



STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
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 DOVER, DELAWARE 19903

JENNIFER COHAN
 SECRETARY

July 27, 2020

Mr. Doug Atkin
 Delaware Division Administrator
 Federal Highway Administration
 1201 College Park Drive, Suite 102
 Dover, DE 19904

Dear Mr. Atkin,

DelDOT is pleased to submit our fifth annual report related to our SEP-14 approval of our non-traditional contracting technique, which was approved by FHWA on April 1, 2015. Per your letter to Jennifer Cohan on December 23, 2019, we have approval to continue use of this technique through the end of 2024.

As previously discussed, and approved, our primary measure of effectiveness is the amount of time between the completion of design and the start of construction. Our reporting period includes projects that had a design completion date between April 1, 2019 and April 1, 2020.

For all projects during the reporting period that were under the DelDOT Traffic Section's direct control, a summary of several critical dates is included in the attached table. The "hand off" date represents the official completion of design and the official transfer of a project from our Design to our Construction Section. The other dates noted in the attachment are self-explanatory.

The average time between the completion of design and beginning of construction was 37 calendar days for this year's reporting period. Over the course of our work under the SEP-14 approval, this measure has varied somewhat from year to year as shown in the table below:

| <i>Year of Report</i> | <i>Design Completion Date Range</i> | <i>Average Number of Calendar Days from Design Completion to Start of Construction</i> |
|-----------------------|-------------------------------------|--|
| 2016 | 4/1/15 - 4/1/16 | 32 |
| 2017 | 4/1/16-4/1/17 | 34 |
| 2018 | 4/1/17 -4/1/18 | 63 |
| 2019 | 4/1/18-4/1/19 | 44 |
| 2020 | 4/1/19 - 4/1/20 | 37 |



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Our 2018 SEP-14 annual report discussed some of the reasons why the average time from design completion to construction start increased for that reporting period. We are pleased to see that the value in this year's report decreased again, nearly to the levels of the first two years' reports.

Regardless, the average value even in the "worst" reporting year of 63 calendar days is still significantly faster than the fastest that a regular design-bid-build project can advance from the completion of the Plans, Specifications, and Estimate (PS&E) to construction start, under non-emergency DelDOT, Delaware, and Federal rules, which is approximately 4 months. Most projects take 6 or more months between PS&E and construction start. For the 2020 reporting period, our project with the longest duration between design completion and construction start (119 calendar days) was less than 4 months.

Per the updated reporting requirements specified in your December 23, 2019 letter, please see below:

1. In-Depth review of the "10 worst" times between design completion and construction start. This will help better understand why some projects are taking longer and may lead to process improvements.

DE 273 & DE 141 - Basin Road/Washington St. (119 days): The bulk of the delay in this project was 74 days from "Handoff" (or design completion) to "Notice to Proceed" (i.e., the day the contractor is given permission to start work). This delay was due to an error by DelDOT Signal Construction staff. The handoff package was not awarded to a contractor in a timely manner, most likely due to an oversight. When staff noticed the project had not yet begun work, they went back and realized the error and then moved it through the process as fast as they could.

US 40 at Buckley Blvd. (104 days): Notice to Proceed was given to the contractor in a timely manner, but the contractor delayed the start of construction by 87 days. This was due to the contractor having a large workload and not enough staff to keep up with the assigned work. DelDOT followed up with the contractor by issuing them a letter threatening to pursue liquidated damages unless construction was started as soon as possible. The contractor then began work to avoid penalties.

Boxwood Road & Jackson Ave. (95 days): This contract took 87 days from handoff before the contractor was issued a Notice to Proceed. The project included specialty items that were not normally included in DelDOT contracts that required special price quotes from each contractor before it could be awarded. The procedure of requesting and receiving these price quotes was the cause of the delay for this project.

DE 896 & Old Chestnut Hill Road (94 days): This was originally awarded to a contractor who eventually backed out due to workload and turned down the project. The project was then awarded to the 2nd-lowest bidder and that contractor eventually proceeded to complete the project. The delay was due to the change in contractors.

DE 48 & North Washington St. (84 days): The significant delay in this project was 56 days from Notice to Proceed to the start of construction. This project was awarded to a contractor who was new to the Signal Construction process, having just been awarded one of the open-end contracts in the past year. This was one of the first tasks they were assigned under this contract, so they had more questions and unfamiliarity with the process than the other contractors who

have been working for us for years.

