

*Public Works Department*

**Orange County  
School Zone Speed Detection Camera  
Program**

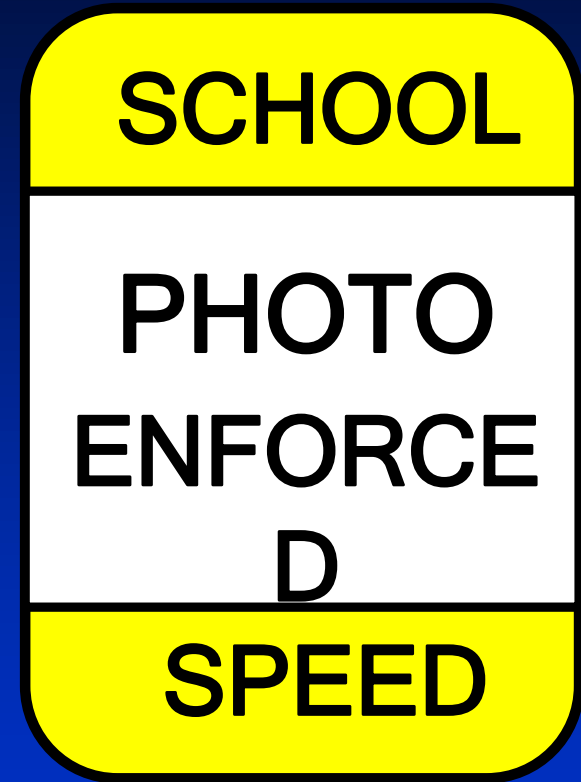
**Discussion Item**

**December 17, 2024**



# Presentation Outline

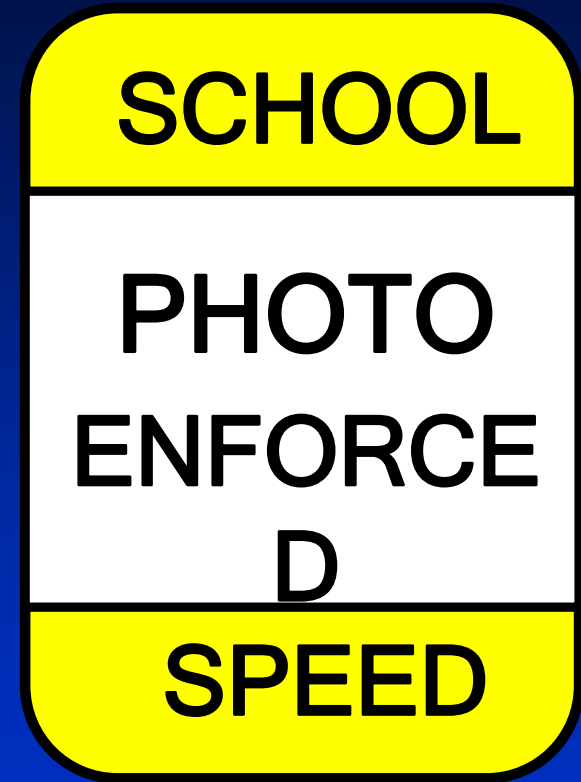
- Purpose
- Background
- Examples
- Recommended Program Framework
- Program Financial Analysis
- Next Steps/Schedule
- Summary
- Board Direction





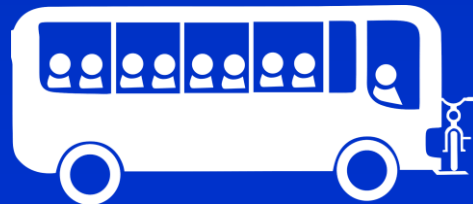
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## ▪ Speed Enforcement in School Zones

