



2015 Enhanced Visitation Evaluation

**Measurement of Visitors Traveling Through Reservations, Participating in
Recreational Visits and/or Attending Programs or Events at Cleveland Metroparks
Facilities**

Reported by:

**Jackie McLaughlin
Manager, Research & Analytics**

In 1993, Cleveland Metroparks began a systematic effort to estimate attendance at its reservations, golf courses, and Cleveland Metroparks Zoo. There are currently over 120 mechanical counters installed with detector loops embedded in roadway asphalt throughout the reservations. A transition to new meter technology will be occurring over the next several years. New meters that record and save daily data and do not require loops are being tested and will be used to replace old, malfunctioning or damaged meters in the future. The meters assist in: 1) documenting the number of visits to reservations, 2) informing planning decisions related to signage and entrances, and 3) identifying general shifts in reservation usage as they occur.

Three types of visitation are measured for Cleveland Metroparks. These categories range from general to specific and are listed below:

(1) Visitor Occasions represent the number of people *entering* Cleveland Metroparks reservations by vehicle, foot, or bicycle for any reason. Visitor Occasions include all of those who travel through the parks as well as those who visit the parks for recreational purposes.

Why do we track Visitor Occasions? While every person that travels through Cleveland Metroparks on a yearly basis may not stop for a “recreation” visit, we patrol, pave, repair, plow and otherwise maintain 100 miles of connecting parkways for public use. For this reason it is important that we understand how many visits occur on our properties on a yearly basis. In addition, it is beneficial from a sponsorship standpoint to know how many potential impressions could occur on our properties.

(2) Recreation Visits Counts only include people who *park their vehicles, or arrive by foot/bicycle/in-line skate, etc.* to use the parks.

(3) Commuter/Scenic Driving Visits represents the number of vehicles and visitors unaccounted for by Recreation Visits. They are estimated by taking the difference between Visitor Occasions and Recreation Visits.

Visitation Statistics by Category for 2015

Visitor Occasions (1)	45,161,306
Recreation Visits (2)	17,920,121
Commuter/Scenic Driving (3)	27,241,185

VISITOR OCCASIONS

Visitor Occasions are an estimate of the number of people entering Cleveland Metroparks, through major vehicular entrances, for any reason. These figures include both recreational and commuter traffic.

Method for Estimating Visitor Occasions

Typically, before installing a mechanical counter, attendance counter technicians visually count all traffic, both vehicular and pedestrian, entering the reservations at major intersections for a full calendar year. The primary function of the counts are to determine the proportion of vehicles entering at each intersection and to compute a weight-based multiplier on the average number of passengers in these vehicles. Once a reservation has been counted for a full year by visual observation, mechanical counters can be installed and used with confidence.

Calibration of counters consist of...

- **estimating the percentage of motorized vehicles that enter through each roadway entrance for an entire reservation.** Attendance counters record the number of vehicles entering the reservation at all major vehicular entrances for one year. Vehicles already in the reservation and just passing through an intersection are not counted. Once the proportion of vehicles entering the reservation through each entrance is known, a mechanical counter can then be installed at entrances with the largest flows of traffic to estimate use for the entire reservation.
- **estimating the average number of people in vehicles.** At the same time that vehicles are being counted, visual observations are made of how many people are in each vehicle. A multiplier is then calculated for each reservation. For instance, if the attendance counter identifies 100 cars entering a reservation carrying a total of 150 people, the average number of people per vehicle is 1.5. This figure is multiplied by the mechanical counter reading to estimate the total number of people entering the reservation each month.
- **estimating the percentage of people entering the reservation on foot, bicycle, in-line skates, etc.** Results from the In-Park User Survey conducted in 2010-2011 assisted in the creation of updated pedestrian adjustments. Pedestrian adjustments for reservations acquired after 2011 were created differently, based off of other survey data collected (e.g., Lakefront Strategy Research) and visual observations.

Once visual counts are completed at a reservation, attendance estimations are made based on readings from the mechanical counters. At the end of each month, mechanical counter readings are recorded. These readings reflect the number of vehicles entering the reservation at a specific entrance. The reading is divided by the percentage of cars estimated to enter the reservation at that entrance and is then multiplied by the average number of people per vehicle. The total is the monthly attendance at that reservation.

