An Analysis of JROTC: A Jackson Public Schools Success Story

The Junior Reserve Officer's Training Corps (JROTC) in the Jackson Public School (JPS) district is a program that annually serves thousands of at-risk students throughout the district's seven four-year high schools. With an average of 1,800 students enrolled per year, it is the largest JROTC program in Mississippi. Analysts at the Mississippi Office of the State Auditor conducted a study of the program's effectiveness and found the JPS program outperforms many outstanding JROTC programs at the state and national level. To reach conclusions, analysts conducted interviews, reviewed accreditation documents for the program, and reviewed program outcome data.

Background on JROTC

JROTC is a program where retired military service members teach military history and other courses to high school students. In addition to regular classes, a JROTC cadet is involved in drill exercises and a ceremony once a week, physical training once a week, and an additional JROTC class that meets twice a week. Students wear military uniforms when participating and are subject to a uniform inspection once per week. Aside from the JROTC class, there are also optional teams available, which include drill team, raider team, rifle team, color guard, honor guard, academic teams, etc. Community service is also mandatory for successful program participation.

According to two different Rand Corporation reports on JROTC (2000² and 2017³), along with other state data analysis, students enrolled in JROTC programs outperform state and national averages for college and career readiness, grades, graduation rates, and attendance. Nationally, more than 550,000 students in 9th through 12th grade participate in JROTC programs in more than 3,400 high schools across the nation. Often described as a program that helps students who are at risk of failing or dropping out of school by providing structure, expectations, discipline, consequences, and rewards, JROTC emphasizes hard work, character, leadership, self-discipline, and other similar values. Cadets receive credit for coursework in classes like health and physical education. The JROTC does not require military service commitments, it is not used to recruit for Armed Forces service, and they do not conduct combat skills training.

Mississippi hosts 84 JROTC programs affiliated with four branches: 51 Army, 15 Air Force, 12 Navy, and 6 Marine units throughout the state.

JROTC has been active in Jackson-area public schools since 1936. Its growth was most prominent between 1971 and 1980 when each of the JPS high schools opened their own units. Since 2016, Powell Middle School has started a Junior Cadet Corps Unit, which is similar to JROTC but serves younger students and receives less federal funding.

Monica, Calif.: RAND Corporation, MR-1200-OSD, 2000. As of August 20, 2020: https://www.rand.org/pubs/monograph_reports/MR1200.html

¹ The Jackson Public School District has seven four-year high schools: Lanier, Forest Hill, Callaway, Murrah, Provine, Wingfield, and Jim Hill ² Elliott, Marc N., Lawrence M. Hanser, and Curtis L. Gilroy, Evidence of Positive Student Outcomes in JROTC Career Academies, Santa

³ Goldman, Charles A., Jonathan Schweig, Maya Buenaventura, and Cameron Wright, Geographic and Demographic Representativeness of the Junior Reserve Officers' Training Corps, Santa Monica, Calif.: RAND Corporation, RR-1712-OSD, 2017. As of August 18, 2020: https://www.rand.org/pubs/research_reports/RR1712.html

JPS JROTC Statistics

Over the last decade, quality indicators for the JPS program have continued to improve and remained high even during several years of federal budget cuts. During this ten-year period, an average of 223 JPS JROTC cadets graduated each year with 95% accepted to college. Graduating classes saw an average of \$4,993,806 in scholarships annually—\$22,394 per cadet. In the 2018-2019 school year, 288 cadets graduated with a 96.8% college acceptance rate and \$10.1 million in scholarships. JROTC cadets who complete the program rarely end up dropping out of school (near 100% graduation rate) compared to the state drop-out average of 9.7% and the JPS district average of 18.7%. In the last decade, Jackson's JROTC

- had an almost 100% graduation rate, compared to the state average graduation rate of 85% and the JPS district graduation rate of 75.1% (both of which include the JROTC numbers in calculations);
- total program enrollment averaged 1,999 annually, or 26.4% of the total JPS high school population;
- average attendance held steady at 95% (5% absenteeism), compared to a chronic JPS high school absenteeism rate of 43.93%. Lanier High (61.73%), Wingfield High (57.42%), and Forest Hill High (50.09%) were all in the top five worst absenteeism rates in the state, making this a significant outcome;
- average GPA for cadets was 2.8;
- average ACT score for cadets was 18.2, compared to the JPS average of 15.4 and the state average of 17.86;
- and community service hours average 38,783 annually.

These numbers are verified through the independent JROTC Program for Accreditation process.

JROTC Program for Accreditation (JPA)

Since 2005, the Army JROTC has been rated by an independent national accrediting agency. The JPA is conducted by the Department of Army, U.S. Army Cadet Command in Fort Knox, Kentucky.

Every three years, the JPA review evaluates programs on personnel and administration, education and training, operations, school logistics, and supply. In its 2020 JPA evaluation results, all seven Jackson high schools scored in the top tier. All JPS JROTC cadets are allowed to wear a gold star on their uniforms signifying their program's excellence.

Evaluation scores result in the following level assignments:

- Gold Level Support: 100-95 points (Lanier-97; Forest Hill-98; Callaway, Murrah, Provine, and Wingfield each scored 99; and Jim Hill scored 100 points after the accreditation review)
- Silver Level Support: 94-85 points
- Bronze Level School Support: 84-80 points
- Unsatisfactory: 79.9 points and below

Funding

JROTC is a match-funded program. Of the \$5.25 million annual total JPS JROTC program cost, JPS has to match about \$2.6 million (or one percent of the district's total budget) per year, and the U.S. Army provides about \$2.65 million, with some additional financial assistance provided by donors.⁴

Current expenses include 26 classroom instructors (must be service members with at least 20 years of experience), four staff personnel, uniforms, supplies, activities, field trips, operations, and maintenance. Depending on the number of cadets, the cost is between \$2,500 and \$3,000 per student, with JPS paying half of that amount. To include all JPS high school students in the program, JPS would need to invest less than \$10 million dollars per year. At the same rate, a JROTC curriculum addition provided to all public high school students in Mississippi would cost about \$185 million per year.

