



The Small Business *AI* **Readiness** Index

How ready are America's small business websites to be found, read and trusted when customers ask AI? We measured 2,000 of them across all 50 states and DC with the same checks we publish as free connectors for Claude.



59

Index score, out of 100

2,000

small business websites measured

51

states and DC sampled

Eight checks, *one number*

INDEX SCORE

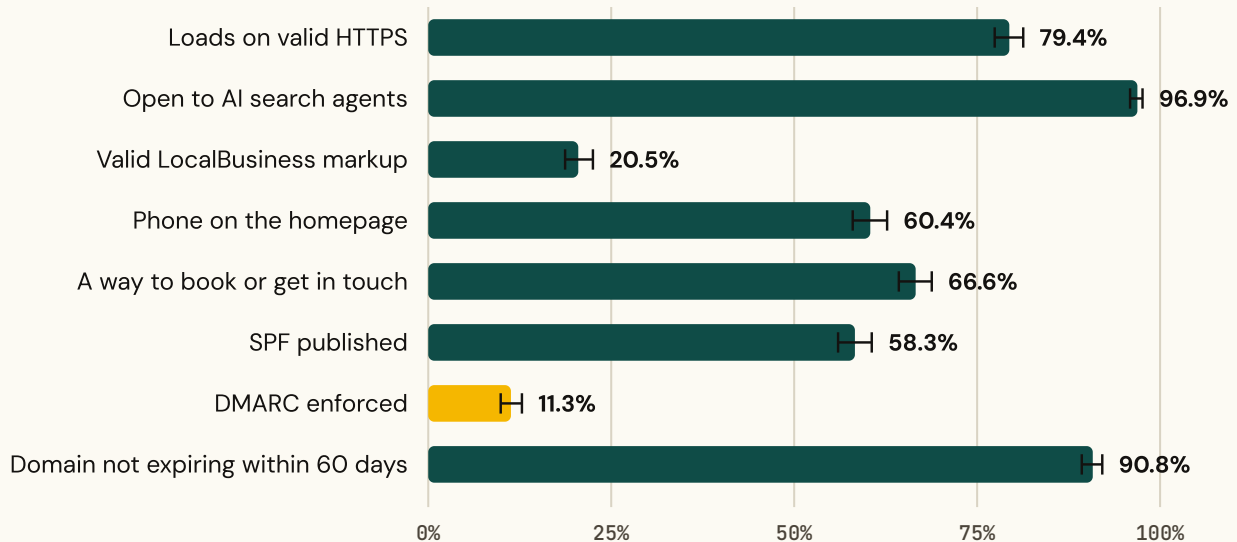
59

95% CI 57.4 TO 59.7

Each site earns one point for each of eight checks that apply to it; the score is the share passed, out of 100, averaged over sites with national weights. The checks cover what an AI assistant or a customer meets first: can the site be reached safely, may AI search agents read it, does it say plainly what the business is, can a customer call, book or write, and are the email domain and the domain itself in good order.

The weakest link nationally: **DMARC enforced**, passed by 11% of the sites it applies to.