Therefore, for each reservation, monthly attendance =



Since usage varies by season, percentages of cars entering each reservation entrance are calculated bi-monthly. A different percentage is used for each two-month period throughout the year. For example, January/February may have a different multiplier than March/April. The ability to estimate attendance using percentages for bimonthly periods improves the accuracy of the estimates. Essentially, this is a control for seasonal and accompanying weather variations. Visual counts also control for differences between weekday and weekend usage. The only other adjustment made is adding golf attendance for Seneca, Shawnee Hills, Sleepy Hollow and Manakiki to their respective reservations (Bedford, Brecksville and North Chagrin). This is done because routes to these golf courses do not require entrance into the reservations.

Ongoing visual counts/observations are necessary to ensure the most up to date information is being used in the calculation of estimates. In 2015, visual observations occurred at the following reservations; Bradley Woods, Huntington, North Chagrin, Rocky River and South Chagrin. Observations were done to update various multipliers and APT usage figures (e.g., parking lot multipliers, persons per car multipliers). In 2015 a meter was also placed at Wendy Park/Whiskey Island to begin assessing visitation to this location.

Installation and maintenance of mechanical traffic counters in all reservations is an ongoing project. Estimates become more accurate as more mechanical traffic counters are installed and as additional visual counts are replicated. Approximately three percent of traffic counters will malfunction or be damaged each year. Having counters at several entrances in each reservation allows estimates to be made even if one unit malfunctions.

Results

During 2015, **45,161,306** individual visits were made to Cleveland Metroparks and Cleveland Metroparks Zoo. This represents an increase of 2.5% from 2014 (44,046,766).

RECREATION VISITS

People enter Cleveland Metroparks reservations for a variety of reasons. However, a basic distinction can be made between those who are commuting through the reservations to a destination outside the parks, and those seeking recreation, education or conservation opportunities within the reservation. Distinguishing between the two groups is difficult, since mechanical traffic counters cannot measure motivations, and treating commuters and recreationists as mutually exclusive groups is a questionable assumption.

In 1993 a systematic attendance counting approach was implemented. Recreation visits were defined as those who park in a parking lot, or walk or bicycle into a reservation.

Method

Single Entrance Reservations

In estimating recreation visits, reservations with a single vehicular entrance are assumed to be used strictly for recreational, educational, and conservation purposes. The number of people entering in vehicles, plus an upward correction for pedestrians, is the number of recreational visits for these types of reservations. For these locations, recreational visit figures will be identical to visitor occasions. That is, 100% of those entering reservations with one entrance are assumed to be recreational visits.

Multiple Entrance Reservations

To estimate recreation visits for reservations with two or more entrances requires estimating the percentage of vehicles parking in each parking lot over a period of one year in bi-monthly periods. Once these percentages are known, a mechanical counter is installed in selected parking lots. Counts from these lots are then used to estimate the total number of recreation vehicles. For instance, if a year of observational counts indicates that 10 percent of all vehicles are parked at one parking area in a reservation, then a mechanical counter can be installed there. The monthly total for that parking lot is then divided by 0.10 to estimate total recreation vehicles for the entire reservation. The estimated total number of recreation vehicles is then multiplied by 1.75 to estimate the number of people in the vehicles that came for a recreational visit.

Reservations vary greatly in the volume of pedestrians that walk, jog or bike in to each park. Location of the particular reservation as well as the number of access points makes this vary widely across the system. More detail on the pedestrian adjustment can be found on page 3.

The All Purpose Trail (APT) system throughout Cleveland Metroparks is popular with various types of recreationists, including walkers, bicyclists, runners, and dog-walkers. In 2003, the first visual counts were made in Big Creek Reservation to determine percentages of these different types of users along the APT. Over the years more reservations have been observed and are to be continually refreshed every several years. Table 2, page 8, provides the data on of each APT segment that has been counted to date.

Results

The recreation visitation total for 2015 was **17,920,185** visits. This represents an increase of 4.0% from 2014 (17,232,172).

