

Department of Legislative Services  
Maryland General Assembly  
2018 Session

FISCAL AND POLICY NOTE  
First Reader

House Bill 204 (Delegate Korman)  
Environment and Transportation

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Traffic Control Signal Monitoring Systems – Duration of Yellow Signal  
(4-Second Act)

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This bill requires a traffic control signal at an intersection monitored by a traffic control signal monitoring system (*i.e.*, a red light camera system) to display a yellow light for *at least* four seconds before changing to a red signal.

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Fiscal Summary

**State Effect:** The bill does not materially affect State operations or finances. Although the State Highway Administration (SHA) must adjust the signal timing on roads where it has allowed local jurisdictions to operate red light camera systems, SHA advises it can do so with existing resources.

**Local Effect:** Local government revenues for jurisdictions operating red light camera systems decrease, potentially significantly, beginning in FY 2019. Expenditures also increase to the extent that reprogramming changes or contractual services are required to modify existing systems on roads that are the responsibility of local jurisdictions. **This bill may impose a mandate on a unit of local government.**

**Small Business Effect:** Minimal.

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Analysis

**Current Law/Background:** The agency primarily responsible for traffic control at an intersection monitored by a red light camera must ensure that the length of a yellow light is set in accordance with regulations adopted by SHA consistent with standards or guidelines established by the Federal Highway Administration.

According to SHA regulations, on any approach to a traffic signal where a red light camera is in use, the relevant agency must ensure that the yellow change interval on that approach is not shorter in duration than that determined by a specified formula. However, certain adjustments must be made. First, the calculated yellow change interval must be rounded up to the nearest half second. Second, if the calculated yellow change interval is *less* than 3.0 seconds, then the interval must be set at 3.0 seconds. Third, if the calculated interval is *greater* than 6.0 seconds, then the interval must be set at 6.0 seconds.

*Traffic Control Signal Monitoring Systems (Red Light Cameras)*

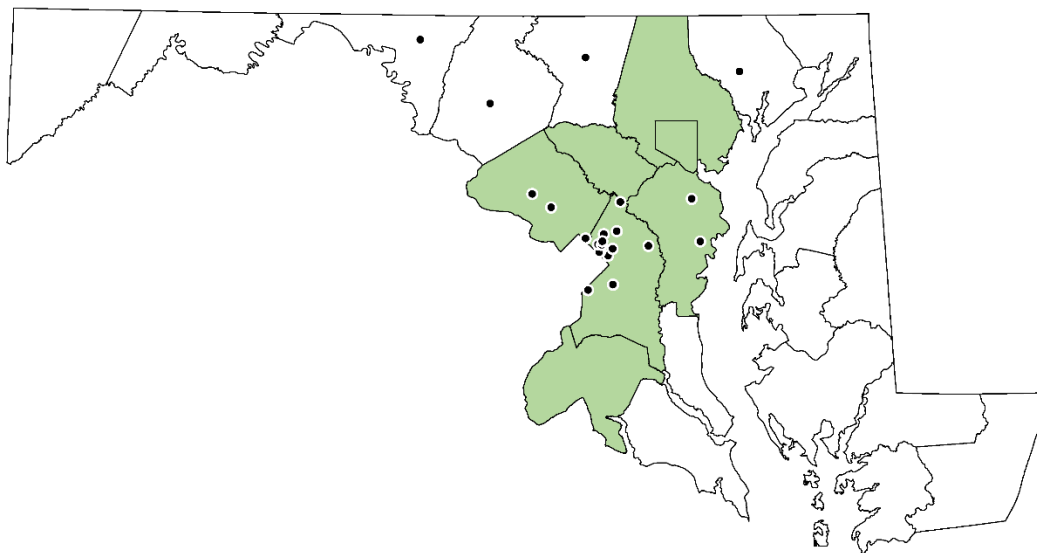
Unless the driver of a motor vehicle receives a citation from a police officer at the time of the violation, the owner or driver of a vehicle recorded by a red light monitoring system entering an intersection against a red signal in violation of the Maryland Vehicle Law is subject to a civil penalty of up to \$100. Red light camera enforcement applies to a violation of specified Maryland Vehicle Law requirements applicable to a vehicle approaching a steady circular red signal or arrow, including (1) stopping at a clearly marked stop line, or crosswalk if there is no stop line, or intersection if there is no crosswalk, and (2) remaining stopped until a signal allows the vehicle to proceed.

A driver is specifically authorized under the Maryland Vehicle Law to cautiously enter an intersection to make a right turn (or left turn from a one-way street to another one-way street) after stopping at a steady red light, unless a sign otherwise prohibits the turn.

According to the Insurance Institute for Highway Safety, 422 jurisdictions across the nation have red light camera programs as of January 2018. In Maryland, six counties, Baltimore City, and 22 other jurisdictions use red light cameras. **Exhibit 1** shows red light camera usage across the State as of January 2018.

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**Exhibit 1**  
**Local Red Light Camera Enforcement in Maryland**  
**January 2018**



Note: ● represents municipal corporations that operate red light camera systems; ■ represents counties that operate red light camera systems.

Source: Insurance Institute for Highway Safety; Department of Legislative Services

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**Local Fiscal Effect:** The bill affects numerous jurisdictions in the State that operate red light camera systems, as shown in Exhibit 1.

Under the bill, those jurisdictions must modify existing systems in order to comply with the four-second timing requirement. As noted above, the formula specified by SHA results in some degree of variation in the length of yellow light signals, depending on factors such as the approach speed and deceleration rate of vehicles and the approach grade. Therefore, local expenditures likely increase in fiscal 2019 for jurisdictions not currently in compliance with the bill's requirement and for which SHA does not make the required adjustment.

*For instance*, the Montgomery County Department of Transportation (MCDOT) advises that modifying traffic signal timings can take considerable staff time, as the timings can impact factors such as traffic flow, safety, and delays. MCDOT anticipates that external consultants are required to modify signals. In total, the department estimates consulting costs of between \$1,500 and \$3,000 per traffic signal in the county. While MCDOT indicated that it is responsible for approximately 900 traffic signals in the county, the Department of Legislative Services advises that the bill does not apply to *all* traffic signals;

rather, it applies to traffic control signals at intersections with red light cameras. Thus, while the county may incur costs for intersections monitored by a red light camera, it is not necessary to modify every traffic signal in the county.

In addition, because the bill potentially results in longer yellow lights in some jurisdictions, local revenues decrease, potentially significantly, beginning in fiscal 2019, as fewer individuals may be recorded entering an intersection against a red light signal. A precise estimate cannot be made at this time due to the number of jurisdictions operating red light camera systems and the considerable amount of variation in timing signals between jurisdictions. Nevertheless, SHA regulations currently set the minimum yellow light signal at three seconds. Under the bill, the minimum must be set at four seconds. Potentially, then, the duration of some yellow lights could increase by as much as one second. Accordingly, the number of violations captured by red light cameras at those intersections may decrease significantly and result in fewer citations.

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### **Additional Information**

**Prior Introductions:** None.

**Cross File:** None.

**Information Source(s):** Insurance Institute for Highway Safety; Harford and Montgomery counties; City of College Park; Judiciary (Administrative Office of the Courts); Maryland Department of Transportation; Department of Legislative Services

**Fiscal Note History:** First Reader - February 7, 2018  
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