Share of sites passing each check

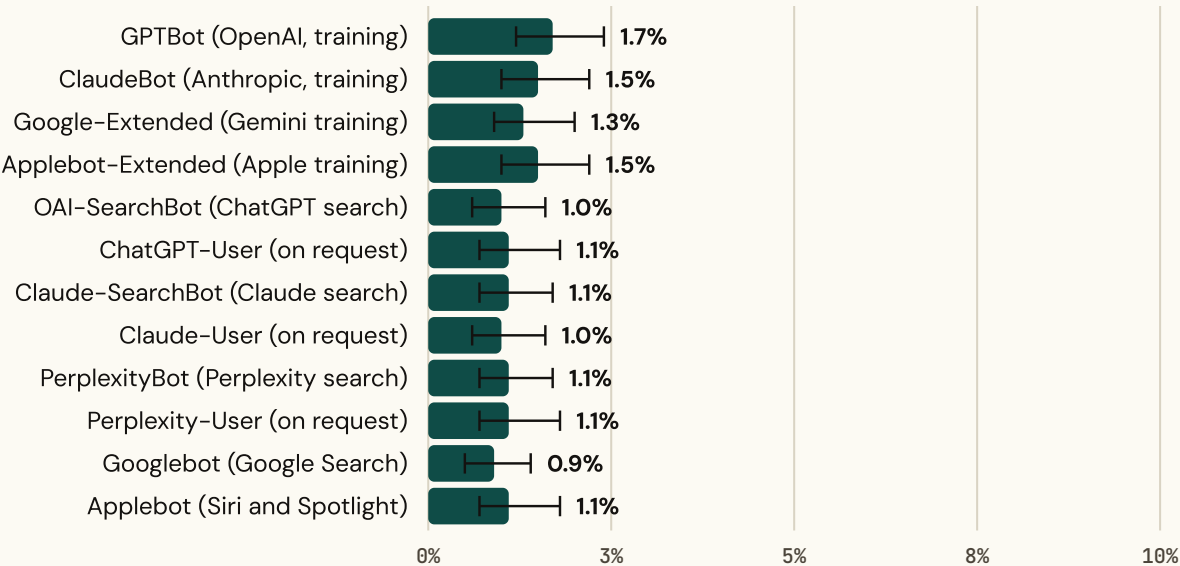


How scores spread



AI agents may read *almost everything*

Access is not the gap. Only 1.3% of sites with a readable robots.txt answer block at least one AI search or AI assistant agent (95% CI 0.8 to 1.9), and 0.9% block every one we checked. Training opt-outs are a separate choice: 1.9% opt out of at least one training crawler. OpenAI, Google and Apple each document that their training controls are independent of their search products, so a training opt-out alone does not hide a business from AI answers.



Denominator: sites whose robots.txt answered (a file, a 404, or an HTML page). A robots.txt that answers with a server error counts as blocking every agent, as RFC 9309 tells crawlers to assume. 2.2% of loaded homepages also carry a noindex directive.

/llms.txt arrives with the builder, not the owner

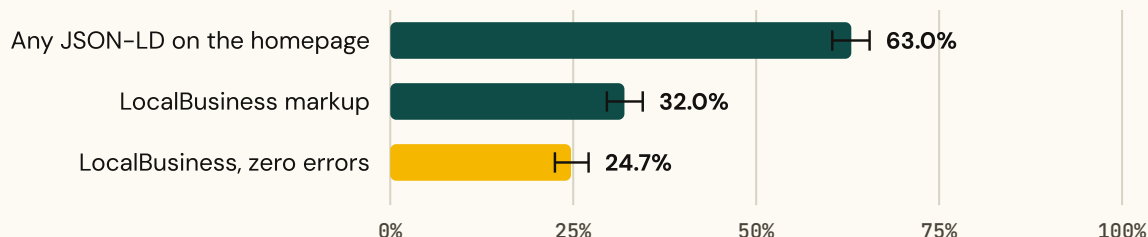
27.1% of loaded sites answer /llms.txt (95% CI 24.8 to 29.5), far more than an owner-adopted convention would suggest. The files cluster on platforms that now generate one for every site; on sites where we could not identify a builder, adoption is 13.1%.

PLATFORM	LOADED SITES IN SAMPLE	SHARE WITH /LLMS.TXT	SHARE OF ALL LLMS.TXT FILES FOUND
Wix	131	93%	29%
Shopify	81	95%	19%
Platform not identified	466	13%	15%
WordPress	428	14%	15%
Duda	44	100%	11%
GoDaddy Website Builder	64	55%	8%
Next.js	27	37%	2%

Unweighted counts of sampled sites whose homepage loaded; platforms with fewer than 10 such sites are not shown.