Table 1. Visitor Occasions and Recreation Visits by Reservation

Reservation	2012	2013	2014	2015
Acacia				
Visitor Occasions	--	46,710 ^d	89,201	89,548
Recreation Visits	--	46,710 ^d	89,201	89,548
Bedford				
Visitor Occasions ¹	733,303	700,080	733,171	738,016
Hawthorne Parkway ²	272,126	255,293	281,443	200,362
Recreation Visits	799,775	724,223	672,423	718,158
Big Creek				
Visitor Occasions	8,771,948	7,648,531	8,981,619	8,653,507
Recreation Visits	930,226	909,809	867,411	959,615
Bradley Woods				
Visitor Occasions	97,161	101,761	93,550	96,133
Recreation Visits	97,161	101,761	93,550	96,133
Brecksville				
Visitor Occasions ¹	1,165,901	1,230,991	1,059,942	1,236,535
Valley Parkway ²	3,050,204	2,779,281	2,644,137	3,008,230
Recreation Visits	1,234,395	1,224,615	1,144,078	1,337,653
Brookside				
Visitor Occasions ³	226,844	226,943 ^c	226,985	256,660
Recreation Visits ³	226,844	226,943 ^c	226,985	256,660
Euclid Creek				
Visitor Occasions	1,877,234	1,864,453 ⁱ	1,759,233	1,750,307
Recreation Visits	1,102,628	1,151,200	1,099,143	1,060,048
Garfield Park				
Visitor Occasions	1,763,524	1,831,284	1,979,268	1,910,133
Recreation Visits	474,587	427,466	428,079	401,569
Hinckley				
Visitor Occasions	888,148	802,775	889,308	780,188
Recreation Visits	888,148	802,775	889,308	780,188
Huntington				
Visitor Occasions	950,826	900,923	915,168	922,328
Recreation Visits	617,101	577,298	586,958	598,739
Lakefront Reservation (Edgewater Park)				
Visitor Occasions	--	702,199 ^d	1,235,002	1,248,897
Recreation Visits	--	702,199 ^d	1,235,002	1,248,897
Lakefront Reservation (Whiskey Island/Wendy Park)				
Visitor Occasions	--	--	--	199,175 ^l
Recreation Visits	--	--	--	199,175 ^l
Lakefront Reservation (E. 55, E. 72, Nature Preserve)				
Visitor Occasions	--	487,287 ^d	834,004	779,001
Recreation Visits	--	487,287 ^d	834,004	779,001

Reservation	2012	2013	2014	2015
Lakefront Euclid Creek (Villa Angela/Wildwood/Euclid Beach)				
Visitor Occasions	--	267,724 ^d	344,403	402,249
Recreation Visits	--	267,724 ^d	344,403	402,249
Mill Stream Run				
Visitor Occasions	9,311,082	10,402,921 ^a	10,019,972	10,433,296
Recreation Visits	1,827,456	2,000,790	1,878,723	1,900,463
North Chagrin				
Visitor Occasions ¹	1,674,784	1,257,294	1,391,733	1,517,105
Recreation Visits	1,173,343	1,160,344	1,191,650	1,226,715
Ohio & Erie Canal				
Visitor Occasions	439,997	440,053	384,775	398,550
Recreation Visits	439,997	440,053	384,775	398,550
Rocky River				
Visitor Occasions	5,967,227	6,186,207 ^a	5,979,837	6,262,650
Recreation Visits	3,511,911	3,612,049	3,319,728	3,407,859
South Chagrin				
Visitor Occasions	622,320	632,388	635,105	635,511
Hawthorne Parkway ²	2,310,665	2,226,325	2,248,171	2,177,137
Recreation Visits	674,764	641,380	626,012	593,177
Washington				
Visitor Occasions ¹	104,987	114,503	134,245	143,138
Recreation Visits ¹	104,987	114,503	134,245	143,138
Merwin's Wharf Visitor Count	--	--	25,318 ^m	94,406
West Creek				
Visitor Occasions	--	65,217 ^d	101,544	138,096
Recreation Visits	--	65,217 ^d	101,544	138,096
Zoo and RainForest				
Total Ticketed/Non-Ticketed Attendance ⁿ	1,170,443	1,123,660	1,059,632	1,090,148
Grand Total				
Total Visitor Occasions	41,398,724	42,294,803	44,046,766	45,161,306
Total Recreation Visits	15,273,766	16,808,006	17,232,172	17,920,185