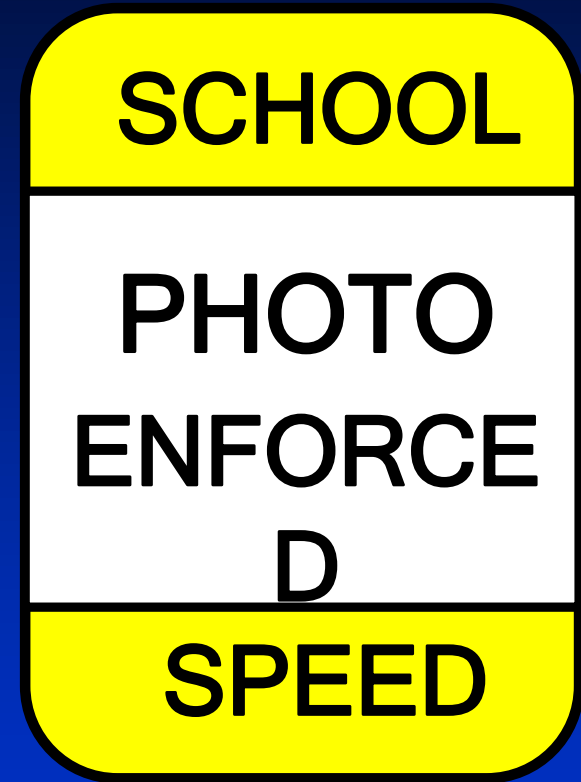
- Speeding kills
- Supplements traditional enforcement efforts and ensures consistent law enforcement presence, particularly during peak traffic times.
- Creates safer environments for students, pedestrians, and other road users in school zones
- Encourages drivers to adhere to posted speed limits within school zones
- Raises awareness among drivers about the importance of safe driving near schools





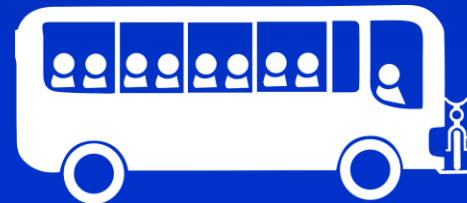
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# Background

- **House Bill 657 (S.B. 588) Enforcement of School Zone Speed Limits**
  - Approved on May 31, 2023
  - Effective as July 1, 2023
  - F.S. “authorizing a county or municipality to enforce the speed limit in a school zone at specified periods through the use of a speed detection system”



# Background

## ▪ Statutory Framework (FS 316.008)

- Speed detection system for the use of speed enforcement and capturing of photographs or videos of speeding violations more than 10 miles per hour over the speed limit at the time of the violation
- 30 minutes before the start of a regularly scheduled school session
- During the entirety of a regularly scheduled school session
- 30 minutes after the end of a regularly scheduled school session
- Signage warning motorists that speed detection systems are in use
- 30-day public awareness campaign



