
30 JULY 2020

Museum Routes in Italy in 2018

Road routes that connect the museums and similar institutions surveyed by the Istat survey 2018 form the museum routes presented here (Istat, 2019a), the routes are enriched with information on places of culture and tourism from official statistics or institutional sources.

The methodology with which they are built was already tested on the data of the survey Museums and similar institutions 2015, and disseminated in the form of experimental statistics (Istat, 2019b). Through a GIS procedure, the 107 start point museums, chosen as structures with the largest number of visitors in each Unità Territoriali Sovracomunali (UTS) (NUTS 3: the provinces, the metropolitan cities, the free consortia of municipalities or the former provinces of Friuli-Venezia Giulia) are connected to all museums located up to 30 minutes away by car. The tracts of road cross a set of communal territories in which there are villages, protected natural areas and UNESCO sites. These territories are also characterized from the point of view of the tourists who attend them and the population that inhabits them, all potential users of museums and their natural and cultural heritage.

The routes here presented are very different from each other, some are particularly rich in museums and other types of cultural heritage, some are concentrated in a single center and others are distributed along many kilometers through the territory, beyond the boundaries of the UTS and the reference regions. In some cases, the paths overlap with each other, elsewhere they are isolated. Local public administrators, decision-makers, cultural, tourism entrepreneurs, and economic operators will find in this integrated geographical vision a useful support for their work.

Each route is mapped and described in a summary card that presents a series of indicators on the context, the type of museums and the tourist attitude of the route. Below you will find useful information for reading the attached fact sheets.

Results

This is a first three-year update on museum routes, based on the aforementioned experimental Statistics. The periodicity follows that of the long form survey on museums and similar institutions that is carried out every 3 years.

Compared to the previous experiment, it should first be noted that the number of UTS has changed, since some provinces of Sardinia have been abolished, from 110 to 107 routes. From the comparison of those overlapping, in many paths there are little or no variations in both the geography and the values of the associated statistics. In some cases, however, the differences

are considerable, due to the following causes:

- Improvement of the registry of museums, as described in the section on methodological aspects of the survey, which is to be considered a cognitive tool in continuous evolution. This makes it possible to better assess the position of the surveyed objects and to improve the evaluation of the number of visitors. For example, the path that starts from the Abbey of Farfa reached in 2015 the municipality of Rome (with conspicuous numerical consequences on associated statistics) for the presence of the "Museum of instrumentation and crystallographic information" which was generically located on the Via Salaria. The museum now has an exact address correctly located in the municipality of Montelibretti. The 2018 route is therefore more compact and reaches museums with a better geo-referencing. An example of how the change in the number of visitors can change a route is in the Province of Forlì-Cesena where compared to 2015 the IDRO – Water Ecomuseum of Ridracoli, located in the Apennines, become less visited than the Museums of San Domenico located in the city, in a flat and very interconnected area; the new route is therefore considerably more extensive and rich in itineraries.
- Opening of new museums that are sometimes immediately very attractive to the public, thus replacing the previous starting point of the route. A completely different route from the previous one is, for example, in the province of Bolzano where in 2018 the most visited museum is the Rastplatz "Plessi museum"/ rest area "Plessi" of Bressanone, a recently established structure which, however, is located near the State border, reachable by a single road and therefore the starting point of a route more meaner than the one built in 2015 that started from the South Tyrol Archaeological Museum of Bolzano.
- Traffic changes that increase or decrease the distances covered in 30 minutes. An obvious example is in the path of the archaeological area of Pompei where the arrangement of the Naples-Salerno motorway and the opening of new communication routes between the area of Pozzuoli and the Caserta tollbooth and among the Vesuvian municipalities has modified the previous route by adding 48 new museums to the 53 of 2015.

Table 5 shows the 107 routes ordered according to the number of visitors and provides some information on the population, the surface area, the number of museums and the arrivals in the tourist facilities of the area underlying the route.

The analysis, carried out by integrating the different statistical sources, shows that routes with the largest number of tourist arrivals do not necessarily have the largest number of museum visitors and vice versa. Some cases are definitely examples of this evidence. The museum route of Rimini, as an example, in 2018 registered only 637482 museum visitors but 5631140 tourist arrivals. By contrast, the route of the excavations of Pompei (the third most visited museum in Italy with about 4 million people) has over 13 million visitors but is at 96th place for tourist arrivals (3780175 in 2018).

Table 5 – Museum routes in Italy: population, area, number of museums, museum visitors, tourist arrivals year 2018 (absolute values and percentages)

