



Restructure Plan Summary

May 2016



Session Law 2015-241 Section 29.14.(d)

SECTION 29.14.(d) Restructure – A review of the organization, staffing, and operations of the Division of Highways within the Department of Transportation is needed to improve the efficiency and effectiveness of the Division of Highways' operations and to align operations and staffing with the strategic goals set for the Division of Highways. To that end, the Department of Transportation shall study and review the Division of Highways. The study and review, at a minimum, shall include all of the following:

- 1) A review of current Division of Highways' operations, staffing levels, and employee performance management efforts.
- 2) An evaluation of current laws and policies related to Division of Highways' operations and staffing.
- 3) Recommendations on how best to align staffing with strategic goals and workload.
- 4) Recommendations on how to better shift decision making on project development to the 14 Highway Divisions, including a plan developed by the Department of Transportation to eliminate at least ten percent (10%) of the total amount of filled positions within the Department of Transportation that are centrally or regionally based and that perform administrative, managerial, supervisory, or oversight functions. The plan shall describe the functions performed at the centrally and regionally based offices, including justification as to why each function cannot be outsourced, consolidated, or shifted to the Highway Divisions.
- 5) Recommendations on performance or incentive-based systems to improve the effectiveness of the Division of Highways.
- 6) Recommendations on whether current laws and policies should be continued or modified based upon study results and human resource best practices.

The Department of Transportation shall submit the results of the study and review to the Joint Legislative Transportation Oversight Committee by May 1, 2016.



Department's Objectives

Building a Better Business

- The intent of this review was to identify processes and organizational structure that yield a better business model for the delivery of highway projects
- The Department identified the following objectives:
 - Enhance authority for project decision making at the Division level
 - Individualize accountability for the delivery of highway projects
 - Right size the organization and align staffing levels with strategic goals



Improvements

Organizational and business process improvements to support Divisions as project owners

- Align staff to support project delivery by relocating resources (vacant FTEs) to Divisions
- Organize central project delivery staff into multidisciplinary teams (i.e. eliminate the silo approach, and create a single point of accountability)
- Establish an Executive Committee to oversee a new screening process which will determine the annual project delivery plan
- Continue to outsource a vast majority of all planning and design work to consultants



Overview of Current Staffing Levels

- Central Business Units (CBU) evaluated for this effort are directly involved with project development
 - Planning and Programming
 - Technical Services
 - Division of Highways (DOH)
- The current staffing levels evaluated for this review are illustrated in the figure below

Centrally and Regionally Based Positions				
	Program and Planning	Technical Services	DOH - Central	Total
Vacant Positions	15	65	121	201
Filled Positions	131	457	929	1,517
Total Positions	146	522	1,050	1,718

*The number of positions does not include Transportation Engineering Associates (under DOH), and Location and Survey (under TS) that are located in each highway division.



Overview of Planned Staffing Levels

- The plan reduces filled positions as required by law, and a transfer of vacant positions from Central Business Units to Divisions
- Central Business Units will make available identified vacant positions which can be transferred to the Division Offices
- These transfers will occur as indicated by monthly resource assessments completed by the Chief Engineer's Office and each Division

DOH (Central) and Technical Services - Planned Staffing Levels						
Central Business Unit ³	Current Filled Positions	Filled Position Reduction	% Change	Transfers of Vacant Positions	% Change (including transfers)	Ultimate Planned Filled Positions
Technical Services	457	49	-11%	60	-24%	348
Division of Highways	929	186	-20%	8	-21%	735
Total	1,386	235	-17%	68	-22%	1,083

Planning and Programming - Planned Staffing Levels						
Central Business Unit	Current Filled Positions	Filled Position Reduction	% Change	Transfers of Vacant Positions	% Change (including transfers)	Ultimate Planned Filled Positions
Planning and Programming	131	21	-16%	-	-16%	110



