



State of Delaware

Department of Transportation (DeIDOT) Maintenance & Operations

Inclusive Culture Assessment

FINAL REPORT
September 2017

Prepared by Ivy Planning Group

BALANCING
STRATEGY,
DIVERSITY
AND
THE BOTTOM LINE



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EXECUTIVE SUMMARY

In Fall 2016, the State of Delaware contracted with Ivy Planning Group (Ivy) to conduct an independent study of diversity and inclusion (D&I) related policies, procedures, and organizational culture [Executive Branch] to create a more diverse and inclusive environment. Findings and recommendations presented in the final report, completed in December 2016, provides a blueprint for the State to move beyond its historical challenges to realize its future potential.¹

While Ivy was tasked to focus and provide recommendations on the Statewide experience rather than focusing on each specific Department, we noted that several Executive Branch Departments, including DeIDOT, are experiencing chronic underrepresentation in individual labor market categories in female and/or minority employment. Minorities are underrepresented in the Skilled Craft and Technician EEO-4 categories while women are underrepresented in the Technician EEO-4 categories. Further, we conducted statistical analyses in the areas of Hiring, Promotion, Separation, Disciplinary Action, Grievances, and Discrimination Complaints. These analyses show that most of these processes within DeIDOT show evidence of adverse impact and/or statistically significant differences across race and gender (See Appendix).

Following the Statewide assessment, DeIDOT contacted Ivy to assess and develop recommendations for the Maintenance and Operations (M&O) North District regarding racially charged issues and an increased number of Equal Employment Opportunity (EEO) complaints filed by minorities relating to unfair treatment, hiring, and promotion decisions. DeIDOT leadership expressed concerns that the issues and complaints filed have created a work environment that negatively impacts the North District.

Initially, Ivy's project objective was to assess the M&O culture, develop a strategy, implementation, and training plans to foster an inclusive culture of trust, respect, forgiveness, and collaboration. However, based on the kickoff meeting and further discussions with the client, the scope of the project evolved to:

- Understand the culture at the North District
- Identify barriers that exist with promoting people of color into supervisor/managerial positions at the North District
- Convene a DeIDOT Project Culture Team to develop a pathway forward to improve the culture at the North District

To better understand the issues relating to North District, we conducted interviews with DeIDOT leadership as well as staff in both North and Canal Districts. Canal District is used as a comparison group as it is geographically close to North District and both have similar operations. However, we understand that Canal does not have the same racial tension or number of complaints.

The following are the key findings from our assessment:

1. The culture is not inclusive.
 - Limited representation of visible diversity at all levels indicate there are systemic biases and barriers impacting opportunity.

¹ <http://omb.delaware.gov/documents/DiversityInclusionStudy.pdf>

- There is an “us vs them” culture that has created insiders and outsiders and is negatively affecting team morale.
 - Leaders are not encouraged to value difference and seek it at all levels.
2. Leaders, managers, and employees are not effective discussing and resolving workplace issues.
 - Instead of exercising sound leadership and management principles leaders, managers, and employees use EEO to bring forth workplace issues and conflicts.
 - Issues and conflicts go unresolved (or the resolution is not communicated), which leads to resentment, skepticism, and poor working relationships.
 - Personal beliefs, biases, symbols and language regarding race impact the team. It is unclear the degree to which it impacts the community/constituents.
 - There is a lack of courageous, authentic, and effective cross-cultural communication, which perpetuates perceptions of bias and negative intent, mistrust, continued conflict, and harmful team dynamics.
 3. The lack of consistent leadership, performance management, and transparency in decision-making results in opportunities given based on factors other than merit.
 - Relationships are used as proxies for effective and consistent leadership and management practices.
 - There is a lack of rigor across people and operational processes that makes behavioral and performance expectations unclear.
 - Accountability for behaviors and performance is inconsistent and unevenly applied.

The issues identified above can be addressed with a renewed commitment to acknowledging the past, requiring consistency and fairness from everyone, developing a plan to move forward, and holding everyone accountable. Ivy has provided draft recommendations from which the DeIDOT M&O Culture Project Team can start.

Overall recommendations to address the key findings:

1. Define, communicate, and demonstrate a renewed commitment to leadership, diversity, respect, inclusion, and productivity
2. Increase performance management and people management processes and activities
3. Infuse greater objectivity into hiring and promotion panels
4. Create an inclusive culture
5. Establish accountability for performance and culture
6. Increase communication and education

As Ivy stated in the Statewide report: *Whether you receive services from the State or choose to work there, you should expect that your experience will be consistent and great. Meeting this expectation means understanding that everything at the State is interdependent. Like the ripples on a pond, one stone's throw radiates out. Delaware's history radiates out to influence what people believe is possible today. Similarly, a commitment to "One Delaware" can radiate too - in a good way. After all, those ripples touch everyone.* Ivy is proud to see the ripples from this commitment have touched DeIDOT and they are moving forward to address issues in M&O North District.

Concurrently, the Statewide report data analyses reveals there are likely broader issues across DeIDOT. Our hopes are that the ripples from this report, and subsequent action, continue to radiate to the entire DeIDOT team a desire to improve.

UNDERSTANDING

DeIDOT's Objective: Under the leadership of Delaware's Secretary of Transportation, DeIDOT provides a safe, efficient, and environmentally sensitive transportation network. We design, construct, and maintain roads and bridges, administer highway operations, and operate DART First State, Delaware's statewide public transit network. We are responsible for Delaware's transportation long range planning and work cooperatively with many public and private partners in helping to improve the movement of people and goods in and through our state. As a member of the I-95 Corridor Coalition, we administer and partner in pilot/experimental projects for many Integrated Transportation Management System (ITMS) contracts for the region. (Source: <http://deldot.gov/About/employment/index.shtml?dc=career#Mission>)

Equal Opportunity statement: DeIDOT is an Equal Opportunity Employer who takes pride in its diverse workforce. Our diverse workforce creates a well-rounded Agency which strives to provide excellent service to meet the needs of Delaware's citizens. (Source: <http://deldot.gov/About/employment/index.shtml?dc=career#Mission>)

Maintenance & Operations (M&O)

Mission

The mission of Maintenance & Operations is to provide excellence in transportation by keeping the state's road transportation network in a state of good repair through the careful and consistent application of personnel, equipment and financial resources.