Museo principale del percorso	Comune	Provincia	Popolazione	Superficie (Kmq) (a)	Numero di musei	Visitatori	di cui visitatori stranieri	Arrivi	di cui arrivi di non residenti
Pantheon	Roma	Roma	3.111.709	1.717	131	25.505.971	34,1	10.398.205	70,0
Area Archeologica di Pompei	Pompei	Napoli	3.391.287	1.421	101	13.019.202	28,3	3.780.175	52,1
Palazzo Reale - Reggia di Caserta	Caserta	Caserta	2.285.427	1.195	76	12.376.591	26,1	1.949.128	43,9
Uffizi-Gallerie delle Statue e delle Pitture	Firenze	Firenze	975.485	1.461	105	11.986.405	38,0	5.133.646	72,0
Villa Medicea di Poggio a Caiano e Giardino	Poggio a Caiano	Prato	1.258.614	1.964	140	10.186.141	33,4	5.701.004	70,6
Museo di San Marco	Venezia	Venezia	260.520	416	29	5.877.142	59,4	5.255.499	86,6
La Venaria Reale (Consorzio Delle Residenze Reali Sabaude)	Venaria Reale	Torino	1.514.530	1.176	74	5.171.956	17,8	1.736.340	24,4
Mudec - Museo delle Culture	Milano	Milano	3.344.122	1.390	101	5.083.801	21,3	7.814.451	57,1
Museo della Cattedrale di Lucca	Lucca	Lucca	1.064.622	2.479	90	5.043.621	30,1	3.100.510	53,8
Museo e Tesoro del Duomo di Monza	Monza	Monza e della Brianza	3.438.605	1.225	83	4.873.795	23,7	8.046.335	57,6
Cattedrale di Santa Maria	Pisa	Pisa	813.969	1.634	64	4.848.448	28,4	2.247.092	50,6
Museo di Storia Naturale del Mediterraneo	Livorno	Livorno	555.627	1.250	34	3.943.285	31,1	1.651.789	51,7
Museo dell'Opera della Metropolitana di Siena - Complesso del Duomo di Siena	Siena	Siena	152.717	1.123	41	3.502.875	35,7	879.121	56,8
Casa Natale Santa Cabrini	Sant'Angelo Lodigiano	Lodi	1.990.831	1.235	64	3.318.039	21,6	6.382.371	59,6
Anfiteatro Arena	Verona	Verona	795.885	1.613	37	2.117.800	27,6	4.502.548	59,6
Musei Civici di Padova - Arte Moderna e Medievale e Archeologica	Padova	Padova	1.085.935	1.494	53	2.096.827	19,3	7.474.674	74,0
Parco Archeologico di Naxos Taormina	Giardini-Naxos	Messina	965.997	1.045	25	2.055.045	26,1	1.406.490	55,3
Parco del Castello di Miramare	Trieste	Trieste	284.212	294	53	1.947.898	28,9	572.133	48,5
Museo Civico di Palazzo Chiericati	Vicenza	Vicenza	902.513	1.411	61	1.903.410	16,3	1.392.062	46,6
Mambo- Museo d'Arte Moderna di Bologna	Bologna	Bologna	1.288.364	3.093	93	1.530.454	22,4	2.775.901	41,6
Complejo Monumentale Palazzo Reale e Cappella Palatina	Palermo	Palermo	1.054.969	1.616	45	1.487.849	26,2	844.207	47,2
Museo Arcivescovile	Ravenna	Ravenna	626.255	2.249	59	1.483.762	15,9	2.590.375	19,3
Museo delle Scienze	Trento	Trento	361.662	1.661	41	1.346.765	23,4	1.396.677	48,8
Musei di San Domenico	Forlì	Forlì-Cesena	601.258	1.944	56	1.341.415	15,4	2.433.216	17,4
Museo Civico Castello Ursino	Catania	Catania	704.805	906	25	1.281.824	26,0	1.339.250	55,6
Parco Archeologico e Paesaggistico della Valle dei Templi	Agrigento	Agrigento	183.648	881	10	1.114.375	30,3	183.145	59,1
Storico Giardino Garzoni e Colloidi Butterfly House	Pescia	Pistoia	481.557	1.542	59	1.011.500	29,6	1.207.726	60,3
Galata Museo del Mare	Genova	Genova	903.022	1.298	91	1.002.400	18,9	1.758.478	46,8
Galleria Nazionale di Parma	Parma	Parma	649.090	1.953	72	943.437	17,4	857.710	37,0
Parco E Museo del Volo - Volandia	Somma Lombardo	Varese	2.762.070	1.489	65	917.331	13,8	7.623.072	60,1
Museo Ferrari - Maranello	Maranello	Modena	471.506	922	34	895.659	19,2	530.090	35,1
Castello Scaligero	Sirmione	Brescia	280.565	898	26	887.307	23,2	3.178.166	64,3
Area Archeo della Neapolis e Orecchio di Dioniso	Siracusa	Siracusa	275.971	1.277	11	805.910	32,4	388.282	46,4
Statua Colossale di San Carlo	Arona	Novara	641.190	999	44	763.272	22,9	1.751.171	62,6
Musei Civici - Palazzo dei Musei	Reggio nell'Emilia	Reggio nell'Emilia	932.335	1.761	43	730.970	16,9	1.086.816	34,1
Complesso Monumentale del Castello e Parco di Racconigi	Racconigi	Cuneo	1.278.011	1.618	40	705.362	21,0	1.521.547	27,7
Museo Artistico E Storico di Palazzo Borromeo	Stresa	Verbano-Cusio-Ossola	122.980	410	24	647.694	35,9	747.384	73,9
Museo di Palazzo Ducale	Mantova	Mantova	198.332	937	19	646.754	22,9	208.504	26,8
Museo della Città Luigi Tonini	Rimini	Rimini	613.459	1.187	45	637.482	15,2	5.631.140	18,9
Museo del Tesoro della Basilica Papale di San Francesco	Assisi	Perugia	312.995	1.248	41	629.362	33,1	1.211.581	31,1
Parco dei Mostri, Sacro Bosco di Bomarzo	Bomarzo	Viterbo	181.554	1.735	25	600.684	25,5	313.256	28,9
Pinacoteca e Museo Civico di Palazzo Mazzetti	Asti	Asti	1.343.794	1.799	55	581.550	18,9	1.738.030	31,9
Pozzo di San Patrizio	Orvieto	Terni	68.261	1.207	28	569.990	28,3	284.637	41,6
Parco Archeologico di Segesta	Calatafimi-Segesta	Trapani	417.211	2.390	22	554.800	27,9	430.573	39,0
Casa Museo Villa Monastero	Varennna	Lecco	167.251	800	25	540.626	27,6	479.170	75,0
Pinacoteca Accademia Carrara	Bergamo	Bergamo	1.357.531	1.242	50	527.532	14,2	1.578.546	46,4
Pinacoteca del Seminario Vescovile	Rovigo	Rovigo	631.621	1.681	50	522.754	20,1	1.863.128	38,6
Villa Carlotta	Tremezzina	Como	50.324	340	14	487.406	42,3	352.235	83,3
Rocca Demaniale di Gradara	Gradara	Pesaro e Urbino	459.446	766	31	463.110	19,8	3.735.335	20,6
Museo Archeologico Nazionale di Paestum	Capaccio Paestum	Salerno	96.978	358	8	462.789	23,1	206.530	20,8
