

# Reading between the Emails: Gendered Patterns of Communication in Local Government

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Desmarais

# Gender in Organizations

- ▶ Gender bias in organizations is well documented.
- ▶ Correcting it is important.
- ▶ open question about communication.

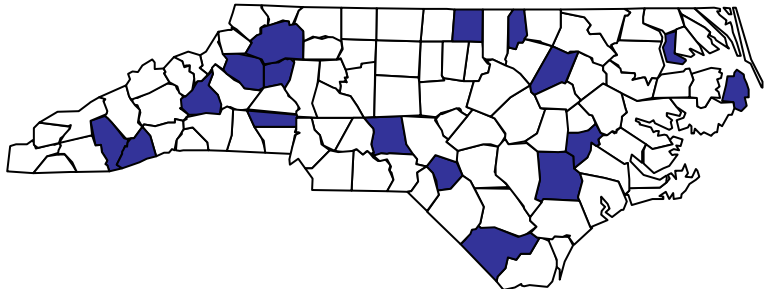
# Challenges and Opportunities

- ▶ Observational data not so good.
- ▶ open governemnt + electronic communication = goldmine.
- ▶ Can study micro level behavior.
- ▶ look for bias in communication patterns

# Public Domain Email Data

# County Government Email Data

- ▶ Public records requests.
- ▶ Department manager email data from 17 North Carolina Counties.
- ▶ 500,000 emails, 17,000 between managers.



# The Data

County	Manager Gender		# Emails
	Male	Female	
Alexander	12	9	907
Caldwell	12	8	121
Chowan	12	11	2,027
Columbus	14	10	920
Dare	15	12	2,247
Duplin	13	14	1,914
Hoke	13	11	1,106
Jackson	18	6	1,499
Lenoir	15	5	560
Lincoln	15	7	573
McDowell	12	5	326
Montgomery	8	10	680
Nash	11	8	1,147
Person	12	9	1,491
Transylvania	16	4	1,857
Vance	10	8	185
Wilkes	15	2	303
Total	362	139	17,863

# Descriptive Analysis

# Aggregate Patterns

	Manager Gender	
	Male	Female
Average # emails sent	48.3	51
Average # recipients per email sent	1.45	1.43
Average # emails received	70.8	71.6

		Recipient		
		Male	Female	Total
Sender	Male	7,299	6,286	13,585
	Female	5,325	3,510	8,835
Total		12,624	9,796	



# Individual Departments

	Emergency	Health	IT	Manager	HR	Library	Plan/Dev	Deeds	Parks/Rec	Finance	Soc/Serv	Veterans	Util/Waste	Elections
Male	15	5	11	15	3	3	11	6	9	5	8	5	11	2
Female	2	11	2	2	12	8	3	9	5	12	8	7	1	11
Total														

## Cross-Department Communication

Sender Department		Recipients																							Female/Total Managers	
		Emergency	Manager	HR	Finance	IT	Plan/Dev	Util/Waste	Health	Tax	Maintenance	Parks/Rec	Soc. Serv	Transport	Info	Misc	Inspections	Library	Veterans	Seniors	Animal	Elections	Sheriff	Environment		Deeds
Emergency	220	443	359	302	229	182	36	185	149	159	179	37	220	226	3	36	48	49	131	44	55	157	43	10	62	2/17
Manager	102		274	557	146	140	255	208	191	93	227	65	41	94	1	134	57	33	44	77	55	76	18	33	22	2/17
HR	203	399		154	188	82	124	111	167	113	138	114	105	54	22	91	131	75	24	66	96	81	56	93	8	12/15
Finance	84	491	116		94	42	69	85	390	119	46	61	73	77	37	3	44	11	3	7	8	64	22	22	7	12/17
IT	65	137	111	96		41	55	116	192	36	91	55	14	76	25	21	62	37	18	23	39	22	6	58	12	2/13
Plan/Dev	3	472	83	81	35	21	52	18	21	189	33	4	14	5	1	92		4	1			5	39	11	22	3/14
Util/Waste	33	434	82	180	18	13	14	52	30	13	78	6	1	4	46	2	5	8	111	1		4	8	4	1	1/12
Health	26	337	119	73	52	4	28		20	122	55	64	8	19	12	20	14	2	3	30	1	54	2	3		11/16
Tax	2	211	104	153	167	9	2	26	30	56	55	1	30	4	30	17	14	8	5	30		18		4		5/15
Maintenance	30	65	96	111	32	111	21	103	31	9	59	43	33	11	5	2	14	2	1	6	3	1	15	13		0/5
Parks/Rec	6	189	77	49	51		24	56	10	63		13	93	11	18	11		9	91	11	1	14	1	6	6	5/14
Soc. Serv	7	125	93	73	46	1	10	58	4	54	64	9	35	1	14		4	5	4	1		8	1	2		8/16
Transport	12	52	61	228	25	5	1	13	1	34	47	38		4	16	1		1	1			4		1		1/7
Info	33	153	23	51	75	13	3	5	11	5	31	2	12		5	2	6	3	6		20	17	6	10	1	5/7
Misc	3	25	19	35	19	3	50	9	13	15	189	12	13	3	8	2	2	1	3		22	7	1	3		1/6
Inspections	3	161	23	6	13	30	1	28	2	4	18					52								3		3/14
Library	1	46	102	19	24	1	1	19	18	8	1	5	2	2		1		2	1	1	1		1	1		8/11
Veterans	1	40	37	24	31	4	5	9	4	1	21	8		23	5		6		3		4		3			7/12
Seniors		44	47	10	6		52	7			30	3		2	1			2						1		6/8
Animal	2	75	37	5	7		2	8	2	6	4	4				2					1	19		1		3/12
Elections	1	45	15	17	24			1	2	8	2			12	24			1			1		2			11/13
Sheriff	6	55	8	13	1			1	2	7	2		4	12	6					1	1					1/17
Environment		20	13	8	3	12	1	42		3	3										3			1		4/11
Deeds		9	11	9	20	3		3	2	5	4	2	1	6			1	1			2					9/15
Extension	1	5	2	9			2				2											3				5/13

# Modeling Email Content

# A Model for Email Data

# Inference

# Gender Differences in Communication

# Future Directions and Policy Recommendations