*Project Screening
Multidisciplinary Teams
Technical Services*



Overview of New Screening Process

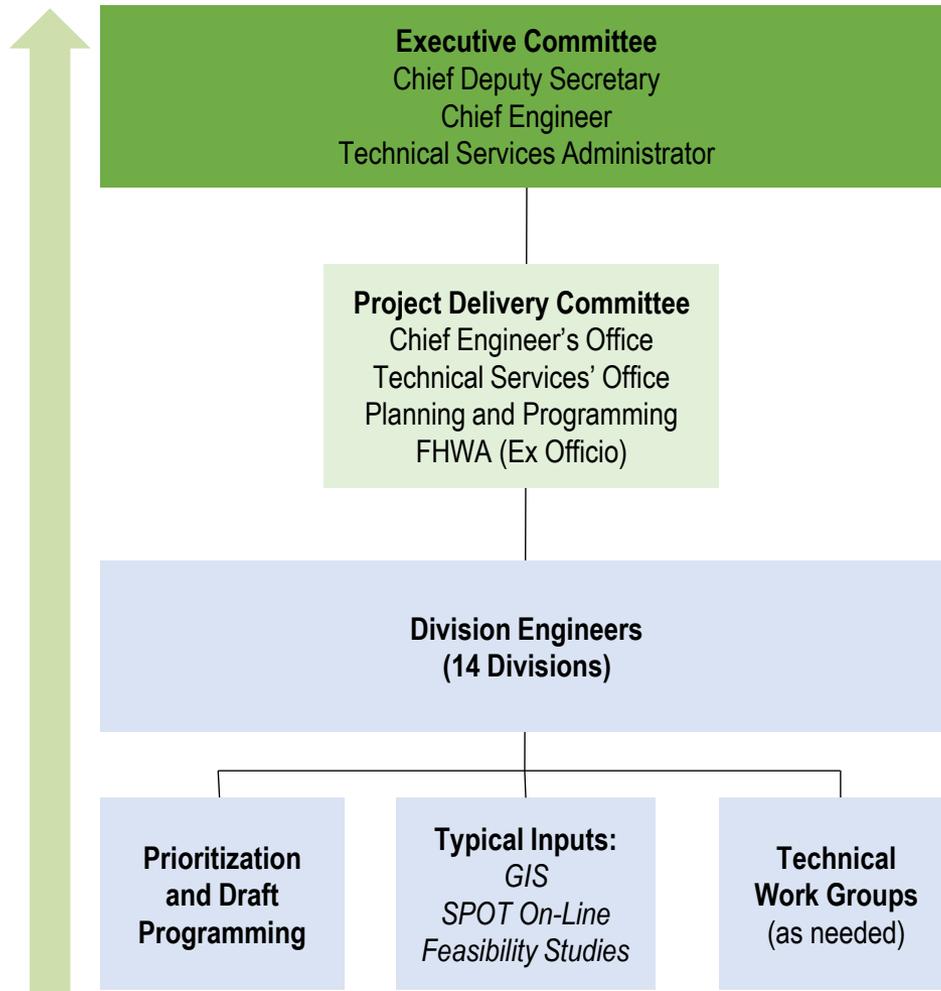
Summary of Screening Criteria

- ✓ Environmental document type
- ✓ State vs. Federal Funding
- ✓ Procurement method
- ✓ Merger vs. Non-Merger
- ✓ Let Dates

- Results of preliminary STIP screening:
 - 70% of projects will be developed by Divisions
 - 30% will be delivered by multidisciplinary teams (i.e., the Department's most complex projects)
- The first round of screening will be complete by August 1, 2016
- Each time projects are added to STIP the process will be conducted



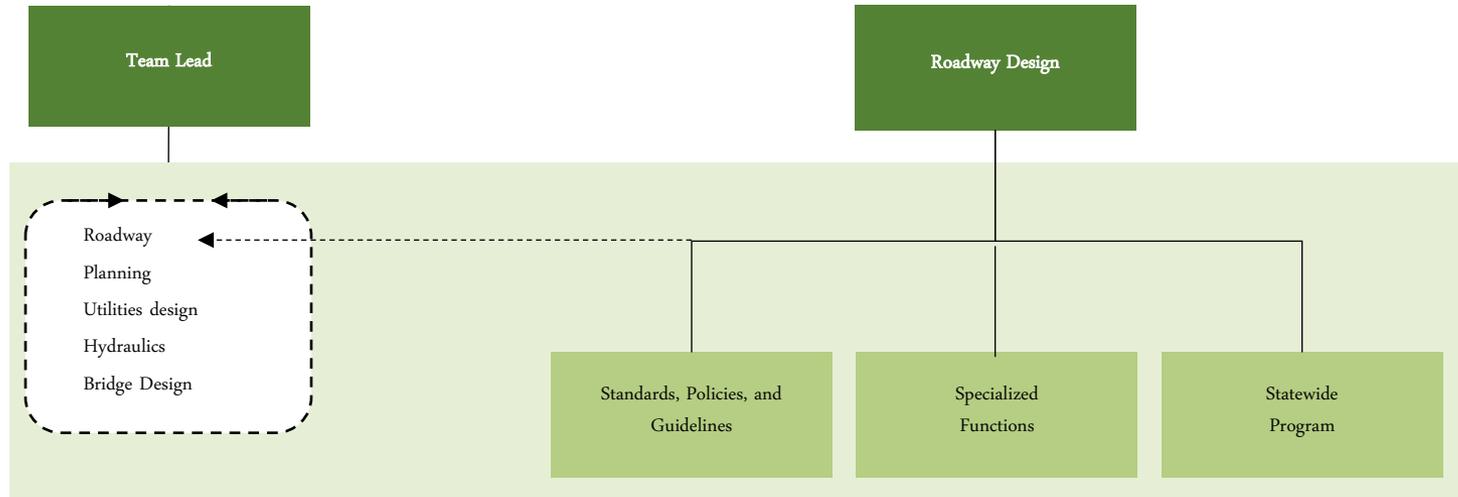
Overview of New Screening Process (continued)