Key Objectives

- Perform emergency response to weather events, including winter snow removal and seasonal responses to conditions.
- Manage the Community Transportation Fund (CTF), ensuring requests are estimated, responded to and funded in an appropriate timeframe.
- Manage our equipment fleet maintenance to have our assets functional and available as needed to support our highway system maintenance activities.

Source: <http://deldot.gov/About/divisions/index.shtml>

Working for the State of Delaware is seen as a good job to have. DeIDOT, in particular, should have limited challenges attracting a diverse talent pool given there do not seem to be difficult to acquire knowledge, skills, and abilities required that could present barriers to entry. This is an advantage for DeIDOT.

National Association of Manufacturers (NAM) predicts that U.S. companies will be facing two million job vacancies by 2025. And the American Welding Society contends that manufacturing industries will need 300,000 welders and welding instructors by 2020. Technology has replaced some jobs and made others obsolete. But a significant number of manufacturing jobs remain open with not enough people to fill them.²

However, DeIDOT is not hiring, promoting, and retaining a diverse workforce at a rate that would be expected. The following assessment seeks to understand why this is occurring at M&O North District and provides recommendations to address.

² <http://www.hrdiver.com/news/why-blue-collar-industries-are-facing-such-a-massive-skills-shortage/439756/>

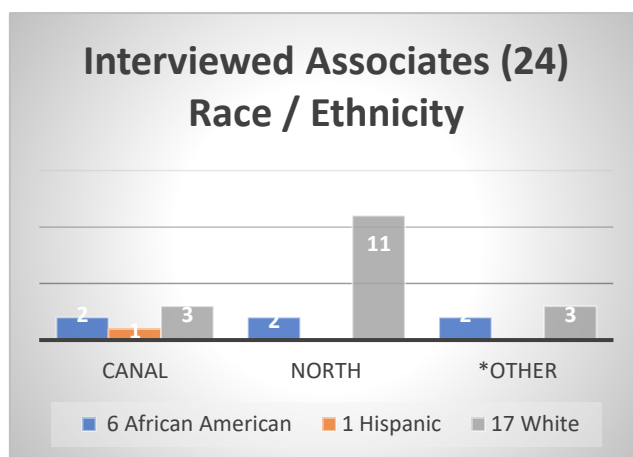
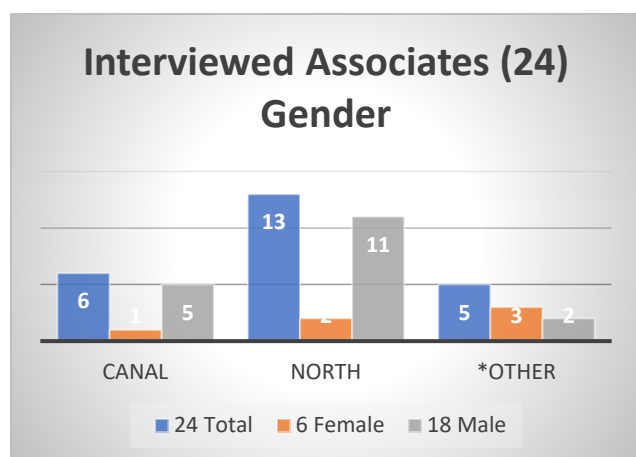
METHODOLOGY

Ivy began its work with a kickoff meeting with the DeIDOT Deputy Secretary, EEO/AA Specialist, and the project team. At this meeting, we confirmed the scope and were provided specific details on the approach (e.g., North District focus, convene a Culture Project Team to develop final implementation plan). Next, Ivy performed qualitative data analysis and synthesis to identify meaningful trends, critical organizational observations, and recommendations. Finally, Ivy developed status reports and presented preliminary findings to the DeIDOT Secretary.

We conducted a thorough document review of DeIDOT’s hiring data, EEO-4 reports, discrimination complaints, promotion data, and data analyses from the Final Report of the Independent Study of Diversity & Inclusion Related Policies, Procedures, and Organizational Structure written by Ivy and published by the Governor in December 2016.

During our initial discussions with leadership, the Canal District was mentioned as the closest district to North but does not experience the same issues. In response to this information, Ivy conducted interviews with a diverse group of North and Canal District employees, leaders, and external stakeholders who operate in the North District.

DeIDOT Interview Summary			
	Total in Yard	Total Contacted	Total Interviewed
North District			
Yard 11 - Kiamensi	20	13	0
Yard 12 - Talley	20	13	0
Yard 13 - Expressways	20	17	3
Yard 14 - Expressways	18	17	4
Yard 15 - Building Maint. & Bridge Crew	10	2	2
Canal District - All Yards & Headquarters	N/A	25	5
Other Stakeholders	N/A	14	4
Grand Total Contacted and Interviewed		109	24



Ivy also conducted a focus group meeting with the AFSCME Council 81, Local 837 that was attended by approximately 35 DeIDOT employees.

To further solidify Ivy’s findings and recommendations, we collected data on the similarities and differences between North and Canal Districts. Canal and North District follow the same procedures as merit employees but employee morale and experiences are vastly different.

- *“We are consistently inconsistent. The Districts are not set up the same. Sometimes [leader] wants to get into the weeds instead of just making a decision. We are four distinct Districts with 4 distinct needs of our customers. So, stop treating us the same.”*
- *“Canal vs North District. Morale is bad with respect to pay, but Canal is more friendly and issues are different than night and day.”*
- *“The culture here is more relaxed... if you get to it, you get to it, if you don’t, you don’t. They have the volume here, but if it gets done it gets done.”*
- *“I have such a great reputation, because I took the time to talk with staff and try to resolve their issues informally.”*
- *“I hope it gets better...North District is bad.”*

While Canal is experiencing fewer complaints than North, it is important to note that both experience a lack of visible difference at all levels. Therefore, the following table outlines meaningful differences and similarities that we observed in comparing their environments. Note however, that we did not make assumptions about either as a best practice workplace environment.