Basilica Patriarciale	Aquileia	Udine	200.134	831	26	461.844	18,2	258.740	49,3
Castello di Goriizia - Museo del Medioevo Goriziano	Gorizia	Gorizia	161.646	527	26	458.634	16,7	242.455	50,8
Museo Regionale Villa Romana del Casale di Piazza Armerina	Piazza Armerina	Enna	53.555	874	7	20.388	35,8	56.695	43,2
Rastplatz "Plessi Museum"/Area di Sosta "Plessi"	Bressanone	Bolzano/Bözen	44.435	663	5	395.431	67,7	636.315	64,8
Castello Malaspina	Massa	Massa-Carrara	470.326	775	39	363.197	20,7	1.263.208	43,0
Casa Leopardi	Recanati	Macerata	423.213	1.240	54	359.244	14,7	720.718	17,0
Forte di Bard	Bard	V.d'Aosta/Vallée d'Aoste	25.885	389	14	354.246	16,4	133.728	28,4
Abbazia di Fossanova	Priverno	Latina	402.907	1.523	24	349.989	12,1	262.475	17,0
Museo Preistorico della Val Varatella Nino Lamboglia	Toirano	Savona	273.884	656	46	321.278	27,1	1.474.340	30,1
Basilica di San Francesco	Arezzo	Arezzo	270.062	2.032	39	321.104	29,6	450.222	47,4
Castel del Monte	Andria	Barletta-Andria-Trani	200.067	865	6	301.911	17,3	49.378	20,4
Abbazia di Montecassino	Cassino	Frosinone	93.411	563	9	300.323	25,3	61.323	21,3
Sacro Monte di Crea	Serrulanga di Crea	Alessandria	144.163	732	22	299.814	17,8	103.229	39,6
Museo Archeologico Nazionale	Reggio di Calabria	Reggio Calabria	257.146	482	16	299.394	25,3	138.943	18,3
Galleria d'Arte di Palazzo Bellini	Comacchio	Ferrara	235.250	1.706	16	271.205	13,3	951.882	27,2
Fondazione Museo del Violino Antonio Stradivari Cremona	Cremona	Cremona	357.708	1.448	34	253.731	12,5	332.857	30,8
Museo del Castello, Collezioni Civiche Archeologiche U. Formentini	La Spezia	La Spezia	365.815	1.105	33	249.791	23,6	696.963	44,7
Area Archeologica Su Nuraxi	Barumini	Sud Sardegna	73.279	1.422	38	246.296	12,8	28.394	14,7
Storica Casa Grotta di Vico Solitario	Matera	Matera	168.530	1.173	14	231.649	33,7	396.700	25,5
Museo della Rocca Viscontea di Castell'Arquato	Castell'Arquato	Piacenza	258.896	1.264	25	229.173	19,4	436.350	34,1
Museo Civico	Summonte	Avellino	516.184	876	29	224.543	16,7	426.830	29,2
Trullo Sovrano	Alberobello	Bari	366.875	1.845	17	213.091	30,4	678.787	35,6
Parco Archeologico di Siponto	Manfredonia	Foggia	102.223	935	8	212.503	19,4	339.550	26,5
Ricetto Candelo - Ecomuseo Della Vitivinicoltura	Candelo	Biella	198.170	764	31	211.638	16,5	94.771	28,3
Sacraffo Militare di Cima Grappa	Crespano del Grappa	Treviso	86.973	391	12	197.883	18,8	122.518	43,8
Museo dell'Intreccio Mediterraneo	Castelsardo	Sassari	17.471	266	6	186.794	45,0	66.176	71,4
Museo Nazionale e Parco Archeologico Archeologico di Egnazia G. Andreassi	Fasano	Brindisi	256.571	1.164	15	183.189	36,1	723.018	37,2
Museo Malacologico Piceno	Cupra Marittima	Ascoli Piceno	429.179	1.159	62	181.398	19,7	896.146	13,8
Area Archeologica di Tarhos	Cabras	Oristano	40.861	187	8	159.988	29,8	87.423	41,9
Museo Abbazia Benedettina di Santa Maria In Silvis	Sesto al Reghena	Pordenone	524.680	1.808	37	157.673	11,8	468.360	50,0
Castello Sforzesco Visconteo	Vigevano	Pavia	199.211	493	11	156.724	9,0	43.080	35,6
Museo della Vita e delle Tradizioni Popolari Sarde / Museo del Costume	Nuoro	Nuoro	59.475	820	14	156.660	29,9	119.041	55,2
Museo Marca - Museo delle Arti Catanzaro - Open Marca Parco Internazionale di Catanzaro	Catanzaro	Catanzaro	199.108	784	14	150.463	20,0	152.126	14,5
Cisterne Romane	Fermo	Fermo	317.792	804	37	146.913	16,4	587.815	14,6
Forte Santa Tecla	Sanremo	Imperia	181.085	486	25	146.278	36,4	588.314	50,9
Area Archeologica del Teatro Romano di Benevento	Benevento	Benevento	322.588	1.440	28	137.303	17,3	113.641	16,3
Area Archeologica di Nora	Pula	Cagliari	8.976	236	3	129.589	36,7	120.729	51,8
Museo Archeologico Nazionale del Melfese Massimo Pallottino	Melfi	Potenza	91.324	1.202	9	129.071	20,0	42.914	10,8
Le Castella	Isola di Capo Rizzuto	Crotone	92.968	442	5	128.175	35,0	117.755	7,6
Museo Archeologico Nazionale D'Abruzzo - Villa Frigerj	Chieti	Chieti	419.874	960	25	123.741	21,8	501.816	13,9
Parco Archeologico 'Citta' del Tufo'	Sorano	Grosseto	41.061	1.321	25	123.408	25,0	183.161	23,5
Museo Casa Natale di Gabriele D'Annunzio	Pescara	Pescara	469.467	1.011	29	120.642	22,5	674.920	14,3
Museo della Carta e della Filigrana	Fabriano	Ancona	135.644	1.694	35	120.219	15,5	186.356	17,2
Museo Provinciale Murattiano	Pizzo	Vibo Valentia	196.868	857	16	118.125	24,2	316.562	36,1
Fortezza e Museo delle Armi e Mappe Antiche	Civitella del Tronto	Teramo	298.876	906	29	106.715	19,4	432.448	13,7
Museo Archeologico Nazionale di Taranto	Taranto	Taranto	387.319	1.106	11	89.456	17,3	157.437	23,6
Museo Naturalistico Centro Visita Cupone	Spezzano della Sila	Cosenza	50.483	981	8	83.339	28,3	38.671	3,6
Area Archeologica di Cava D'ispica	Modica	Ragusa	216.310	1.621	11	80.773	35,6	345.171	40,4
Museo della Grande Guerra In Marmolada-Onlus	Rocca Pietore	Belluno	4.553	252	3	74.913	25,0	204.542	50,4
Museo Civico di Niscemi	Niscemi	Caltanissetta	225.468	1.340	15	73.317	18,5	47.110	32,9
Sacro Monte di Varallo	Varallo	Vercelli	29.636	258	10	64.819	19,1	9.726	23,2
Frantoi Ipogei di Palazzo Granafei	Gall								

