



NORTH CAROLINA

Department of Transportation



Requesting Mapping and Surveys

Keith Johnston, PE, PLS
State Photogrammetric Engineer

NCDOT Pre-Construction Workshop
May 8-9, 2018

Background & Continuing Issues

- Project mapping and surveys require programmed funding, correct limits, and sufficient lead time to meet delivery schedules
- Seek to take advantage of leaf-off flight season
 - (mid-December to mid-April)
- Insufficient coordination, incorrect project limits, and inadequate lead time resulting in late mapping and survey delivery
- Limited number of qualified PEFs with capacity to perform mapping and surveys work

Ongoing Solution

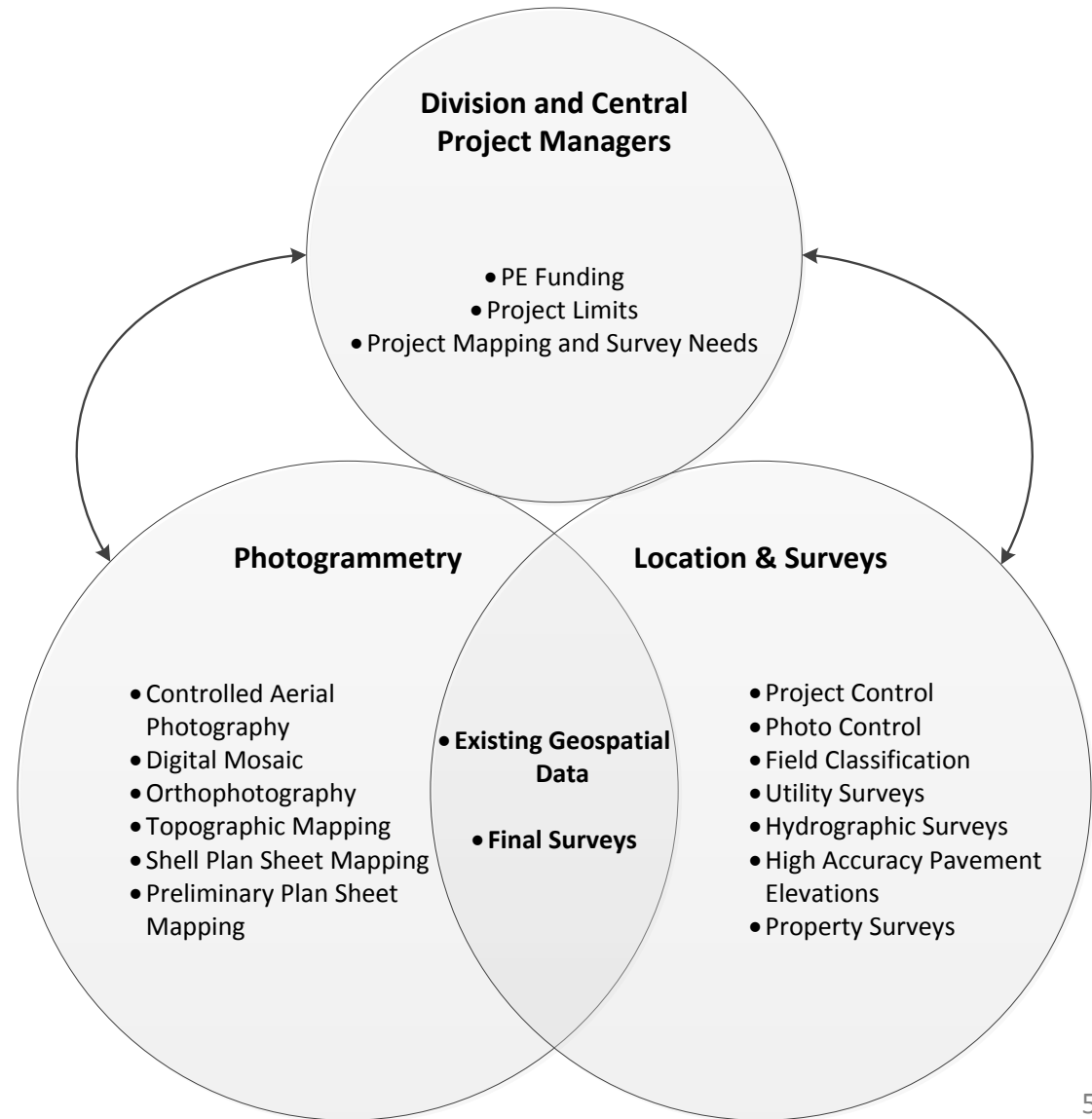
- Workgroup established late summer 2017 to address situation
- Developing a holistic, programmatic approach to scoping and scheduling mapping and surveys
- Provided training for NCDOT Project Managers fall 2017
- Implemented process in fall 2017 with improved results
- Still opportunities for improvement
- Working on increased outreach and education as we get closer to starting this year's Requesting Mapping & Surveys cycle

Opportunities for Improvement

- Start earlier in year and soliciting interest in pre-cycle training
- Emphasize looking further out in STIP
- Encourage greater utilization of existing statewide orthoimagery and LiDAR elevation data
- Repeat training webinars and encourage PEF attendance
- Working with Feasibility Studies Unit to generate initial mapping/surveys limits at completion of Express Design

Collaborative Effort

- The majority of mapping and surveys products used for planning and design are produced with work performed concurrently by Photogrammetry and Location & Surveys



Requesting Mapping & Surveys Timeline

July: Face-to-face mapping meetings with Division and Central staff (as needed) to prepare for the upcoming cycle

August: Mapping Request / Documentation sent to all Project Delivery Teams and Regional Mapping Meetings are scheduled for October

September: Completed Mapping Request spreadsheet and DGN limits are submitted to Photogrammetry / Location & Surveys

October: Regional Mapping Meetings conducted with all Project Managers, Photogrammetry, and Location & Surveys. Mapping products and limits with tentative delivery schedules are defined.