Overall Observations of North & Canal Environments		
	Canal	North
Mission	Same type of work as North but their geographical responsibility is less hazardous – no major corridors like North.	Same type of work as Canal but North handles 95 and Turnpike which are deemed more dangerous and intense for the workers.
Structure	Same titles and laddering – both are under the merit system. Canal is 87% White, 13% POC	Same titles and laddering – both are under the merit system. North is 75% White, 25% POC
Constituents	More suburbs and rural	More urban and some suburbs
Culture observations	<ul style="list-style-type: none"> • Collegial working environment • Lower disciplinary actions than North • Leadership who is respected and has good rapport with employees • Informal ways of solving issues • Blue Collar • Team rather than individual-focused 	<ul style="list-style-type: none"> • Petty • Low accountability • Relationship-driven • Cliquish • Hierarchical • Micro-management • Inconsistent • Blue Collar • Individual rather than team-focused
Strategy	Performance is high according to leadership. Objectives are being met.	Performance is high according to leadership. Objectives are being met.
Systems	Performance measurement is administered based on the merit rules and feedback was that it is mostly used to document weaknesses, not strengths. There is little evidence of other systems in place that measure improved or excellent performance.	Performance measurement is administered based on the merit rules and feedback was that it is mostly used to document weaknesses, not strengths. There is little evidence of other systems in place that measure improved or excellent performance.
Structure	The structure is the same as North. Management has an informal and interactive style with employees. There is a daily meeting at	Management employs a distant, yet more controlling style. Some managers watch staff from a distance with binoculars to ensure tasks

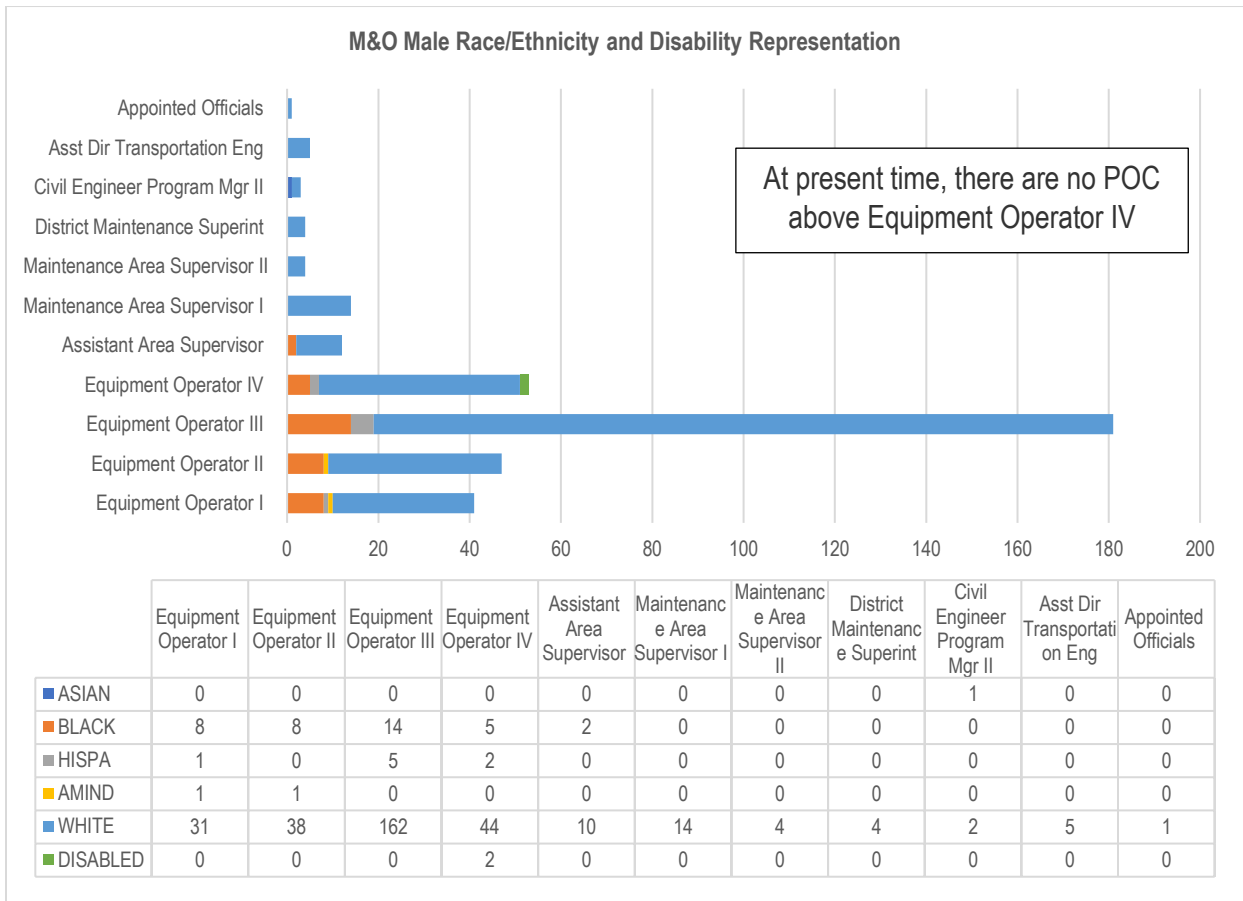
	8:15 am each morning and that is how staff are measured as on time. If they are late to that meeting, they must fill out a leave slip.	get done. Meetings are held each morning like in Canal, but employees must use a three-step time card system to validate their working hours.
Skills	Certifications relate to the equipment that are employed by road crews. No specific educational requirement but many operators have at least a college degree.	Certifications relate to the equipment that are employed by road crews. No specific educational requirement but many operators have a college degree.
Other differences or similarities	Canal is not having the same racial issues as North although (and perhaps because) their POC makeup is smaller. Relationships between managers and staff are strong. Managers seem more comfortable with leading diverse staff.	North is identified as having operators who came from Wilmington (the city). This was identified as an issue due to their lack of knowledge having not come from a farm lifestyle. Managers seem less comfortable with leading diverse staff.

