

A Additional Tables and Figures

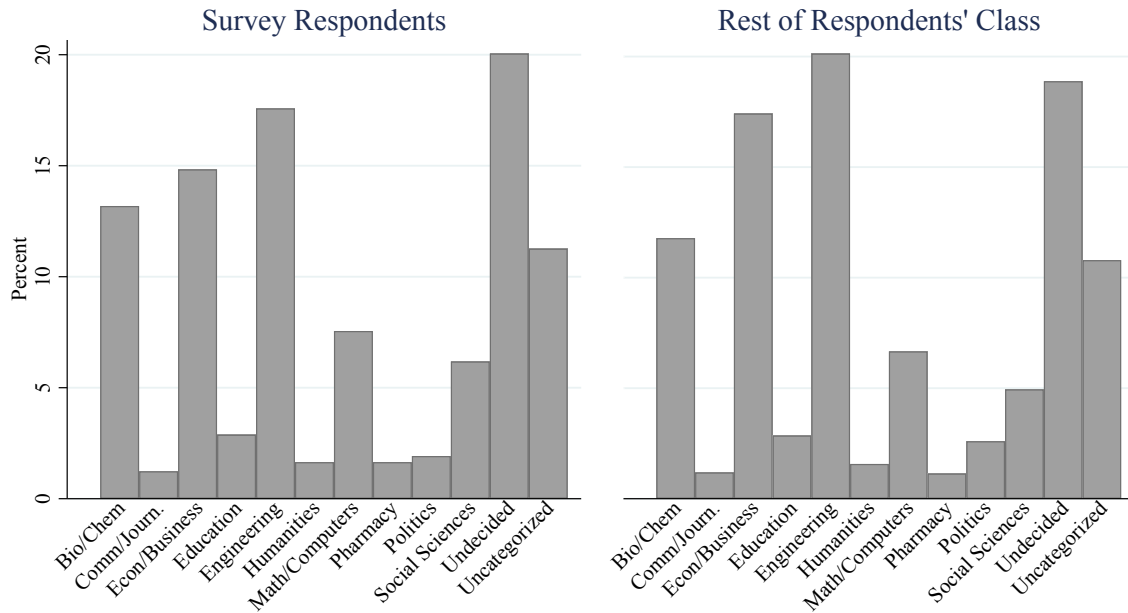


Figure A1: Frequency of Major Fields (Fall 2014)

