FORWARD Meeting Agenda –
November 19, 2010, Peace Garden Room

Chair's Forum –
- November 17, Dana Britton, Administrator Survey
- November 29, Jennifer Sheridan, Enhancing Department Climate
- December 15, Betsy, Charlene, Wendy, Mentoring and Evaluating Faculty – **Attachment1**

Committee on the Status of Women Faculty and Policy Work – Karen

Climate Programs – Betsy

Faculty Recruitment and Hiring – Angela

Mid Career Mentoring Program – Charlene

Junior Faculty Mentoring Program – Wendy

Faculty Exit Interview Study – Ann

Grant Programs – Canan

Allies Program – Tom

Evaluation – Christi

Administrator Survey – Dana– **Attachment2**

EAB Visit – Julie

Other?

FORWARD Meetings:
   FORWARD Monthly Meeting: December 10, Peace Garden Room

NDSU Faculty Evaluator/Evaluatee Check List

A tool to include for evaluations and to facilitate effective communication for mentoring

☐ Be sure that all new hires or transfers are **oriented and informed** about their work environments and cultures. This will include participation in University, College and Unit orientation activities. Check to ensure that the newly-arrived faculty have access to the information, services, and materials (e.g., computing, phone, keys, equipment, break area, etc.) needed to function effectively. A tip sheet is a helpful tool.

☐ Establish **clear expectations and goals** and plan for regular interaction and feedback. Be sure that percent appointments for teaching, research, *and* service are clear, allow for realistic time allocation and that productivity expectations are in alignment with these percentages. Ensure that expectations align with unit PTE criteria. Be aware of Policy 350.1, which states:

- o 350.1.5 "….The department chair or head of an academic unit will ensure that all faculty have job descriptions that are periodically reviewed and updated. Each job description will be signed by the Dean, the Chair or head of the academic unit, and the faculty member and filed in the faculty member's official personnel file. Each job description shall specify how a faculty member's assigned responsibilities will be allocated among teaching, research, and service which will determine the weight to be given to each area of responsibility for tenure, promotion, and continuing evaluations."
- o 350.1.6 …."Evaluation criteria shall relate to a faculty member's duties and goals and be appropriately weighted in accordance with the terms of the faculty member's contract…."

☐ Become familiar with unit, college and NDSU Policy, especially Policy 352 Promotion, Tenure, and Evaluation
- o 352.4 Periodic Review
    - ▪ 352.4.3 "**All full-time faculty will be reviewed annually**…." [*includes tenured and non- tenured*]
    - ▪ 352.4.5 "….Periodic reviews shall result in a written report to the faculty member being reviewed. The report shall state expectations and goals for the coming review period...."
    - ▪ 352.4.6 "….Annual reviews of tenured faculty shall include an evaluation of the faculty member's performance relative to the current position description. **For Associate Professors, annual reviews must include specific recommendations to strengthen the case for promotion**…."

☐ Be careful to **frame criticism in a constructive way**, but also be as clear as possible. Provide specific information, and avoid generalizations that may lead to defensiveness and resentment. "….Professionals embody the learning dilemma: they are enthusiastic about continuous improvement—and often the biggest obstacle to its success….Performance evaluation is tailormade to push professionals into the doom loop…." (Agryus, 1991).

☐ **Be aware of conscious and unconscious biases** in evaluation and mentoring; we all have them (see Project Implicit). Avoid gendered language and its inherent bias when composing letters of evaluation (Trix and Psenka, 2003). Make sure similar criteria are used for all faculty, or for all faculty at particular ranks.

☐ Ensure that all faculty **know about NDSU policies intended to ease the work-family conflict** such as stopping the "tenure clock" and modified duties (See Policy 352.3.6). Ensure that senior colleagues understand these policies and their intent.

☐ **Facilitate and encourage a mentoring climate**. "….mentoring has been known to invigorate senior faculty, to help junior professors learn the ropes…." (Luna and Cullen, 1997)
- o Senior members of a unit should be approachable, and evaluations of tenured faculty *might document their efforts to assist junior faculty* in getting research grants, establishing themselves as independent researchers, and having their work published in peer-reviewed outlets. Collaborative research—especially when the junior scientist is the lead author—may also be a sign of a productive career advising relationship.
- o You may also want to ask junior faculty to *indicate which senior faculty have been helpful to them*, as a sort of check on these self-reports.
- o Recognize that senior faculty may not be completely certain how best to engage in career advising. *Help them!* For example, sponsor a lunch for senior faculty in which the topic of discussion is career advising and faculty can exchange information and ideas on the subject.
- o Encourage informal interaction between junior and senior faculty. You might create a fund for ordering pizza, a lunch budget, a gift card for a local coffee shop for them to share, etc.

☐ Use email and other tools to **ensure the entire faculty has equal access to information**, such as key decisions, meetings minutes, and career opportunities. It is important to ensure that no one is intentionally or unintentionally excluded from information. "Communication, through both formal and informal channels, is the lifeblood of any organization." (Buchholz, 2001)

NDSU Administrative Survey – EXECUTIVE SUMMARY
Dana M. Britton, Ph.D., October 2010

The NDSU administrative survey was presented to department heads, deans, and other administrators from February 18, 2010 to March 24, 2010. The items focus largely on administrators' perceptions of gender equity on campus and in their units and attitudes about strategies for change.