FINDINGS

The following findings give insight into the causes of racial tension and increased complaints from minority employees in the M&O North District.

1. The culture is not inclusive.

- Limited representation of visible diversity at all levels and subjective decisions often along racial lines indicate there are systemic biases and barriers impacting opportunity. There are (5) five women (2 people of color) and 48 people of color out of 370 employees.
 - *“Hiring practices in management are bad. Vacancies are filled from the same ‘cultural tree’.”*
 - *“This is a true barrier – there is a good ole boys network that prevents women from being hired to work in the yards.”*
 - *“I don’t see equality. When I applied, it says we are an equal treatment employer. I don’t see that. I don’t see diversity.”*



As of 6/30/2016

- There is an “us vs them” culture that has created insiders and outsiders and is negatively affecting team morale.
 - *“Managers should take the time to get to know all of their employees, not just their buddies. They should make the effort to be more cordial.”*

- *“I feel like I’m against them and I’m not going to win. Who will support me on this? I feel like I have more support with [some] like we can fight to do something about this.”*
 - *“At staff meetings, [individual] takes and distributes notes but information does not cascade [down] to the staff.”*
 - Leaders are not encouraged to value difference and seek it at all levels.
 - *“There is a culture of mistrust. Instead of being a dictatorship, [leaders and managers] need to come down to their level and engage more.”*
 - *“We must use the chain of command to make suggestions. However, one time I made a recommendation two levels above my boss. But that leader reached out to me and I simply made a minor recommendation that [the leader] liked and ended up implementing. I was told I needed to use the chain of command and should not have done that. A week later I get a [recognized] for making the suggestion...”*
 - *“I complained about safety issues that exist. Was told to shut up...”*
 - *“There is retaliation for speaking up about issues with management.”*
 - *“In my interview, I mentioned what I observed, what the problem is and how I would fix it. I don’t think [individual] liked that I mentioned a problem in something that he had a hand in. [Another person was] told to come in do the job and then transfer into it. Position was not open to anyone else.”*
 - *“[Individual] doesn’t respect women in high positions, he favors men.”*
- North District Culture Characteristics
Observed

 - Proud
 - Blue Collar
 - Hierarchical
 - Political
 - Cliquish/relationship-driven
 - Micro-management
 - Inconsistent
 - Petty
 - Individual rather than team-focused
 - Low accountability
-
- 2. **Leaders, managers, and employees are not effective discussing and resolving workplace issues.**
 - Instead of exercising sound leadership and management principles, leaders, managers, and employees use EEO to bring forth workplace issues and conflicts.
 - *“Racial issues are not dealt with informally – only when EEO complaint is filed does management get involved, in writing only.”*
 - *“They [staff] want to say something but when they are given the opportunity, they pull back.”*
 - *“Would want [leaders] to be courageous enough to ask for help.”*
 - *“How can the issue be fixed? Acknowledge that the decision we made at the time isn’t the best decision now? Past happens, however acknowledge what happened so people can feel included and listened to. But the EEO issues are supposed to be confidential.”*
 - *“There was town hall meeting recently that he heard was called due to issues raised with [an individual] and racism. The meeting occurrence was distributed via word of mouth in the breakroom. The meeting was bad. Nothing was said or done that had to do with racism.”*
 - Issues and conflicts go unresolved (or the resolution is not communicated), which leads to resentment, skepticism, and poor working relationships.
 - *“We were making good progress towards improving race relations but lost momentum around this time [2010]. Issues have persisted for many years but have gotten worse since 2014.”*
 - *“People say things happened years ago, but they felt there is no solution to their issues. How do you deal with it - the old stuff? For example, manager was not upfront about a relationship and hired the friend. This was a big deal that people are still holding on to. People felt offended and wronged.”*

- *“Complaints investigated from employees are indicative of cover ups by management to make things appear differently. They protect each other.”*
 - *“There was a sexual harassment issue. Nothing was done about it...I was angry for a while.”*
- Personal beliefs, biases, symbols and language regarding race impact the team. It is unclear the degree to which it impacts the community/constituents. (See White Employee Perceptions vs. People of Color Employee Perceptions)
- There is a lack of courageous, authentic, and effective cross-cultural communication, which perpetuates perceptions of bias and negative intent, mistrust, continued conflict, and harmful team dynamics.

White Employee Perceptions	People of Color Employee Perceptions
<ul style="list-style-type: none"> • <i>“Racial issues don’t seem bad from my view but folks don’t do their jobs.”</i> • <i>“Worked with the EEO/AA specialist to start meetings to allow people to come and engage with management once per month. People haven’t come in recent months.”</i> • <i>“Blacks complain too much. I want them to just come in and do their jobs and maybe they will get leniency. The complainers also are underperformers, with 80% of the bad work coming from them.”</i> • <i>“Perception is that black employees are lazy.”</i> • <i>“Complaints are made by minorities about promotions. But when I asked [some of them] to give feedback on what is needed for promotion, they never came back to me.”</i> • <i>“We are fixing the issues brought to us by EEO. We give them diversity of tasks but then they say they don’t want to do it or don’t know how to do it. You can’t win.”</i> • <i>“Sixty percent of the under performers are black. The high performers are called ‘the white crew’ and 35-40% of them are white. They are well recognized. I don’t feel like symbols like confederate flags are detrimental to black folks.”</i> 	<ul style="list-style-type: none"> • <i>‘There is harassment of people of color. There is favoritism and certain folks get better assignments.’</i> • <i>“The most tenured black employee has not been promoted even though he qualifies for the [next] role. He has considerable influence and voice but has not been consulted on how to improve race relations.”</i> • <i>“Minorities are disciplined more than other groups. [Leader] needs to bring consistency to how rules are enforced for all staff.”</i> • <i>“Boss creates assignments for the “A” team, a group of 4-5 white guys, to allow them to stay together. This “A” team is able to congregate in the supervisor’s office 15-20 minutes early – alienating the rest of the group.”</i> • <i>“Racial issues like the complaint [against employee] for using the ‘N’ word against another operator. Nothing happened to him.”</i> • <i>“Feels like black people will not be promoted even though they work very hard. Managers have it out for them.”</i> • <i>“Racial issues like confederate flags and vanity tags on vehicles created tension.”</i> • <i>“Nicknames were given to buildings and crews that racially divide staff.”</i>

3. The lack of consistent leadership, performance management, and transparency in decision-making results in opportunities given based on factors other than merit.