- The Project Development Committee will provide their recommendations to an Executive Committee
- The Executive Committee will adjust and approve the delivery program, as appropriate
- The Secretary and Executive Committee will receive a monthly briefing summarizing schedule constraints and changes
- Quarterly organizational metrics briefing will be provided to the Board of Transportation (e.g., project delivery rates)



Technical Services – Multidisciplinary Teams



- Team Leads are responsible for “what and when” related to project delivery
- Roadway Design Unit is responsible for the “why and how”
- Teams can serve various regions of the state, or be based on types of projects such as bridges, widening projects, new location, etc.
- 7 multidisciplinary teams will be formed to serve project owners
- Personnel will report to team leads and a Deputy Technical Services Administrator

Technical Services – Planned Staffing Level

Organizational Units	Central and Regional Based Positions			Central and Regional Based Positions (located outside of Raleigh)			Total Filled	Planned Staffing Reductions	
	Total Positions	Vacant	Filled	Total Positions	Vacant	Filled		Total Filled Reduction	Central Transfers to Divisions
Technical Services Division									
Technical Services Director's Office	5	1	4	0	0	0	4	0	0
Contract Standards & Administration	49	2	47	0	0	0	47	5	0
Design Build	13	1	12	0	0	0	12	0	0
Geotechnical Unit	48	5	43	35	9	26	69	8	14
Hydraulics Unit	53	8	45	0	0	0	45	4	14
Location & Surveys Unit	28	0	28	112	4	108	136	4	0
Photogrammetry Unit	47	1	46	0	0	0	46	6	0
Priority Projects	9	0	9	0	0	0	9	0	0
Professional Svcs Mgmt	9	3	6	0	0	0	6	0	0
Project Development & Environmental Analysis Unit	105	13	92	0	0	0	92	10	16
Roadway Design Unit	85	18	67	0	0	0	67	8	16
Transportation Program Management	36	4	32	0	0	0	32	4	0
Subtotal Technical Services	487	56	431	147	13	134	565	49	60





Division of Highways



Overview of Strategic Goals (for this study)

Project Development and Delivery Goals

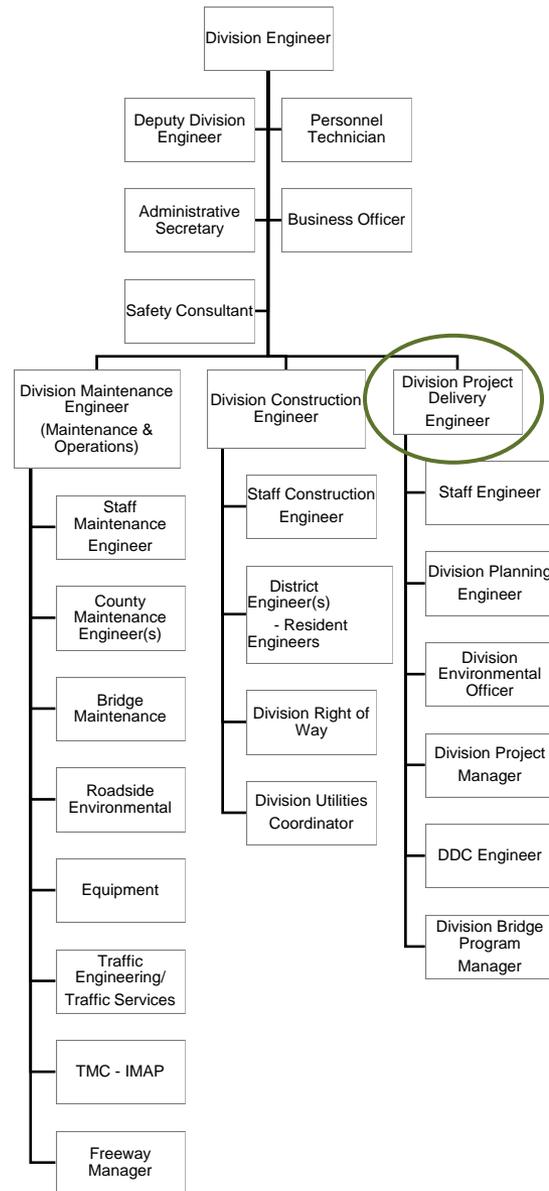
- Planning document completion
- Contract letting dates
- Construction completion dates