Demographics

75 administrators received the survey; 42 (56%) responded (Table one). The sample profile is as follows:

1. Sex and race: 25 respondents (60%) are men, eleven (26%) are women, six (14%) chose not to answer. 33 (79%) of respondents are white; nine (21%) chose other categories or did not respond.
2. Experience: 25 respondents (60%) have been at NDSU eleven years or more, eleven (26%) for four to ten years, the remainder (three, or 7%) for three years or fewer (three respondents did not answer).
3. Position: The majority of respondents (27, or 64%) are department heads, five (12%) are Deans, five (12%) are assistant/associate Deans or heads. Five (12%) are in other positions or did not answer.
4. College: Sixteen respondents (38%) indicated an appointment in one of the three STEM colleges. The remaining thirteen (31%) indicated appointments in non-STEM colleges.   One indicated another appointment and twelve (29%) did not answer this item. This likely reflects confidentiality concerns.

Further analysis of response rates appears in table two.

NDSU Climate

A number of items on the survey tap issues of NDSU campus climate. The first is a set of paired items that ask, for example, whether service expectations are reasonable for faculty who are men, followed by a parallel item asking whether they are reasonable for women. Responses (as throughout) range from one to five, with five indicating strong agreement. There are fifteen of these pairs (Table three). Administrators are in almost respects more positive about the campus climate for men than for women. Statistical tests indicate significant differences in administrators' perceptions for ten of fifteen pairs.

Eight additional items tap general perceptions of gender equity in campus climate, e.g., equity in allocation of resources to men and women faculty (Table four). Means indicate moderate levels of agreement with all of these items. Tests of mean differences between men and women administrators reveal that women are significantly more negative about gender equity on the NDSU campus – there are significant mean differences across six of these eight items, and in all instances women perceive less equity than men.   There are no significant differences between STEM and non-STEM administrators.

The final set of items asks administrators to choose reasons men and women are most likely to leave the university (Table ten). The top five reasons are the same, but there are six (of sixteen) significant differences, including the findings that administrators believe women are less likely to leave because they receive a competing offer and more likely to leave because they are frustrated with informal systems at NDSU.

<u>Unit climate</u>
Items in this part of the survey tap two basic dimensions, gender equity in hiring/retention/leadership and department climate for work/family balance. On the first dimension (table four), administrators generally believe they have tried to recruit women and that their unit climates are supportive for women. They are less positive about their units' actual plans to retain and mentor women and help them advance to leadership positions, however. There are significant differences between men and women administrators in several areas – in general, men are more positive about their unit climates in this regard than are women. There are no differences between administrators in STEM and non-STEM colleges.

The items that tap work/family balance show that administrators generally believe their units have policies to support efforts to balance work and family (Tables five and six). Even so, most indicate some level of agreement that it is often difficult for faculty to deal with family responsibilities. There are many significant differences between men and women administrators, with women consistently perceiving a less positive climate and more difficulties for faculty in dealing with family responsibilities. There are no significant differences between STEM and non-STEM administrators on these items.

<u>Policy</u>
There are two sets of policy-oriented items in the survey, the first taps attitudes about NDSU policies aimed at increasing gender equity (e.g., child care or stop the clock policies - table seven); the second taps attitudes about ADVANCE FORWARD initiatives. The analysis here reveals a very consistent pattern: there is broad consensus that such NDSU policies are valuable. Similarly, respondents view ADVANCE FORWARD initiatives as valuable. There are NO significant differences on any of these items between the levels of agreement for men and women administrators, or for STEM versus non-STEM faculty.

<u>Conclusions and implications</u>
Taking all of the university and climate items together reveals a pattern of marginally positive responses (i.e., mean values of agreement above three on a five point scale), to items assessing whether the climate is gender equitable for men and women faculty. There is far less agreement that units have concrete policies in place to retain, promote, and advance women into leadership positions, however, which suggests that this is an area in need of attention. There is also relatively strong agreement on the need for institutional transformation to create gender equality (X = 3.71 for this item).

For almost all climate items, women administrators are significantly less positive than men. Interestingly, there are no differences between STEM and non-STEM administrators on any of these dimensions. This argues strongly for efforts to address the university and campus climate that target all colleges, rather than STEM units. The fact that women administrators are more likely to perceive problems than men administrators also argues quite strongly for including men as central players in efforts to document inequity and create change.

One of the most positive findings from the survey is the broad consensus about policies aimed at increasing gender equity. All administrators (men/women, STEM/non-STEM) believe these policies are valuable. This suggests that policy initiatives to address gender equity, particularly in the areas of work/family balance, should elicit widespread support among administrators.

NDSU Administrative survey – DRAFT REPORT
Dana M. Britton, Ph.D., 17 October 2010

The NDSU administrative survey consists of fifteen items – many with sub-items – that were presented to department heads, deans, and other administrators from February 18, 2010 to March 24, 2010. The items focus largely on administrators' perceptions of gender inequality on campus and in units; and specific questions query perceptions of campus climate, community climate, department and university practices, and strategies for change.