- Relationships are used as proxies for effective and consistent leadership and management practices. Relationships are often established along racial lines.
 - *“Your experience, good or bad, depends on who you align yourself with. This means that you can get away with doing the minimum.”*

- *“Managers collude to hire who they want to. Even when an investigation happens, there is no communication about how the issue is resolved.”*
- *“There is favoritism in assignments...I don’t know who to go to. They are all buddy buddy. They all go to [this person] and [this person] always has his way.”*
- *“Everyone has their little cliques. I’ve been an outsider with these cliques. I don’t see people giving their full effort here. There was an opportunity to work and make more money but they don’t want to work it because it’s doing work on a Saturday. I will do it alone. Head of the clique says to his guys, ‘don’t do it because you will make him look good.’ No one wants to take initiative to fix what’s broken. They think I’m a pain in the ass.”*
- *“Lots of racially aligned cliques, promoted by the supervisors.”*
- There is a lack of rigor across people and operational processes that makes behavioral and performance expectations unclear.
 - *“I would tell the union guys to get the work done. They are spending time trying to get out of work. I see people sitting at the punch clock at 3:30 when they are off at 4. Why?”*
 - *“Safety issues are pervasive.”*
 - *“[In my review] I was disappointed that I just ‘met expectations’, no ‘exceeded’ them. I got all these things fixed that haven’t gotten fixed in years and yet I get a ‘meets expectations’. Good things were not documented in my review. No development / suggestions were made. It gives you the thought, ‘why should I do more when I won’t get recognition for it.’ I feel my review did not acknowledge my work.”*
 - *“I got no training, only got a book. I taught myself about the truck. No one told me I can go online to practice the test ...until I failed the first one.”*
 - *“Managers make rules up as they go although they are told that new rules come down from Dover.”*
 - *“Hiring conditions are changing but not written.”*
 - *“DeIDOT does not have a single Standard Operating Procedure for equipment operator or maintenance worker tasks.”*
 - *“New rules are decided and communicated during manager meetings but there is no consistent way of cascading information to employees.”*
- Accountability for behaviors and performance is inconsistent and unevenly applied.
 - *“Cliques protect each other. I’m not in the union. I’m in limbo. When the Union guy comes in the shop and they all shut up. It’s like they want me to do less. My supervisor tells me, ‘It’s ok if you don’t do the job you said you’d do’.”*
 - *“There have been many complaints filed against certain managers but nothing has changed.”*

FINAL RECOMMENDATIONS

These recommendations are presented as best practices for improving DeIDOT's culture. DeIDOT has agreed as part of this project to convene a Culture Project Team that will refine and implement these recommendations based on the appetite for change at DeIDOT and most specifically North District.

1. **Define, communicate, and demonstrate a renewed commitment to leadership, diversity, respect, inclusion, and productivity.**
 - a. Equip supervisors and managers to lead the cultural transformation.
 - b. Communicate to everyone what's different this time, expectations, their responsibilities and how they will be held accountable.
 - c. Measure progress and evaluate necessary staffing changes.
2. **Increase performance management and people management processes and activities.**
 - a. Establish people focused style of leadership that makes people management a top priority.
 - b. Institute "a more active presence in the yards" ensuring equitable time is spent across all teams.
 - c. Develop ways to increase amount of informal, authentic, real-time feedback across demographic groups.
 - d. Develop standardized, inclusive approach for populating teams.
 - e. Create Maintenance & Operations focused Employee Development Training Director position who will have oversight of the employee training and certification process.
 - f. Standardize job requirements and centralize access to training, certification and requirements for job progression.
 - g. Establish performance based metrics for employee training and development.
 - h. Conduct regular meetings with supervisors and managers to review timelines and prevent lags in employee training and certification testing.
3. **Infuse greater objectivity into hiring and promotion panels.**
 - a. Ensure at least 50% of the promotion panels are made up of neutral interviewers or raters (e.g., panel members have no informal relationship with candidate).
 - b. Evaluate weight distribution of decision-making for selections (e.g., should manager and/or highest-ranking panel member have final decision?).
4. **Create an inclusive culture.**
 - a. Identify the desired culture including formal and informal norms, values, and behaviors.
 - b. Develop informal process for handling complaints, focusing on resolving complaints at the lowest level.
 - c. Develop policies regarding respectful language and symbols (e.g., Confederate flag on personal vehicle) at the workplace.
5. **Establish accountability for performance and culture.**
 - a. Identify behavioral and action-based requirements (objective and measurable) aligned with the desired culture.
 - b. Include culture components in performance expectations.
 - c. Communicate the disciplinary actions for violating culture and value standards consistent with merit rules.
 - d. Determine the impact of the culture on performance and service delivery (i.e., customer/constituent satisfaction).

6. Increase communication and education.

- a. Use “toolbox talks” (morning check in meetings) to discuss any team concerns
- b. Conduct management/supervisor-specific education sessions to develop skills on “leading and managing across difference”.
- c. Convene employee-specific education sessions.
- d. Conduct a diversity dialogue series (across levels) focused on race and gender in the workplace.






APPENDIX: DeIDOT DATA ANALYSES FROM STATE OF DELAWARE REPORT

Statistical analyses were conducted in the areas of Hiring, Promotion, Separation, Disciplinary Action, Grievances, Discrimination Complaints, and Compensation. The purpose of the analyses was to identify if there were differences in the rate of occurrence for these events (e.g., promotion, separation) and in compensation amounts based on Gender, Race/Ethnicity, and where possible, Age. For Race/Ethnicity, rates for White applicants or employees were compared separately to those for Asian, Black, Hispanic, and American Indian/Native American groups, as well as to results for all People of Color (POC) combined.