November: Photogrammetry / Location & Surveys submit revised delivery schedules to appropriate Division and Central staff. Final product delivery dates are established.

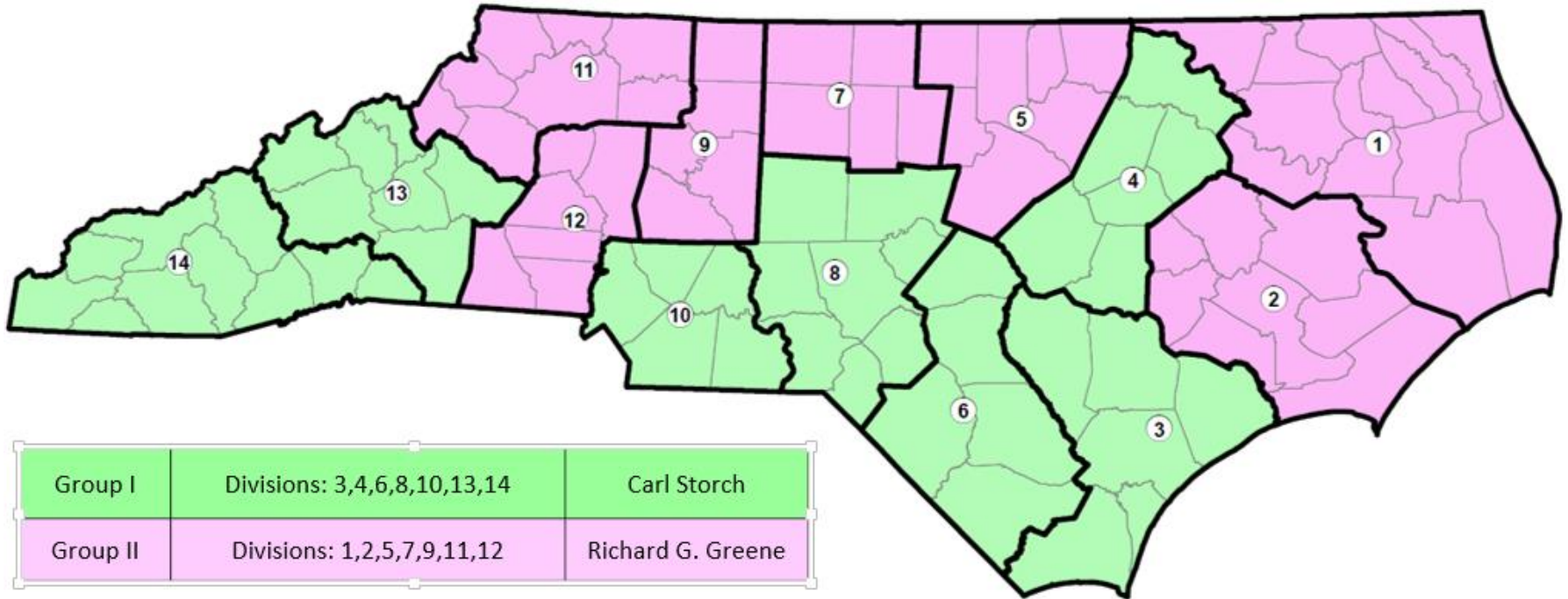
Mapping Request Documentation

A	E	F	G	H	I	J	K	L
TIP	Mapping Product	Mapping Scale	Date Needed By	PROJ. DEF. (WBS)	ROW Date	Let Date	Description	Special Notes / Link to Project Limits (If Mapping or Survey Limits Are Not Firm, You Will Need to Follow Up with the Regional L&S Engineer. Please Also Include Any Production ROW and / or Production Let Dates.)
	Shell Plan Sheets (SPS) <input type="text"/>							

- Submit mapping/surveys Limits as a closed polygon in MicroStation dgn format at time of request
- Work with Regional or Division Location & Surveys Team Leads to prepare mapping/surveys limits

Photogrammetry Staff

May 2018



Note: Carl Storch is retiring May 31, 2018. Please contact Rob Allen, Assistant Unit Head, after May 31st for Division 3, 4, 6, 8, 10, 13, & 14 mapping needs until Carl's position is filled.

Location & Surveys Staff

May 2018



Regional Team Lead

- Regional Engineer - Derek Bradner, PE, PLS, CPM

Division Group Leads

- Division 4 - Vacant
- Division 5 - Jason Hedley, PLS
- Division 7 - David Langston, PE
- Division 8 - Greg Myrick, PE
- Division 10 - Mojdeh Masihpour

Regional Team Lead

- Regional Engineer - Pat Tuttle, PE, PLS, CPM

Division Group Leads

- Division 9 - Mike Motsinger, PLS
- Division 11 - Larry Absher
- Division 12 - James Jeffreys, PE, PLS
- Division 13 - Richard Hensley, PE
- Division 14 - Barry Hamrick

Regional Team Lead

- Regional Engineer - Keith Honeycutt, PE, PLS, CPM

Division Group Leads

- Division 1 - Vacant
- Division 2 - Robert Reigner, PLS
- Division 3 - Rick Neal
- Division 6 - John Kaukola, PLS
- Sonar Surveys Group - Mark Ward, PLS

More details are available at the
Photogrammetry Unit and
Location & Surveys Unit
Booths