Information Gap filled

Often information on museum heritage is spread out according to traditional administrative geographies. In identifying non-administrative geographies, this study provide a more accurate and consistent spatial reading of the phenomenon analyzed. There are many actors potentially interested in this information: local and national administrators and policy makers, economic operators involved in tourist services management, researchers involved in the study of the relationships of cultural phenomena with the territory.

Innovation

The method (described in the section dedicated to methodology, and in the experimental statistics on Museum Routes 2015) is an original method to identify routes that, starting from the geographical coordinates of the most visited museum, defines all the routes that connect it to all museums within 30 minutes driving time; hence giving rise to a precise representation of the path independent from administrative boundaries. Paths can be updated thanks to the periodicity of the survey on museums and similar institutions.

The 2018 survey, described below, acquires an additional key of reading the many data produced. The method allows the survey data to be presented in relation to new geographies and integrated with other sources (tourism data, environmental data, demographic data, etc.). The sources used are mainly from official statistics, with verified reliability and considerable synthesis.

Method

The Survey on museums and similar institutions

Methodological aspects

The Survey on museums and similar institutions - foreseen in the National Statistical Programme 2017-2019 that defines statistics of national importance - was carried out by ISTAT in the framework of the "Memorandum of Understanding for the development of the integrated information system on institutes and places of culture", signed in 2017 at the State-Regions Conference by Istat, MIBACT, Regions and Autonomous Provinces of Trento and Bolzano, and in close collaboration with the CEI - Ufficio Nazionale per i Beni Culturali Ecclesiastici e l'Edilizia di Culto, which provided the data of institutes of ecclesiastical institutions collected annually as part of its institutional activities. Since 2017 the survey is conducted on an annual basis thanks to the agreement between ISTAT and the Managing Authority of the PON "Governance and Institutional Capacity 2014-2020", relating to the implementation of the Project "Territorial and Sectorial Statistical Information for Cohesion Policies 2014-2020", which sees ISTAT and the Department of Cohesion Policies (DPCOE) as proposers Presidency of the Council of Ministers and the Territorial Cohesion Agency (ACT) and that allows to update in a systematic way the identification and descriptive data on the institutes and places of culture (museums and

libraries) present in Italy, through the realization of special short surveys.

The census survey provides an updated and detailed description of all the museums and other museums in Italy, whether public or private, state or non-state, as long as they are open to the public in the reference year, with regulated way of use. The survey is aimed at the main of each unit present in the starting list through the compilation of online questionnaires divided into several modules. The survey explores several topics. In addition to the description of the structural characteristics of the museums, the type of assets preserved and exhibited, the legal nature and forms of management, it investigates how to access and visit, the consistency of assets owned, staff employed, on the financial resources and expenses incurred, on the support for the visit, the cultural activities and services offered to the public and, for the first time, also on the presence and the characteristics of the museum structures that are part of ecomuseal projects formally recognized.