US 13 & Hyetts Corner Road (84 days): It took 77 days for this project to be given Notice to Proceed after being handed off to Signal Construction. This was due to DelDOT staff overlooking the project in the queue, so the delay was due to our own error.

US 13 (Philadelphia Pike) @ I-495 NB Ramps Flashing Red Arrow Conversion (72 days): This project took 65 days from Notice to Proceed to the start of construction. The delay was due to the contractor having a heavy workload and not being able to get started sooner due to the backlog of projects. DelDOT made contact and pushed for work to start on this project after some time.

US 13 & Del. State University Entrance (66 days): Similar to the US 13/I-495 NB Ramp project, this project also was delayed in starting construction after Notice to Proceed (48 days). The contractor had a heavy workload and was slow to start work on this task. Once again, DelDOT reached out to push the contractor to start work.

DE 71 & DE 299 Pedestrian Improvements (63 days): This project took 41 days to start construction after the contractor received Notice to Proceed. This was a different contractor than the one working the above two tasks, but it was the same issue as the contractor was slow starting due to a heavy workload. DelDOT did communicate with the contractor and push for a start when it became apparent that the project was suffering a delay.

DE 141 & Washington Ave. (55 days): Similar to other projects and the most common type of delay observed was between the NTP and start of construction (44 days). The contractor had a heavy workload and was slow to start work on this task. Once again, DelDOT reached out to push the contractor to start work.

2. *Report on the number of projects that were not awarded to the low-cost contractor and the reasons why.*

Only one project was declined by the low-cost contractor and assigned to the second lowest-cost contractor.

3. *Lessons Learned:*

- A. We are reviewing and plan to improve internal processes in the Signal/ITS Construction group to ensure there is not a significant delay between receipt of the hand-off package and the issuance of Notice to Proceed to a contractor.
- B. We have reminded Traffic Systems Design staff that prices for specialty items normally need to be negotiated with the contractors prior to the issuance of the hand-off package.

Our results after five years of implementation clearly show the benefits of this innovative project delivery method. We strongly believe this method epitomizes FHWA's Everyday Counts initiative. Furthermore, this method is fully institutionalized into DelDOT's project delivery process. Prior to our SEP-14 approval, DelDOT used this same method for projects using state funds for many years. Although we do not have specific data for those years, the turnaround times were similar. Per the conditions of our SEP-14 approval through 2024, we intend to continue submitting annual reports, which are fully expected to continue to prove the success of this program.

Sincerely,

/S/

Mark Luszczyk, P.E., PTOE
Deputy Director, Design
Division of Transportation Solutions

Enclosures

cc:

Caroline Trueman, Federal Highway Administration
Patrick Kennedy, Federal Highway Administration
Shante Hastings, Chief Engineer
Jim Pappas, Deputy Director, Operations & Administrative Support
Peter Haag, Chief of Traffic Engineering
Don Weber, Chief of Traffic Operations
James Hoagland, Contract Services Administrator
Mark Harbeson, Traffic Field Operations Manager
Max Saintil, Traffic Systems Design Manager