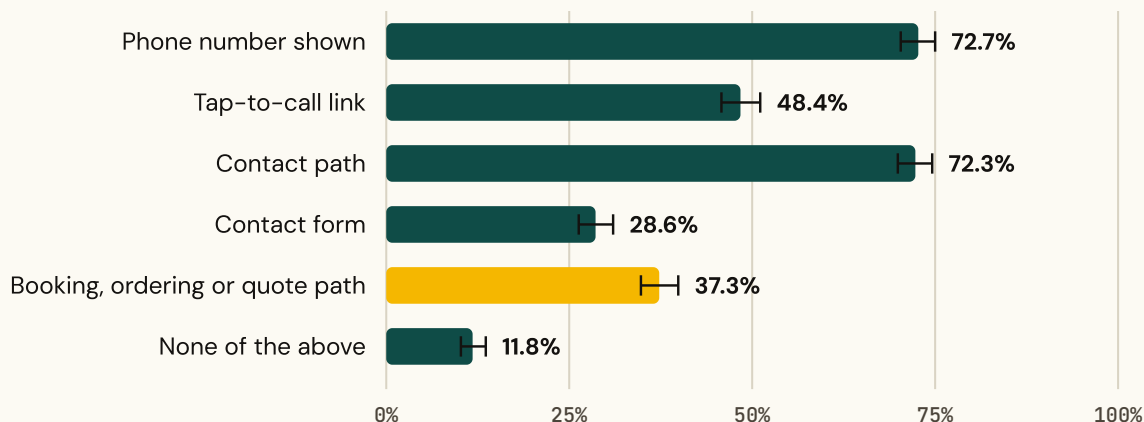
Few sites say it in ***structured*** form

AI answers lean on the same signals search engines do: a page that loads, says plainly who the business is, and marks up its name, address, phone and hours. 63.0% of homepages carry any JSON-LD at all, 32.0% describe the business as a LocalBusiness, and only 24.7% do so with zero validation errors (95% CI 22.5 to 27.1). About half of the sites with any JSON-LD never describe the business itself as a LocalBusiness.



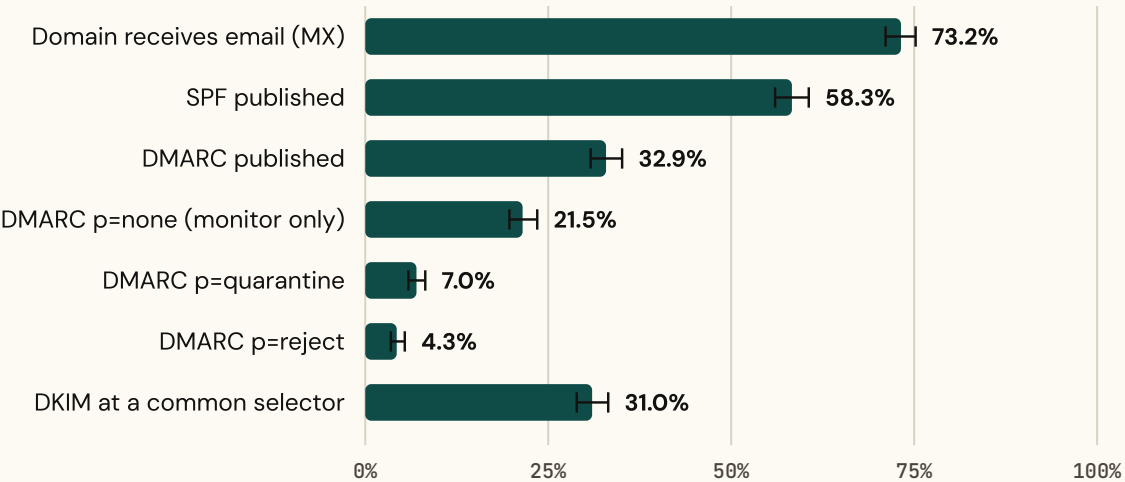
The phone is there. ***Booking*** mostly is not.