Istat conducted the survey between May and July 2019, sending the information letter to all the museums and similar institutions present in the list built based on the previous Istat survey and integration provided by the regions and intermediate bodies that actively collaborate at the different stages of the survey¹.

Of the 5688 museum units on the starting list 5042 units were eligible – that is, they had the requisites to become part of the observation universe. To these, adding the ecclesiastical structures and the province of Bolzano, provided respectively by the CEI and the Provincial Statistical Institute (Astat) at the end of the survey, there is a total of 5,236 eligible units (Tav. 1).

Tavola 1 - Unità eleggibili per tipologia e regione - Anno 2018

REGIONI	ISTITUTI MUSEALI		
	STATALI	NON STATALI	TOTALE
Piemonte	16	408	424
Valle d'Aosta - Vallée d'Aoste	-	65	65
Lombardia	26	422	448
Trentino-Alto Adige	-	207	207
<i>Bolzano Bozen</i>	-	112	112
<i>Trento</i>	-	95	95
Veneto	16	304	320
Friuli-Venezia Giulia	14	170	184
Liguria	13	202	215
Emilia-Romagna	34	451	485
Toscana	66	518	584
Umbria	13	159	172
Marche	17	335	352

¹ especially the Ministry for cultural heritage and activities (Mibact), Regions and autonomous Province (via documental, statistics and administrative archieves) and the Italian Episcopal Conference (Ce) with its database BeWeb.

Lazio	97	277	374
Abruzzo	26	100	126
Molise	13	31	44
Campania	72	178	250
Puglia	19	155	174
Basilicata	15	35	50
Calabria	19	158	177
Sicilia	-	265	265
Sardegna	20	300	320
Italia	496	4.740	5.236

Of these, in 2018, 4,908 museums and similar institutions are open to the public. The 328 structures that remained excluded, equal to 6.2%, declare to have remained closed to the public in the reference year.

Results of the 2018 survey

In 2018, the Italian heritage is quantified in 4,908 institutions spread throughout the national territory able to mobilize a total of over 128 million visitors².

It is a heritage consisting of 3,882 museums and collections of collections (79.1%), 630 monuments or monumental complexes (12.8%), 327 areas or archaeological parks (6.7%) and 69 museum structures belonging to ecomuseal projects (1.4%), found in a capillary way throughout the territory: one in three Italian municipalities offers at least one structure, about 1 per 50 square km and 1 per 12 thousand inhabitants.

Tuscany (553), Emilia-Romagna (454), Lombardy (433), Piedmont (411), Lazio (357) and Veneto (304) are the regions with the highest concentration of structures either museums, archaeological areas or monuments while Rome (121), Florence (69), Turin (49), Milan (47), Bologna (46), Trieste (41) Genoa (40), Naples (38), Venice (37) and Siena (34) are the first 10 cities with the greatest number of evidence of the historical-cultural, architectural and archaeological wealth of Italy.

In addition to the poles of greatest attraction there are also places of cultural interest in small and very small municipalities: 16.1% of museums are located in municipalities with less than 2 thousand inhabitants – some of which can count up to 5-6 structures – while 30% is present in municipalities from 2 thousand to 10 thousand residents. The cultural offer presented by Italian museums is extremely varied. There is a wide diffusion of archaeological museums with evidence of prehistoric and ancient civilizations, archaeological areas and parks and archaeological artifacts (20%) especially in Sardinia, Basilicata, Molise, Sicily and Lazio. Then there are the museums that exhibit collections and heritage of ancient, modern and contemporary art (17.8%), mainly present in Umbria, Tuscany, Marche and Lombardy, and the

2 The number of visitors is calculated based on the data provided by museums and similar institutions that answered the question, equal to 90.5% of the total facilities.

museums that tell the uses and customs of local communities through ethno-anthropological collections (11.7%), mainly found in Basilicata, the Province of Bolzano, Calabria, Valle d'Aosta and Piedmont. The museums of sacred art, museums and monuments with a religious vocation are 10.3% of the total, located largely in the South (Apulia, Campania, Calabria and Sicily).

In 2018 there was a record number of 128.6 million admissions (+8% compared to 2017): 63.4 million in museums, 51.1 million in monuments, 13.7 million in archaeological areas and 488 thousand in museum structures participating in ecomuseal projects.

In addition to the variety of the offer, the national cultural heritage also distinguishes the dimensional polarization and concentration of visitor flows: Pantheon, Flavian Amphitheater (Colosseum), Archaeological Area of Pompeii and Museum and Park of Capodimonte, have registered more than three million visitors each in 2018, totaling 21.5 million people, representing 17% of the total audience of the entire Italian cultural heritage.

The territorial and type of structure differences are however relevant. To attract the largest number of public (100 thousand admissions on average per structure) are mainly villas, palaces and monuments of historical and artistic interest, especially in Friuli-Venezia Giulia and Lazio. On average, more than 40 thousand visitors per exhibition structure are registered by modern and contemporary art museums (especially in Veneto, Tuscany, Campania and Piedmont). Abruzzo, Molise and Marche are the regions whose structures welcome the lowest number of visitors (on average about 6 thousand per year).

