County Engineers Association of Ohio

Ohio Senate Transportation Committee

Written Testimony Opposing Senate Bill 180

County Engineers Association of Ohio

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Thank you, Chairman Patton, Vice Chair Schaffer, Ranking Minority Member Antonio and members of the Committee, for the opportunity to present testimony regarding Senate Bill 180. As Preble County Engineer, I represent not only my county, but also the operational and budgetary realities faced by all Ohio's 88 counties in maintaining safe, efficient infrastructure for the public.

Drones: Essential Tools for County Engineers

County engineers across Ohio utilize drones, small unmanned aircraft systems, for a wide variety of vital functions that directly improve public safety, fiscal responsibility, and the efficiency of road and bridge management. We primarily use drones for bridge inspections, roadway and right-of-way mapping, topographic surveys, drainage and floodplain analysis, construction documentation, and emergency response coordination. Our use of drone-based surveying has reduced inspection costs by up to 70% and cut project timelines by weeks, reducing labor needs and improving safety by removing engineers from dangerous environments.

Precision engineering relies on sensor compatibility and long-term data archives; forced fleet changes negatively affect longitudinal project analysis and may degrade data quality.

Who County Engineers Buy Drones From

The vast majority of county engineers have depended on affordable, technologically advanced drones from manufacturers such as DJI, a company currently classified in SB 180 as a "foreign adversary", for infrastructure work. DJI systems account for over 90% of drones currently used in county engineer fleets statewide due to proven reliability, sensor quality, and budget-friendly pricing.

Alternative U.S. or NDAA-compliant manufacturers such as Skydio, Parrot (ANAFI USA), Wingtra, Freefly, and AgEagle offer quality options, but have been cost-prohibitive for many counties, with some models costing two to three times as much as equivalent DJI models.

Number of Counties Impacted

SB 180 will impact at least 60 of Ohio's 88 counties, likely more, because these counties already operate drone mapping, inspection, or surveying programs using technology subjected to the bill's prohibition. CEAO is predicting more counties will be affected in the next two years as the DriveOhio statewide drone first responder program expands further into rural areas.

Estimated Costs

Replacing non-compliant drones, primarily DJI, will impose a considerable cost burden on county governments:

- NDAA-compliant drones cost $7,000–$40,000 per unit, compared to $1,500–$20,000 for DJI models.
- For a typical county engineer with 2–3 drones, immediate replacement would require $15,000–$80,000 in new spending per county, plus training and transition costs, totaling over $1–2 million statewide.

Given constrained local budgets, this is an unfunded mandate for counties already managing aging infrastructure and statutory mandates. Rapid sunset of DJI systems, rather than a phased or grandfathered replacement period, will cause work stoppages, delay critical bridge and roadway inspections, and increase long-term costs to taxpayers. While the sunset date has been set as February of 2027, many counties already have or are preparing budgets for 2026. This would not allow adequate time to have new drones and sensors procured prior to this sunset date.

Statewide procurement limitations could undermine competitive bidding and further reduce options, ultimately resulting in higher taxpayer expense with minimal improvement in operational security; counties have no formal capacity to vet manufacturing supply chains without state or federal guidance.

Drone policies should balance prudent security controls with operational flexibility, cost-effectiveness, and agency-specific needs. SB 180, as written, does not include provisions for grant funding, phased compliance, or agency-level waivers, all of which are necessary to avoid operational disruption.

While I understand security concerns at a national and state level, such as those at military installations, county government does not operate them in this capacity. County Engineer's use of them in the aforementioned capacities is no more of a security threat than Google Earth. The intention of many County Engineers is, in fact, to have enhanced versions of this information, tailored to their specific needs. Additionally, SB 180 only applies to the County's direct ownership and use of DJI or other foreign drones but does not address contracting out the services to companies that utilize the very drones that we would be prohibited from operating.

On behalf of Ohio's county engineers, I strongly urge the committee to reconsider SB 180's current approach. The bill will disrupt vital mapping and inspection programs in a majority of counties, force costly equipment transitions, and potentially jeopardize public safety and fiscal stewardship. Alternative models, such as phased compliance, grandfathering existing fleets, or targeted state support should be thoughtfully considered.

Thank you for the opportunity to present today and I am happy to answer any questions.