Two types of difference criteria were computed: Adverse Impact Ratios (AIRs) and statistical significance (EEOC, 1978). An AIR is a ratio between the proportion of people in a target group (e.g., female employees) and the proportion of people in another group (e.g., male employees) to which an event occurred (e.g., promotion, disciplinary action). For example, if 9.5% of female applicants were hired and 12.4% of male applicants were hired, the AIR for female applicants is $0.095/0.124 = 0.76$. When an AIR is <0.80 , it is considered a violation of the “4/5 standard,” indicating that the rate of occurrence for the event of interest is notably lower (e.g., lower promotion rate) or notably higher (e.g., higher number of disciplinary actions) for the target group.³

Statistical significance is based on the result of a chi-square test or, when samples are small, a Fisher’s Exact Test (FET).⁴ Results are provided in the form of a p value. When $p < .05$, the difference is considered statistically significant. Unlike AIRs, statistical significance takes sample size into account. Thus, a difference that violates the 4/5 standard may not be statistically significant if the sample is small. Conversely, a small difference may not violate the 4/5 standard, but may be statistically significant with a large sample size. For this reason, it is advisable to take into account both AIRs and statistical significance when examining results. It is important to note that where results indicate disparities, there may be plausible explanations for the results that do not involve illegal discrimination. The identification of disparities indicates that it is worth taking a closer look at the causes for the disparities.

For each analysis, color-coded cells within the tables summarize the results according to the legend below. Green boxes indicate the target group is doing as well as or better than the comparison group, according to both decision criteria (AIR and statistical significance). Yellow boxes indicate the target group is lower according to one of the difference criteria. Red boxes indicate the target group is lower according to both of the difference criteria. Gray boxes indicated that the numbers were too small to produce stable results. Specifically, if there were less than five actions (e.g., selections, promotions, grievances) for a specific analyses (e.g., within a Department), differences are not assessed due to instability of results.

Legend	
	Adverse Impact Ratio $> .80$ and no significant difference
	Adverse Impact Ratio $< .80$ disfavoring group of interest
	Statistically significant difference disfavoring group of interest
	Adverse Impact Ratio $< .80$ & statistically significant difference disfavoring group of interest
	Not assessed, small samples (population <5)

³ Equal Employment Opportunity Commission, Civil Service Commission, Department of Labor, and Department of Justice (1978). Uniform guidelines on employee selection procedures, 43, No. 166.

⁴ Except for the compensation analyses, in which statistical significance was based on t-tests because compensation is on a continuous scale.

Hiring

Two stages of the hiring process were examined: referral and being hired. Both referrals and hires were compared to the applicant population. The purpose of these analyses was to answer the following question: are applicants of one gender or racial/ethnic group more likely to be referred and/or hired than applicants of a comparison group? To compute adverse impact ratios, the percentage of applicants who were referred or hired was compared by gender and race.

Table 1 presents hiring results by Gender. DeIDOT exhibited lower female than male referral rates within each of the three years examined based on the adverse impact ratio and/or statistical significance. Overall and within each of the three years examined, females were hired at a lower rate than males.

Table 2 presents hiring results by Race/Ethnicity. Overall, Black, Hispanic, American Indian/Alaskan Native, and POC applicants made the referral list at a statistically significant lower rate than White applicants, though the adverse impact ratios for these groups did not reach the 4/5 threshold. POC applicants were referred at lower rates consistently in DeIDOT. Within each of the three years examined, all POC racial/ethnic group applicants were hired at lower rates than White applicants.

Table 1. Hiring Adverse Impact Results by Gender

Dep./ Agency	Year	Female Referrals	Male Referrals	Female Hires	Male Hires	Female Ref. AIR	Male Ref. AIR	Ref. p value	Female Hire AIR	Male Hire AIR	Hire p value	Female Ref.	Male Ref.	Female Hires	Male Hires
DelDOT	2014	1,012	1,365	117	196	0.75	1.34	0.00	0.60	1.67	0.00	■	◇	■	◇
DelDOT	2015	1,127	1,510	113	218	0.72	1.38	0.00	0.50	1.99	0.00	■	◇	■	◇
DelDOT	2016	1,430	1,605	150	248	0.78	1.28	0.00	0.53	1.89	0.00	■	◇	■	◇

Table 2. Hiring Adverse Impact Results by Race/Ethnicity

Dep./ Agency	Year	POC Referrals	White Referrals	POC Hires	White Hires	Referrals			Hires			Referrals						Hires						
						POC AIR	White AIR	p value	POC AIR	White AIR	p value	Asian	Black	Hisp.	AI/AN	POC	White	Asian	Black	Hisp.	AI/AN	POC	White	
DelDOT	2014	729	1,561	106	203	0.70	1.42	0.00	0.79	1.27	0.04	◇	■	■	■	■	■	◇	⊗	■	◇	⊗	■	◇
DelDOT	2015	829	1,701	98	226	0.71	1.40	0.00	0.63	1.58	0.00	■	■	■	■	■	◇	⊗	■	◇	⊗	■	◇	
DelDOT	2016	1,018	1,905	109	287	0.76	1.31	0.00	0.54	1.85	0.00	◇	■	○	◇	■	◇	■	■	⊗	⊗	■	◇	

Transition from Casual/Seasonal

Next, we examined adverse impact among the casual/seasonal employee population (i.e., disparities among subgroups' hiring rates within this population). The purpose of these analyses was to answer the following question: are casual/seasonal employees of one gender or racial/ethnic group more likely to be hired into merit employment than casual/seasonal employees of a comparison group? Tables 3 and 4 present the results of these analyses based on Gender and Race/Ethnicity, respectively. No evidence of adverse impact was found for gender. There statistically significant differences and evidence of adverse impact for race/ethnicity.

