

ArcGIS use in Finnish universities, annual report 2023

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This is the annual report of the Finnish university ArcGIS Site license consortium. There were 14 university members in the consortium and it was coordinated by CSC– Finnish IT Centre for Science.

The members of the consortium were:

1. Aalto University
2. HAMK University of Applied Sciences
3. Karelia University of Applied Sciences
4. Lapland University of Applied Sciences
5. Novia University of Applied Sciences
6. South-Eastern Finland University of Applied Sciences
7. Tampere University of Applied Sciences
8. Tampere University
9. University of Eastern Finland
10. University of Helsinki
11. University of Jyväskylä
12. University of Oulu
13. University of Turku
14. Åbo Akademi

The Site license included following software for academic use:

- ArcGIS Online
- ArcGIS Pro and Desktop.
- ArcGIS Enterprise
- ArcGIS Drone2map, NEW 2023
- Esri CityEngine
- ArcGIS Monitor
- ArcGIS Hub Premium
- ArcGIS Developer Subscription
- ArcGIS Premium Apps
- ArcGIS online
- Virtual Campus courses

Additionally, ESRI Finland's road and street network data was available for download for all consortium members for academic use.

Usage statistics

ArcGIS Pro is for the second year the main ArcGIS desktop tool used by Finnish universities. ArcGIS Pro uses primarily a different licensing system - named users, instead of license server. Named user licenses are provided in ArcGIS Online, in total 3664 users had such license in 2023. This is 32% increase compared to 2022. Additionally, 1655 users (+8%) used ArcGIS Pro with concurrent license installed to CSC license server and 4 had ArcGIS Pro Single Use license.

The biggest number of users of ArcGIS Pro named licenses have Universities of Helsinki, Oulu and Turku. More detailed named users ArcGIS Pro license statistics can be found from Appendix A.

The ArcGIS license manager was common for all universities and it is maintained by CSC. During 2023 the license server was in total connected by 2479 users (-4%) from 2629 computers (-4%). The number of users of the old ArcGIS Desktop is clearly decreasing (see Figure 1).

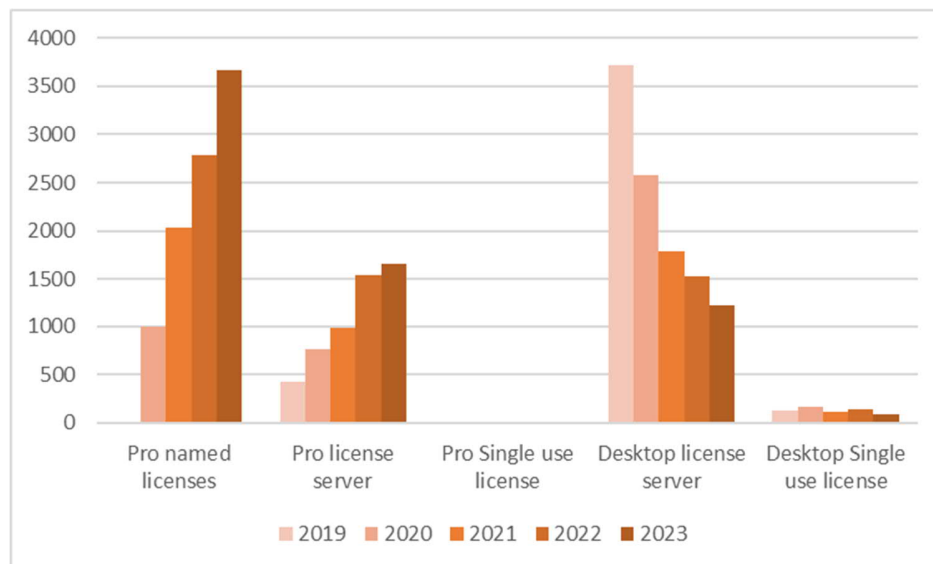


Figure 1. Usage of ArcGIS desktop products different licensing options.

ArcGIS main licenses (ArcGIS Desktop or Pro) were checked out 163 895 times (+92 %). Totally there were 481 180 license checkouts (+52%), that includes also all the extensions and special features. The most used extensions were: Spatial Analyst, 3D Analyst, Geostatistical Analyst, Network Analyst and Image Analyst. At most busy day the license server had 86 concurrent users (20.1.2023). More detailed information about ArcGIS license server use is available from Appendices B.

