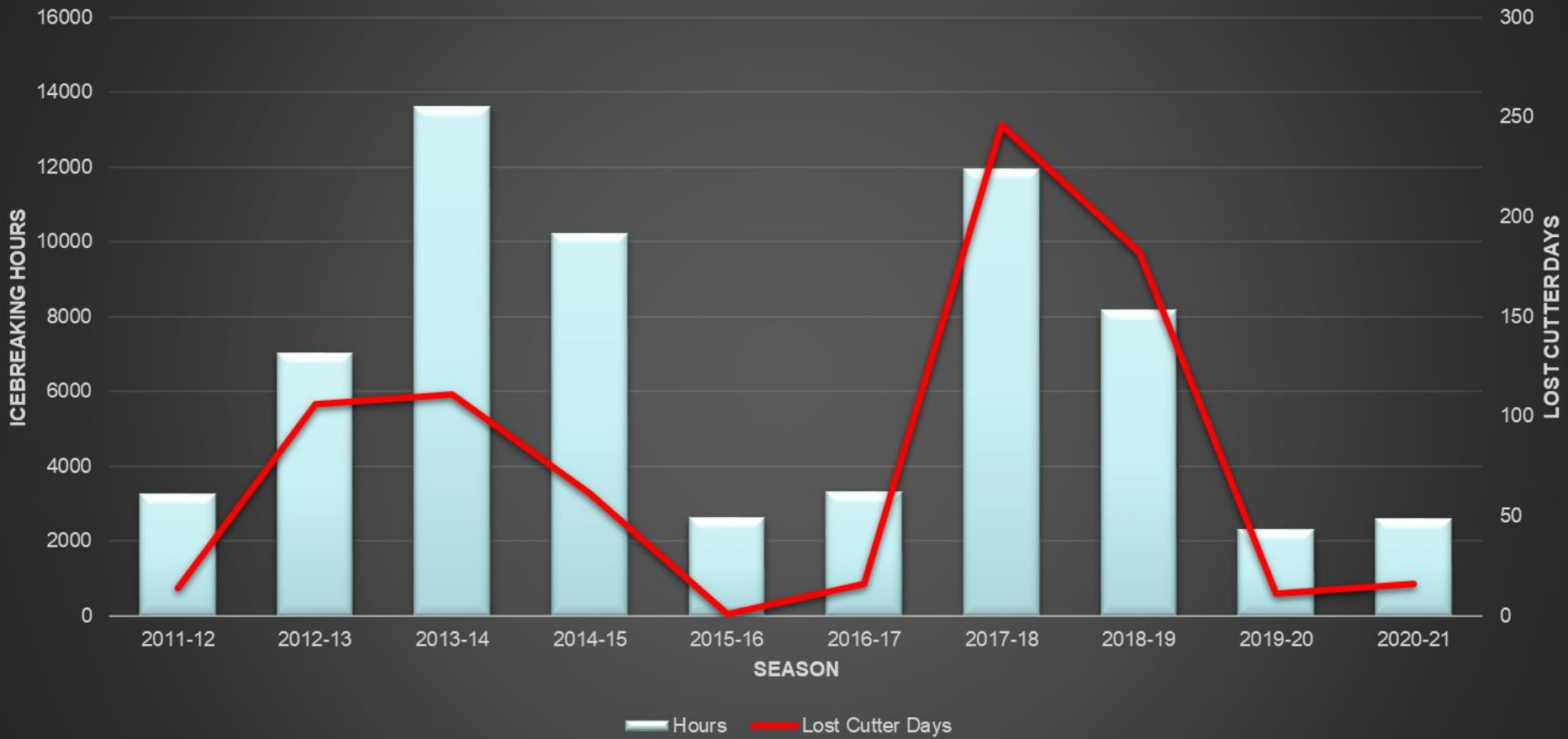
- **Commenced operations began on 21 December 2020**
 - 95 days of ice breaking
 - 2,068 hours
 - Assisted 109 commercial vessels transits
 - 19 of these transits required direct ice breaking assistance (5 US/14 CA)
 - Operation Taconite ended on 26 March 2021

Operation Coal Shovel





- **Commenced operations began on 2 February 2021**
 - 40 days of ice breaking
 - 527 hours
 - Assisted 51 commercial vessels transits
 - 50 of these transits required direct ice breaking assistance (13 US/29 CA/08 Other)
 - Operation Coal Shovel ended on 14 March 2021