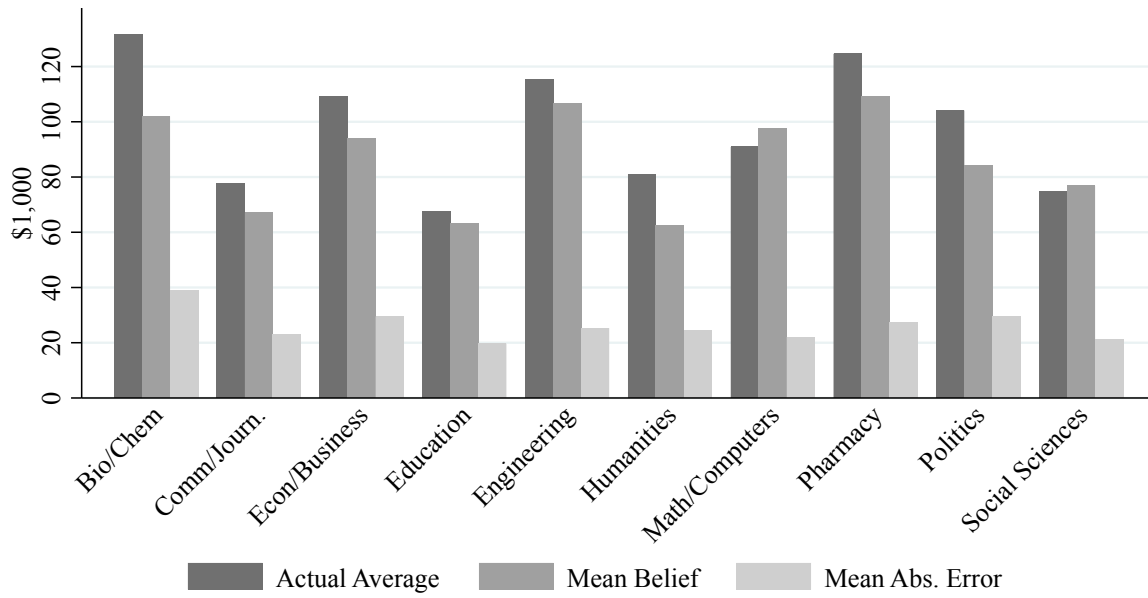


Figure A2: Beliefs of Salary for Workers with any Post-Graduate Degree

Table A1: Salary Beliefs and Errors for Bachelor's Degree

Major Group	Mean Belief	Std. Dev. of Beliefs	Actual Average	Mean Abs. Error
Bio/Chem	66316	23562	68774	17938
Comm/Journ.	47637	19860	65199	22807
Econ/Business	67186	23178	87390	26025
Education	43108	18989	50902	16160
Engineering	78883	24130	96676	25143
Humanities	42579	17385	63586	24040
Math/Computers	72742	24028	82963	20853
Pharmacy	70206	26019	117259	49027
Politics	57492	21102	81484	27888
Social Sciences	50170	20677	59078	18345

Table A2: Salary Beliefs and Errors for Post-Graduate Degree

Major Group	Mean Belief	Std. Dev. of Beliefs	Actual Average	Mean Abs. Error
Bio/Chem	101883	32979	131495	38871
Comm/Journ.	67054	26476	77622	22983
Econ/Business	94004	31735	108998	29509
Education	63160	25815	67466	19688
Engineering	106550	29666	115379	25319
Humanities	62269	22223	80948	24304
Math/Computers	97470	29345	90898	22062
Pharmacy	109332	29648	124615	27444
Politics	84105	28637	104079	29612
Social Sciences	76778	29219	74746	21130

B Correlates of beliefs and errors

I find that respondents' observable characteristics are poor predictors of their beliefs and errors. Table B1 shows the results of an OLS regression of respondents' beliefs of average salary on the actual average salary, their gender, race/ethnicity, GPA, their expected student debt upon graduation, whether either of their parents has a post-secondary degree, and the rank they assigned the field. Tables B2 and B3, respectively, detail similar analyses for respondents' absolute error for individual fields and the difference between fields (their "relative error").

Ethnic minorities and non-citizens¹ tend to make somewhat larger errors, though these effects are not always consistent and do little to explain variation in beliefs or errors (excluding ethnicity dummies reduces the adjusted R^2 for each regression by less than .03).

The more student debt a respondent expects to graduate with, the higher her belief and the lower her absolute error. Higher expected debt is associated with larger relative error for respondents' beliefs about her two top fields for those with a post-graduate degree, though this estimate is smaller and insignificant when we look at all pairs of fields.

Somewhat surprisingly, neither whether a respondent's parents have a post-secondary degree (2- or 4-year) nor her GPA has any significant relationship with beliefs or errors. A respondent's gender also does not appear to have a consistent relationship with errors or beliefs.

Finally, the rank a student assigns to a field has a large and significant effect on both beliefs and absolute errors. The lower a student ranks a field, the lower her belief of its average salary. This result could be due either to selection into majors (a student may choose a major in part because she overestimates its salary) or by ex post rationalization.

Table B1: Correlates of Beliefs about Average Salary

	(1) BA	(2) PGD
Actual BA	0.521*** (0.0222)	
Actual PGD		0.665*** (0.0242)
Male	1353.6 (1364.0)	1720.9 (1765.5)
Asian	1329.5 (2582.5)	3683.0 (3119.9)
Black	1845.8 (3212.3)	5786.6 (5134.9)
Hispanic	5804.1 (3628.2)	7715.1* (3982.7)
Non-citizen	8842.1* (4593.4)	8980.1* (5369.1)
None Given/Race Unknown	-406.2 (5087.7)	6712.1 (6232.9)
Two or More Races	-2958.2 (3222.9)	-2040.6 (4511.1)
GPA Fall 2014	558.3 (987.7)	1757.1 (1335.7)
Expected Student Debt	0.0834*** (0.0288)	0.0697** (0.0348)
Parent has degree?	-1129.6 (1771.3)	-221.5 (2212.1)
Rank 2	-3918.2*** (813.7)	-1119.0 (1055.4)
Rank 3	-5572.6*** (863.9)	-3460.2*** (1081.3)
Rank 4	-6684.6*** (827.5)	-4979.9*** (1034.6)
Rank 5	-7695.4*** (847.2)	-5273.6*** (1106.7)
Constant	20385.0*** (4457.7)	15181.6*** (5757.3)
Observations	3639	3638
R^2	0.176	0.204
Adjusted R^2	0.173	0.200

Table shows OLS estimates. The dependent variable is the respondent's belief about the average salary of workers in Ohio, aged 30-50, conditional on having a major in one of her top five ranked fields. The first column uses beliefs about workers with only a BA, and the second about workers with any sort of post-graduate degree. Standard errors are clustered on the individual. *, **, *** denote significance at 10%, 5%, and 1% levels, respectively. Respondents ranked fields by their perceived likelihood that they would graduate with a major in each. "Rank 2", "Rank 3", etc, are dummy variables indicating which rank she assigned the field (Rank 1 is the excluded dummy).

