Web Accessibility of Irish Local Government Websites

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***Abstract*—The European Union Web Accessibility Directive required public sector bodies in EU Member States to ensure that their websites are accessible to users and, in particular, for people with disabilities, by September 2020. This paper examines the web accessibility of local authority websites in the Republic of Ireland. It provides an evaluation of web and accessibility statement availability, web accessibility, search engine visibility, and social media visibility, using manual and automated methods. Despite the minimum requirements set out in the Web Accessibility Directive, the overwhelming majority of local government websites examined continue to present significant accessibility issues and vary in the form and detail of their accessibility statements.**

***Index Terms*—web accessibility, mobile accessibility, accessibility audits, e-government, local government, web accessibility directive, local authorities**

I. Introduction

In 2021, almost 58% of people in the European Union (EU) aged 16–74 years made use of the internet to interact with public authorities [1]. The ISO define accessibility as "...the extent to which products, systems, services, environments and facilities can be used by people from a population with the widest range of user needs, characteristics and capabilities to achieve identified goals in identified contexts of use, where such contexts include direct use or use supported by assistive technologies." [2]. In scholarly literature, website accessibility is an oft-referenced term but has many meanings. As Krol & Zdonek [3] note it may refer to (i) the ability to browse web content comfortably, regardless of physical limitations, (ii) search engine visibility, (iii) social media visibility, and (iv) web availability. A key theme in web accessibility literature is the removal of barriers to access and use online information and services for people with disabilities and the elderly [4]–[6]. While commentators note that the concept of 'disability' is ambiguous, indeterminate, multifarious, political, culturally contingent, multi-dimensional and highly complex [3], [5], [7], the focus of web accessibility evaluation literature, standards, and legislation has been on visual and auditory disabilities and to a lesser extent cognitive, and motor disabilities.

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The legal standing of web accessibility has been debated since the first decade of the worldwide web [4]. In particular, there has been a significant and growing movement to legislate for government websites and those of public sector bodies to meet minimum web accessibility standards resulting in Section 508 of the US Rehabilitation Act Amendments of 1998, Section 20(6) of the UK Equality Act 2010, and most recently the EU Directive on the accessibility of the websites and mobile applications of public sector bodies. These laws typically require public sector websites to meet a set of testable criteria based on the 2010 ADA Standards for Accessible Design and guidelines recommended by the world wide web consortium (W3C).

Over the last two decades, the introduction and ubiquity of the smartphone has significantly changed how the public access online information and services including public sector websites. This is reflected in the Directive (EU) 2016/2102 of the European Parliament and of the Council of 26 October 2016 on the accessibility of the websites and mobile applications of public sector bodies (the Web Accessibility Directive) enacted on 26 October 2016 which became law in Member States on 23 September 2018. The Web Accessibility Directive requires public sector bodies to ensure that their websites and mobile applications are more accessible in particular for people with disabilities. The Web Accessibility Directive specifically requires public sector websites to meet the so-called POUR principles of accessibility i.e. perceivability, operability, understandability, and robustness, and is testable against criteria such as those laid out in the European standard EN 301 549 V1.1.2 which is largely based on the W3C Web Content Accessibility Guidelines (WCAG) 2.0. The Web

Accessibility Directive allowed for a phased implementation of measures with all public sector websites to be compliant by 23 September 2020. As a result, there has been a renewed interest by scholars in the web accessibility of both national and local government websites in the EU (see for example [3], [8]).

Article 28A of the Irish Constitution recognises the role of local government in providing a forum for the democratic representation of communities and in exercising and performing powers conferred by law. The primary legislative code outlining the structures, powers, functions and duties of local government in Republic of Ireland is laid out in the Local Government Act 2001 and the Local Government Reform Act 2014. There are currently 31 local authorities in the Republic of Ireland - 26 county councils, three city councils (Cork, Dublin and Galway), and two city and county councils (Limerick and Waterford). The operations of local authorities are also impacted by other legislation. This paper assesses the website accessibility of the 31 local authorities in the Republic of Ireland. The Web Accessibility Directive was transposed in to Irish law through the European Union (Accessibility of Websites and Mobile Applications of Public Sector Bodies) Regulations 2020 which came into force on 23 September 2020.