USCG Lost Cutter Days (Historical)



	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	Avg.
Total	14	106	111	61	10	16	246	182	11	16	76

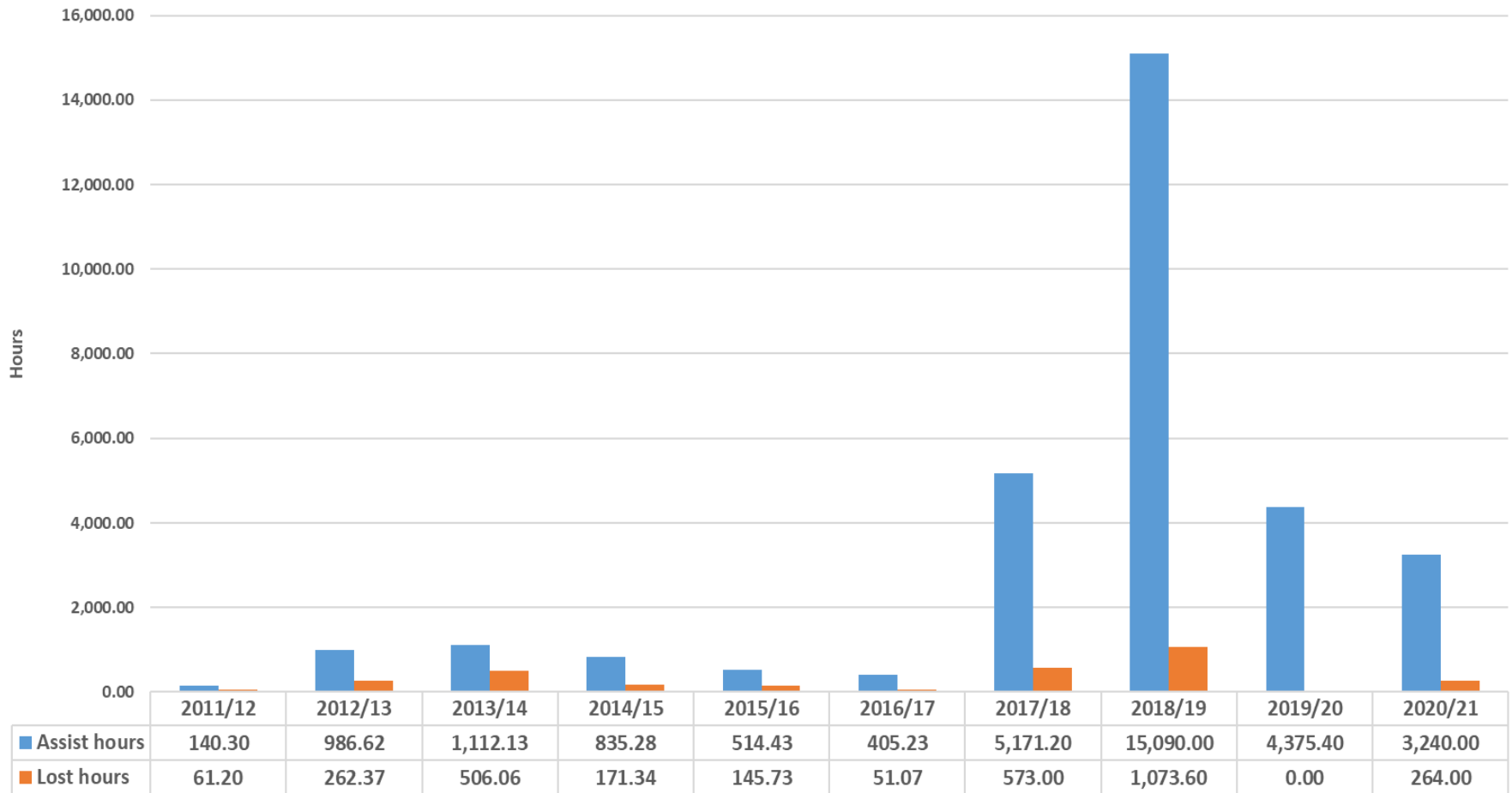
- **Operations began on December 26, 2020 (Assets available since Dec 21st)**
 - 94 days of ice breaking services / ice office opened 112 days
 - 1712 hours of which 1150 direct assistance hours
 - 1150 vessel transits within the region
 - 87 of these vessels required direct ice breaking assistance (57 CA; 21 US; 9 Others)
 - Operations ended on March 27, 2021