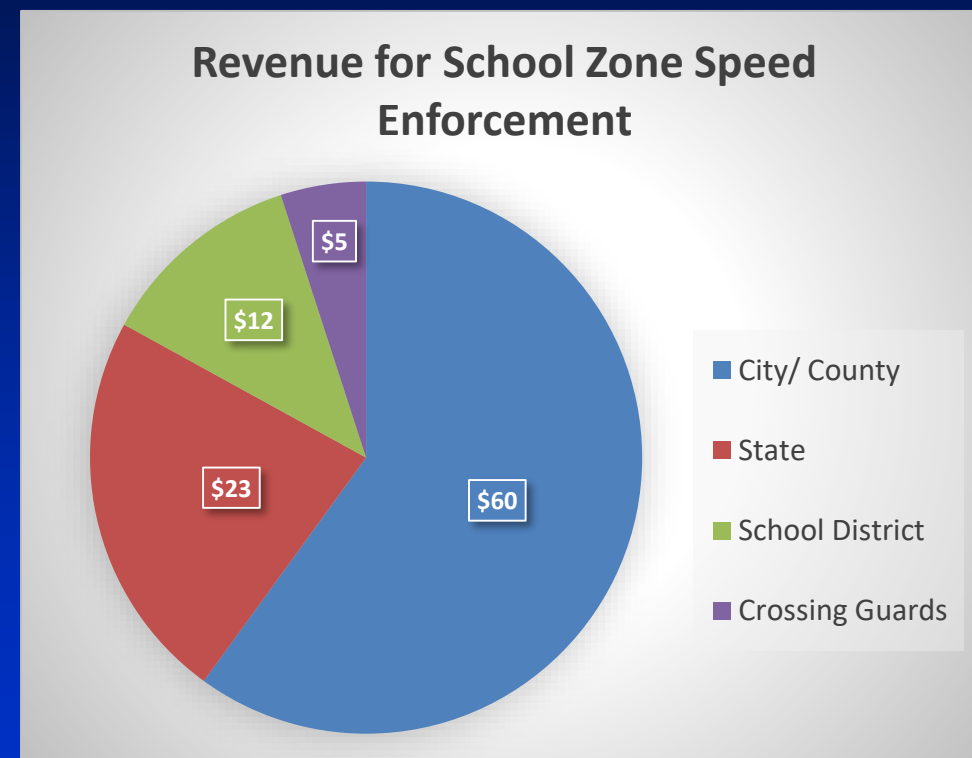
## ■ Statutory Framework

### – Fines for Notices of Violations

- \$100 for speeds 10 MPH over the posted school zone speed limit

- County - \$60
- State - \$23
- School District - \$12
- Crossing Guards - \$5

### – Revenue generated from violations to fund the program and safety initiatives





# Background

## ▪ National Experience/Results

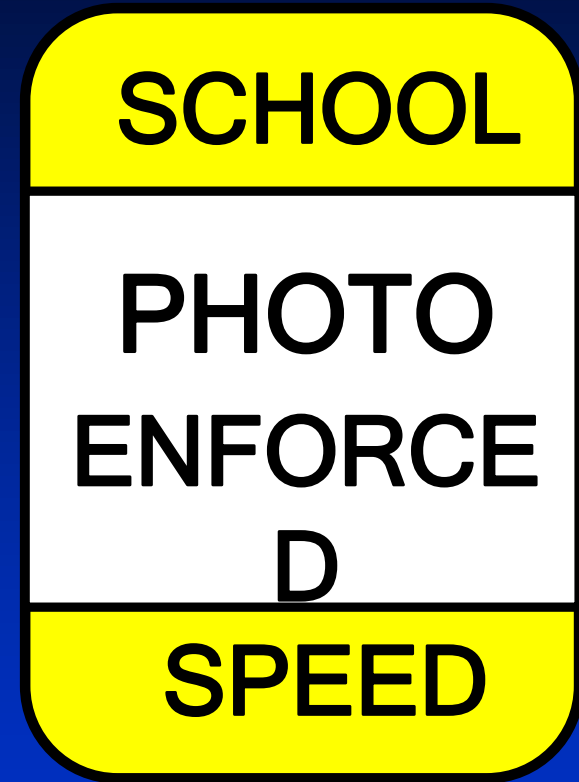
- According to a 2021 NHTSA study speeding contributed in 29% of all traffic fatalities
- Maryland, Arizona and the District of Columbia found that the proportion of drivers exceeding speed limits by more than 10 mph declined by 70%, 88% and 82%, respectively, six to eight months after cameras were introduced
- Gwinnett County Ga. Police Department reported speeding is down 95% in school zones where cameras were installed





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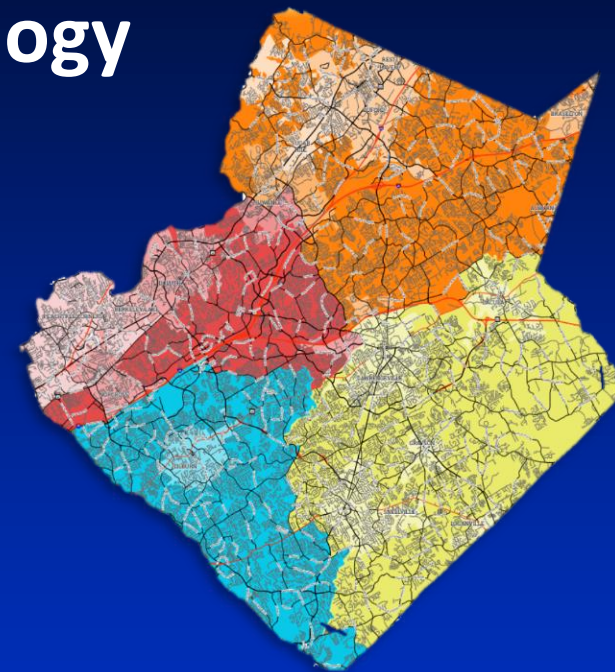
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## Public Agencies adopting Speed Camera Technology