II. Data and Methods

The study involves all 31 websites of local authorities in the Republic of Ireland. This study examined four aspects of web accessibility, namely: web availability, web accessibility, search engine visibility, and social media visibility. We only focus on websites. Data was collected in December 2022 and January 2023, both manually and using automated tools. Firstly, whether the website uses secure http (HTTPS), data on the availability of a web accessibility policy, the availability of assistive tools on each local government website, and social media presence was manually collected. In addition, search engine accessibility was examined by manually checking whether (a) a robots.txt file blocked search engine crawling, (b) the local authority was displayed in a knowledge panel and whether it was claimed or unclaimed, and (c) as per King & Youngblood [10] whether the county website ranked on the first page of search engine results on Google, Bing, Twitter and Facebook. Secondly, we utilised PowerMapper's OnDemand Suite, a commercial software tool tha scans web code against 1,300 standards-based checkpoints including WCAG 2.1, WCAG 2.0, Section 508 (2017), accessible file formats, desktop and browser mobile compatibility, broken links and errors, web standards (including W3C HTML and CSS standards), and Google and Bing SEO best practice guidelines. Thirdly, Google Lighthouse, an open-source, automated tool for improving the quality of web pages, was used to assess both desktop and mobile quality of experience. Finally, the Google Mobile Friendly Test tool was used to test mobile usability. Powermapper's OnDemand Suite and Google Lighthouse are used widely by private and public sector organisations for accessibility and quality of experience evaluation, and increasingly in scholarly research (see, for example, [3], [10]–[17]).

III. Results and Discussion

A. Website Availability, Accessibility Statements and Assistive Technologies

With respect to web availability, local authorities in Ireland all have a dedicated website. Over 77% of Irish citizens use a smartphone for private purposes [19] and over 99% of Irish Internet users use a smartphone to access the Internet [20]. As such, mobile usability is an important factor in web availability and accessibility for local authorities. The Google Mobile Friendly Testing tool was used to test usability on smartphones. One local authority blocked Google crawls. Of the other 30 websites, 28 were deemed usable on a smartphone (mobile friendly). HTTPS provides and additional layer of protection to data transferred between users and websites by providing cryptographic security protection for data, authenticating websites using digital certificates, and enabling browser-based security mechanisms [21]. These mechanisms provide protection to web traffic from network attackers and build trust in websites and the web in general. Without HTTPS, any data passed is insecure. Furthermore, if HTTPS is not used search engines will display a warning which may adversely impact trust in the local authority. Only one website in the sample did not use HTTPS. While this suggests high penetration, it is still surprising that there was not full coverage.

Regulation 7 of the European Union (Accessibility of Websites and Mobile Applications of Public Sector Bodies) Regulations 2020 requires an accessibility statement in a required form to be published on local authority websites. While our results found that the requirement to publish an accessibility statement on a local authority websites has been generally complied with, the form and detail varies significantly particularly with respect to the accessibility links on local authority homepages. Implementation ranges from detailed accessibility statements to links to empty web pages or external third party websites. The Web Accessibility Directive and associated regulations do not require local authorities to integrate or implement assistive tools; it is as a 'minimum harmonisation' directive. This means that it only sets out the absolute minimum requirements that have to be met by public sector bodies for their websites and mobile applications. Notwithstanding this, for public sector bodies it is reasonable to consider the provision and integration of assistive technologies as best practice. Only eight local authority websites in the sample featured integrated assistive technologies. Table I summarises our findings by website.

Article 7 of the Web Accessibility Directive requires local authorities to produce an accessibility statement in an accessible format and to be published on the website concerned. 26 county councils had web accessibility statements of some form on their website and 23 featured web accessibility statements of some form on the homepage of their website. The Web Accessibility Directive also requires accessibility statements to be prepared using the model accessibility statement referred to