		
	CCGS SAMUEL RISLEY	CCGS GRIFFON
Commissioned	1984	1970
Length	69.7 m (229 ft)	71.3 m (234 ft)
Beam	13.7 m (45 ft)	14.9 m (49 ft)
Horsepower	6562 kW (8800 hp)	3984 kW (5342 hp)
Ice Breaking Capability	3 kts through uniform first year ice 900 mm (3.0 ft)	3 kts through uniform first year ice 600 mm (2.0 ft)

CCG Total Hours and Inactive hours



Active Hours vs Inactive Hours

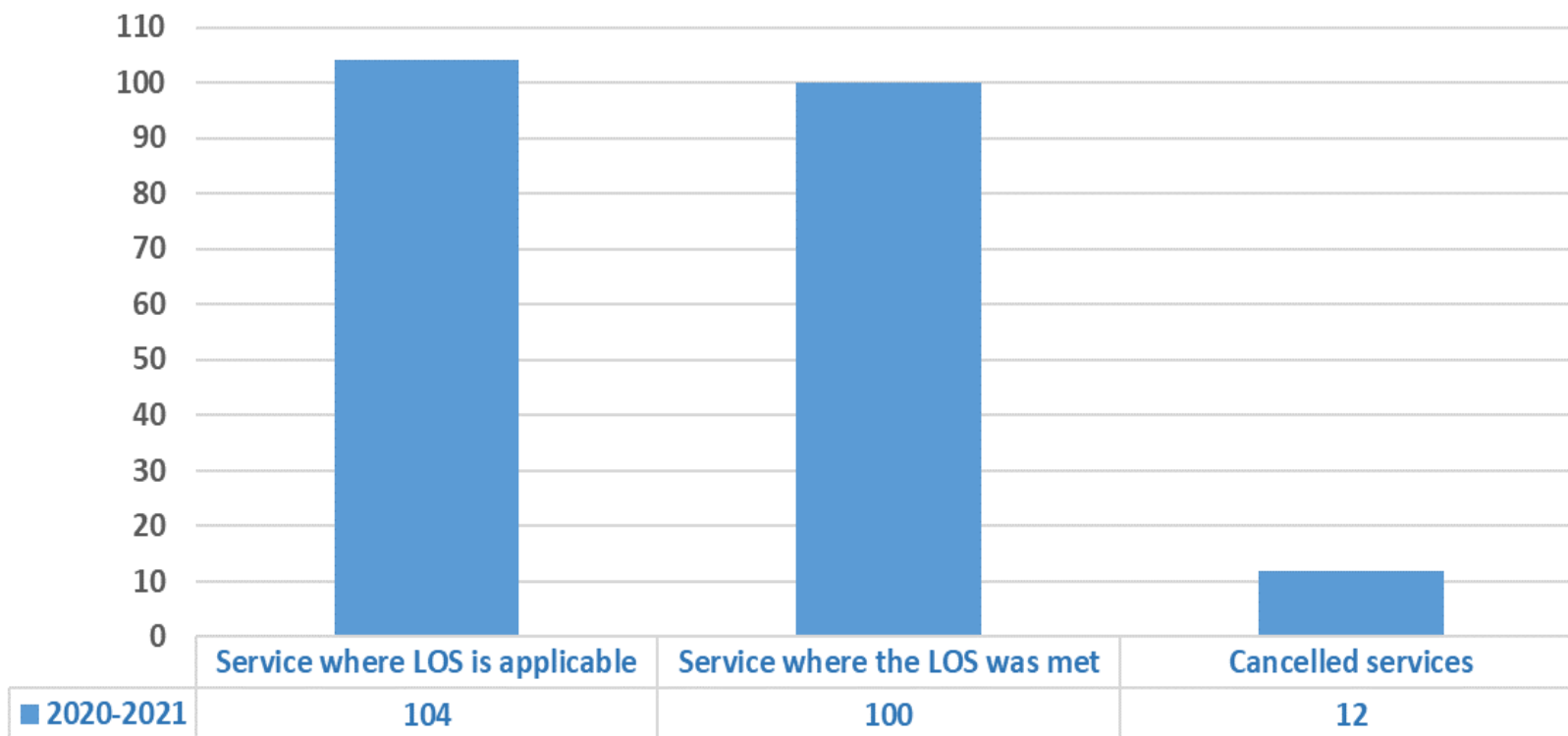


CCG Performance Standards



- Level of service (LOS) met by the CCG.