Table B2: Correlates of Absolute Error in Average Salary

	(1) BA	(2) PGD
Male	-1889.4** (791.0)	-409.2 (929.2)
Asian	777.4 (1308.4)	-1090.1 (1604.7)
Black	644.2 (1719.8)	2015.3 (2687.9)
Hispanic	-3118.2 (2148.9)	-1908.1 (2095.2)
Non-citizen	7695.0*** (2401.7)	10991.2*** (2705.0)
None Given/Race Unknown	1368.9 (2132.0)	885.1 (2577.8)
Two or More Races	3398.6 (2224.8)	4768.0* (2550.2)
GPA Fall 2014	-471.6 (579.1)	-448.5 (710.5)
Expected Student Debt	-0.0286* (0.0160)	-0.0140 (0.0182)
Parent has degree?	705.3 (952.0)	1290.6 (1215.3)
Rank 2	-87.77 (670.2)	214.8 (845.9)
Rank 3	923.5 (694.8)	837.4 (857.6)
Rank 4	1367.9** (695.7)	1171.2 (847.7)
Rank 5	971.8 (716.3)	1085.6 (862.2)
Constant	19526.2*** (2301.0)	38672.9*** (3028.5)
Observations	3639	3638
R^2	0.247	0.105
Adjusted R^2	0.242	0.099

Table shows OLS estimates. The dependent variable is the absolute error for the average salary of workers in Ohio, aged 30-50, conditional on having a major in one of her top five ranked fields. The first column uses beliefs about workers with only a BA, and the second about workers with any sort of post-graduate degree. Regressions also include field fixed effects. Standard errors are clustered on the individual. *, **, *** denote significance at 10%, 5%, and 1% levels, respectively. Respondents ranked fields by their perceived likelihood that they would graduate with a major in each. "Rank 2", "Rank 3", etc, are dummy variables indicating which rank she assigned the field (Rank 1 is the excluded dummy).

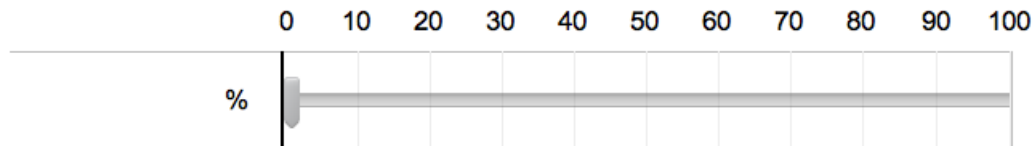
Table B3: Correlates of Absolute Error in the Difference between Fields

	Top Two Fields		All Pairs of Fields	
	BA (1)	PGD (2)	BA (3)	PGD (4)
Male	-721.3 (1401.0)	2018.8 (1681.5)	-712.9 (694.7)	1144.2 (851.0)
Asian	-1499.1 (1883.2)	-1654.6 (2540.9)	1393.9 (1235.7)	331.5 (1605.0)
Black	3755.7 (3314.3)	5213.1 (4191.2)	3017.7* (1708.9)	1914.0 (1712.1)
Hispanic	2551.1 (4621.8)	10870.9** (4300.3)	2932.0 (1939.2)	4564.7* (2547.0)
Non-citizen	3974.8 (3129.4)	4997.7 (3234.6)	4382.7*** (1666.5)	5249.7*** (1892.4)
None Given/Race Unknown	-103.7 (3222.0)	-1814.3 (4666.3)	1344.8 (1730.9)	4225.2** (1865.3)
Two or More Races	5259.5 (4223.9)	2977.0 (5502.0)	2657.3 (2156.8)	2938.1 (3124.9)
GPA Fall 2014	-704.8 (806.9)	-677.6 (994.3)	61.89 (449.7)	-521.5 (567.7)
Expected Student Debt	-0.000336 (0.0248)	0.0571* (0.0296)	0.0154 (0.0154)	0.00963 (0.0163)
Parent has degree?	-580.3 (1535.0)	1972.5 (1621.6)	-543.9 (903.6)	-408.9 (1072.2)
Constant	20362.3*** (3659.3)	29631.2*** (4724.9)	19451.6*** (2060.6)	30286.4*** (2645.9)
Observations	727	725	7276	7268
R^2	0.317	0.147	0.236	0.088
Adjusted R^2	0.264	0.081	0.230	0.081