### –Gwinnett County

- 28 cameras monitoring 11 schools (elementary, middle and high schools)
- 9 more schools w/ 20 more cameras to be added 24'-25' school year
- Cameras installed in 3 waves (about 4 schools per month)
- Enforcement throughout the entire school day
- Program highly successful



## ▪ Public Agencies adopting/exploring Speed Camera Technology

### –City of Eustis

- Live cameras April 2024
- Currently monitoring 3 schools
- Vendor-managed program



### –Osceola County

- 16 Schools Sited selected
- Passed and adopted ordinance for program December 2023
- Live cameras December 2024



## ▪ Public Agencies adopting/exploring Speed Camera Technology

### –City of Orlando

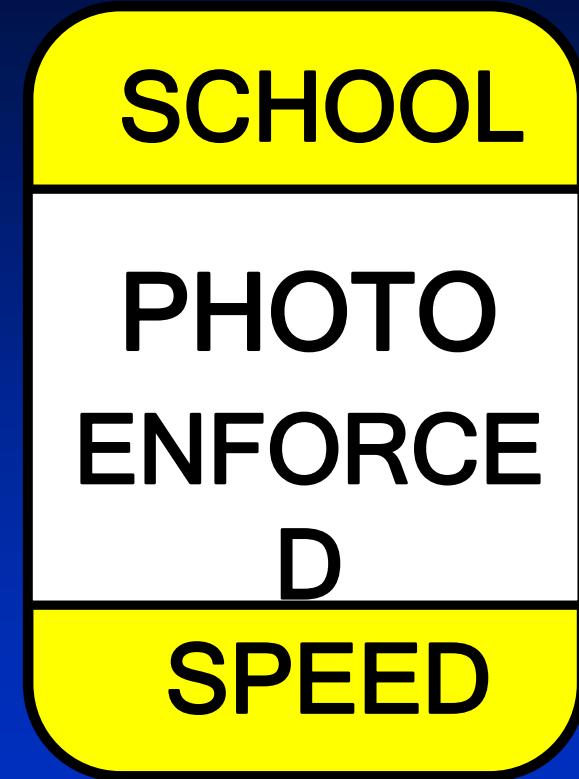
- 6 Schools in Year 1 (up to 24 cameras)
- 1st Reading Ordinance June 2024
- 2nd Reading of Ordinance December 2024
- Advertise RFP December 2024
- Live cameras start of 2025 School Year





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# Recommended Program Framework

## ▪ Perspective of OCSO

Lt. Michael Crabb

Orange County Sheriff's Office

- Greater coverage of more school zones
- Continuous coverage throughout the school day
- Frees up deputies to address other traffic complaints







# Recommended Program Framework

## ▪ Perspective of OCPS

Josi M. Figueroa Alvarado

Administrator, Office of Occupational Safety & Health

- Addressing community speeding concerns
- Decreasing vehicle vs. student pedestrian crashes
- Supporting schools with traffic safety solutions







# Recommended Program Framework

## ▪ Administrative

### – Technology

- Stationary fixed units (not mobile)
- Radar technology with video (more reliable w/weather vs LiDAR)

### – Staffing

- Traffic Engineering staff member needed to establish the program
- OCSO additional enforcement staff to review potential violations





# Recommended Program Framework

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## ▪ Program Cost Model Options

- Costs recovered as County's \$60 portion of \$100 citation
- Any model should provide for full cost recovery