| Proceed No | Project No | Project Description | Hand Off Date | Notice To Proceed | Start Of Construction | Completed Construction | Calendar Days - Hand Off to Construction Start |
|------------|----------------|--|---------------|-------------------|-----------------------|------------------------|--|
| 1400 | T201904001.11 | US.13 & Scarborough Rd. Lighting | 4/5/2019 | 4/12/2019 | 4/29/2019 | 7/24/2019 | 24 |
| 1401 | T201704105 | Advanced Traffic Mitigation for I-95 & Brandywine River Bridge | 4/12/2019 | 4/18/2019 | 4/29/2019 | | 17 |
| 1403 | T201904102 | US.13 & Wildel/Fernwood Aves. -5th Leg Removal | 5/1/2019 | 5/10/2019 | 5/27/2019 | 9/9/2019 | 26 |
| 1405 | T201904001.13 | US.13 & Public Safety Blvd. | 5/7/2019 | 5/20/2019 | 5/27/2019 | 9/23/2019 | 20 |
| 1410 | T202004001 | Alapocas Dr. Bicycle Crossing improvements | 6/3/2019 | 7/12/2019 | 7/12/2019 | 10/2/2019 | 39 |
| 1408 | T201904103 | Thompson Station Rd @ Hopkins Rd/Pleasant Hill Rd | 6/5/2019 | 6/10/2019 | 6/24/2019 | 9/16/2019 | 19 |
| 1412 | T202004001.1 | US.13 & DSU Entrance | 6/24/2019 | 7/12/2019 | 8/29/2019 | 8/29/2019 | 66 |
| 1413 | T201800402.6 | Brackenville Rd. & Mill Creek Rd. | 7/15/2019 | 7/29/2019 | 7/31/2019 | 1/13/2020 | 16 |
| 1415 | T202004001.2 | De. SB & Del Tech APS | 7/29/2019 | 8/7/2019 | 8/26/2019 | 8/26/2019 | 28 |
| 1416 | T202004 001.3 | US 113 & SR 24 Lighting | 8/5/2019 | 8/19/2019 | 8/26/2019 | 3/13/2020 | 21 |
| 1417 | T202004001 .4 | Kent County Ped Signals | 8/6/2019 | 8/19/2019 | 8/28/2019 | 9/ 20/2019 | 22 |
| 1421 | T201909203 | US.13 & Old State Rd. | 8/26/2019 | 9/10/2019 | 9/16/2019 | 3/20/2020 | 21 |
| 1424 | T202004001.6 | De. 8 96 & Old Chestnut Hill Rd. | 9/9/2019 | 10/21/2019 | 12/12/2019 | 12/19/2019 | 94 |
| 1423 | T202004001.5 | De.48 & Old Wilmington Rd. | 9/9/2019 | 9/18/2019 | 9/28/2019 | 1/7/2020 | 19 |
| 1431 | T201900401.2 | De. 48 & N. Washington St. | 9/10/2019 | 10/8/2019 | 12/3/2019 | 12/11/2019 | 84 |
| 1425 | T202004001.7 | Silver Lake Lighting Rehab | 9/12/2019 | 9/20/ 2019 | 9/30/2019 | 4/1/2020 | 18 |
| 1432 | T202004001.8 | De.71 & De.299 Ped Improvements | 9/19/2019 | 10/11/2019 | 11/21/2019 | 11/27/2019 | 63 |
| 1430 | T202004001.9 | De.42 & Brenford Rd./ Seeneytown Rd. | 9/24/2019 | 10/8/2019 | 10/14/2019 | 3/30/2020 | 20 |
| 1446 | T202004001.15 | US.13 & Hvetts Corner Rd. | 9/ 27/2019 | 12/13/2019 | 12/20/2019 | 1/21/2020 | 84 |
| 1447 | T202004001.16 | DE.273 & DE.141 -Basin Rd./Washington St. | 10/3/2019 | 12/16/2019 | 1/30/2020 | 3/3/2020 | 119 |
| 1435 | T201909906 | Mill Creek Emergency Fi re Signal @ DE.2 | 10/7/2019 | 10/31/2019 | 11/6 / 2019 | 2/13/2020 | 30 |
| 1434 | T201B00402.7 | US.13 & De.24 | 10/7/2019 | 10/21/2019 | 10/21/2019 | | 14 |
| 1436 | T201909809 | Kings Hwy. & Gills Neck Rd./Cape Henlopen H.S. | 10/11/2019 | 10/24/2019 | 11/7/2019 | 11/14/2019 | 27 |
| 1437 | T202004001 .10 | Salem Church Rd. & Chapman Rd. Lighting | 10/15/2019 | 10/28/2019 | 11/15/2019 | | 31 |