- **LOS met at 96.2%**

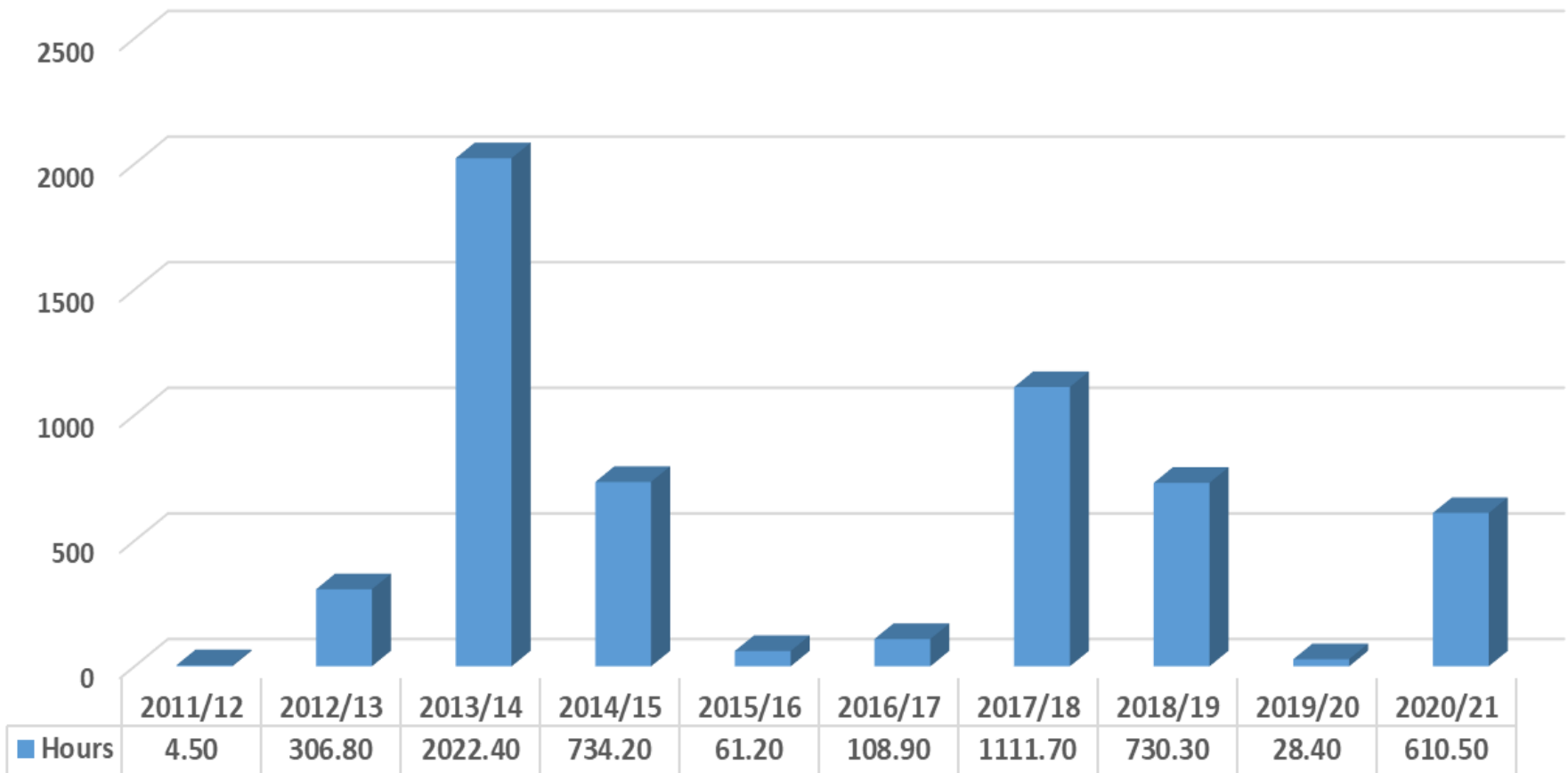
2020 - 2021



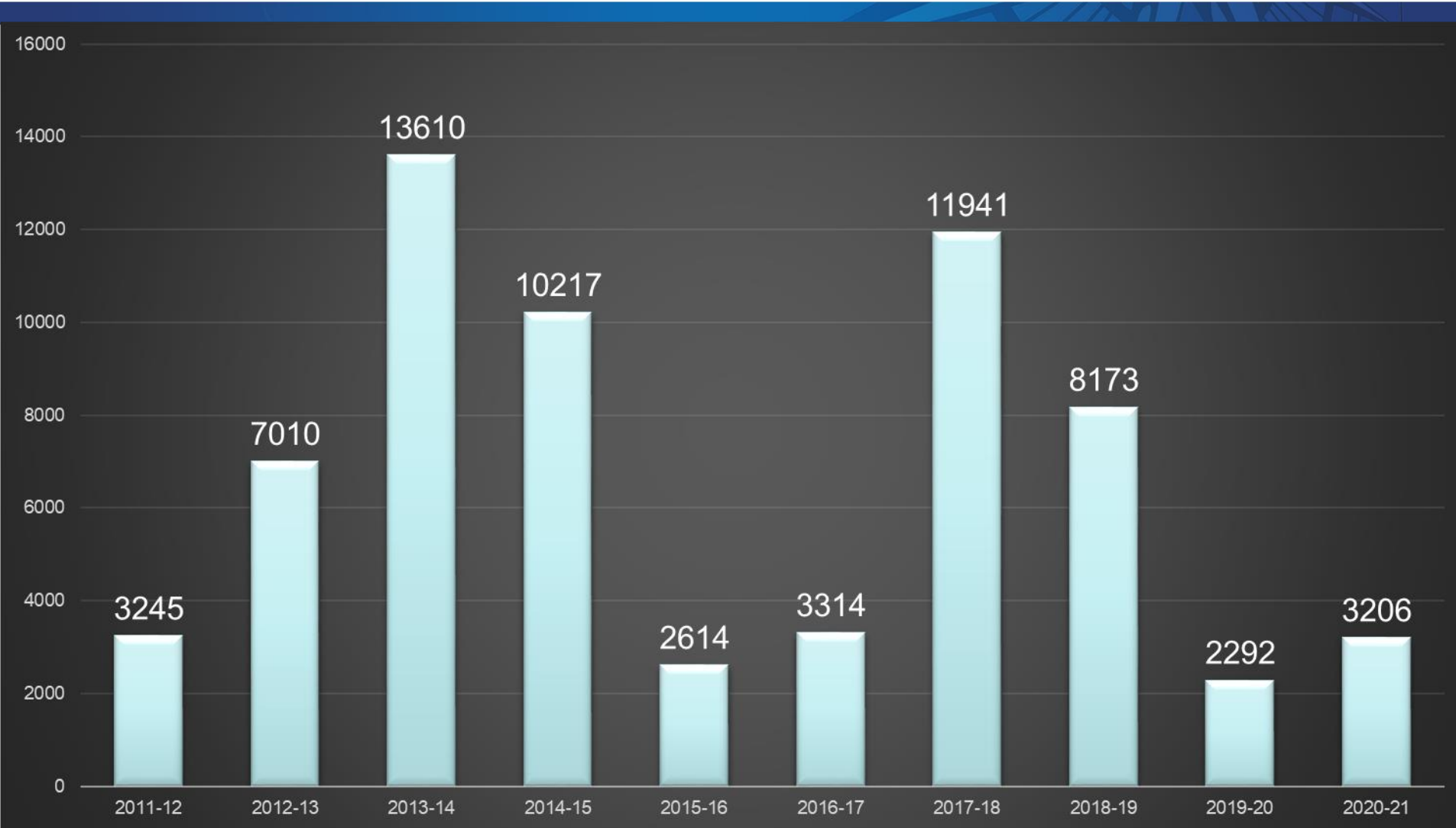
CCG Icebreaking hours per season



Hours per season for the last 10 years



Combined Icebreaking Hours



Homeland Security

United States Coast Guard 

2020-2021 Successes



- Continued partnership with USCG Tactical Commanders, Canadian Coast Guard, fleet and industry through daily ice calls
- Teamwork and adaptability of USCG and Canadian Coast Guard icebreaker fleets to overcome challenges of COVID-19
- Minimal lost cutter hours from engineering casualties

Tactical Commander Recommendations



- Continue to work with cutter support and logistics to minimize lost operational days during the ice season.
- Review and improve communications capabilities.
- Provide standard reporting formats for all required reports (daily, weekly, and annual) to ensure complete data collection.

Questions?