1. Response rate and demographics

75 administrators received the survey; 42 ultimately responded, for a response rate of 56%. 25 of these respondents (60%), were men, eleven (26%) were women, six (14%) chose not to answer this question. 33 (79%) of respondents are white, six (14%) chose "other" or preferred not to answer. One respondent indicated that she/he is biracial, and two chose "Asian or Pacific Islander." The remaining demographic characteristics are listed in table one.

The majority of respondents are department heads (27, or 64%), and have been at NDSU for eleven or more years (25, or 60%). The modal category of experience in administration is three years or less (18, or 43%), and have a 51 to 75 percent administrative appointment (20, or 48%). Sixteen respondents (38%) come from the three STEM colleges (Agriculture, Food Systems, and Natural Resources, Engineering and Architecture, and Science and Math), thirteen (31%) come from non-STEM colleges, thirteen (31%) of respondents chose "other" or preferred not to answer. Missing data for all of these questions ranges from 2% (How long in current administrative position?) to 29% (College of Appointment). This likely indicates concerns about confidentiality, which would not be unusual given the nature of the survey and the small sample size. In the analyses that follow, missing data will be excluded. As it is very likely that these missing data are likely not distributed equally across categories of interest, any comparison across these categories (particularly for items with large numbers missing – such as college) should be viewed with some caution. These concerns are tempered somewhat by the fact that exploratory tests do not reveal significant mean differences on climate items between those who provided data for "college of appointment" and those who did not, however.

Women administrators are not distributed evenly across these categories – they are significantly less likely (as assessed by a chi-square test) to be chairs (nineteen men are chairs, versus five women – four women are associate chairs, versus one man, four men are Deans, but no women), to have less experience in their administrative appointments (82% of women have three years or fewer of experience, compared to 36% of men), and to have part time appointments (82% of women administrators have a 50% time or less appointment, compared to 38% of men). Though a chi-square test is not significant (likely due to sample size) for the distribution across colleges, it is worth noting that 63% of women administrators who indicated a college of appointment (N=5) in the sample are in non-STEM colleges, versus 38% (N=8) men. Chi-square tests of differences between STEM and non-STEM administrators on the academic position, experience, and percentage of appointment variables indicate no significant differences – this indicates that these dimensions do no vary significantly across these groups of colleges.

Table 1: Demographics

WHAT POSITION DO YOU HOLD?		
Department Head/Chair	27	64%
Associate/Assistant Department Head/Chair or Associate/Assistant Dean	5	12%
Academic Dean	5	12%
Program coordinator	1	2%
Missing/Prefer not to answer	4	10%
HOW LONG AT NDSU?		
3 years or less	3	7%
4 to 10 years	11	26%
11 or more years	25	60%
Missing/Prefer not to answer	3	7%
HOW LONG IN CURRENT ADMIN POSITION?		
3 years or less	18	43%
4 to 10 years	15	36%
11 or more years	8	19%
Missing	1	2%
PERCENT OF APPOINTMENT ADMINISTRATIVE?		
25 percent or less	6	14%
26 to 50 percent	14	33%
51 to 75 percent	20	48%
Missing	2	5%
COLLEGE OF APPOINTMENT?		
Agriculture, Food Systems, and Natural Resources	8	19%
Arts, Humanities, and Social Sciences	7	17%
Business	2	5%
Engineering and Architecture	3	7%
Pharmacy, Nursing. and Allied Sciences	4	10%
Science and Mathematics	5	12%
Human Development and Education	0	0%
Academic Affairs/Graduate and Interdisciplinary Studies	1	2%
Prefer not to answer	12	29%

Response rates within categories are difficult to calculate due to the presence of missing data. 56 men administrators received the survey, 25 of those who respondents indicated that they are male, for a response rate of 45%. Nineteen women administrators received the survey; eleven respondents indicated that they are female, for a response rate of 58%. Six respondents did not answer this item. Response rates for by college should be interpreted with even more caution, as twelve respondents – 16% of the entire original sample of 75 (and 29% of the final sample of 42 respondents) – did not answer this item. Table two reports the response rates for each college that can be determined on the basis of the responses of those who identified their college of appointment.

Table 2: Response rates by college

Agriculture, Food Systems, and Natural Resources	47%
Arts, Humanities & Social Sciences	58%
Business	50%
Engineering & Architecture	30%
Human Development & Education	0%
Pharmacy, Nursing, and Allied Sciences	57%
Science & Mathematics	38%
Graduate & Interdisciplinary Studies/Acad Affairs	14%

2. Overall NDSU community (items one and two)

Items one and two assess respondents' attitudes about the climate at NDSU as a whole. The question that leads into both of these sets of items is the same: "With respect to the overall NDSU community, please indicate your level of agreement with each item on a scale of 1 to 5, where 1=strongly disagree and 5=strongly agree." There are two types of items in these sections. Most items are direct comparisons between respondents' attitudes about the climate for men faculty versus women faculty, e.g., "Service expectations after tenure are reasonable for faculty who are women," followed by an item that replaces the word "women" with "men." The second type of item directly assesses perceptions of climate, e.g., "Search committees at NDSU receive sufficient resources for gathering a gender diverse candidate pool." I will report results for these types of items in turn.