72.7% of loaded homepages show a phone number and 48.4% make it tap-to-call. 72.3% offer a contact form, an email link or a contact page link. Only 37.3% offer a way to book, order or request a quote from the homepage, and 11.8% offer none of the three.



Email authentication is the *quiet* gap

Gmail, Yahoo and Outlook now require SPF, DKIM and DMARC from bulk senders, and the same records decide whether a quote or invoice from the business lands or is spoofed. Among sites on their own domain, 58.3% publish SPF and 32.9% publish DMARC, but only 11.3% enforce it with quarantine or reject (95% CI 9.9 to 12.8). DKIM keys were found at a common selector on 31.0%; selectors are not discoverable from DNS, so that figure is a floor.



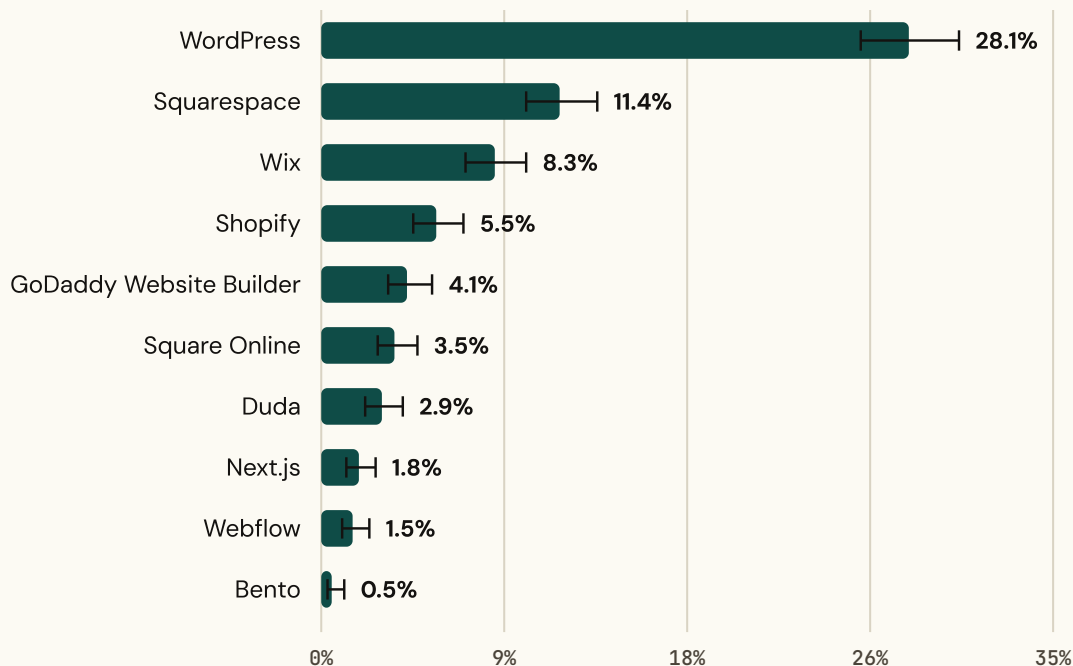
HTTPS, certificates and the domain itself

83% listed sites that load	96% loaded sites ending on HTTPS	4.8% certificate untrusted or within 7 days of expiry	9.2% domains expiring within 60 days
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Domain expiry is read from the registry's public RDAP record. An expiry inside 60 days is often renewed on time; the figure measures exposure, not loss. 12.3% of servers still accept TLS 1.0 or 1.1. 93% of readable domains carry a transfer lock.

The domain is theirs. The ***website*** often is not.

93% of readable domains are locked against transfer and 47% of businesses score 80 or more on Own It's portability model, so the keys to the name are mostly in hand. The website is another matter: where the website layer could be rated, 47% sit on a platform that is hard or impossible to move without a rebuild. We identified the website platform from the outside on 69% of loaded homepages. 38.9% run on a hosted builder or commerce platform, and 1.5% of all sampled listings point to a builder subdomain instead of a domain of their own. Across all layers (domain, DNS, website, email, tags, booking), 2.2% score under 40, hard to leave or locked in. 26% of homepages carry an agency or builder footer credit.