Operational Goals

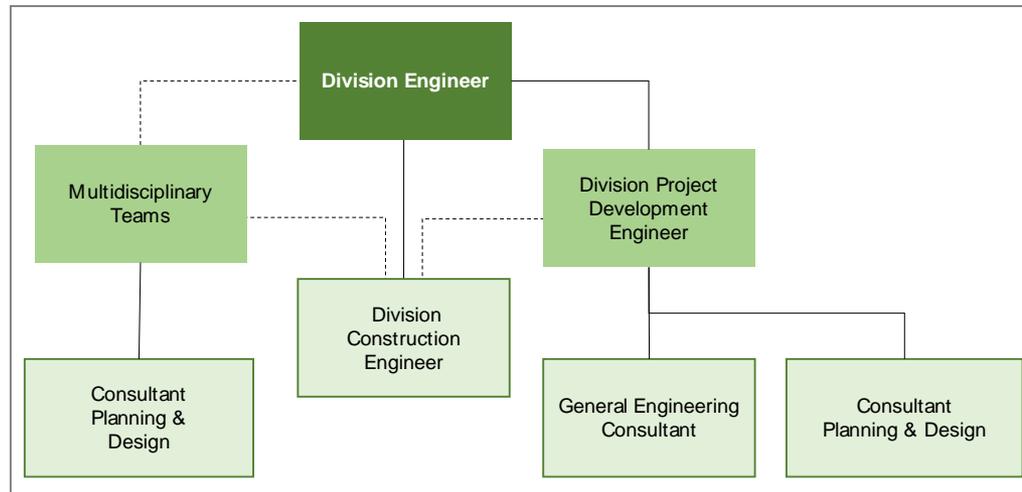
- Lane-miles resurfaced
- Bridges replaced
- Lane-miles of pavement preservation
- Adherence to baseline unit cost within 10% variance for
 - contract resurfacing
 - pavement preservation
 - bridge replacements
 - commodities
 - 10 critical maintenance activities
- Adherence to NCDOT “Responsiveness” legislation
 - fix potholes within 2 business days
 - address safety items within 10 business days
 - non-safety items within 15 business days
- Response to emergency and storm events
 - Snow removal on bare pavement routes within 48 hours of storm conclusion



Typical Division Organizational Structure



Project Delivery Structure



- **Division Engineers** – Assumes an ownership role to determine project scope and budget, and set schedules
- **Division Project Development Engineers** – Assigns project development responsibilities, and engage a combination of resource options
- **Consultants** – Supplements Division staff for planning and design activities, performing turnkey planning and design functions, managing projects
 - General Engineering Consultants (GECs) may perform work necessary to review other consultants' work products
- Project delivery progress will be briefed to the Executive Committee and Secretary on a monthly basis and to the Board of Transportation on a quarterly basis



Department of Highways – Planned Staffing Level

Organizational Units	Central and Regional Based Positions			Central and Regional Based Positions (located outside of Raleigh)			Total Filled	Planned Staffing Reductions	
	Total Positions	Vacant	Filled	Total Positions	Vacant	Filled		Total Filled Reduction	Central Transfers to Divisions
Division of Highways									
Chief Engineer's Office	22	6	16	0	0	0	16	3	0
Facilities Management Unit	29	5	24	8	1	7	31	7	0
Operations & Fleet Management Unit	116	9	107	4	0	4	111	25	0
Operations Program Management	24	1	23	0	0	0	23	5	0
Construction Unit	14	1	13	14	1	13	26	4	0
Materials & Tests Unit	106	14	92	113	12	101	193	39	0
Right of Way Unit	35	3	32	53	8	45	77	16	0
Roadside Environmental Unit	45	5	40	15	1	14	54	9	0
Structures Management Unit	152	10	142	54	9	45	187	36	8
Utilities Unit	42	7	35	0	0	0	35	8	0
ITS & Signals Unit	60	6	54	0	0	0	54	11	0
Oversize Overweight Permits Unit	23	4	19	0	0	0	19	4	0
Signing & Delineation Unit	23	2	21	0	0	0	21	5	0
Systems Operations Unit	15	1	14	0	0	0	14	1	0
Traffic Management Unit	40	9	31	0	0	0	31	6	0
Traffic Safety Unit	30	4	26	13	2	11	37	7	0
Subtotal Divisions of Highways	776	87	689	274	34	240	929	186	8