The pattern of means for these items, reported in table three, is instructive. All items with a mean value of 4.0 or higher refer to men – administrators perceive that men faculty members are encouraged to provide suggestions on how to improve the workflow in their units (X = 4.18), that they feel a part of the local community (X = 4.11), and that annual evaluations help them to advance their careers (X = 4.03). None of the top three ranked items for women faculty reach this level of agreement. The top ranked item for women taps administrators' perceptions that women faculty respect individual and cultural differences (X = 3.92), that annual evaluations help them advance their careers (X = 3.83), and that they feel a part of the local community (X = 3.82). It is worth noting that the top ranked items for men faculty and women faculty capture very different characteristics – men faculty exercise power by providing suggestions to improve workflow (a quality that is likely ranked to advancement and pay), women faculty are sensitive to individual and cultural differences (a trait arguably less likely to be rewarded). Conversely, administrators' responses rank the "improving workflow" item number five for women faculty (X = 3.65), and the "sensitivity to individual and cultural differences" number 13 (of fifteen) for men faculty (X = 3.23).

Table 3: Paired items for climate with tests of significance	Mean	N	Sig.
Pair 1 Service expectations after tenure are reasonable for women faculty.	3.03	39	0.04
Service expectations after tenure are reasonable for men faculty.	3.54		
Pair 2 Women faculty are disadvantaged by the existing tenure process.	2.32	38	0.04
Men faculty are disadvantaged by the existing tenure process.	1.82		
Pair 3 The promotion process from associate to full professor status is fair for NDSU faculty who are women.	3.55	38	NS
The promotion process from associate to full professor status is fair for NDSU faculty who are men.	3.53		
Pair 4 Women faculty are disadvantaged by the existing promotion process.	2.13	38	NS
Men faculty are disadvantaged by the existing promotion process.	1.95		
Pair 5 Women faculty at NDSU respect individual and cultural differences.	3.92	38	0.00
Men faculty at NDSU respect individual and cultural differences.	3.21		
Pair 6 Faculty who are women at NDSU are empowered to resolve problems.	3.26	39	0.01
Faculty who are men at NDSU are empowered to resolve problems.	3.82		
Pair 7 Formal grievance processes are effective for faculty who are women.	3.29	31	0.10
Formal grievance processes are effective for faculty who are men.	3.68		
Pair 8 Informal grievance processes effectively address concerns of faculty who are women.	3.16	32	0.01
Informal grievance processes effectively address concerns of faculty who are men.	3.72		
Pair 9 Faculty at NDSU who are women are encouraged to provide suggestions on how to improve the work flow in their unit.	3.63	38	0.01
Faculty at NDSU who are men are encouraged to provide suggestions on how to improve the work in their unit.	4.18		
Pair 10 Women faculty feel a part of the NDSU community.	3.62	34	0.01
Men faculty feel a part of the NDSU community.	4.15		
Pair 11 Women faculty at NDSU feel a part of the Fargo/Moorhead community.	3.81	31	0.11
Men faculty at NDSU feel a part of the Fargo/Moorhead community	4.00		
Pair 12 Communication between administrators women faculty is effective.	3.34	38	0.00
Communication between administrators and men faculty is effective.	3.95		
Pair 13 The networking opportunities for faculty who are women are helpful.	3.80	35	NS
The networking opportunities for faculty who are men are helpful	3.86		
Pair 14 The mentoring opportunities for faculty who are men are helpful.	3.62	37	NS
The mentoring opportunities for faculty who are women are helpful.	3.81		
Pair 15 Annual evaluations of women faculty help them advance their careers.	3.90	40	NS
Annual evaluations of men faculty help them advance their careers.	4.03		

The appropriate statistical test for differences in paired items is a "paired samples T-Test." This is a test that assesses whether answers across a pair of items differ for the same respondent; in this case the test measures whether the respondent feels that a the concept tapped by an item differs for men and women faculty in the NDSU community as a whole. Results of this analysis appear in Table three.

Of the fifteen possible pairs of items, there are significant differences for ten pairs, all of which indicate that respondents believe the climate is more difficult for women faculty. These items capture a perception that service expectations after tenure are less reasonable for women faculty, that women are disadvantaged by the existing tenure process, that women are more likely to demonstrate respect for individual and cultural differences, that they are less likely to be empowered to solve problems, that formal and informal grievance processes are less effective for women, that they are less likely to be asked for suggestions on how to improve the work flow in their units, feel less a part of the Fargo/Moorehead community, and have less effective communication with administrators. Given that this test taps difference WITHIN the same respondent (which minimizes variation), this is a very significant pattern of results. Items for which differences are not significant include two on promotion to full, two on mentoring/networking, and one on annual evaluations.

There are eight additional items in these two sections that tap administrators' perceptions of the NDSU climate as a whole for men and women faculty. For comparisons of these items across groups of faculty, independent samples t-tests are appropriate. Results for these items and comparisons across men and women and STEM and non-STEM administrators appear in table four. The first column of results indicates the sample mean, the second is the value obtained when subtracting one group's mean from the other (e.g., the mean for men administrators minus the mean for women administrators). A positive value indicates that the reference group's mean (men administrators or STEM administrators) is higher than the comparison group (women administrators or non-STEM administrators). A bold value indicates this difference is statistically significant (p<0.05).