TABLE I
LOCAL AUTHORITY WEBSITE AVAILABILITY

Local Authority	Website	HTTPS	Mobile Friendly
Carlow CC	Y	Y	Y
Cavan CC	Y	Y	Y
Clare CC	Y	Y	Y
Cork CiC	Y	Y	Y
Cork CC	Y	Y	Y
Dun Laoghaire-Rathdown CC	Y	Y	Y
Donegal CC	Y	Y	Y
Dublin CiC	Y	Y	Y
Fingal CC	Y	Y	Y
Galway CiC	Y	Y	Y
Galway CC	Y	Y	Y
Kerry CC	Y	Y	Y
Kildare CC	Y	Y	Y
Kilkenny CC	Y	Y	Y
Laois CC	Y	Y	Y
Leitrim CC	Y	Y	Y
Limerick CCC	Y	Y	Y
Longford CC	Y	Y	Y
Louth CC	Y	Y	Y
Mayo CC	Y	Y	Y
Meath CC	Y	Y	Y
Monaghan CC	Y	Y	Y
Offaly CC	Y	N	Y
Roscommon CC	Y	Y	NA
Sligo CC	Y	Y	Y
South Dublin CC	Y	Y	Y
Tipperary CC	Y	Y	Y
Waterford CCC	Y	Y	Y
Westmeath CC	Y	Y	Y
Wexford CC	Y	Y	Y
Wicklow CC	Y	Y	Y

Notes — CC: County Council; CiC: City Council; CCC: City and County Council.

TABLE II
LOCAL AUTHORITY ACCESSIBILITY STATEMENT AND ASSISTIVE TOOL AVAILABILITY.

Local Authority	Statement	Homepage Link	Assistive Tools
Carlow CC	N	N	N
Cavan CC	Y	Y	N
Clare CC	Y	Y	N
Cork CiC	Y	Y	Y
Cork CC	Y	Y	Y
Dun Laoghaire-Rathdown CC	Y	Y	Y
Donegal CC	Y*	Y	N
Dublin CiC	Y	Y	N
Fingal CC	Y	Y	Y
Galway CiC	Y	Y	N
Galway CC	Y	Y	N
Kerry CC	Y	Y	N
Kildare CC	Y	Y	N
Kilkenny CC	N	N	Y
Laois CC	Y	N	N***
Leitrim CC	Y	Y	N
Limerick CCC	Y	N	N
Longford CC	Y	Y	N
Louth CC	Y	Y	N
Mayo CC	Y	Y	N***
Meath CC	Y	N	N
Monaghan CC	Y	Y	Y
Offaly CC	N**	Y	Y
Roscommon CC	Y	Y	N***
Sligo CC	Y	Y	N
South Dublin CC	Y	Y	N
Tipperary CC	Y	Y	N
Waterford CCC	Y	N	N
Westmeath CC	Y	N	N
Wexford CC	N	N	Y
Wicklow CC	Y	Y	N

Notes — CC: County Council; CiC: City Council; CCC: City and County Council. *Links to W3C WAI Guidelines. **Website featured link to webpage however no content was present on target page. ***Accessibility statement references assistive tools but tools were not integrated into website.

in Commission Implementing Decision EU 2018/1523. While our results found that the requirement to publish an accessibility statement on a local authority websites has been generally complied with, the form and detail varies significantly. For example, one merely provided links to the Access Officer, another linked to the W3C Web Accessibility Initiative (WAI), and one linked to a page containing no content.

The Web Accessibility Directive and associated regulations do not require local authorities to integrate or implement assistive tools. As discussed above, it is a 'minimum harmonisation' directive. Notwithstanding this, for public sector bodies it is reasonable to consider the provision and integration of assistive technologies as best practice. Only eight local authority websites in the sample featured integrated assistive technologies; a further three referenced recommended assistive technologies. Three such technologies were prevalent - Recite Me (6), Reachdeck (3), and Browse Aloud (2). Table II summarises our findings by website.

B. Website Accessibility

PowerMapper's OnDemand Suite was used to evaluate five categories of standards-based checkpoints:

- Errors - quality issues including broken links, server configuration problems, script errors and issues with Internet RFCs;
- Accessibility issues - compliance with WCAG 2.1 and Section 508 (2017);
- Compatibility issues - browser-specific content, functionality, layout or performance problems;
- Standards issues - validation that pages meet W3C HTML/XHTML and CSS standards and identification of issues related to W3C deprecated features; and,
- Usability issues - general usability issues based on Usability.gov guidelines, W3C Best Practices, and readability.

In addition, to identifying the number of pages with issues, PowerMapper provides a benchmark against websites in their test database. Sites are designated worse or better. Overall, 29 local authority websites could be scanned; two blocked remote scanning. Our results also suggest that the local authorities in the sample had significant volumes of pages on their websites featuring quality issues and errors, as well as browser incompatibility and non-compliance with accessibility, technical web standards and usability guidelines. All 29 websites performed worse than the PowerMapper benchmark. Overall, the sample websites performed better than the benchmark in only one category, Errors, where 21 websites performed better than the benchmark. Only one website in the sample performed better than the Powermapper benchmark for each of accessibility and usability. Table III summarises our findings by website.