¹ Includes golf course visits, estimated separately

² A separate Visitor Occasion estimate is provided for those reservations that have major stretches of parkway outside the main body of the reservation. These counts estimate the number of visitors traversing the stretches of parkway

³ Does not include the parking lot off Fulton Parkway

^a Frequent road closings make these estimates less reliable

^c Bridge construction and opening of new Zoo entrance through Brookside effect the accuracy of estimates 2007-2012

^d Not full year counts

^f Education/Outreach is defined as "Total People served through Education Programming/Outreach excluding Field Experiences". Field experiences are counted in ticketed attendance

^l Recalibration in 2013

^k Parkway construction over 1-77 bridge contributed to low numbers

^l Tfrax meter installed at Whiskey Island/Wendy Park in spring 2015, after testing/calibration, counts started in June of 2015

^m Partial year data, restaurant opened June 2014

ⁿ Education/Outreach has been removed from the total attendance numbers for the Zoo, as they are captured in the Ticketed/Non-Ticketed Attendance figure

Table 2. All Purpose Trail Use & Estimated Attendance by Reservation

Reservation	Year Counted	Walkers	Runners	Bicycles	In-Line Skaters	Anglers ²	Dog Walkers ¹	APT Attendance
Euclid Creek ³	2013	78%	12%	2%	<1%	<1%	8%	77,723
Hinckley	2012	60%	13%	3%	<1%	3%	21%	116,675
Garfield Park	2012	73%	10%	5%	<1%	--	12%	98,360
Mill Stream Run	2012	39%	20%	25%	<1%	6%	10%	327,174
Bedford	2011	51%	10%	21%	<1%	--	18%	47,409
Rocky River	2010	42%	16%	25%	<1%	7%	10%	394,428
Brecksville	2010	62%	12%	4%	<1%	4%	22%	117,803
Big Creek	2009	50%	13%	20%	1%	--	16%	157,158
Ohio & Erie Canal	2009	42%	7%	35%	1%	7%	8%	79,240
South Chagrin	2008	60%	12%	18%	0%	--	10%	184,368
North Chagrin	2004	83%	4%	6%	2%	--	5%	371,223

¹ Began including dog walkers in counts in 2004

² Began including anglers seen visible in streams from the APT starting 2009

³ This count is for the APT trail between Highland Road and Anderson Road in Euclid Creek

Table 3. Chalet Visitation

The Chalet	2012	2013	2014	2015
Public Admissions	30,127	37,868	32,630	19,809
Private Rentals	15,477	19,054	20,335	18,447
Total for Chalet	45,604	56,922	52,965	38,256

Note: Toboggan Chutes were closed 7 out of 15 days during their holiday hours due to weather. In addition, 2014 numbers included the free day in December for The Cleveland Foundation which boosted attendance by 2000.

Table 4. Ranger Programs

Ranger Department Programs	2012	2013	2014	2015
Total for Ranger Department*	20,424	57,674	57,725	54,342

*This number does not include Edgewater Live or Euclid Beach Live.

Table 5. Golf Visitation

Golf Division	2012	2013	2014	2015^c
Big Met				
Golfers @ 9 holes	77,487	66,979	59,096	68,995
Clubhouse Events	3,239	1,200	1,470	5,106
Instructional Classes	2	--	2	--
Non-golfers (incl. skiing, APT visitors, etc.)	1,315	1,475	815	6,100
Starts*	--	49,467	43,567	49,208
Total for Big Met (including 9-hole rounds)	82,043	69,654	61,383	80,201
Total for Big Met (including starts)	--	52,142	45,854	60,414
Little Met				
Golfers @ 9 holes	28,206	24,005	21,958	25,623
Instructional Classes	6	--	--	--
Non-golfers	285	114	190	151
Starts*	--	24,085	22,065	25,424
Total for Little Met (including 9-hole rounds)	28,497	24,119	22,148	25,774
Total for Little Met (including starts)	--	24,199	22,255	25,575
Manakiki				
Golfers @ 9 holes	61,373	55,643	51,896	58,540
Clubhouse Events	7,459	-- ^a	3,547**	11,154
Instructional Classes	321	392	282	516
Practice Tee	830	572	504	452
Non-golfers	1,618	1,417	1,418	1,067
Starts*	--	37,111	34,369	37,398
Total for Manakiki (including 9-hole rounds)	71,601	58,024	57,647	71,729
Total for Manakiki (including starts)	--	39,492	40,120	50,587
Mastick Woods (golf & footgolf combined prior to 2015)				
Golfers @ 9 holes	24,610	21,749	21,688	19,495
Instructional Classes	167	190	631	364
Non-golfers	492	656	520	650
Footgolf Total	--	--	--	3,455
Starts*	--	21,849	21,808	19,486
Total for Mastick (including 9-hole rounds)	25,269	22,595	22,839	23,964
Total for Mastick (including starts)	--	22,695	22,959	23,955
Seneca				
Golfers @ 9 holes	30,898	38,994	44,950	41,471
Practice Tee	802	963	1,438	1,736
Instructional Classes	--	1,083	1,246	792
Non-golfers	--	239	257	348
Starts*	--	31,974	36,524	33,628
Total for Seneca (including 9-hole rounds)	31,700	41,279	47,891	44,347
Total for Seneca (including starts)	--	34,259	39,465	36,504