Shares are of loaded homepages. Platforms below half a percent are not shown; the CSV carries all of them. A site we could not attribute is counted as unidentified, not as custom code.

Readiness by *trade*

Weighted estimates with 95% intervals under each figure. Trades follow the OpenStreetMap tag that put each business in the frame; the appendix of the methodology lists every mapping.

TRADE	SITES	INDEX SCORE	BLOCKS AN AI SEARCH AGENT	VALID LOCALBUSINESS	BOOKING PATH	DMARC ENFORCED	DOMAIN EXPIRING 60 DAYS
Health, dental and veterinary	176	66 62 to 69	0.6% 0 to 4	33.6% 26 to 42	49.9% 42 to 58	12.8% 9 to 19	9.7% 6 to 15
Professional services	216	63 60 to 67	2.1% 1 to 5	13.6% 9 to 20	21.0% 16 to 28	24.4% 19 to 30	8.0% 5 to 13
Trades and home services	138	61 57 to 66	0.0% 0 to 3	27.9% 20 to 37	31.1% 23 to 40	16.7% 11 to 24	10.8% 7 to 18
Lodging, fitness and other services	154	58 53 to 62	4.1% 2 to 9	22.6% 16 to 31	38.4% 30 to 48	12.4% 8 to 19	7.6% 4 to 13
Retail shops	266	57 54 to 60	1.9% 1 to 5	19.7% 15 to 26	12.5% 9 to 18	9.1% 6 to 13	8.8% 6 to 13
Food and drink	692	57 55 to 59	0.8% 0 to 2	27.1% 24 to 31	50.1% 46 to 54	7.2% 6 to 9	8.8% 7 to 11
Beauty and personal care	98	55 49 to 60	0.8% 0 to 6	24.1% 16 to 35	50.8% 40 to 62	5.1% 2 to 12	12.5% 7 to 22
Auto and vehicle services	90	53 47 to 59	0.0% 0 to 5	29.7% 20 to 42	13.6% 7 to 25	11.3% 6 to 20	13.1% 7 to 22



Readiness by *state*

Every state and DC holds at least 10 measured sites. State samples are small: intervals are wide and rankings between neighbouring states are not meaningful. Read the interval, not the order.