ArcGIS usage statistics in Finnish universities – 2023

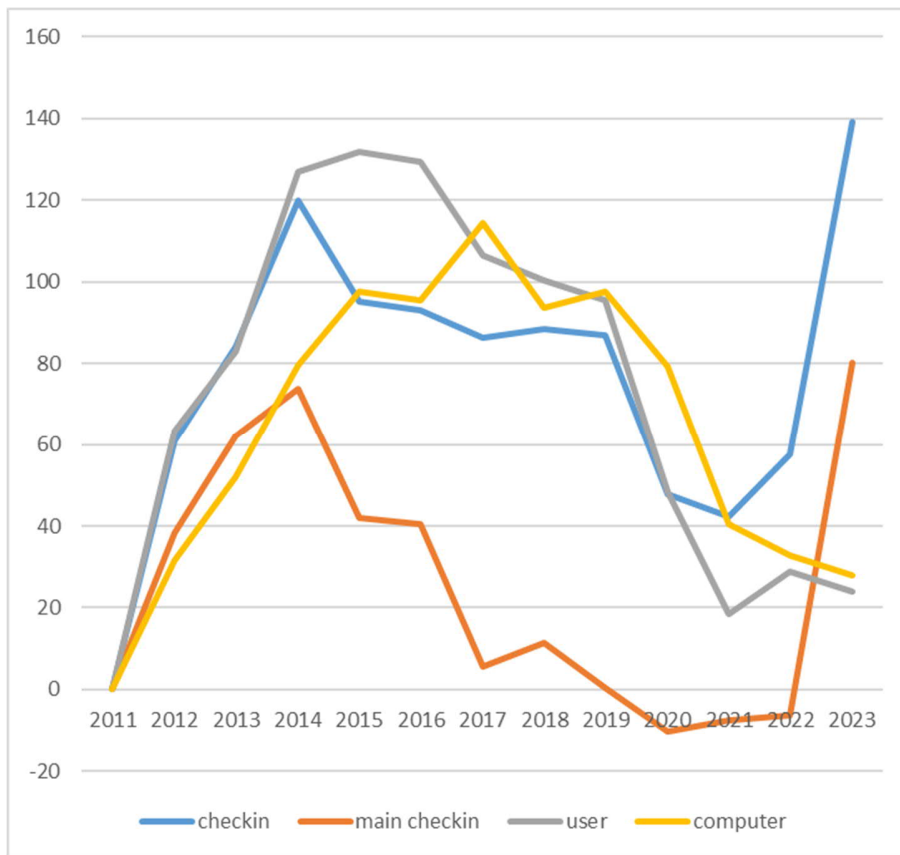


Figure 2. Relative change during the years in main usage statistics of CSC's ArcGIS license server.

Single Use licenses were used for 91 ArcGIS Desktop and 4 ArcGIS Pro installations in 2023.

CityEngine product had only 2 users.

ArcGIS Server licenses were not used.

Attendance to the Virtual Campus courses was very good in some of the universities. 867 courses were started and 751 finished. Most active Virtual Campus users were from University of Helsinki and Turku, and HAMK University of Applied Sciences.

ArcGIS usage statistics in Finnish universities – 2023

Appendix A. Users of ArcGIS Online and users with named ArcGIS Pro license in universities

University	Users with named ArcGIS Pro license
University of Helsinki	899
University of Oulu	529
University of Eastern Finland	480
University of Turku	419
HAMK University of Applied Sciences	380
Novia University of Applied Sciences	287
Lapland University of Applied Sciences	237
Aalto University	187
South Eastern Finland University of Applied Sciences	150
Åbo Akademi	47
Tampere University	37
University of Jyväskylä	12
North Karelia University of Applied Sciences	0
Total	3664

ArcGIS usage statistics in Finnish universities – 2023

Appendix B. Use of ArcGIS desktop products and extensions

	Total number of license check outs	Users
Product:		
ArcGIS Pro Advanced	133221	1655
ARC/INFO	30584	1213
CityEngine	56	2
ArcGIS Pro extensions:		
spatialAnalystP	56087	982
3DAnalystP	15482	660
geostatAnalystP	16516	657
networkAnalystP	13492	574
imageAnalystP	35298	543
dataInteropP	12025	460
dataReviewerP	10072	422
productionMapP	10066	419
defenseP	9588	412
locRefP	9994	410
workflowMgrP	10281	407
publisherP	9542	406
locateXTP	9239	397
airportsP	8742	395
maritimeP	8340	382
bathymetryP	8808	377
aviationP	8189	375
ArcGIS desktop extensions:		
Grid	18500	532
TIN	13773	464
GeoStats	9783	264
Network	7360	226
Publisher	5228	189
Schematics	1149	151
Interop	5343	89
Defense	1037	84
Foundation	611	84
Aeronautical	610	83
NauticalB	854	83
DataReViewer	223	42
Nautical	175	40

ArcGIS usage statistics in Finnish universities – 2023

AeronauticalB	160	33
ArcStorm	102	12
ArcStormEnable	102	12
MrSID	102	12
Plotting	102	12
TIFFLZW	102	12
JTX	61	8
Highways	59	7
LocateXT	56	7
LocRefDesktop	66	7