### 1. Fixed Costs to Lease Hardware

- Pros
  - Similar to Red Light Camera Program
  - Predictability and transparency (annual budget)
  - Positive public sentiment (excess revenues is for safety)
- Cons
  - Upfront hardware costs
  - Fluctuation in violations

### 2. Percentage Fee

- Pros
  - No startup funding required
  - No monthly vendor fee
- Cons
  - Negative public sentiment (vendor profits driven by number of citations issued)
  - Possible reduced revenues for safety improvements



# Recommended Program Framework

## ▪ Framework

- Enforcement throughout the entire school day (including 30 minutes before and after)
- All reporting will be in accordance with HB 657
- Phased Deployment
  - RFP for 3 year contract; Optional renewal after 3 years
  - 12 Schools in year 1
  - 3 installation phases; 4 schools per month
  - Up to 12 School sites in years 2 and 3
  - Partnering with OCPS and OCSO





# Recommended Program Framework

## ▪ School Site Selection:

–HB 657 - *“the county or municipality must determine that the school zone where a speed detection system is to be placed or installed constitutes a heightened safety risk that warrants additional enforcement measures pursuant to this subsection.”*



–Traffic Safety Evaluation for each Selected School Site

–2 School Sites per Commission District

- Work with the District Commissioner on the selection of School Sites

–Some schools may require more than 2 cameras (Arterial, collector, local roads)





# Recommended Program Framework

- 141 public schools within unincorporated Orange County
- Potential schools as recommended by OCPS
  - Avalon Middle
  - Chain of Lakes Middle
  - Cheney Elementary
  - Colonial 9<sup>th</sup> Grade Center
  - Conway Elementary
  - Conway Middle
  - Dream Lake Elementary
  - Evans High
  - Hiawassee Elementary
  - Horizon West Middle
  - Lake Nona High
  - Lake Nona Middle
  - McCoy Elementary
  - Oak Hill Elementary
  - Oak Ridge High
  - Panther Lake Elementary
  - Rock Lake Elementary
  - Sadler Elementary
  - South Creek Middle
  - Timber Creek High
  - Timber Springs Middle
  - Union Park Middle School
  - Wedgefield K-8
  - Westridge Middle
  - Wetherbee Elementary





# Recommended Program Framework

## Union Park Middle School

Dean Rd. @ Elm St.

4 Lane

20 MPH School Zone Speed Limit

45 MPH Regular Speed Limit

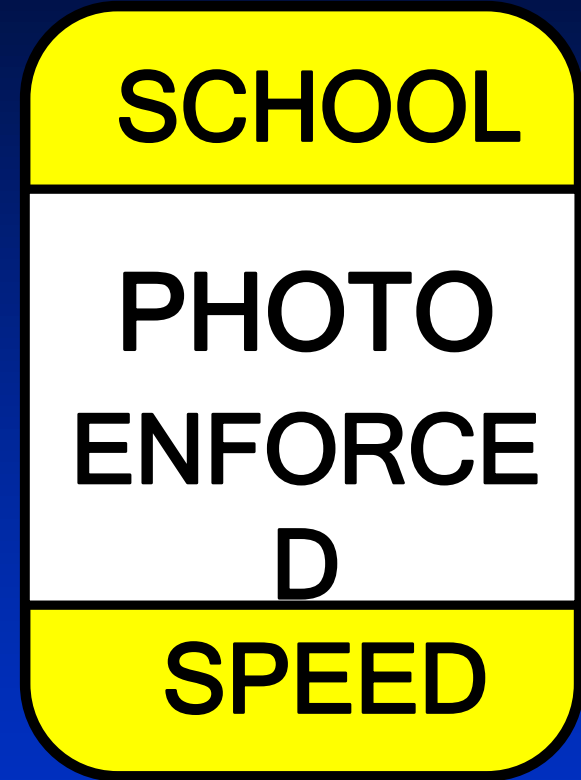
AM 0845-0945	Thursday 08/10/2023	Friday 08/11/2023	Monday 08/14/2023	Tuesday 08/15/2023	Wednesday 08/16/2023	Weekly Average
Vehicle Count	429	434	457	456	479	451
Highest Speed	55	59	54	56	59	56
10 MPH+ Over	94	69	96	109	105	94
Percent Over	22%	16%	21%	24%	22%	21%
PM 1545-1645	Thursday 08/10/2023	Friday 08/11/2023	Monday 08/14/2023	Tuesday 08/15/2023	Wednesday 08/16/2023	Weekly Average
Vehicle Count	606	613	586	623	601	605
Highest Speed	54	60	53	63	72	60
10 MPH+ Over	194	184	164	156	180	175
Percent Over	32%	30%	28%	25%	30%	29%