Google Lighthouse was used to measure the quality of

TABLE III
LOCAL AUTHORITY ONDEMAND SUITE SCAN RESULTS.

Local Authority	Pages Scanned	Quality Issues	Errors	Accessibility	Compatibility	Standards	Usability	Overall	Errors	Accessibility	Compatibility	Standards	Usability
Carlow CC	529	301	8	277	28	59	66	Worse	Better	Worse	Better	Better	Better
Cavan CC	529	467	2	465	431	467	467	Worse	Better	Worse	Worse	Worse	Worse
Clare CC	527	317	21	315	305	304	304	Worse	Better	Worse	Worse	Worse	Worse
Cork CiC	526	373	68	368	372	370	368	Worse	Better	Worse	Worse	Worse	Worse
Cork CC	528	337	314	328	322	316	316	Worse	Worse	Worse	Worse	Worse	Worse
Dun Laoghaire-Rathdown CC	530	239	11	211	228	218	180	Worse	Better	Worse	Worse	Worse	Worse
Donegal CC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dublin CiC	527	365	182	358	359	356	357	Worse	Worse	Worse	Worse	Worse	Worse
Fingal CC	521	319	308	309	6	310	314	Worse	Worse	Worse	Better	Worse	Worse
Galway CiC	520	339	334	332	9	295	335	Worse	Worse	Worse	Better	Worse	Worse
Galway CC	524	343	83	338	47	305	305	Worse	Better	Worse	Worse	Worse	Worse
Kerry CC	519	323	11	306	318	305	150	Worse	Better	Worse	Worse	Worse	Worse
Kildare CC	525	246	15	223	44	223	225	Worse	Better	Worse	Worse	Worse	Worse
Kilkenny CC	523	330	4	321	320	315	315	Worse	Better	Worse	Worse	Worse	Worse
Laois CC	464	190	169	178	180	172	176	Worse	Worse	Worse	Worse	Worse	Worse
Leitrim CC	530	482	6	474	478	477	478	Worse	Better	Worse	Worse	Worse	Worse
Limerick CCC	528	202	194	196	200	198	199	Worse	Worse	Worse	Worse	Worse	Worse
Longford CC	519	325	29	320	26	316	319	Worse	Better	Worse	Better	Worse	Worse
Louth CC	530	491	108	482	491	487	487	Worse	Worse	Worse	Worse	Worse	Worse
Mayo CC	529	385	382	381	321	382	383	Worse	Worse	Worse	Worse	Worse	Worse
Meath CC	504	356	6	239	356	355	356	Worse	Better	Worse	Worse	Worse	Worse
Monaghan CC	527	446	7	443	466	454	453	Worse	Better	Worse	Worse	Worse	Worse
Offaly CC	525	487	5	474	487	479	482	Worse	Better	Worse	Worse	Worse	Worse
Roscommon CC	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sligo CC	520	284	26	273	279	273	274	Worse	Better	Worse	Worse	Worse	Worse
South Dublin CC	528	458	3	454	458	457	456	Worse	Better	Worse	Worse	Worse	Worse
Tipperary CC	517	335	2	320	15	322	329	Worse	Better	Worse	Better	Worse	Worse
Waterford CCC	527	349	29	50	58	336	338	Worse	Better	Better	Worse	Worse	Worse
Westmeath CC	530	353	4	348	4	192	351	Worse	Better	Worse	Better	Worse	Worse
Wexford CC	528	338	33	334	12	319	321	Worse	Better	Worse	Better	Worse	Worse
Wicklow CC	529	495	30	480	19	486	488	Worse	Better	Worse	Better	Worse	Worse

Notes — CC: County Council; CiC: City Council; CCC: City and County Council.

experience of each website across three measures - performance, accessibility, and best practice - for both mobile and desktop users. Performance measures how well a given page is optimised for users to be able to see and interact with page content. Accessibility assesses the extent to which all users can access content and navigate a given website effectively. Best practices assesses the underlying code health of a given website against best practice. Google Lighthouse score ranges are: 0 to 49 (red): Poor; 50 to 89 (orange): Needs Improvement; and 90 to 100 (green): Good. Table IV presents the results from Google Lighthouse analysis. Our results suggest while local authority websites in the sample are usable on smartphones, performance, accessibility and alignment with best practices for mobile use varies significantly with most websites requiring significant improvements. Desktop results were significantly better than those for mobile suggesting that the websites were primarily design for desktop users. Notwithstanding this, there is clear room for improvement. Table V summarises our results.