Table 3. Casual/Seasonal Transition Adverse Impact Results by Gender

Department/ Agency	Year	Female Hires	Male Hires	Female AIR	Male AIR	p value	Female	Male
DelDOT	2014	20	23	0.99	1.01	0.97	◆	◆
DelDOT	2015	33	28	1.21	0.83	0.40	◆	◆
DelDOT	2016	33	29	1.17	0.86	0.50	◆	◆

Table 4. Casual/Seasonal Transition Adverse Impact Results by Race/Ethnicity

Dep./ Agency	Year	POC Hires	White Hires	POC AIR	White AIR	p value	Asian	Black	Hisp.	AI/AN	POC	White
DelDOT	2014	14	28	0.78	1.29	0.40	⊖	⊗	◆	⊖	⊗	◆
DelDOT	2015	28	33	1.34	0.75	0.20	◆	◆	■	⊖	◆	⊗
DelDOT	2016	20	42	0.81	1.24	0.38	⊗	⊗	◆	⊖	◆	◆

Promotion

The adverse impact analysis population was comprised of all employees, excluding Casual/Seasonal employees. The purpose of these analyses was to answer the following question: are employees of one gender, racial/ethnic, or age-based group more likely to be promoted than employees of a comparison group? To compute adverse impact ratios, the percentage of employees who were promoted was compared between female, POC group, or 40+ years of age employees and male, White, or <40 years of age employees.

Tables 5-6 present promotion results by Department/Agency and by Gender, Race/Ethnicity, and Age, respectively. For Gender, DelDOT exhibited lower female than male promotion rates within each of the three years examined based on both the adverse impact ratio and statistical significance. For Race/Ethnicity,

Nearly all Age-based results indicated that fewer 40+ year-old employees were promoted than <40 year-old employees.

Table 5. Promotion Adverse Impact Results by Department/Agency and Gender.

Department/ Agency	Year	Female Promos	Male Promos	Female AIR	Male AIR	p value	Female	Male
DelDOT	2014	48	169	0.61	1.65	0.00	■	◇
DelDOT	2015	54	168	0.69	1.44	0.01	■	◇
DelDOT	2016	57	186	0.64	1.57	0.00	■	◇

Table 6. Promotion Adverse Impact Results by Department/Agency and Race/Ethnicity.

Dep./ Agency	Year	POC Promos	White Promos	POC AIR	White AIR	p value	Asian	Black	Hisp.	AI/AN	POC	White
DelDOT	2014	30	186	0.79	1.27	0.19	⊗	■	◇	◇	⊗	◇
DelDOT	2015	35	187	0.86	1.17	0.36	◇	◇	◇	⊗	◇	◇
DelDOT	2016	38	204	0.83	1.20	0.26	⊗	⊗	◇	○	◇	◇

Table 7. Promotion Adverse Impact Results by Department/Agency and Age.

Department/ Agency	Year	40+ Promos	<40 Promos	40+ AIR	<40 AIR	p value	40+	<40
DelDOT	2014	96	121	0.33	3.05	0.00	■	◇
DelDOT	2015	90	132	0.31	3.27	0.00	■	◇
DelDOT	2016	100	143	0.33	2.99	0.00	■	◇

Separation

Three years of separation data were examined: 2014, 2015, and 2016.⁵ Separations were classified as voluntary, involuntary, or retirement. Figure 1 indicates how separation codes were classified into these categories; “Other” was not included due to infrequent occurrence and lack of interpretability. Because population data were cross-sectional (i.e., a “snapshot” of employees at one time), combined 2014-2016 separations were compared to 2016 population data.

Figure 1. Separation code categories.

Separation Code	Category
Voluntary Resignation	Voluntary
Cancel Appointment	Voluntary
End of Temporary Employment	Involuntary
Term/Long-Term Disability	Involuntary
Dismissed	Involuntary
Job Abandonment	Involuntary
Term of Contract	Involuntary
Unsatisfactory Background Check	Involuntary
Lacks Job Required License/Certificate	Involuntary
Retirement (5 codes, all specifying retirement)	Retirement
Death	Not Included
Other	Not Included

The adverse impact analysis population was comprised of all DelDOT employees, excluding Casual/Seasonal employees. The purpose of these analyses was to answer the following question: are employees of one gender, racial/ethnic, or age-based group more likely to separate than employees of a comparison group?

Keep in mind that voluntary separation and retirement are not necessarily negative events from the employee’s point of view. Voluntary separation is driven by a wide range of factors, some related to the employee experience and some not. Retirement often represents a loss for the employer, but a favorable event for the employee who is retiring; the opposite can be true as well. Despite these nuances, all separation types are coded as yellow or red for groups who separated at higher rates than would be expected based on the groups’ size.

To compute adverse impact ratios, the percentage of employees who were separated was compared between female, POC group, or 40+ years of age employees and male, White, or <40 years of age employees.

⁵ Data for a given year ran from July 1 of the previous calendar year through June 30 of that year. Specifically, 2014 = 07/01/13 – 06/30/14, 2015 = 07/01/14 – 06/30/15, and 2016 = 07/01/15 – 06/30/16.

Table 8. Separation Adverse Impact Results by Department/Agency and Gender.

Department/ Agency	Year	Separation Type	Female Sep.	Male Sep.	Female AIR	Male AIR	p value	Female	Male
DelDOT	2014-2016	Involuntary	15	46	1.47	0.68	0.18	◇	⊗
DelDOT	2014-2016	Retirement	59	151	1.23	0.81	0.15	◇	◇
DelDOT	2014-2016	Voluntary	91	183	0.97	1.03	0.78	◇	◇

Table 9. Separation Adverse Impact Results by Department/Agency and Age.