In 2018, the audience of foreigners is estimated at 58.6 million (46% of the total audience). Almost half are attracted by works and goods exhibited in museums and/or art collections (45.9%), 42% by monumental beauties and 12% by archaeological areas or parks.

Routes identification

The "Survey on Museums and Similar Institutions" has, for the first time in 2015, allowed to locate on the territory the objects detected through the control and normalization of addresses and the assignment of a pair of geographical coordinates to the access point of the museum. The processes of geo-coding and geo-referencing evolve in the successive editions of the survey so, together with the refinement of the registry, the knowledge of the position of the objects of the culture surveyed has improved.

Territorial geo-reference assigned to each structure concern:

- normalized address, or the address is rewritten in the normal form (DUG + nome + civic) and possibly identified by the national register of ANNCSU addresses. This process is assisted by commercial software (Egon owned by the company Ware Place srl) for recognition and standardization
- mesh of the European regular grid provided by EUROSTAT, defined in the reference

system (EPSG: 3035) ETRS89/LAEA and transformed into WGS84 / UTM32N

- address point coordinates in the WGS84 reference system projected into UTM32N. The geo-referencing process, which began with the survey of 2016, consists in assigning the coordinates of the entrance of the museum, starting first from those available together with the addresses automatically recognized. An operator using orthophoto recognition, Openstreetmap or Google Maps, tracks missing coordinates on a map. In the following occasions of investigation, it has been possible to verify the automatic positioning while validating all those for which the position had been retrieved with approximation.

Geo-referencing and geo-coding allow immediate comparison with spatial information from other sources, at different levels of detail.

For each supra-municipal territorial unit (NUTS 3), from the geographical coordinates of the most attractive museum, in terms of annual number of visitors (main museum), all routes connecting it to other museums within a maximum driving time of 30 minutes have been defined, even if there are temporary traffic restrictions (for example, limited traffic zones provided for time slots in some urban centres). To define the routes, the Tom-Tom road graph was used in the March 2018 version within the Arcmap Network Analyst tool. This process allows to obtain a representation of the paths adhering to the territorial reality regardless of administrative boundaries.

The choice of the starting point of the itineraries is a proposal to answer the pressing question on how to reduce congestion in "fashionable" tourist destinations, distributing the public in the less known though interesting structures. The current need for compliance with physical spacing measures in the most well-known mosaic structures because of emergency management Covid-19 and the rediscovery by the public from both Italy and the rest of the world of part of the museum heritage make the proposal even more congruent. However, the methodology used would allow routes to be drawn from any other starting point, using different means of transport, over different distances. It would be possible, for example, to design cycling routes around a farm, or walking routes from a parking lot, or even train routes from airports or ports and also routes from the most popular tourist destinations, just to name a few.

The routes are analyzed and characterized by their spatial aspects, both in relation to each other and to the territory they cross, using G.I.S. instruments (e.g. the number of accessible museums, proximity to parks and natural areas).

The geographies obtained are also characterized by integrating the data of the survey on the Museums with those available on an area basis at a minimum level of the municipality: tourism (Istat, Movement of customers in accommodation establishments), demography (Istat, Movement and calculation of the annual resident population), UNESCO sites (UNESCO), municipalities "Borgo" (The Most Beautiful Villages in Italy, Orange Flags, and the "Authentic Villages of Italy"), protected natural areas (Ministry of the environment). All the sources used provide geo-referenced information or, at least, geocoded information at the municipal level. It is therefore possible to analyze the range of statistical information available in relation to the new geographical units defined.

Overall, the 107 museum routes consist of 3,770 itineraries that lead to each museum reachable in 30 minutes by car; the museum institutions placed in the total of the routes are 2,749, 74 of which are reached in more than one route as shown in Figure 2. The routes cross 2,470 municipalities, which represent the geographical unit of analysis for the statistics presented in the attached tables (Figure 1).

Figura 1 – I percorsi museali: geografie



As already mentioned, sometimes the same museum can be reached from one or more main museums and therefore become a destination in more than one route, as can be seen from figure 2.

Each identified route is described by the characteristics of the museums reached, the presence or not of parks, villages, UNESCO sites and the basin of potential users (resident population and tourist arrivals). While to characterize each of the itineraries we use exact spatial information (for example, exact location of the museum, the park, etc.), in the same way, for the 107 routes, data and indicators refer to the municipalities underlying them:

- tourism (Istat, Movement of customers in accommodation establishments);
 - demography (Istat, Movement and calculation of annual resident population);
 - UNESCO sites (UNESCO);
 - hamlets (I Borghi più belli d'Italia, Bandiere arancioni, Borghi Autentici d'Italia);
 - protected natural areas (Ministero dell'ambiente e della Tutela del Territorio e del Mare).