Golf Division	2012	2013	2014	2015^c
Shawnee Hills (golf & footgolf combined prior to 2015)				
Golfers @ 9 holes	65,417	56,795	54,002	60,735
Driving Range Tokens	26,114	22,869	27,768	26,746
Clubhouse Events	251	770	720	820
Instructional Classes	1,189	561	200	500
Non-golfers	1,300	735	811	1,215
Footgolf Total				1,608
Starts*	--	46,000	43,739	47,291
Total for Shawnee (including 9-hole rounds)	94,271	81,730	83,501	91,624
Total for Shawnee (including starts)	--	70,935	73,238	78,180
Sleepy Hollow				
Golfers @ 9 holes	63,339	56,200	53,721	63,144
Driving Range Tokens	51,911	36,855	48,017	40,617
Clubhouse Events	5,480	4,480	5,160	4,660
Instructional Classes	302	458	283	393
Non-golfers	950	910	1,450	485
Starts*	--	36,039	34,102	38,954
Total for Sleepy (including 9-hole rounds)	121,982	98,903	108,631	109,299
Total for Sleepy (including starts)	--	78,742	89,012	85,109
Washington				
Golfers @ 9 holes	12,905	10,591	10,289	10,478
Driving Range Tokens	20,879	30,326	48,713	48,534
Clubhouse Events	582	782	--	--
Instructional Classes	3,116	1,602	2,829	1,557
Non-golfers	1,226	1,225	895	255
First Tee	466	667	663	2,388
Practice Tee***	1,482	1,085	1,273	1,388
Starts*	--	10,627	10,312	10,459
Total for Washington (including 9-hole rounds)	40,656	46,278	64,662	64,600
Total for Washington (including starts)	--	46,314	64,685	64,581
Total for Golf				
Golfers @ 9 holes	364,235	330,956	317,600	348,481
Golfers @ Starts	--	257,152	246,486	261,848
Footgolf Total	--	--	--	5,063^b
Grand total for Golf (using starts)	--	368,778	397,588	424,905

*Pre-2015 Starts include Courtesy Coupons which are not in 9-hole rounds (clarifies why starts are higher than 9-hole rounds)

**Catering total from Dino's beginning 5/16/14

***Includes Putt & Chip + Short Game Combo

^a Due to multiple concessionaires 2013 numbers are unavailable

^b In 2014 Footgolf was rolled up into rounds/starts, in 2015 it was reported as its own sub-total