STATE	SITES	INDEX SCORE	BLOCKS AN AI SEARCH AGENT	VALID LOCALBUSINESS	BOOKING PATH	DMARC ENFORCED
Mississippi	14	70 56 to 84	0% 0 to 20	39% 18 to 65	23% 8 to 50	19% 7 to 43
South Dakota	16	67 55 to 79	0% 0 to 20	33% 15 to 58	20% 7 to 45	25% 10 to 50
Arizona	32	66 61 to 71	0% 0 to 10	13% 5 to 29	36% 21 to 53	15% 6 to 30
Oklahoma	20	65 54 to 77	0% 0 to 17	22% 9 to 45	22% 9 to 45	14% 5 to 35
Minnesota	40	64 59 to 69	5% 1 to 17	14% 6 to 28	38% 24 to 54	5% 1 to 16
Colorado	53	64 58 to 69	2% 0 to 10	26% 16 to 40	30% 19 to 45	20% 12 to 32
Missouri	31	63 56 to 71	0% 0 to 11	29% 15 to 47	25% 13 to 43	12% 5 to 27
Montana	17	63 56 to 71	0% 0 to 18	13% 4 to 36	25% 10 to 50	24% 10 to 47
Idaho	18	63 52 to 74	0% 0 to 18	27% 11 to 52	33% 15 to 58	5% 1 to 24
Utah	29	62 55 to 70	0% 0 to 12	19% 8 to 37	52% 34 to 69	13% 5 to 29
Georgia	40	62 54 to 71	0% 0 to 9	29% 17 to 46	38% 24 to 55	16% 8 to 29
West Virginia	15	62 51 to 73	0% 0 to 22	21% 8 to 48	14% 4 to 40	7% 1 to 32
Wisconsin	43	62 55 to 68	2% 0 to 12	26% 15 to 42	24% 13 to 39	18% 10 to 32
Alabama	20	62 50 to 73	0% 0 to 16	35% 17 to 59	29% 13 to 53	9% 2 to 27
Nebraska	19	61 52 to 70	0% 0 to 18	29% 13 to 53	59% 36 to 78	5% 1 to 24
New York	106	61 57 to 65	3% 1 to 8	23% 15 to 32	44% 34 to 54	9% 5 to 16
Illinois	65	61 55 to 66	0% 0 to 6	20% 11 to 32	43% 31 to 56	15% 8 to 26
Louisiana	22	60 48 to 73	5% 1 to 22	33% 16 to 56	39% 20 to 61	13% 4 to 31
Maine	18	60 49 to 71	0% 0 to 16	20% 7 to 45	33% 15 to 58	18% 7 to 39
Maryland	45	60 53 to 67	0% 0 to 8	18% 9 to 33	21% 11 to 36	26% 16 to 40
Pennsylvania	67	60 55 to 66	2% 0 to 8	27% 17 to 39	32% 21 to 44	4% 1 to 11
Virginia	60	60 53 to 66	4% 1 to 13	22% 13 to 35	47% 34 to 61	8% 4 to 18
Florida	65	59 53 to 65	3% 1 to 12	30% 19 to 44	42% 29 to 56	18% 11 to 29
California	156	59 55 to 62	0% 0 to 3	28% 21 to 36	42% 34 to 51	13% 9 to 20
Iowa	24	58 45 to 71	0% 0 to 14	33% 16 to 56	17% 6 to 39	12% 4 to 29
Michigan	51	58 51 to 65	0% 0 to 7	36% 23 to 51	41% 27 to 56	9% 4 to 20

Readiness by ***state***, continued

STATE	SITES	INDEX SCORE	BLOCKS AN AI SEARCH AGENT	VALID LOCALBUSINESS	BOOKING PATH	DMARC ENFORCED
Indiana	27	57 45 to 69	0% 0 to 14	38% 21 to 59	33% 17 to 55	10% 4 to 26
Tennessee	25	57 48 to 66	4% 1 to 19	15% 5 to 36	45% 26 to 66	7% 2 to 22
South Carolina	34	57 48 to 66	0% 0 to 12	18% 8 to 36	29% 15 to 47	14% 6 to 29
Texas	82	57 51 to 62	0% 0 to 5	23% 14 to 34	46% 34 to 57	5% 2 to 11
Arkansas	19	57 42 to 71	0% 0 to 18	27% 11 to 52	33% 15 to 58	11% 3 to 31
Oregon	63	57 50 to 63	4% 1 to 12	25% 15 to 38	34% 23 to 47	10% 5 to 20
Alaska	14	56 43 to 70	0% 0 to 24	n under 10	n under 10	13% 4 to 36
North Carolina	50	56 50 to 62	0% 0 to 8	22% 12 to 37	24% 14 to 39	8% 3 to 19
Vermont	18	56 44 to 68	0% 0 to 18	40% 20 to 64	27% 11 to 52	5% 1 to 25
New Jersey	39	56 47 to 65	3% 1 to 16	40% 25 to 58	60% 42 to 75	5% 1 to 17
Connecticut	23	55 43 to 68	0% 0 to 16	24% 10 to 47	35% 17 to 59	15% 6 to 34
Washington	60	55 49 to 61	2% 0 to 9	23% 13 to 37	27% 17 to 41	9% 4 to 18
Nevada	21	55 46 to 65	0% 0 to 18	20% 7 to 45	47% 25 to 70	14% 5 to 33
Hawaii	19	55 44 to 65	0% 0 to 18	31% 14 to 56	44% 23 to 67	5% 1 to 24
District of Columbia	19	54 42 to 67	0% 0 to 18	27% 11 to 52	47% 25 to 70	14% 5 to 33
Ohio	48	54 47 to 62	0% 0 to 9	20% 10 to 36	34% 21 to 51	14% 7 to 26
Massachusetts	41	54 46 to 63	2% 0 to 13	26% 14 to 43	39% 24 to 56	4% 1 to 14
New Mexico	20	54 40 to 68	6% 1 to 28	25% 10 to 50	25% 10 to 50	20% 8 to 42
Rhode Island	15	52 39 to 65	0% 0 to 23	17% 5 to 45	33% 14 to 61	6% 1 to 28
Wyoming	16	52 36 to 68	0% 0 to 24	27% 10 to 57	27% 10 to 57	13% 4 to 36
Kansas	24	51 39 to 63	0% 0 to 18	24% 10 to 47	35% 17 to 59	12% 4 to 30
North Dakota	10	50 31 to 69	0% 0 to 26	n under 10	n under 10	29% 12 to 55
Delaware	10	49 32 to 67	0% 0 to 23	n under 10	n under 10	0% 0 to 19
New Hampshire	25	49 36 to 62	0% 0 to 16	24% 10 to 47	41% 22 to 64	7% 2 to 23
Kentucky	22	34 21 to 47	0% 0 to 23	9% 2 to 38	36% 15 to 65	5% 1 to 23