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# Program Financial Analysis

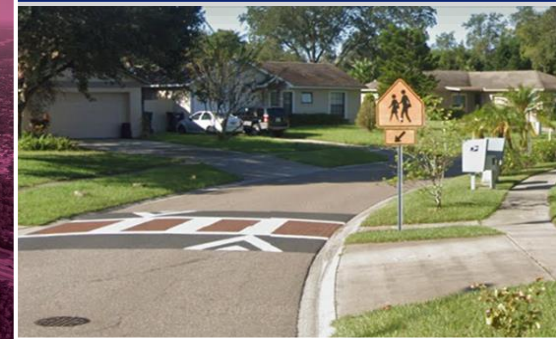
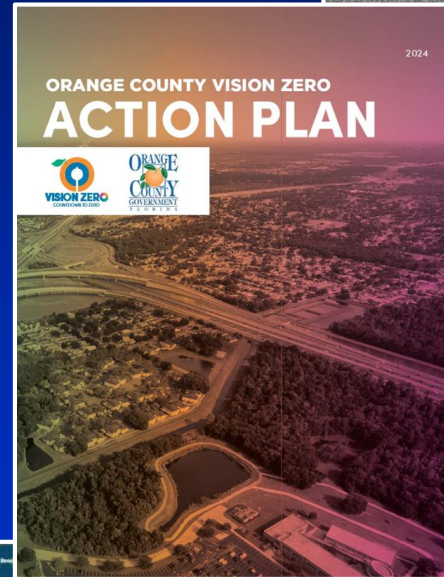
- **Revenues per School Site (based on Union Park Middle):**
  - Orange County Revenue Fee = \$60
  - Daily violations (following 85% reduction) ~ 40
  - School days in operation = 180
  - Yearly Collection per School Site =  $\$60 \times 40 \times 180 = \$432,000$
- **Orange County annual revenue generation across 12 schools could be approx. \$5M**
  - Additional revenues for OCPS ~ \$1M
  - Additional revenues for OCSO Crossing Guards ~ \$400k





# Program Financial Analysis

- Safety Improvements Could fund:
  - Accelerated Transportation Safety Projects
  - Vision Zero Action Plan Projects
  - Traffic Calming
  - Corridor Lighting
  - Safe Routes to School