C. Search Engine Visibility

Search engine visibility are not required under legislation although they play an important role in information accessibility and discoverability. As per King & Youngblood [9] we manually assessed whether each local authority website ranked on the first page of search engine results on Google and Bing. In all cases, the local government website featured in the first search engine results page. Knowledge panels give websites more exposure as they occupy more space in a search engine results page, is more understandable and provides better usability by giving faster access to important information and links. In each case, a knowledge panel was displayed for each local authority however in 11 cases, the knowledge panel had not been claimed thereby limiting the range and timeliness of data that could be displayed. If a website uses a robots.txt file to limit crawling, its URL can still appear in search results but the search result will not have a description, non-HTML files will be excluded, and rich results will not display. As such, it can impact website accessibility and usability. Only three websites blocked search engine crawling. Table VI summarises our findings by website.

OnDemand Suite was also used to evaluate whether a given website met Google, Bing and Yahoo! search guidelines, robots.txt guidelines, and search best practices. Again, two websites blocked scans of their website. Of the remaining 29, only two websites performed better than the PowerMapper benchmark in the search category. Furthermore, Google Lighthouse was used to assess how well a given website is optimised for search engines. Again, score ranges are: 0 to 49 (red): Poor; 50 to 89 (orange): Needs Improvement; and 90 to 100 (green): Good. Generally speaking, Google Lighthouse results for SEO were relatively high for both mobile and desktop with an average score of 84 for both. Table VII summarises our findings by website.

D. Social media visibility

In Europe, on average 58% of the individuals participated in online social networking sites in 2022 [23]. While statistics are not available for Ireland for 2022, historically Irish social media use has been higher than the EU average [24]. 30 of the websites provided links to at least one social networking sites on their home page and 28 provided links to two or more social networking sites. Twitter (30) and Facebook (208) were the most prevalent. Table VIII summarises our findings by website. In addition, we completed the same manual assessment on social media search engine results on Facebook and Twitter. All local authorities featured on the first (extended) search engine results page for Twitter and 29 local authorities featured on the first search engine results page on Facebook.

IV. Conclusions

Policymakers and legislators have made significant efforts to ensure that minimum standards are met for website accessibility. Our findings suggest that in Ireland, despite these efforts, there are significant issues to be addressed in nearly all local authority websites. Many of these issues are neither difficult to implement nor costly. As demonstrated from this paper, the identification of issues at a page level can be achieved using free and commercial off-the-shelf tools. Further research is required to identify the specific barriers to achieving and maintaining web accessibility.

Regulation 8 of the European Union (Accessibility of Websites and Mobile Applications of Public Sector Bodies) Regulations 2020 names the National Disability Authority as the monitoring body. Although testing different samples with some overlap, our findings are consistent with their 2021 Monitoring Report (see [21]). This suggests that greater commitment to accessibility is required by public sector bodies but also that the monitoring body requires more effective enforcement procedures (including penalties). Local authorities should be the leaders in ensuring a more accessible Internet in their community. While much has been done, there would seem to be a lot more to do.

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TABLE IV
GOOGLE MOBILE FRIENDLY AND GOOGLE LIGHTHOUSE PERFORMANCE RESULTS