The Catalyst: Army Colonel Paul L. Willis (ret.)

Retired Army Colonel Paul Willis was selected to run the JPS JROTC program 16 years ago. Many people interviewed about the program pointed to the leadership and vision of Col. Willis as the catalyst for the program's excellence. From May 13, 1979, after graduating from Alcorn State University, until July 1, 2004, Col. Willis's career in the Army took him around the world with increasing responsibilities, including service in Operation Desert Shield. Willis worked in military transportation logistics and organization, ensuring that troops and his staff had the resources where and when they were needed. Willis noted that he saw the value that mentoring for young and inexperienced soldiers during his service and how that mentoring improved operations.

As to the program's success, Willis noted that he has worked to find the best former service members available to teach in the program. Col. Willis and his staff have also partnered with universities and other organizations to provide training and education programs to show cadets what opportunities await after high school.

Other JROTC programs from California, Florida, Georgia, and Texas have sent teams to learn from the JPS JROTC. Tennessee, Alabama, and Louisiana have JROTC programs that have joined some of the JPS JROTC activities, such as the Mississippi State University weeklong STEM (Science, Technology, Engineering, and Math) camp.

Col. Willis has also developed a "Partners in Learning" program that includes the Army National Guard; Stand and Serve; 100 Black Men; Mississippi State University; Jackson Municipal Airport Authority; University of Southern Mississippi Polymer Science; Jackson State University Nanotoxicity Center; William Carey University—Institute of Health Careers; Education Services Foundation/Get2College Center; Jackson Police Department—Police Explorers; and U.S. Judge Henry Wingate. All of these organizations have committed financial resources, time, or space to provide additional enrichment opportunities to JPS cadets.

⁴ Examples of significant contributions from donors (one-year): JSU Interdisciplinary Nanotoxicity Center Summer Institute— \$102,600; 100 Black Men of Jackson, Inc. (via a Hilton Corp. grant)—\$100,000; National Flight Academy, Pensacola Air Station, FL— \$10,000; American Legion Post 1776 (Boys/Girls State Sponsorship)—\$10,000; Military Order of World Wars (Youth Leadership Conference sponsors)—\$3,000; JSU Engineering Building, Jackson Police Department facilities and personnel, Offices of Judge Henry Wingate, USM STEM facilities—all at no charge.

Experiential Learning and Exposure to Post-Secondary Education Opportunities

Col. Willis and his team insist their success is due to a focus on experiential learning and broad exposure to college majors and careers. Within that framework, civics, health, language arts, financial management, government, history, and sciences are core areas that cadets study. Through the combination of academic programs, field trips, community service, and competitions in drill, academics, and athletics, the program emphasizes leadership development and citizenship. Cadets focused on STEM learn through camps, field trips, and outside training opportunities in areas of study like biomedicine and aviation.

Because the JROTC curriculum stresses citizenship, JPS JROTC cadets also volunteer with at Stop Hunger NOW; Habitat for Humanity; nursing homes and veterans' hospitals; and local clean-up projects. Cadets have taken field trips to the Memphis and the Jackson Civil Rights Museums; the Battleship Memorial in Mobile; the World War II Museum in New Orleans; the National Military Park in Vicksburg; and the Camp Shelby Military Museum. Other enrichment experiences include:

- The National Flight Academy at the Pensacola Naval Air Station hosts 75 students each summer who spend
 a week learning about aviation careers. This residential experience is sponsored by 100 Black Men of
 Jackson, with transportation costs paid by the U.S. Army.
- Jackson State University's Center for Computational Chemistry sponsors the JPS JROTC-JSU STEM Leadership Academy, where students learn about chemistry careers.
- William Carey University's Institute of Health Careers is a week-long STEM camp that introduces cadets to
 healthcare and related careers. Demonstrations during the week-long residential camp may include cadaver
 dissection, microscopy, medical imaging, physical therapy, and emergency first-aid.
- Mississippi State University hosts a JPS JROTC STEM camp focused on Engineering and Geosciences each year. Begun as a one-week residential program for JPS cadets, it has expanded to six one-week sessions in which other JROTC groups from Mississippi and surrounding states participate.
- The University of Southern Mississippi hosts a two-day computer/cybersecurity invitational with the JPS and Mobile County, Alabama, JROTC programs. In addition to the STEM activities that focus on cybersecurity, cadets attend a football game and reside overnight in the Camp Shelby military barracks.
- The West Point Leadership, Ethics, and Diversity Workshop at JSU is a one-day workshop for over 200 JPS JROTC cadets annually, along with 50 JPS educators.

Conclusion

JPS JROTC cadets outperform their peers and surpass national and state averages on key education performance measures like graduation rates, ACT scores, and school attendance. The JPS program is reviewed by a national accrediting body and earns the body's top ranking. While in the program, cadets learn self-discipline and leadership skills. Cadets are also exposed to potential careers and college majors for when they graduate high school. After the program, cadets routinely earn thousands in scholarships. The JPS JROTC program built by Col. Willis and his staff is a "best practice" that Mississippi could learn from.

Statewide implementation of high-quality JROTC programs could improve the opportunities for many students who are at risk for dropping out. The JPS JROTC program's return on investment seems to be significant. According to the data obtained for this report, for an additional local expenditure of less than \$1,500 per student per year, students are significantly more likely to graduate and be more prepared for college and careers. The JPS JROTC program could be replicated around the state for an estimated cost of \$185 million per year.