# Program Financial Analysis

- **Estimated Fixed Costs**

- \$4,000 per camera per month

- 2 cameras per school site

- Yearly Expenditure per School Site =  $\$4,000 \times 2 \times 12 = \$96,000$

- 12 schools = \$1.15M

- **Personnel Costs**

- 1 FTE Traffic Engineering, 3 FTE for OCSO

- 4 FTE @ \$150,000 = \$600,000

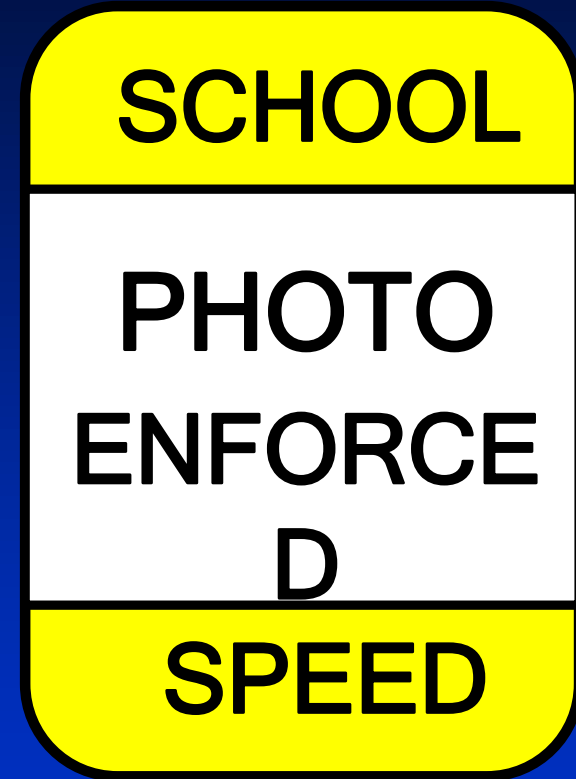
- **Total Costs Approximately \$1.75M**

**Revenues > Expenditures**



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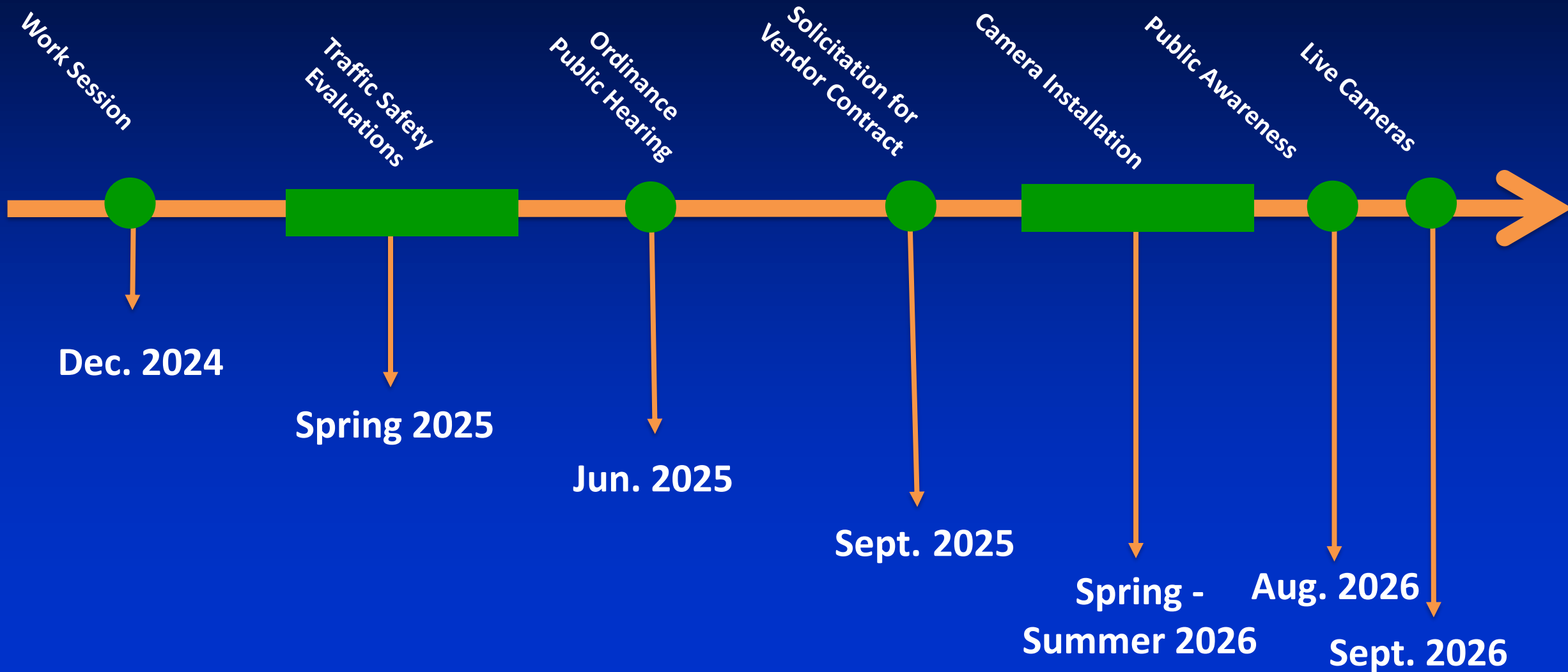