County Council	Mobile Friendly	Mobile Performance	Mobile Accessibility	Mobile Best Practices	Desktop Performance	Desktop Accessibility	Desktop Best Practices
Carlow CC	Usable	40	88	67	80	88	75
Cavan CC	Usable	76	99	92	94	99	92
Clare CC	Usable	76	99	92	94	99	92
Cork CiC	Usable	50	90	100	76	90	100
Cork CC	Usable	42	81	75	91	73	67
Dun Laoghaire-Rathdown CC	Usable	44	89	92	64	89	92
Donegal CC	Usable	43	100	42	89	93	42
Dublin CiC	Usable	NA	NA	NA	63	100	92
Fingal CC	Usable	72	90	83	96	90	92
Galway CiC	Usable	75	83	83	84	83	83
Galway CC	Usable	58	83	75	88	83	83
Kerry CC	Usable	50	83	83	76	87	83
Kildare CC	Usable	24	81	67	50	84	75
Kilkenny CC	Usable	70	96	92	96	96	92
Laois CC	Usable	39	91	67	70	88	75
Leitrim CC	NA	42	78	NA	74	83	NA
Limerick CCC	Usable	38	89	83	86	89	83
Longford CC	Usable	12	77	75	29	85	75
Louth CC	NA	30	84	NA	85	86	NA
Mayo CC	Usable	45	100	83	99	99	83
Meath CC	Usable	91	100	100	97	100	100
Monaghan CC	Usable	12	86	75	24	86	83
Offaly CC	Usable	12	84	75	57	77	75
Roscommon CC	NA	NA	NA	NA	NA	NA	NA
Sligo CC	Usable	43	99	83	73	99	83
South Dublin CC	Usable	8	100	67	60	100	75
Tipperary CC	Usable	69	88	83	92	86	92
Waterford CCC	Usable	67	93	67	96	93	67
Westmeath CC	Usable	70	98	83	92	98	92
Wexford CC	Usable	60	90	83	90	84	92
Wicklow CC	Usable	26	92	83	78	84	83

Notes — CC: County Council; CiC: City Council; CCC: City and County Council.

TABLE V
GOOGLE LIGHTHOUSE ASSESSMENT SCORES

Metric	Poor	Needs Improvement	Good	NA	Total
Mobile Performance	16	12	1	2	31
Mobile Accessibility	0	14	15	2	31
Mobile Best Practices	1	20	6	4	31
Desktop Performance	2	17	11	1	31
Desktop Accessibility	0	17	13	1	31
Desktop Best Practices	1	16	11	3	31

TABLE VI
LOCAL AUTHORITY WEBSITE SEARCH ENGINE VISIBILITY MANUAL EVALUATION.

Local Authority	Robots.txt	Google SERP1	Bing SERP1	Knowledge Panel
Carlow CC	N	Y	Y	Claimed
Cavan CC	N	Y	Y	Claimed
Clare CC	N	Y	Y	Claimed
Cork CiC	N	Y	Y	Unclaimed
Cork CC	N	Y	Y	Claimed
Dun Laoghaire-Rathdown CC	N	Y	Y	Claimed
Donegal CC	N	Y	Y	Claimed
Dublin CiC	N	Y	Y	Claimed
Fingal CC	N	Y	Y	Unclaimed
Galway CC	N	Y	Y	Claimed
Galway CiC	N	Y	Y	Unclaimed
Kerry CC	N	Y	Y	Claimed
Kildare CC	N	Y	Y	Unclaimed
Kilkenny CC	N	Y	Y	Claimed
Laois CC	N	Y	Y	Claimed
Leitrim CC	Y	Y	Y	Claimed
Limerick CCC	N	Y	Y	Unclaimed
Longford CC	N	Y	Y	Claimed
Louth CC	Y	Y	Y	Claimed
Mayo CC	N	Y	Y	Claimed
Meath CC	N	Y	Y	Claimed
Monaghan CC	N	Y	Y	Unclaimed
Offaly CC	N	Y	Y	Claimed
Roscommon CC	Y	Y	Y	Claimed
Sligo CC	N	Y	Y	Unclaimed
South Dublin CC	N	Y	Y	Unclaimed
Tipperary CC	N	Y	Y	Unclaimed
Waterford CCC	N	Y	Y	Claimed
Westmeath CC	N	Y	Y	Claimed
Wexford CC	N	Y	Y	Unclaimed
Wicklow CC	N	Y	Y	Unclaimed

Notes — CC: County Council; CiC: City Council; CCC: City and County Council.

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TABLE VII
LOCAL AUTHORITY AUTOMATED SEARCH ENGINE VISIBILITY RATINGS BY WEBSITE