Table 4. NDSU Climate comparisons	Sample Mean	Men v. Women	STEM v. Non-STEM
Academic Administrators at NDSU are equally accessible to faculty who are men and faculty who are women.	3.79	**1.36**	0.45
NDSU has an equitable process for nominating faculty who are men and faculty who are women for awards.	3.61	**2.05**	0.85
Policies are applied equitably to faculty who are men and faculty who are women.	3.62	**1.85**	0.19
Search committees at NDSU receive sufficient resources for gathering a gender diverse faculty candidate pool.	3.10	0.34	-0.73
Resources are allocated equitably to faculty who are women and faculty who are men.	3.23	**1.71**	0.55
There is a need for institutional transformation at NDSU to create more gender equality.	3.71	**-1.32**	-0.35
Faculty at NDSU (men and women) have a shared sense of mission for the university.	3.50	0.74	-0.56
On the department level, NDSU has a transparent process for allocating resources to men and women faculty	3.29	**1.85**	0.12

Sample means for all of these items indicate a marginal to moderate level of agreement – all are in the 3.1 to 3.8 range. The highest levels of agreement are for the items assessing whether administrators are equally accessible to men and women (X = 3.79), and – significantly – in the perception that there is a need for institutional transformation to create more gender equity at NDSU (X = 3.71). The lowest level

of mean agreement is with the item tapping whether search committees receive sufficient resources for gathering a gender diverse faculty pool (X = 3.10).

There are significant differences on six of the eight items for men adminstrators versus women administrators, however, and in all cases women's attitudes about climate are significantly more negative than men's. The largest mean difference is for the item that taps attitudes about nominations for awards – men administrators (X_{men} = 4.38) are significantly more likely than women administrators (X_{women} = 2.33) to believe that NDSU has an equitable process for nominating men and women faculty for awards. Men administrators are also significantly more likely than women administrators to believe that policies are applied equitably to men and women faculty, that NDSU has a transparent process for allocating resources to men and women faculty, that resources are allocated equally to men and women faculty, and that academic administrators are equally accessible to men and women faculty. Importantly, men administrators (X_{men} = 3.28) are significantly *less* likely than women administrators (X_{women} = 4.60) to believe that institutional transformation to achieve gender equity is necessary at NDSU. There are no significant differences in mean values for STEM verus non-STEM administators on any of these items. This means that the differences between men administrators and women administrators are NOT due to the fact that men are more likely to be in STEM colleges (and women in non-STEM colleges). This pattern of difference illustrates a significantly different (and more pessimistic) view of the NDSU gender climate among women administrators.

3. Unit climate – recruitment, retention, promotion and leadership (item four)

Item four taps respondent attitudes on recruitment, retention, promotion and leadership within their units. The statement that leads into these items is: "With respect to campus climate, recruitment, retention, promotion and leadership, please rate your level of agreement with the following statements relating to faculty in your UNIT, on a scale from 1 to 5, where 1=strongly disagree and 5=strongly agree."

The pattern of means in response to these questions, reported in table five, is illuminating. The highest mean value is for recruitment – administrators generally believe their units have tried to recruit women faculty (item two), and that climates in their units are supportive for women (item three), largely due to successful efforts to enhance that climate (item four). However, respondents also believe that their units would benefit from more women in application pools (item one) and in leadership positions (item five). Administrators are far less positive about their units' efforts to retain and promote women, however; the means for all of these items are among the lowest of any in the table. This perhaps suggests that efforts around hiring have been perceived as successful, but that more resources should be concentrated on retention, promotion and leadership for women.

Table 5. Unit climate comparisons

	Sample Mean	Men minus Women	STEM minus non-STEM
My unit would benefit from more candidates who are women in applicant pools.	3.71	**1.52**	0.94
My unit has actively tried to recruit faculty who are women.	4.45	0.38	0.58
The climate for faculty who are women in my unit is supportive.	4.29	0.79	0.38
My unit has taken steps to enhance the climate for faculty who are women.	4.21	0.54	0.17
My unit would benefit from more faculty who are women in leadership positions (e.g., program coordinators, PTE or search committee chairs, department heads/chairs).	3.85	0.55	0.42
My unit has developed a specific plan to move faculty who are women into leadership positions.	2.36	0.44	-0.43
My unit has developed a specific plan to retain faculty who are women.	2.73	**0.95**	-0.62
My faculty unit has developed a specific plan to mentor faculty who are women.	3.10	**1.29**	-0.21
My unit has developed a specific plan to promote faculty who are women.	2.78	0.50	-0.25
I would do more for faculty who are women in my unit, but there would be negative reactions from the faculty who are men in my unit.	1.65	-0.43	-0.10

There are three significant differences between men and women administrators on these items – men administrators (X_{men} = 4.16) are more likely than women (X_{women} = 2.64) to believe their units would benefit from more women in applicant pools, and men administrators are more likely to say their units have specific plans to retain (X_{men} = 3.04, X_{women} = 2.09) and mentor (X_{men} = 3.56, X_{women} = 2.27) faculty who are women. The result in the first case is probably due to the fact that men are more likely to be in more heavily male-dominated units. The meaning of results for the latter two items are unclear – either men administrators are more likely to be in units with mentoring or retention plans, or they are more likely to *believe* their units have such plans. Given the results to this point, the latter explanation seems more plausible – a review of policy would help to adjudicate this. There are no significant differences for STEM versus non-STEM administrators. As with the issues on NDSU climate, this suggests that issues around recruitment, retention and promotion of women exist campus-wide, rather than in particular colleges.