Figura 2 – Example of partially coincident routes

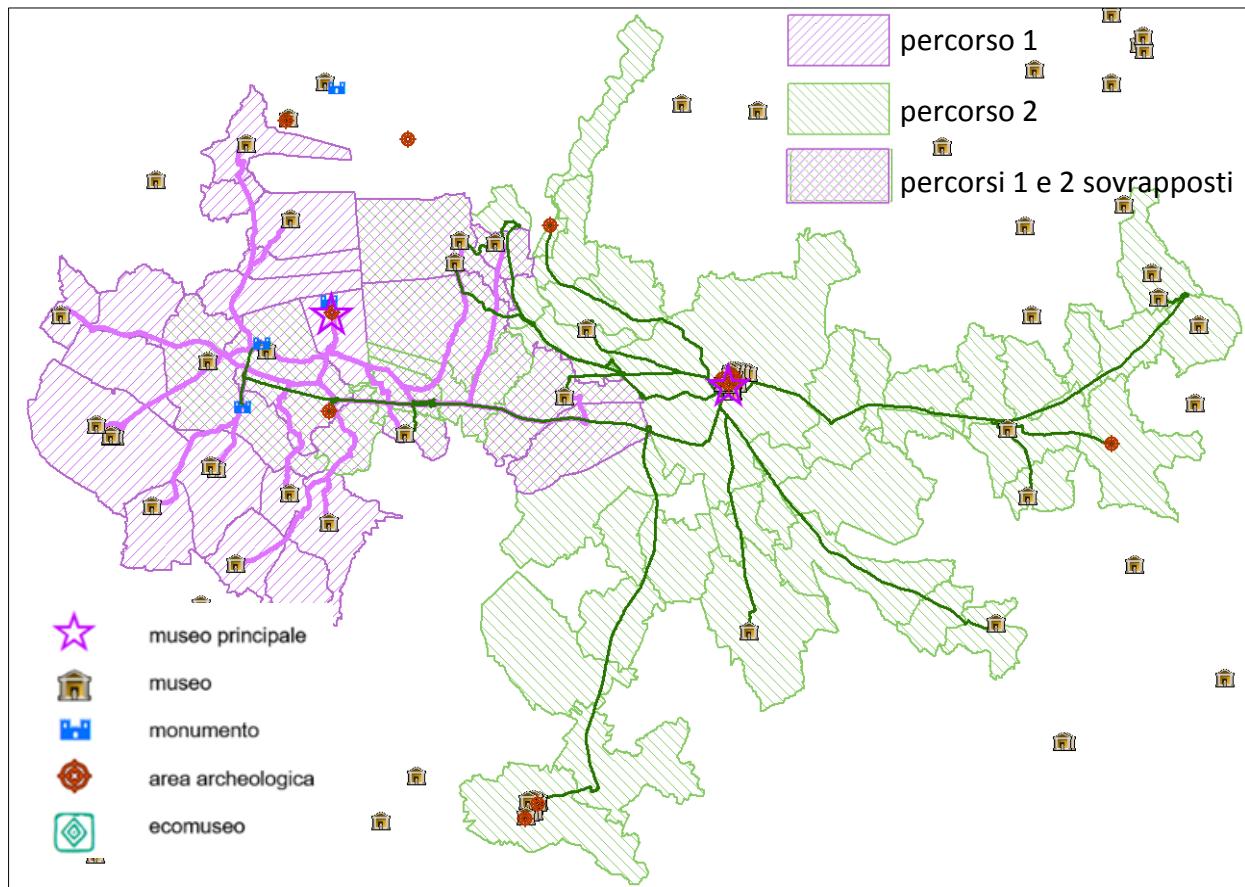


Table 1 shows some information on the identified routes. The museum routes are 107, corresponding to the 107 most visited museums for each NUTS 3, from which you can visit 2,749 museums (56% of all Italian museums) through a network of routes that can be covered in 30 minutes by car. Table 1 also shows a marked polarization in terms of visitors. In fact, the identified routes concentrate about one third of the visitors (31.4%) in the 107 most frequented museums and 86.6% in all the museums located in the itineraries. The museums not reached by the routes are, however, 2,159, for a basin of just over 17 million visitors, 13.4% of all visitors to Italian museums.

On average, there are 34 museums in each route, but with an extreme variability: from 3 to 140 institutes. This depends on several factors, including the historical-cultural identity, very varied in the country, the road networks and the morphology of the different territories. The latter shapes the extension of the routes that can be covered in 30 minutes by car and therefore the number of museums: routes located in the plains will have a greater linear extension as more developed and more easily passable will be the road networks compared to those of routes located in mountain areas.

**Tabella 1 - Musei ed istituti similari inseriti nei percorsi museali,
anno 2018 (valori assoluti e percentuali)**

Musei	Musei e istituti similari		Visitatori	
	Numero	%	Numero	%
Musei inseriti nei percorsi	2.749	56,0	111.338.085	86,6
<i>Musei più visitati nei percorsi</i>	107	2,2	40.350.491	31,4
<i>Altri musei inseriti nei percorsi</i>	2.642	53,8	70.987.594	55,2
Musei non inseriti nei percorsi	2.159	44,0	17.301.837	13,4
Totale musei Italia	4.908	100,0	128.639.922	100,0

Fonte: Elaborazione su dati Istat, "Indagine sui musei e gli istituti similari", anno 2018.

Table 2 provides information on the types of museum institutions included in the routes: 51.4% of the most visited are museums, 35.5% monuments or monumental complexes and 12.1% archaeological areas or parks, in line with national averages.

**Tabella 2 - Musei ed istituti similari inseriti nei percorsi museali per tipologia principale
anno 2018 (valori assoluti e percentuali)**

Musei	Numero					Percentuale				
	Museo, galleria e/o raccolta	Area o parco archeologico	Monumento o complesso monumentale	Ecomuseo	Totale	Museo, galleria e/o raccolta	Area o parco archeologico	Monumento o complesso monumentale	Ecomuseo	Totale
Totale musei inseriti nei percorsi	2.189	150	383	27	2.749	79,6	5,5	13,9	1,0	100
<i>Musei più visitati nei percorsi</i>	55	13	38	1	107	51,4	12,1	35,5	0,9	100
<i>Altri musei inseriti nei percorsi</i>	2.134	137	345	26	2.642	80,8	5,2	13,1	1,0	100
Totale musei non inseriti nei percorsi	1.693	177	247	42	2.159	78,4	8,2	11,4	1,9	100
Totale musei Italia	3.882	327	630	69	4.908	79,1	6,7	12,8	1,4	100

Fonte: Elaborazione su dati Istat, "Indagine sui musei e gli istituti similari", anno 2018.