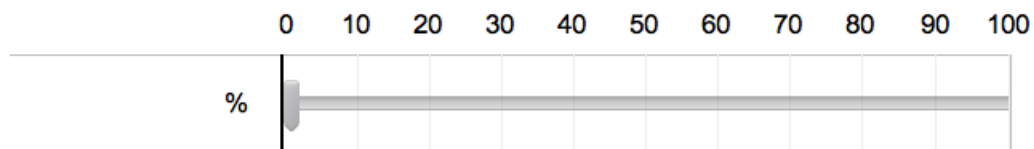
Table shows OLS estimates. The dependent variable is the absolute error for the difference in average salaries between two of respondents' top five ranked fields of major. Columns 1 and 3 use beliefs about workers with only a BA, and columns 2 and 4 use beliefs about workers with any sort of post-graduate degree. Columns 1 and 2 restrict the sample to only respondents beliefs about their two top ranked fields, while columns 3 and 4 include all pairs of fields. Regressions also include pair fixed effects. Standard errors are clustered on the individual. *, **, *** denote significance at 10%, 5%, and 1% levels, respectively.

C Survey Questions

What do you think is the percent chance that you will graduate with a degree in the major you are currently pursuing?



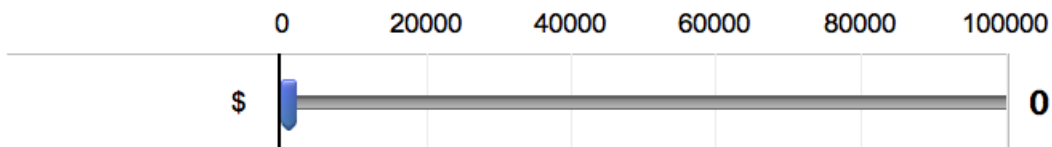
What do you think is the percent chance that you will graduate with more than one major?



What is the highest level of education that either of your parents achieved?

- Less than high school
- High school
- Some college, but no degree
- Associate's (2 year) degree
- Bachelor's (4 year) degree
- Graduate or professional degree

How much student loan debt do you think you will have by the time you graduate from Ohio State?

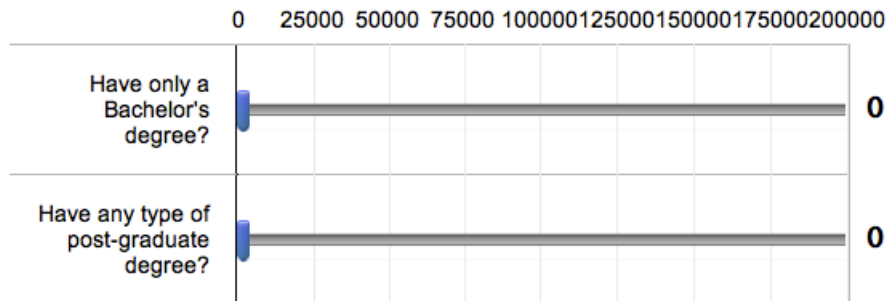


Below are 10 groups of college majors, displayed in a random order. In bold is the name of the group, followed by the individual majors that belong to the group.

Please rank these groups of majors by the likelihood that you will graduate with a major contained within the group, **with 1 meaning "most likely" and 10 meaning "least likely"**. You can do this by **DRAGGING THE MOST LIKELY GROUPS to the top of the list**.

- **Economics and Business:** Accounting, Business Economics, Economics, Marketing. **1**
- **Engineering:** Chemical, Civil, Electrical, and Mechanical Engineering **2**
- **Humanities:** Common Foreign Languages, English, History, Philosophy & Religious Studies **3**
- **Social Science:** Anthropology, Psychology, Sociology **4**
- **Politics:** International Relations, Political Science **5**
- **Pharmacy:** Pharmacy **6**
- **Communications and Journalism:** Communications, Journalism **7**
- **Math and Computers:** Computer & Information Systems, Computer Science, Mathematics **8**
- **Biology & Chemistry:** Biochemistry, Biology, Chemistry, Microbiology **9**
- **Education:** Early Childhood, Secondary, and Special Needs Education **10**

The group **X** contains the following majors: **A, B, and C**. What do you think is the average yearly salary of workers in Ohio age 30 to 50 who graduated with an undergraduate major in **X**, provided that they have a full-time job, if they....