4. Work/family lives of faculty in unit (item 6)

This section of the instrument consists of several combination items assessing work/life balance issues in units. The statement leading into this section is: "Statements with respect to the personal lives of faculty in your UNIT: FIRST, please indicate your level of agreement with each statement on a scale from 1 to 5, where 1=strongly disagree and 5=strongly agree. THEN, please indicate whether you perceive a difference on each statement for NDSU faculty who are women compared to faculty who are men." This is a somewhat unusual item structure. The first part of the questions – level of agreement – is standard, and higher values indicate higher levels of agreement. The second part is more difficult to assess. The response options for this piece of the question are "yes," "no" and "don't know." As the question asks

only whether a respondent perceives difference, rather than whether such things are harder for men versus women, theoretically a perception of difference could go in either direction. Table six lists the sample means for the items, as well as the distribution of responses to the "difference" item for each question.

Table 6. Unit climate for work and family	Different for Men versus Women? (%)			
	Sample Mean	Yes	No	Don't Know
It is difficult for faculty in my unit to adjust their work schedules to care for children or other family members.	2.53	44%	28%	28%
It is difficult for faculty in my unit to attend meetings held early in the morning or late in the afternoon due to family obligations.	3.29	60%	22%	19%
My unit has supportive policies for faculty with a new baby/child.	4.05	65%	22%	14%
My unit has supportive policies for faculty with dependent care responsibilities.	3.89	63%	14%	23%
My unit is supportive of new faculty hires who need to utilize spousal/partner hiring.	4.14	65%	15%	21%
Faculty in my unit who have children are considered by their peers to be less committed to their careers.	1.76	59%	21%	21%
Pace and pressure in my unit have a negative influence on the personal lives of faculty.	3.00	62%	15%	24%

Sample means range from a low of 1.76, indicating a very low level of agreement, for the item assessing whether faculty who have children are perceived as less committed, to a highs of 4.14 and 4.05 for the items asking whether administrators believe their units support spousal/partner hiring and have supportive policies for faculty with new children. For six of the seven items, more than 50% of respondents indicate that men and women differ along these dimensions. It is reasonable to assume, given women's status as primary caregivers, that these responses indicate administrators believe women have more difficulty balancing work and family. It is worth noting the high numbers of "don't know" responses, which range from 14% to 28% of respondents.

Table 7 compares differences in mean values for levels of agreement for these items for men and women and STEM versus non-STEM administrators. There are very clear differences in these items between men and women administrators; for five of the seven items women administrators describe the work/family climate for faculty as more difficult than men. Women administrators are more significantly more likely than men administrators to agree that faculty have difficulty in balancing their work and family lives; specifically, that it is difficult for faculty to adjust work schedules to care for children or family (X_{men} = 2.09, X_{women} = 3.50) and to attend late/early meetings (X_{men} = 2.95, X_{women} = 4.30), and to agree that faculty who have children are considered by their peers to be less committed to their careers. This latter difference is especially dramatic; the mean for men administrators on this item is 1.18, the lowest for any of these seven items; the mean for women administrators is 3.11. If, as above, we assume that men administrators are more likely than women to be in heavily male-dominated departments, this difference may indicate what other literature suggests – that men faculty who have children are often taken *more*

seriously, but women faculty who have children are perceived as *less* committed to their jobs. It may also simply be that men administrators are less sensitive to these issues, on the whole, than women administrators, who are more likely to have been primary caregivers themselves. Women administrators also perceive a less positive climate than men regarding dependent care (X $_{men}$ = 4.18, X $_{women}$ = 3.25) and spousal hiring (X $_{men}$ = 4.39, X $_{women}$ = 3.29) in their units. There are no significant differences between STEM and non-STEM administrators, again indicating that these differences in perceptions are campus-wide, rather than concentrated in STEM units.

Table 7. Unit work/family climate comparisons	Sample Mean	Men minus Women	STEM minus non-STEM
It is difficult for faculty in my unit to adjust their work schedules to care for children or other family members.	2.53	**-1.40**	-0.37
It is difficult for faculty in my unit to attend meetings held early in the morning or late in the afternoon due to family obligations.	3.29	**-1.35**	-0.45
My unit has supportive policies for faulty with a new baby/child.	4.05	0.87	0.25
My unit has supportive policies for faculty with dependent care responsibilities.	3.89	**0.93**	0.43
My unit is supportive of new faculty hires who need to utilize spousal/partner hiring.	4.14	**1.11**	0.07
Faculty in my unit who have children are considered by their peers to be less committed to their careers.	1.76	**-1.93**	-0.39
Pace and pressure in my unit have a negative influence on the personal lives of faculty.	3.00	-0.94	-0.19

Tests of the differences in the proportions of administrators who say "yes" to the difference items (e.g., in the proportion of administrators who believe that there is a difference between men and women in the difficulty they face in adjusting work schedules to care for children or other family member) largely follow this pattern, with larger numbers of women administrators perceiving differences between men and women. The largest such difference is again on the item assessing whether faculty who have children are perceived to be less committed by their peers: 77% of women administrators perceive that there is a difference in this regard between men and women faculty versus only 25% of men. There are no significant differences in perceptions of difference between STEM and non-STEM administrators.