| 1441 | T202004101 | Newport Rd. & Kiamensi Rd. Signal Removal | 10/16/2019 | 10/18/2019 | 12/4/2019 | 12/5/2019 | 49 |
| 1438 | T202009802 | De.141 & Washington Ave. | 10/17/ 2019 | 10/28/2019 | 12/11/2019 | 12/19/2019 | 55 |
| 1439 | T202004001.11 | US.40 & Buckley Blvd. | 10/18/2019 | 11/4/ 2019 | 1/30/2020 | 3/19/2020 | 104 |
| 1443 | T202004001.13 | Pike Creek Area RRFB's and APS | 10/24/2019 | 11/21/2019 | 11/28/2019 | 5/18/2020 | 35 |
| 1459 | T201900401.5 | Boxwood Rd & Jackson Ave. | 11/18/2019 | 2/13/2020 | 2/21/2020 | 6/4/2020 | 95 |
| 1445 | T202004001.14 | De. 9 & Memorial Dr./West Ave. | 11/19/2019 | 12/9/2019 | 12/26/2019 | 3/27/2020 | 37 |
| 1444 | T201900401.3 | Boxwood Rd. & Birmingham Ave. | 11/20/2019 | 12/9/2019 | 12/16/2019 | 4/8/2020 | 26 |
| 1448 | T202004001.17 | New Castle Co. Maintenance Pedestrian Repairs | 12/3/2019 | 12/20/2019 | 1/24/2D20 | 1/24/2020 | 52 |
| 1451 | T201909202 | De. 4 & Robscott/Kingston/Old Newark Rds. | 12/11/2019 | 1/8/2020 | 1/15/2020 | | 35 |
| 1449 | T201900401.4 | De .30 & Sand Hill Rd. AWSC Conversion | 12/19/2019 | 1/8/2020 | 1/24/2020 | 3/18/2020 | 36 |
| 1450 | T201800402.8 | De.1 & Minos Conaway Rd. | 12/19/2019 | 1/8/2020 | 1/15/2020 | 4/1/2020 | 27 |
| 1452 | T201869003 | Blackbird Weigh Station OMS | 12/23/2019 | 1/9/2020 | 1/31/ 2020 | | 39 |
| 1454 | T201909202.1 | DE.7 & Tarry Lane | 1/14/2020 | 1/24/2020 | 1/31/2020 | 2/27/2020 | 17 |
| 1456 | T202004001.12 | DE.1, Town of Bethany Lighting | 1/24/2020 | 2/3/2020 | 2/10/2020 | 6/30/2020 | 17 |
| 1463 | T201880206 | Prices Corner Lighting | 2/12/2020 | 3/4/2020 | 3/11/2020 | | 28 |
| 1462 | T201701004.8 | Bethany Beach RRFB's | 2/12/2020 | 2/24/2020 | 2/24/2020 | 6/24/2020 | 12 |
| 1464 | T201904105 | US 13 & SR273 Bus Bike Right Turn | 2/14/2020 | 3/ 4/2020 | 3/30/2020 | 6/1/2020 | 45 |
| 1467 | T201904001.14 | US 113 & SR20 Phase Change | 2/25/2020 | 3/10/ 2020 | 4/13/2020 | | 48 |
| 1465 | T201504003 | Bear Yard Test Site | 2/26/2020 | 3/4/2020 | 3/11/2020 | 4/16/2020 | 14 |
| 1471 | T202004001.19 | US13 & Hickory Rid11e/ Spring Meadow | 3/4/2020 | 3/20/2020 | 3/27/2020 | 6/17/2020 | 23 |
| 1470 | T201909202 | US13 and Pine Tree Rd./ Blackbird Landing Split Phase | 3/5/2020 | 3/20/2020 | 3/27/2020 | | 22 |
| 1475 | T202004001.20 | US13 & Stahl FRA | 3/5/2020 | 3/23/2020 | 3/30/2020 | 5/5/ 2020 | 25 |
| 1478 | T202004001.21 | SR2 @ Pike Creek Rd FRA Conversion | 3/18/2020 | 3/26/2020 | 4/2/2020 | 6/30/2020 | 15 |
| 1474 | T202004001.18 | Boxwood Road & Newport Gap Pike Signal Rebuild | 3/18/2020 | 3/23/2020 | 4/1/2020 | 5/26/2020 | 14 |
| 1483 | T202004001.22 | US13 (Philadelphia Pike) @ I-495 NB Ramps FRA Conversion | 3/24/2020 | 3/31/ 2020 | 6/4/2020 | 6/23/2020 | 72 |
| 1476 | T202009806 | US13 & DE72 | 3/24/2020 | 3/25/2020 | 4/1/2020 | | 8 |

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|----------|-----|
| Average: | 37 |
| Max: | 119 |
| Min: | 8 |