D Major Fields (as seen by survey respondents)

1. **Biology and Chemistry:** Biochemistry, Biology, Chemistry, Microbiology.
2. **Communications and Journalism:** Communications, Journalism.
3. **Economics and Business:** Accounting, Business Economics, Economics, Marketing.
4. **Education:** Early Childhood, Secondary, and Special Needs Education.
5. **Engineering:** Chemical, Civil, Electrical, and Mechanical Engineering.
6. **Humanities:** Common Foreign Languages, English, History, Philosophy and Religious Studies.
7. **Math and Computers:** Computer and Information Systems, Computer Science, Mathematics.
8. **Pharmacy:** Pharmacy.
9. **Politics:** International Relations, Political Science.
10. **Social Science:** Anthropology, Psychology, Sociology.

E Major Fields (used to categorize transcript majors and classes)

0. Biology and Chemistry:

Biochemistry; Biological Chem & Pharmacology; Biology; Biomedical Science; Cancer Biology and Genetics; Chemistry; Chemistry; Evol, Ecology & Organismal Bio; Microbiology; Molecular Genetics; Molecular and Cellular Biochem; Physiology and Cell Biology.

1. Communications and Journalism:

Communication, Journalism.

2. Economics and Business:

Accounting; Accounting and Management Info; Agribusiness and Applied Econ; Applied Economics; BS in Business Administration; Business; Business Admin: Finance; Business Admin: Mgmt & HR; Business Admin: Management Sci; Business Admin: Marketing & Log; Business Administration; Economics; Economics - Business; Fashion and Retail Studies; Finance; Human Resources; International Business Admin; Logistics Management; Management&Industry Exploring; Marketing; Master of Accounting; Operations Management.

3. Education:

Agriscience Education; Art Education; Early Childhood Educ; Early Childhood Education; Early & Middle Childhood Stds; Early and Middle Childhood Std; Educ Sts: Counselor Education; Educ Sts: Cultural Foundations; Educ Sts: Education Psychology; Educ Sts: Education Technology; Educ Sts: Higher Ed & Stdt Aff; Educ Sts: Philo & Hist of Educ; Educ Sts: Philosophy of Educ; Educ Sts: Qunt Rsch Eval&Msrmt; Educ Sts: Special Education; Education & Public Service Exp; Education and Human Ecology; Education-Early Childhood Educ; Education-Foreign Language Edu; Education-Lng Arts/English Edu; Education-Middle Childhood Edu; Education-Science & Mathematics; Education-Special Education; Education-Sport Industry; Education-Tehng Engl Spkrs Oth; Education:Teaching & Learning; Educational Studies; Exercise Science Education; Foreign Language Education; Intgrtd Lang Arts/English Edu; Kinesiology:Physical Education; Middle Childhood Education; Music Education Pre-Prof; Phys Educ, Sport, & Phys Actvt; Phys Educ, Sprrt & Phys Activ; Science & Mathematics Education; Special Education; Teachng Engl Spkrs Other Langs.

4. Engineering:

Aero and Astronautical Eng; Aeronautical and Astro Engr; Biomedical Engineering; Chemical Engineering; Chemical and Biomolecular Eng; Civil Engineering; Electrical and Computer Eng; Engineering; Engineering Physics; Engineering Re-Exploring; Engineering-Undeclared; Environmen-

tal Engineering; Food, Agri & Biological Eng; Food, Agricul & Bio Engineer; Industrial and Sys Engineering; Industrial and Systems Eng; Materials Sci and Engineering; Materials Science and Engineer; Mechanical Engineering; Nuclear Engineering; Welding Engineering.

5. Humanities:

American Sign Language; Arabic; Bosnian/Croatian/Serbian; Chinese; Classics; Czech; East Asian Languages and Lit; East European Lang and Lit; English; French; German; Hebrew; History; Italian; Japanese; Korean; Latin; Linguistics; Medieval & Renaissance Studies; Modern Greek; Near Eastn Lang and Cultures; Persian; Philosophy; Portuguese; Religious Studies; Russian; Scandinavian; Slavic Languages & Literatures; Spanish; Swahili; Swedish; World Literatures; Yiddish.