5. NDSU programs for campus climate, recruitment, retention, promotion and leadership (item seven)

This section of the instrument consists of a set of policy items respondents are asked to rate in terms of their value. The statement leading into this section of the instrument is: "Existing NDSU Programs for campus climate, recruitment, retention, promotion and leadership as they relate to faculty in your UNIT: please rate your perception of the value of each program to your UNIT on a scale from 1 to 5, were 1=not at all valuable and 5=very valuable. " Though respondents could answer that they had not heard of a

particular program, this occurred for only two respondents in total; these responses were coded as missing data. Table 8 presents the distribution of these items and differences in mean values on these policy items for men and women administrators and STEM versus non-STEM administrators.

As these responses indicate, respondents perceived all of these programs as moderately valuable, with a low of 3.17 on a five point scale for online sexual harassment training, and mean values greater than four for on campus child care (X   = 4.50), extension of the tenure clock (X   = 4.40), and spousal/partner hiring (X   = 4.22).

Table 8 reports Table 8. NDSU Policy comparisons

	Sample Mean	Men minus Women	STEM minus non-STEM
Extension of the tenure clock	4.40	-0.32	0.14
Spousal/partner hiring	4.22	0.22	0.23
Required training for search committee chairs.	3.56	0.06	0.37
On-line training for search committee chairs.	3.33	-0.02	0.68
Required on-line sexual harassment training	3.17	-0.34	0.75
On campus child care services	4.50	0.38	0.48
Advance FORWARD Programs	3.57	-0.01	0.63

There are no significant differences between men and women administrators in their views of the value of these NDSU policies – this is the first set of items on the survey for which this is the case. Nor are these significant differences between STEM and non-STEM administrators. From an administrative point of view this is good news; it suggests broad consensus about the value of policies aimed at assisting faculty with work/life balance.

6. ADVANCE FORWARD Programs (item eight)

This section lists several ADVANCE FORWARD initiatives and asks respondents to rate their value. The statement leading into this section of the instrument is: "Please rate your perception of the value to your UNIT of each of the following existing NDSU Advance FORWARD programs for campus climate, recruitment, retention, promotion, and leadership as they relate to faculty, on a scale from 1 to 5, where 1=not at all valuable and 5=very valuable."

Respondents were also offered the option of choosing a response indicating they had not heard of a particular program. These numbers were generally low, but ranged across programs: Allies/Advocates Program: 10%, Course release program: 17%, LEAP grant: 14%, Climate research grant: 21%, Travel grants: 0%, Leadership development grants: 10%, Junior faculty cohort mentoring program: 7%, FORWARD lecture series, 0%. Further analysis indicates that almost all of the respondents who indicated they had "never heard" of a particular program are in non-STEM colleges, with the exception of one STEM

respondent each for the course release, LEAP grant, and junior faculty cohort mentoring programs, three STEM respondents for the Climate research grants, two for the Leadership development grants. These respondents are excluded for the purposes of the following comparisons. The reader should keep in mind, however, that more non-STEM than STEM respondents have been excluded for this reason. Combined with the fact that twelve of the original 42 respondents chose not to list their colleges, this means that the comparison population for non-STEM respondents for some items is quite small (in one case, as few as six non-STEM respondents). Table nine reports the mean difference comparisons for men and women and STEM versus non-STEM administrators.

Table 9. ADVANCE FORWARD Policy comparisons

	Sample Mean	Men minus Women	STEM minus non-STEM
Allies/advocates program	3.32	0.37	-0.48
Course release program	3.71	-0.04	1.27
Leap grant program	3.81	0.2	1.26
Climate research grant	3.54	-0.47	0.67
Travel grants	4.47	0.17	0.55
Leadership development grants	4.09	0.08	0.48
Junior faculty cohort mentoring program	3.87	0.18	**0.90**
FORWARD Lecture Series	3.40	-0.25	0.75

On the whole, respondents rate all of these programs at moderately to highly valuable. The lowest rating is for the Allies/Advocates Program (X = 3.32), the highest is for travel grants (X = 4.47); leadership development grants are also perceived as highly valuable (X = 4.09). As for the previous policy items, there are no significant differences between men and women administrators. Again, this suggests broad consensus about the value of policies aimed at creating institutional transformation. For the reasons discussed above, the STEM/non-STEM comparisons are less useful, though there is one significant difference – STEM respondents (mean value = 4.50) perceive junior faculty cohort mentoring programs as more valuable than non-STEM respondents (mean value = 3.60). Again, the relative lack of differences suggests a fairly high level of consensus about policies across groups of administrators.