Method, *briefly*

- **Frame.** Every OpenStreetMap shop, craft, office and selected amenity, healthcare, leisure and tourism feature in the 50 states and DC that lists a website (snapshot 2026-10-12): 642,707 features. Out: institutions and government offices, features tagged with a brand (chains), listings whose website is a social or directory page, private addresses, and any domain listed on three or more features (multi-location). The frame holds 251,025 small business websites.
- **Sample.** 2,000 sites, stratified by state with a floor per state and the rest proportional to frame size, and spread across trades inside each state by systematic selection from a seeded order (seed 4060752512). National and trade estimates are weighted back to the frame.
- **Measurement.** The engines of four Modern Mustard Seed connectors (Site Check, AI Search Kit, Domain Health, Own It), run from the same code that serves the connectors, not through their public endpoints. robots.txt is read first and obeyed for our crawler; each resource is fetched once, under the User-Agent MMSReadinessIndex with a contact URL. Email, TLS and registration come from DNS, a TLS handshake and the registry's RDAP record.
- **Outcomes.** 2,000 measured; 1,512 homepages loaded; 318 did not load; 134 answered with a bot challenge; 36 excluded our crawler and were not read; 1,972 are on their own domain.
- **Statistics.** Shares carry 95% Wilson intervals on the Kish effective sample size. Groups under 10 measured sites are suppressed. Each metric has its own denominator, named in the CSV.
- **Privacy.** Aggregates only. No business, domain or score is ever published. Per-site results stay private.

WHAT THIS IS NOT

Not a ranking of businesses, not a measure of how often AI recommends anyone, and not a promise of placement in any AI product. It measures what is in a business's own hands on its own website, email domain and registration.

Sources and license

Business listings: © OpenStreetMap contributors, available under the Open Database License (ODbL 1.0), openstreetmap.org/copyright. The aggregates derived from them are released under the ODbL. Check rules cite RFC 9309 (robots.txt), schema.org, llmstxt.org, the published crawler documentation of OpenAI, Anthropic, Google, Apple and Perplexity, RFC 7208 (SPF), RFC 7489 (DMARC), RFC 6376 (DKIM) and RFC 9083 (RDAP). Full method: methodology.md. Dataset: readiness-index-2026-Q4-aggregates.csv. Engine commit [4c3515e](https://github.com/modernmustardseed/mcp/commit/4c3515e).

Modern Mustard Seed is an AI product studio in Kalispell, Montana, serving businesses across the US. Sarah Scarano builds; Anthony Scarano runs sales and marketing. Managed for you, end to end. The four connectors used here are free in Claude: mcp.modernmustardseed.com.