County Council	Google Lighthouse		Google Lighthouse		OnDemand Suite	
	Mobile SEO	Desktop SEO	Mobile SEO	Desktop SEO	Pages with Search Issues	Benchmark
Carlow CC	84	83	Needs Improvement	Needs Improvement	28	Better
Cavan CC	100	100	Good	Good	347	Worse
Clare CC	100	100	Good	Good	252	Worse
Cork CiC	83	83	Needs Improvement	Needs Improvement	267	Worse
Cork CC	85	82	Needs Improvement	Needs Improvement	241	Worse
Dun Laoghaire-Rathdown CC	77	73	Needs Improvement	Needs Improvement	191	Worse
Donegal CC	88	90	Needs Improvement	Good	NA	NA
Dublin CiC	NA	79	NA	Needs Improvement	142	Worse
Fingal CC	84	83	Needs Improvement	Needs Improvement	228	Worse
Galway CC	74	73	Needs Improvement	Needs Improvement	43	Worse
Galway CiC	75	73	Needs Improvement	Needs Improvement	107	Worse
Kerry CC	87	92	Needs Improvement	Good	299	Worse
Kildare CC	89	90	Needs Improvement	Good	43	Better
Kilkenny CC	88	91	Needs Improvement	Good	312	Worse
Laois CC	75	73	Needs Improvement	Needs Improvement	107	Worse
Leitrim CC	NA	NA	NA	NA	330	Worse
Limerick CCC	93	92	Good	Good	151	Worse
Longford CC	97	100	Good	Good	117	Worse
Louth CC	81	82	Needs Improvement	Needs Improvement	258	Worse
Mayo CC	92	92	Good	Good	373	Worse
Meath CC	92	92	Good	Good	336	Worse
Monaghan CC	69	67	Needs Improvement	Needs Improvement	441	Worse
Offaly CC	82	82	Needs Improvement	Needs Improvement	189	Worse
Roscommon CC	NA	NA	NA	NA	NA	NA
Sligo CC	83	80	Needs Improvement	Needs Improvement	266	Worse
South Dublin CC	89	91	Needs Improvement	Good	454	Worse
Tipperary CC	66	64	Needs Improvement	Needs Improvement	201	Worse
Waterford CCC	87	90	Needs Improvement	Good	282	Worse
Westmeath CC	100	100	Good	Good	348	Worse
Wexford CC	84	83	Needs Improvement	Needs Improvement	318	Worse
Wicklow CC	82	73	Needs Improvement	Needs Improvement	472	Worse

Notes — CC: County Council; CiC: City Council; CCC: City and County Council.

TABLE VIII
SOCIAL MEDIA PRESENCE ON LOCAL AUTHORITY WEBSITE HOMEPAGE.

County Council	**Total SNS**	**Twitter**	**Facebook**	**LinkedIn**	**Instagram**	**Youtube**	**Pinterest**	**Flickr**	**Vimeo**
Carlow CC	4	1	1	0	0	0	1	1	0
Cavan CC	5	1	1	1	1	1	0	0	0
Clare CC	4	1	1	0	1	1	0	0	0
Cork CiC	5	1	1	1	1	1	0	0	0
Cork CC	5	1	1	1	1	1	0	0	0
Dun Laoghaire-Rathdown CC	4	1	1	0	1	1	0	0	0
Donegal CC	4	1	1	1	0	1	0	0	0
Dublin CiC	3	1	1	0	1	0	0	0	0
Fingal CC	5	1	1	1	1	1	0	0	0
Galway CC	2	1	1	0	0	0	0	0	0
Galway CiC	2	1	1	0	0	0	0	0	0
Kerry CC	3	1	1	0	0	1	0	0	0
Kildare CC	5	1	1	0	1	1	0	0	1
Kilkenny CC	4	1	1	0	1	1	0	0	0
Laois CC	2	1	1	0	0	0	0	0	0
Leitrim CC	3	1	1	0	1	0	0	0	0
Limerick CCC	4	1	1	0	1	1	0	0	0
Longford CC	5	1	1	0	1	1	0	1	0
Louth CC	1	1	0	0	0	0	0	0	0
Mayo CC	5	1	1	1	1	1	0	0	0
Meath CC	4	1	1	1	0	1	0	0	0
Mo0ghan CC	0	0	0	0	0	0	0	0	0
Offaly CC	4	1	1	1	1	0	0	0	0
Roscommon CC	2	1	1	0	0	0	0	0	0
South Dublin CC	4	1	1	0	1	1	0	0	0
Sligo CC	5	1	1	1	1	1	0	0	0
Tipperary CC	3	1	1	0	1	0	0	0	0
Waterford CCC	4	1	1	1	0	1	0	0	0
Westmeath CC	3	1	1	0	1	0	0	0	0
Wexford CC	1	1	0	0	0	0	0	0	0
Wicklow CC	3	1	1	0	1	0	0	0	0
Frequency	**NA**	**30**	**28**	**10**	**19**	**17**	**1**	**2**	**1**

Notes — CC: County Council; CiC: City Council; CCC: City and County Council.