The legal form (Table 3) does not seem to be characteristic of museums included in museum routes compared to those that are not part of it. The total number of institutions present in the routes identified shows, in fact, characteristics in line with the national value, with 62.7% of public museums and 37.3% private. This correspondence, however, disappears when looking at the 107 most visited museums of the routes. The majority of public museums are included in the routes, with peaks of over 70% among the most visited museums.

Tabella 3 - Musei ed istituti similari inseriti nei percorsi museali per forma giuridica del soggetto titolare, anno 2018 (valori assoluti e percentuali) (a)

Musei	Forma giuridica					
	Numero			%		
	Pubblico	Privato	Totale	Pubblico	Privato	Totale
Totale musei inseriti nei percorsi	1.658	985	2.643	62,7	37,3	100
<i>Musei più visitati nei percorsi</i>	<i>75</i>	<i>31</i>	<i>106</i>	<i>70,8</i>	<i>29,2</i>	<i>100</i>
<i>Altri musei inseriti nei percorsi</i>	<i>1.583</i>	<i>954</i>	<i>2.537</i>	<i>62,4</i>	<i>37,6</i>	<i>100</i>
Totale musei non inseriti nei percorsi	1.373	683	2.056	66,8	33,2	100
Totale musei Italia	3.031	1.668	4.699	64,5	35,5	100

(a) Le percentuali sono calcolate sui 4699 musei che hanno risposto al quesito sulla forma giuridica.

Fonte: Elaborazione su dati Istat, "Indagine sui musei e gli istituti similari", anno 2018.

As for the presence of green areas, certified villages and UNESCO sites, just under 90% of the routes insist on at least one green area while 54.2% cross municipalities that have in their territory one or more hamlet and 50.5% municipalities with UNESCO World Heritage Sites (United Nations Educational, Scientific and Cultural Organization). Finally, 20.6% of routes have all three characteristics (Table 4).

Moving on to an analysis of the context of the routes identified, we relate data on museum visitors to those of tourist presence in the municipalities crossed by the different routes, also in order to assess the potential catchment area of the different territories.

Tabella 4 - Percorsi museali che attraversano aree naturali protette, comuni "Borgo" e/o siti UNESCO, anno 2018 (valori assoluti e percentuali)

Percorsi museali	Numero	% sul totale dei percorsi
Percorsi con aree naturali protette	85	79,4
Percorsi con comuni "Borgo"	58	54,2
Percorsi con siti Unesco	54	50,5
Percorsi con aree verdi, comuni "Borgo" e siti Ur	21	19,6

Fonte: Elaborazione su dati Anci, Touring Club Italiano, "Borghi Autentici d'Italia", Ministero dell'Ambiente, UNESCO.

Bibliography

Bertolini M., Caramis A., D'Elia M., Prisco M.R., Talice S. (2019), I percorsi museali in Italia: un mosaico culturale da ricomporre, in S. Cerutti e M. Tadini (a cura di), Mosaico, Memorie geografiche della Società di Studi Geografici, Franco Angeli, Milano.

Bertolini M., Di Pede F., Talice S. Georiferimento di musei e istituzioni similari attraverso l'archivio nazionale degli indirizzi. ASITA 2017.

Comitato Permanente di Promozione del Turismo, Piano Strategico di Sviluppo del Turismo 2017-2022, MiBACT - Ministero dei Beni e delle Attività Culturali e del Turismo, Roma, 2017.

Consiglio d'Europa (2005), Convenzione quadro del Consiglio d'Europa sul valore dell'eredità culturale per la società, Faro.

Istat (2020), Movimento dei clienti negli esercizi ricettivi, Roma.

Istat (2019a), Indagine sui musei e istituzioni similari, Roma.

Istat (2019b), Statistica sperimentale, I percorsi museali in Italia,
<https://www.istat.it/it/archivio/236140>

Minucciani V. (2017), The territory and the small museums: The case of Piemonte, <<Taft Journal>>, pp.1-10.

M. Rota (2019). Musei per la sostenibilità integrata. Fondazione Fizcarraldo, collana Geografie culturali. Editrice Bibliografica

I Quaderni di Symbola – 11 Gen 2018. Piccoli Comuni e Tipicità.

<https://www.symbola.net/ricerca/piccoli-comuni-e-tipicità-la-ricerca-coldiretti-symbola/>

Santagata W. (2005), I distretti culturali nei paesi avanzati e nelle economie emergenti, in <<Economia della cultura>>, X, pp.141-152M.

For information:

Silvia Talice
talice@istat.it
ph. +39 06 4673.7369

Maria Rosaria Prisco
prisco@istat.it
ph. +39 06 4673.7518

The research group that has contributed to the production and analysis of "The museum routes in Italy" is composed of:

- Marina Bertolini, Alessandro Caramis, Marica D'Elia, Alessandra Federici, M. Rosaria Prisco e Silvia Talice.