Gwinnett County Public Schools

Asphalt Paving Maintenance

Wayne Jones, Grounds Maintenance Director
GCPS currently owns approximately 2.2 million sy of asphalt paving in bus drives, parent drives, parking lots, and service drives at 139 schools and a variety of other support locations. This is the front of the main office that will be reclaimed this summer. Estimated 28,650 square yards.
To date, GCPS has used the FDR process for paving reconstruction at 58 School and Support Facility Locations from 2007 through 2017. The performance has been outstanding at all 58 locations with absolutely no annual maintenance or repairs required. Current evaluations at these locations continue to reflect very good performance and none of these locations are included in our current 5 year projections for annual paving reconstruction. This is the bus drive at Knight ES repaved using cement reclamation in 2007, no maintenance required since – 8,100 square yards.
The repair/repaving process that GCPS used prior to 2008 was to remove and patch failed areas without properly addressing the cause in most cases. History proved that most of the patched areas usually failed again within a couple of years and in most cases expanded into the surrounding areas. After the existing asphalt had been removed, the 5 reconstruction projects for 2009 were evaluated. It was determined that the existing base and subgrade was not suitable for repaving without additional stabilization. The decision was made at that point to stabilize the base with portland cement. This is the bus drive at R.D. Head ES, repaved in 2009 – 6,200 square yards.
Prior to bidding our paving reconstruction projects for the Summer of 2010, we began a more aggressive evaluation process. Upon further review and cost analysis, we estimated that FDR would be more cost effective for GCPS. If our assumption and research proved to be accurate, GCPS would in time begin to see a decrease in our annual asphalt paving reconstruction needs along with a reduction in funding needs with the longevity expected with our asphalt paving from the Full Depth Reclamation process. Bus drive at Five Forks MS paved in 2010 – 2,100 square yards.
GCPS has performed 444,335 Sq. Yards of Full Depth Reclamation, at 58 locations, with FDR Paving Contractors over the last 10 years at an average cost of $17.00 per Sq. Yard. GCPS has also performed 72,760 Sq. Yards of Perma-Flex Overlays, at 15 locations, at an average cost of $9.72 per Sq. Yard. Centerville Bus Shop repaved with FDR in 2012 – 9,000 square yards.
During January through March of each year, all GCPS School locations and Support Facilities are evaluated and assessed a grade from A to F for the existing asphalt paving. A=Excellent  B=Good  C=Fair  D=Poor/Alligatored and Failed Areas  F= Unsatisfactory. Brookwood HS stadium drive repaved with FDR in 2011 – 6,800 square yards.
Our evaluations are used to produce this years bid list and project future annual paving reconstruction needs. Each year we revisit locations annually to monitor deterioration, and maintaining a five year projection for expected budgeting. Mill Creek HS bus drives repaved with FDR in 2013 – 15,400 square yards.
The Perma-Flex overlays have performed well in some instances where used as intended, but as mentioned previously, GCPS has determined that most of our paving reconstruction requirements at present are related to base and subgrade failures. Therefore, the use of Full Depth Reclamation will continue to be our primary process for paving reconstruction in the foreseeable future. Meadowcreek HS bus drives, repaved with FDR in 2016 – 21,000 square yards.
The specification that we eventually settled on is 8” thick stabilized with 50 lbs. of portland cement per square yard, with 2” of Type “F” asphalt paving.

Norcross Bus Shop, repaved with FDR in 2015 – 10,800 square yards.
This is a typical bid sheet included in our bid package – Craig ES. An 8.5 x 11 copy of a site layout with the area to be paved high-lighted. We also paint the boundaries of the bid area at the site.
This Summer we plan to re-pave 9 locations – 8 will be Full Depth Reclamation and 1 will be perma-flex overlay. The FDR bid came in at 17.47 per square yard for 102,178 square yards. This is a picture of the entrance/bus drive at Craig ES to be reclaimed this summer – 8,097 sq. yds. Note the failures in the old patch.