Implementation and Next Steps



Implementation – Overview

Progress	Improvement Task	Results /Status
✓ Complete	<ul style="list-style-type: none"> Develop initial Project Screening Process 	
✓ Complete	<ul style="list-style-type: none"> Estimates, Negotiations, Purchase Order and Notice to Proceed Authority Divested to Divisions 	<ul style="list-style-type: none"> Training Continues for Division personnel
✓ Complete	<ul style="list-style-type: none"> Scheduling initiative to accelerate project delivery for widening and new location projects by 25% 	
	<ul style="list-style-type: none"> Execute screening process for projects recently added to the STIP 	<ul style="list-style-type: none"> Complete by August 2016; Receive approval from Executive Committee by September 2016
✓ Complete	<ul style="list-style-type: none"> Grant authority to Division Engineers to approve or reject all project schedule changes 	<ul style="list-style-type: none"> Recent change to afford more accountability and authority to Division Engineers
✓ Complete	<ul style="list-style-type: none"> Implement Environmental tracking and Coordination system (Phase I) 	<ul style="list-style-type: none"> Phase includes first set of environmental analyses (historic/archeological)

Implementation and Next Steps - Overview

Progress	Improvement Task	Results /Status
 <p>In Progress</p>	<ul style="list-style-type: none"> Implement Environmental Tracking and Coordination System (Phase II – IV) 	<ul style="list-style-type: none"> Phase II - IV to include all environmental analyses areas including threatened and endangered species, community studies, permitting, noise studies, air quality Expect completion by February 2017
 <p>In Progress</p>	<ul style="list-style-type: none"> Identify current and future vacancies available for transfer to Divisions 	<ul style="list-style-type: none"> 30% of vacancies already identified
 <p>In Progress</p>	<ul style="list-style-type: none"> Procure General Engineering Consultants for Divisions 	<ul style="list-style-type: none"> Draft solicitation documents developed
 <p>In Progress</p>	<ul style="list-style-type: none"> Develop and execute a series of Reduction Through Reorganization Plans 	

Implementation and Next Steps - Overview

Progress	Improvement Task	Results /Status
Not Yet Started	<ul style="list-style-type: none"> Develop and execute a series of Reduction in Force Plans 	<ul style="list-style-type: none"> To be initiated after a series of Reduction Through Reorganization have been executed
Not Yet Started	<ul style="list-style-type: none"> Assemble central project delivery teams 	<ul style="list-style-type: none"> Completion following satisfaction of Division needs
 In Progress	<ul style="list-style-type: none"> Restructure analysis of other business units 	<ul style="list-style-type: none"> Expected completion January 15, 2017



Next Steps – Tracking Performance

- Revise project delivery tracking and reporting:
 - Initiate multi-state scan to identify best practices for project delivery reporting
 - Revise the Department's methods for tracking progress and reporting delivery rates
 - Establish preliminary targets by July 1, 2016



Next Steps – Incentive Based Programs

Recommendations

- Establish safety bonus to encourage safe practices in the workplace
- Establish team based project delivery bonus, based on letting dates
- Establish project team bonus for early completion and construction projects
- Establish incentives that encourage maintenance teams to exceed DOT Report deadlines
- Establish incentives that encourage maintenance teams to exceed performance targets for planned maintenance activities (i.e., long-line pavement marking)



Next Steps – Staffing Level

Phase 1	May to July 2016 (0-90 days)
	<ul style="list-style-type: none">▪ Transfer first round of vacant positions from the Central Business Units to the Divisions on a rolling basis▪ Divisions advertise and fill vacant positions on a rolling basis▪ Advertise solicitation for Division GECs▪ Issue first round of Reduction through Reorganization (RTR) plans
Phase 2	August to October 2016 (90-180 days)
	<ul style="list-style-type: none">▪ Transfer second round of vacant positions from the Central Business Units to the Divisions on a rolling basis▪ Divisions advertise and fill vacant positions on a rolling basis▪ Issue subsequent rounds of RTRs on a rolling basis▪ Negotiate and award GECs▪ Complete RTRs
Phase 3	November to January 2017 (>180 days)
	<ul style="list-style-type: none">▪ Evaluate status of vacant positions as a result of completed RTR process▪ Develop RIF plans and initiate implementation



Questions?