Department/ Agency	Year	Separation Type	40+ Sep.	<40 Sep.	40+ AIR	<40 AIR	p value	40+	<40
DelDOT	2014-2016	Involuntary	37	24	1.36	0.74	0.23	◇	⊗
DelDOT	2014-2016	Voluntary	122	153	2.62	0.38	0.00	◇	■

Table 10. Separation Adverse Impact Results by Department/Agency and Race/Ethnicity

Dep./ Agency	Year	Sep. Type	POC Sep.	White Sep.	POC AIR	White AIR	p value	Asian	Black	Hisp.	AI/AN	POC	White
DelDOT	2014-2016	Involuntary	23	37	0.36	2.78	0.00	⊗	■	◇	⊗	■	◇
DelDOT	2014-2016	Retirement	29	181	1.40	0.72	0.00	◇	◇	◇	◇	◇	■
DelDOT	2014-2016	Voluntary	56	217	0.87	1.15	0.00	○	■	◇	■	○	◇

Disciplinary Actions

Disciplinary action data were examined for 2014 through 2016.⁶ Because population data were cross-sectional (i.e., a “snapshot” of employees at one time), combined 2014-2016 disciplinary actions were compared to 2016 population data. The three most common disciplinary action classifications (absenteeism, policy violation, and unacceptable/inappropriate conduct) were assessed separately; other classifications were combined into an “other” category.

The adverse impact analysis population was comprised of all employees. The purpose of these analyses was to answer the following question: are employees of one gender, racial/ethnic, or age-based group more likely to receive a disciplinary action than employees of a comparison group? To compute adverse impact ratios, the percentage of employees who received a disciplinary action was compared between female, POC group, or 40+ years of age employees and male, White, or <40 years of age employees.

Female employees in DelDOT were more likely to receive a disciplinary action for absenteeism. Most other results indicated higher rates of male disciplinary actions across the other three action categories.

POC and Black employees were more likely to receive disciplinary action than White employees (according to at least one difference criterion), with other POC groups also exhibiting some evidence of higher rates of disciplinary action within some Departments/Agencies.

Most results (with the exception of unacceptable/inappropriate conduct, which had mixed results) indicated that 40+ year-old employees were less likely to receive disciplinary action than <40 year-old employees.

⁶ 2014 = 07/01/13 – 06/30/14, 2015 = 07/01/14 – 06/30/15, and 2016 = 07/01/15 – 06/30/16.

Table 11. Disciplinary Action Adverse Impact Results by Department/Agency and Gender.

Department/Agency	Year	DA Class.	Female DAs	Male DAs	Female DA AIR	Male DA AIR	p value	Female	Male
DelDOT	2014-2016	Absent.	86	74	0.53	1.89	0.00	■	◇
DelDOT	2014-2016	Conduct	11	25	1.40	0.72	0.35	◇	⊗
DelDOT	2014-2016	Other	59	128	1.33	0.75	0.06	◇	⊗
DelDOT	2014-2016	Policy	45	107	1.46	0.68	0.03	◇	■

Table 12. Disciplinary Action Adverse Impact Results by Department/Agency and Race/Ethnicity.

Department/Agency	Year	DA Class.	POC DAs	White DAs	POC AIR	White AIR	p value	Asian	Black	Hisp.	AI/AN	POC	White
DelDOT	2014-2016	Absent.	73	82	0.38	2.64	0.00	◇	■	◇	◇	■	◇
DelDOT	2014-2016	Conduct	12	24	0.68	1.48	0.00	◇	■	◇	◇	■	◇
DelDOT	2014-2016	Other	59	127	0.73	1.38	0.00	◇	■	◇	◇	■	◇
DelDOT	2014-2016	Policy	44	105	0.81	1.24	0.00	◇	■	○	◇	○	◇

Table 13. Disciplinary Action Adverse Impact Results by Department/Agency and Age.

Department/Agency	Year	DA Class.	40+ DAs	<40 DAs	40+ DA AIR	<40 DA AIR	p value	40+	<40
DelDOT	2014-2016	Absent.	72	88	2.17	0.46	0.00	◇	■
DelDOT	2014-2016	Conduct	26	10	0.68	1.46	0.30	⊗	◇
DelDOT	2014-2016	Other	109	78	1.27	0.79	0.09	◇	⊗
DelDOT	2014-2016	Policy	101	51	0.90	1.12	0.51	◇	◇

Grievances

Grievance data were examined for 2014 through 2016.⁷ Because population data were cross-sectional (i.e., a “snapshot” of employees at one time), combined 2014-2016 grievances were compared to 2016 population data.

The adverse impact analysis population was comprised of all Executive Branch employees, excluding Casual/Seasonal employees. The purpose of these analyses was to answer the following question: are employees of one gender, racial/ethnic, or age-based group more likely to file a grievance than employees of a comparison group?

To compute adverse impact ratios, the percentage of employees who filed a grievance was compared between female, POC group, or 40+ years of age employees and male, White, or <40 years of age employees.

Within DelDOT female employees were less likely to file grievances than male employees. POC and Black employees were more likely to file grievances than White employees (according to at least one difference criterion), with other POC groups also exhibiting greater likelihood of filing grievances. Employees <40 years of age were more likely to file grievances overall to a statistically significant extent, and were more likely to file grievances in DHSS (according to both difference criteria).

⁷ 2014 = 07/01/13 – 06/30/14, 2015 = 07/01/14 – 06/30/15, and 2016 = 07/01/15 – 06/30/16.

Table 14. Grievance Adverse Impact Results by Department/Agency and Gender

Dep./ Agency	Year	Female Griev.	Male Griev.	Female AIR	Male AIR	p value	Female	Male
DeIDOT	2014-2016	23	159	3.32	0.30	0.00	◆	■

Table 15. Grievance Adverse Impact Results by Department/Agency and Race/Ethnicity

Dep./ Agency	Year	POC Griev.	White Griev.	POC AIR	White AIR	p value	Asian	Black	Hisp.	AI/AN	POC	White
DeIDOT	2014-2016	36	146	0.91	1.10	0.00	◆	■	◆	◆	○	◆

Table 16. Grievance Adverse Impact Results by Department/Agency and Age

Dep./ Agency	Year	40+ Griev.	<40 Griev.	40+ AIR	<40 AIR	p value	40+	<40
DeIDOT	2014-2016	129	53	0.86	1.16	0.32	◆	◆