

# Supporting Information for: *Reading between the Emails: Gendered Patterns of Communication in Local Government*

Matthew Denny <sup>\*</sup>, James ben-Aaron <sup>†</sup>, Hanna Wallach <sup>† ‡</sup>, and Bruce Desmarais <sup>\*</sup>

<sup>\*</sup>Penn State University, <sup>†</sup>University of Massachusetts Amherst, and <sup>‡</sup>Microsoft Research NYC  
**Corpus Descriptive Statistics**

**Table 1.** County email corpus descriptive statistics. Note that **Words Removed** indicates the the number of unique words that appeared in only one email in a given county, and were therefore removed in text preprocessing. **0 Token Emails** indicates the number of emails in each county that contain no tokens after text cleaning.

|              | # Emails | # Unique Words | # Tokens | Tokens per Email | Words Removed | 0 Token Emails |
|--------------|----------|----------------|----------|------------------|---------------|----------------|
| Alexander    | 907      | 1595           | 15437    | 17.0             | 975           | 13             |
| Caldwell     | 121      | 94             | 287      | 2.4              | 107           | 20             |
| Chowan       | 2027     | 3038           | 39635    | 19.6             | 1213          | 14             |
| Columbus     | 920      | 1326           | 13763    | 15.0             | 1719          | 6              |
| Dare         | 2247     | 2907           | 38174    | 17.0             | 1549          | 37             |
| Duplin       | 1914     | 2380           | 83162    | 43.4             | 1742          | 6              |
| Hoke         | 1106     | 1397           | 19409    | 17.5             | 1511          | 10             |
| Jackson      | 1499     | 2493           | 34290    | 22.9             | 2118          | 7              |
| Lenoir       | 560      | 1340           | 19780    | 35.3             | 1790          | 13             |
| Lincoln      | 573      | 1458           | 13754    | 24.0             | 2050          | 4              |
| McDowell     | 326      | 1178           | 8863     | 27.2             | 1535          | 6              |
| Montgomery   | 679      | 1137           | 11166    | 16.4             | 1216          | 18             |
| Nash         | 1147     | 2214           | 31629    | 27.6             | 1731          | 4              |
| Person       | 1491     | 2618           | 29153    | 19.6             | 1977          | 11             |
| Randolph     | 87       | 227            | 1432     | 16.5             | 493           | 0              |
| Transylvania | 1857     | 3157           | 57431    | 30.9             | 2262          | 12             |
| Vance        | 185      | 620            | 4070     | 22.0             | 670           | 2              |
| Wilkes       | 303      | 510            | 5594     | 18.5             | 571           | 1              |
| Averages:    | 997.2    | 1,475.4        | 18,696.7 | 17.3             | 1,275         | 16.7           |

**Table 2.** Words and counts for the 200 most frequently used words in aggregate, across all emails in all counties. Compiled after preprocessing.

| 1–50        |       | 51–100        |       | 101–150      |       | 151–200        |       |
|-------------|-------|---------------|-------|--------------|-------|----------------|-------|
| word        | count | word          | count | word         | count | word           | count |
| will        | 8322  | state         | 765   | open         | 525   | amount         | 399   |
| director    | 4179  | confidential  | 760   | benefit      | 522   | center         | 398   |
| fax         | 4085  | wrote         | 752   | emails       | 522   | agenda         | 396   |
| box         | 3103  | employee      | 749   | personal     | 519   | sign           | 395   |
| email       | 2894  | staff         | 732   | computer     | 513   | area           | 395   |
| phone       | 2685  | human         | 726   | contract     | 513   | web            | 389   |
| meeting     | 2588  | account       | 720   | wanted       | 508   | delete         | 387   |
| office      | 2522  | fyi           | 718   | approval     | 506   | file           | 386   |
| time        | 2335  | check         | 717   | hope         | 501   | business       | 386   |
| class       | 1860  | notice        | 717   | visit        | 499   | correspondence | 385   |
| good        | 1553  | system        | 709   | additional   | 494   | enforcement    | 376   |
| received    | 1480  | finance       | 703   | add          | 491   | distribution   | 376   |
| message     | 1464  | going         | 698   | original     | 491   | free           | 373   |
| work        | 1421  | parties       | 693   | response     | 488   | place          | 371   |
| plan        | 1399  | project       | 682   | coverage     | 488   | flexible       | 368   |
| attached    | 1395  | suite         | 682   | officer      | 484   | question       | 367   |
| budget      | 1375  | law           | 681   | service      | 482   | support        | 365   |
| employees   | 1291  | water         | 680   | pay          | 481   | find           | 364   |
| department  | 1269  | update        | 679   | process      | 479   | receive        | 363   |
| manager     | 1241  | site          | 671   | provide      | 478   | best           | 362   |
| address     | 1238  | number        | 669   | complete     | 478   | keep           | 362   |
| junk        | 1226  | meet          | 658   | job          | 477   | and/or         | 361   |
| call        | 1224  | copy          | 656   | schedule     | 474   | document       | 360   |
| contact     | 1162  | disclosure    | 654   | room         | 464   | discussed      | 358   |
| planning    | 1162  | read          | 651   | leave        | 463   | access         | 354   |
| subject     | 1118  | description   | 646   | policy       | 458   | agreement      | 354   |
| health      | 1114  | care          | 642   | required     | 458   | listed         | 353   |
| questions   | 1088  | survey        | 641   | letter       | 450   | general        | 353   |
| review      | 1071  | mail          | 638   | medical      | 449   | morning        | 352   |
| benefits    | 1032  | cost          | 634   | form         | 447   | management     | 352   |
| report      | 981   | training      | 628   | safety       | 447   | street         | 351   |
| building    | 956   | insurance     | 621   | notify       | 443   | items          | 347   |
| cell        | 919   | board         | 612   | order        | 442   | presentation   | 347   |
| summary     | 907   | ext           | 604   | discuss      | 440   | fire           | 346   |
| help        | 905   | local         | 595   | messages     | 440   | website        | 346   |
| great       | 894   | services      | 585   | reply        | 435   | administrator  | 339   |
| tax         | 888   | position      | 585   | library      | 431   | issues         | 337   |
| request     | 879   | payment       | 575   | requisition  | 424   | application    | 336   |
| public      | 871   | disclosed     | 575   | copies       | 423   | scheduled      | 336   |
| intended    | 865   | commissioners | 568   | asked        | 420   | assistance     | 335   |
| attachments | 849   | change        | 565   | security     | 419   | reminder       | 332   |
| working     | 838   | program       | 558   | documents    | 412   | talk           | 330   |
| note        | 831   | forward       | 556   | needed       | 411   | equipment      | 330   |
| well        | 800   | including     | 556   | list         | 411   | considered     | 326   |
| send        | 792   | prohibited    | 548   | community    | 410   | completed      | 323   |
| changes     | 790   | enrollment    | 539   | grant        | 409   | ready          | 321   |
| property    | 783   | electronic    | 536   | notification | 407   | requested      | 321   |
| resources   | 774   | attend        | 532   | info         | 406   | lunch          | 320   |
| sure        | 769   | error         | 532   | funds        | 403   | meetings       | 319   |
| recipient   | 766   | sender        | 526   | issue        | 402   | bill           | 317   |