^c Slight changes were made to the reports pulled from Fairways in 2015

Table 6. Outdoor Experience

Outdoor Experiences	2012	2013	2014	2015
Brecksville Nature Center				
Walk-in	22,277	21,353	21,722	24,259
Program	27,251	21,850	26,569	29,000
Sub-Total	49,528	43,203	48,291	53,259
CanalWay Center				
Walk-in	32,853	28,485	24,630	25,085
Program	22,217	27,195	43,955	58,500
Sub-Total	55,070	55,680	68,585	83,585
Garfield Park Nature Center				
Walk-in	23,120	20,383	15,548	7,504
Program	17,823	20,494	13,296	5,600
Sub-Total	40,943	40,877	28,844	13,104
Historical Interpretation	6,754	7,861	6,054	4,056
Outdoor Recreation	3,456	2,700	4,660	4,037
Look About Lodge				
Walk-in	7,781	6,140	4,688	5,551
Program	11,929	15,592	28,817	7,652
Sub-Total	19,710	21,732	33,505	13,203
Nature Tracks Mobile	25,995	34,814	24,444*	43,782
North Chagrin Nature Center & Education Building (combined)				
Walk-in	62,825	59,365	61,435	63,741
Program	31,964	29,426	21,394	20,160
Sub-Total	94,789	88,791	82,829	83,901
Rocky River Nature Center				
Walk-in	124,047	124,585	122,064	129,805
Program	46,667	51,794	53,990	50,512
Sub-Total	170,714	176,379	176,054	180,317
Youth Outdoors	8,636	8,969	9,628	7,665
Watershed Stewardship Center				
Walk-in	--	23,055	25,794	26,762
Program	--	11,927	27,430	31,002
Sub-Total	--	34,982	53,224	57,764
EcoExplorers (previously included in Nature Tracks)	--	--	6,835	11,143
Total for Outdoor Experiences	475,595	515,988	542,944	555,816

*The 2014 decrease is due to EcoExplorer visits being reported separately from Nature Tracks visits

Table 7. Top 10 Outdoor Experience Events by Attendance

	2015
Fall Fest	5,287
Cedar Valley	3,264
Birds of Prey Weekend	2,571
Buzzard Sunday	1,915
Stinchcomb Series	1,806
Piecing Together a Changing Planet	5,287
Fishing Derbies	3,264
World Water Day	2,571
Reptiles, Amphibians & Fun	1,915
Salute to Snakes	1,806

Table 8. Visitor Experiences

Visitor Experiences	2012	2013	2014	2015**
Reserved Group Picnic Areas	123,655	175,288	201,767	130,183
Reserved Fields	35,970	84,975	21,330	69,509
Camps (Includes Overnight Camping)	--	--	6,702	11,018
Rock Climbing	695	687	367	84
Special Events (Run, Walk, Bike, Wendy Park, etc.)	77,420	104,490	111,249	56,857
Metal Detecting	377	456	1,556	297
Other (1 st Amendment, Baptism, Photography, Filming, Fitness, etc.)	13,984	21,398	40,725	4,795
Wedding Ceremonies	4,361	3,919	5,518	3,692
Total Visitor Experiences	256,462	391,213	389,214	276,435

**Changes in reservation systems resulted in changes to how visitors for events are tracked. This change only accommodated the tracking of the number of visitors for part of the year. In addition, Affiliate Events were removed as a sub-category as they are not tracked separately.

Table 9. Aquatics

Aquatic Division	2012	2013	2014	2015
Swimming Areas:				
Edgewater Beach	--	209,013	294,039*	145,758 ^a
Hinckley Dam	69,597	63,277	65,115	60,812
Huntington Beach	211,145	184,368	184,368**	125,014 ^a
Ledge Lake Pool	42,337	29,332	29,876	26,983***
Wallace Lake	18,804	25,828	32,604	22,803
Aquatic Special Events:				
Dive-in-Movie	311	638	455	312
Dive-in-Movie II	187	270	270	276
Dog Paddle & Pet Palooza	1,895	638	1,490	1,402
Total for Aquatics	344,276	513,364	608,217	383,360

*No visual counts 2014. Method for estimate: Lower Edgewater meter at Honey Hut compared year/year (2013/2014) for summer mths. 31% increase, 31% applied to 2013 estimate of Edgewater Beach aquatic visits. Results, consistent year/year 41-42% of those parking in lot were beach visitors. Edgewater Live walk-on traffic added to estimate.

**2013 estimate substituted as visual counts were not conducted in 2014

***Due to an issue with number of visits per season pass not being tracked an estimate was used to calculate attendance. Using historical data the percent of total visits by season pass holders was obtained (47.7% - 2013, 49.1% - 2014), and used the average (48.4%) to calculate an estimate for 2015 (13,923 non-pass admissions, 13,060 season pass admissions).

^a Edgewater Beach was closed 150.5 hours during the 2015 season for reasons including weather, water quality and waves. This includes 11 full days from June 16-30. Huntington Beach was closed 113.25 hours during the 2015 season for the same reasons.