# Next Steps/Schedule

- **Board Worksession (today)**
- **Coordination with District Commissioners, OCPS, and OCSO**
- **Conduct Traffic Safety Evaluations on recommended school sites**
- **Draft Ordinance and conduct public hearing**
  - Eligibility of Schools
  - Safety Risk
  - School Selection Criteria
  - Contesting Notice of Violations
- **Solicitation for vendor contract**
- **Install cameras, conduct public awareness campaign, launch program**



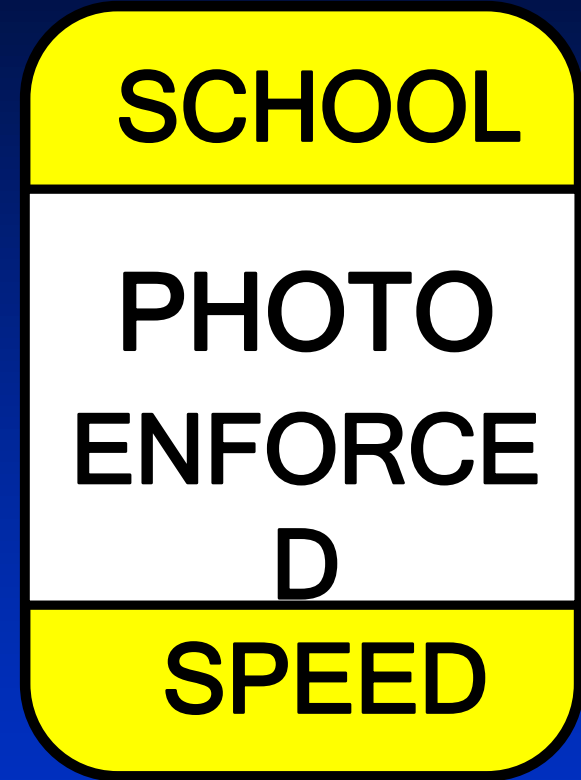
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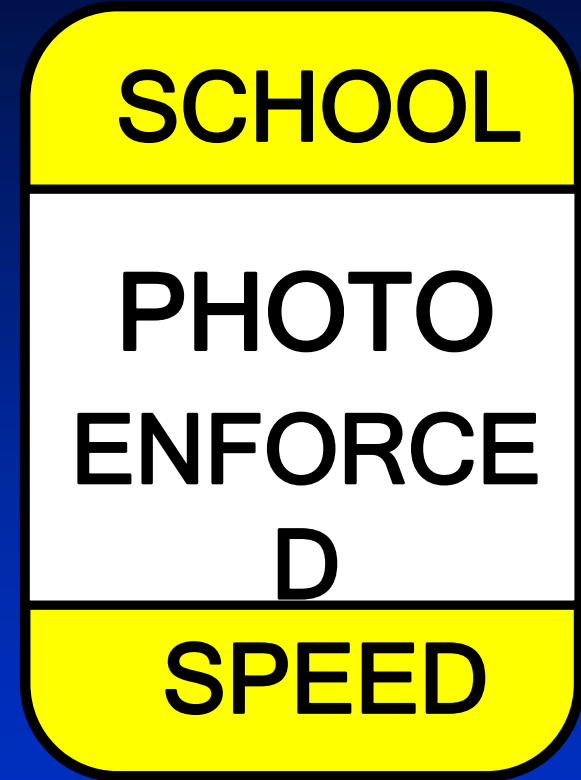
- Aims at improving safety in school zones by deterring speeding and reducing the risk of accidents involving pedestrians, especially children
- Serves as an effective tool in promoting road safety and protecting the well-being of children and other road users in the vicinity of schools
- Consistent with our Vision Zero Initiative
- Provides additional speed enforcement without the presence of OCSO





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# Board Direction

- **Direction for staff to move forward with the development of a School Zone Speed Enforcement Ordinance and prepare an RFP using a fixed cost model**