7. Decisions to leave (item nine)

The final set of items on the instrument assesses the most important reasons respondents believe men and women faculty leave their units. This is a series of items for which respondents were asked to choose the top five reasons they believe men and women leave. The statement leading into these questions is: "Of the following factors, please check the FIVE you believe most contribute to the decision to leave your unit by faculty who are WOMEN and by faculty who are MEN." The top five reasons for each are exactly the same – receiving another offer (#1 for both men and women), the weather (#2 for women, #3 for men), failing to meet expectations for research (#3 for women, #2 for men), a desire to relocate to be closer to family (#4 for both), and a lack of spousal accommodation (#5 for both).

Table 10. Paired items for faculty turnover reasons, with tests of significance

		Mean	N	Sig.
Pair 1	Women: Unable to meet expectations for teaching	0.14	42	0.04
	Men: Unable to meet expectations for teaching	0.24		
Pair 2	Women: Unable to meet expectations for research	0.40	42	0.01
	Men: Unable to meet expectations for research	0.57		
Pair 3	Women: Not having enough resources to conduct research	0.29	42	NS
	Men: Not having enough resources to conduct research	0.31		
Pair 4	Women: Too many service obligations	0.29	42	0.00
	Men: Too many service obligations	0.00		
Pair 5	Women: Receiving an offer for another job	0.57	42	0.01
	Men: Receiving an offer for another job	0.79		
Pair 6	Women: Conflict within the unit	0.19	42	NS
	Men: Conflict within the unit	0.24		
Pair 7	Women: Not compatible with direction of unit	0.12	42	NS
	Men: Not compatible with direction of unit	0.17		
Pair 8	Women: Subtle or overt discrimination	0.05	42	NS
	Men: Subtle or overt discrimination	0.02		
Pair 9	Women: Subtle or overt harassment	0.05	42	NS
	Men: Subtle or overt harassment	0.02		
Pair 10	Women: Frustration with informal systems at NDSU (e.g., cliques, unwritten rules)	0.19	42	0.02
	Men: Frustration with informal systems at NDSU (e.g., cliques, unwritten rules)	0.07		
Pair 11	Women: A partner/spouse with an academic career not being accommodated at NDSU	0.36	42	NS
	Men: A partner/spouse with an academic career not being accommodated at NDSU	0.33		
Pair 12	Women: Lack of supportive family leave policy/options	0.12	42	NS
	Men: Lack of supportive family leave policy/options	0.07		
Pair 13	Women: Need/desire to live closer to family	0.40	42	NS
	Men: Need/desire to live closer to family	0.40		
Pair 14	Women: Not liking the weather	0.43	42	NS
	Men: Not liking the weather	0.45		
Pair 15	Women: Not liking the community	0.19	42	0.04
	Men: Not liking the community	0.29		
Pair 16	Women: Negative Perception of NDSU's prestige as an institution	0.02	42	NS
	Men: Negative Perception of NDSU's prestige as an institution	0.10		

As the same respondent was asked to choose from an identical set of reasons for women and men faculty, the appropriate statistical test is again a paired samples test. This test taps differences between two items within the same respondent. As these were simple yes/no choices, the means for these items

should be read as the proportion of respondents who chose a particular option. Table ten presents the results of this analysis.

Tests of six of these sixteen pairs achieve statistical significance. Specifically, respondents perceive that men are more likely than women to leave because they are unable to meet expectations for teaching, because they are unable to meet expectations for research, because they have received another job offer, and because they do not like the community. Respondents perceive that women are more likely than men to leave because of heavy service obligations and frustration with informal systems (cliques, unwritten rules) at NDSU. There are no significant differences in perceptions across the other ten item pairs.

8. Conclusions and implications

Taking all of the university and climate items together reveals a pattern of marginally positive responses (i.e., mean values of agreement above three on a five point scale), to items assessing whether administrators believe the climate is gender equitable for men and women faculty. There is also relatively strong agreement on the need for institutional transformation to create gender equality (X = 3.71 for this item), however.

There is far less agreement that units have concrete policies in place to retain, promote, and advance women into leadership positions, however. This suggests that while administrators feel that they have made efforts to recruit women and improve the climate in their units, they have far less in place in the way of concrete plans to retain, promote, and advance women faculty into leadership positions. This strongly implies that this is an area in need of attention. Unit heads would perhaps benefit from the distribution of best practices to help them develop their own policies, and/or the establishment of broadly-based programs to help accomplish these aims, such as the ADVANCE initiatives.

For almost all climate items, women administrators are significantly less positive than men. Women administrators perceive less gender equity on campus and in their units, and significantly more conflict, especially for women faculty, in balancing work and family obligations. Interestingly, there are no differences between STEM and non-STEM administrators on any of these dimensions. This argues strongly for efforts to address the university and campus climate that target all colleges, rather than STEM units. The fact that women administrators are more likely to perceive problems than men also argues quite strongly for including men as central players in efforts to document inequities and create change.

One of the most positive findings from the survey is the broad consensus about policies aimed at increasing gender equity. All administrators (men/women, STEM/non-STEM) believe these policies are valuable. This is particularly true for policies – like stopping the tenure clock and child care – aimed at helping faculty balance work and family. Administrators also agree that the ADVANCE FORWARD initiatives (such as small grants and mentoring programs) are valuable. This suggests that policy initiatives to address gender equity, particularly in the areas of work/family balance, should elicit widespread support among administrators.