6. Math and Computers:

Actuarial Science; Adv Computing Cntr Arts&Design; Computer Science & Engin (pre); Computer Science & Engineering; Computer & Information Science; Data Analytics; Information Systems; Mathematics; Statistics.

7. Pharmacy:

Biological Chem & Pharmacology; Pharmaceutical Sciences; Pharmacology; Pharmacy

8. Politics:

International Studies; Political Science; World Politics.

9. Social Science:

Anthropological Sciences; Anthropology; Neuroscience; Psychology; Rural Sociology; Sociology.

10. Uncategorized:

African American & African Std; African-Amer & African Studies; Agricul Envrmtl & Devlop Econ; Agricultural Communication; Agricultural Systems Managemnt; Agricultural Systems Mgmt; Air Force Aerospace Studies; Anatomy; Animal Sciences; Architecture; Art; Art Management; Arts Management; Arts and Sciences; Arts, Innovation & Design Expl; Astronomy; Astronomy and Astrophysics; Athletic Training; Atmospheric Sciences; Aviation; Behavior, Culture & Context Exp; Bioethics; Consortium; Child and Youth Studies; City and Regional Planning; Community Leadership; Comparative Studies; Composition; Construction Systems Mgmt; Consumer Sci: Con & Fam Fin Serv; Consumer Sci: Fashion & Retail; Consumer Sci: Hospitality Mgt; Consumer Sciences; Consumer and Family Fincl Serv; Criminolgy & Criminl Justice Sts; Criminology; Criminology & Criminal Justice; Ctr for Study & Teaching Writing; Culinary Science; Dance; Dental Hygiene; Design; Disability Studies; Earth Sciences; Entomology; Env and Natl Res Undec; Environment & Natural Resource; Environmental Policy & Decsn Mkng; Environmental Science; Envrnmt,Ecnmy,Dvlpmnt & Stnblty; Evolution and Ecology; Exploration in Agriculture; Exploration in

Veterinary Med; Film Studies; Food Business Management; Food Science & Technology; Food Science and Technology; Food, Agricul, & Enviro Sci; Forestry Fisheries & Wildlife; Geographic Informatn Sciences; Geography; Globalization Studies; Health Info Mgmt & Systems; Health Info Mgt & Systems; Health Information Management; Health Professions Exploration; Health Sciences; Health Sciences Program; Health & Rehabilitation Sci; Health and Rehabilitation Sci; Health & Wellnss Innvtn Hlthcare; History of Art; Hlth Prmtn, Ntrtn & Exrcs Sci; Honors, University; Horticulture and Crop Science; Hospitality Management; Human Dev and Family Science; Human Development and Family S; Human Devlp and Family Science; Human Dvlpmt & Family Science; Human Nutrition; Indust,Interior & Vis Comm Dsgn; Industrial Design; Industrial Inter & Visual Dsgn; Insurance; Interior Design; Jazz Studies; Jewish Studies; Kinesiology: Health & Exercs Sci; Kinesiology:Sprt, Ftns&Hlth Pr; Kinesiology:Spt Indsty Spt Mgt; Landscape Architecture; Law; Meat Science; Medical Dietetics; Medical Laboratory Science; Medicine; Medicine, College of; Military Science; Music; Music Education; Music Theory; Natural Resource Management; Naval Science; Neuroscience Department; Nursing; Pediatrics; Performance; Personalized Study Prog - ASC; Physics; Plant Health Management; Plant Pathology; Professional Golf Management; Pub Hlth: Biostatistics; Pub Hlth: Envirmntl Hlth Scis; Pub Hlth: Epidemiology; Pub Hlth: Hlth Bhvr & Hlth Prom; Pub Hlth: Hlth Srvc Mgt & Pley; Public Affairs; Public Affairs, John Glenn Col; Public Affairs, John Glenn Sch; Public Health; Public Mangmnt, Ldrshp, & Pley; Radiologic Sciences & Therapy; Real Estate and Urban Analysis; Respiratory Therapy; Romance Studies; Scholars, University; Second-Year Transform Exp Prog; Social Sci Air Transportation; Social Work; Special Major; Speech and Hearing Science; Sport Industry; Studio Art; Sustainable Plant Systems; Theatre; Undergraduate Non Degree; Vision Science; Visual Communication Design; Women's, Gender & Sexuality Sts; Zoology.

11. Undecided:

Arts & Sciences-Uncecided; Exploration; Re-Exploration; Science & Technology Exploration.