



# FY2027 HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) POTENTIAL OPPORTUNITIES AVAILABLE FOR THE CITY OF FAIR OAKS RANCH

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December 7, 2023



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## PRESENTATION OUTLINE

- ✓ Overview of Highway Safety Improvement Program (HSIP)
  - Recent Changes w/HSIP Funding & Participation
  - \$2.8M of Safety Enhancement Funding Allocated for FY 27
- ✓ Potential Opportunities Available for the City of Fair Oaks Ranch
  - Ammann Rd Curve Improvements & Shoulder Widening
  - Rolling Acres Trail Widening to Add Shoulder
  - Silver Spur Widening to Add Shoulder
  - Other Potential Targeted / Systemic Safety Enhancements
- ✓ Key Takeaways / Discussion / Next Steps



## OVERVIEW OF HIGHWAY SAFETY IMPROVEMENT PROGRAM

# What is the Highway Safety Improvement Program (HSIP)

- The HSIP is a federal-aid program, managed by each state, with the purpose to achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
- Projects may be:
  - Targeted - supported by qualifying preventable crashes with Safety Improvement Index (SII)  $\geq 1.0$
  - Systemic - based on roadway features that may pose known risks for severe crashes regardless of crash history



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## How are projects scored and prioritized?

**Targeted** submissions require an SII  $\geq 1.0$

- Crashes Analyzed
  - ❖ Fatal Injury Crash (K)
  - ❖ Incapacitating Injury Crash (A)
  - ❖ Non-Incapacitating Injury Crash (B)
- Safety Counter-Measures Established
- Project Estimate Developed
- Safety Improvement Index (SII) Calculated

**Systemic** submissions do not need an SII  
but, if available, may be used for prioritization

$$S = \frac{R(C_f F + C_i I)}{Y} - M$$

$$Q = \left( \frac{A_a - A_b}{A_b} \div L \right) S$$

$$B = \frac{S + \frac{1}{2}Q}{1.06} + \sum_{i=2}^L \left[ \frac{(S + \frac{1}{2}Q) + (i-1)Q}{(1.06)^i} \right]$$

$$SII = \frac{B}{C}$$





# OVERVIEW OF HIGHWAY SAFETY IMPROVEMENT PROGRAM

## How much HSIP funding is available?

- Each District has an assigned budget for qualifying projects
- Dedicated funding for off-system
- Districts accountable to meet funding amounts to reduce fatal and serious injury crashes
- **The San Antonio District currently has \$2.8M allocated for FY 27 for off-system projects to be distributed amongst all 12 counties and included municipalities in the San Antonio District**

### FY 2027 Programming Projections

Amount to Program: \$ 387,592,013  
 State Systemic: 15%  
 \$ 58,138,802

District Program Levels:  
 % of Overall Funding: 50% 25% 10%  
 \$ from Overall Funding: \$ 193,796,007 \$ 96,898,003 \$ 38,759,201

District Name	On-system Targeted	District On-System Systemic	Off-system Targeted or Systemic	District Expected Program Total
Comal	\$ 2,180,000	\$ 3,875,920	\$ 300,000	\$ 6,355,920
Paris	\$ 5,822,362	\$ 3,875,920	\$ 315,212	\$ 10,013,494
Pharr	\$ 6,303,911	\$ 3,875,920	\$ 1,233,265	\$ 11,413,096
San Angelo	\$ 2,265,468	\$ 3,875,920	\$ 118,204	\$ 6,259,592
<b>San Antonio</b>	<b>\$ 15,064,815</b>	<b>\$ 3,875,920</b>	<b>\$ 2,882,216</b>	<b>\$ 21,822,950</b>
Tyler	\$ 10,172,717	\$ 3,875,920	\$ 730,897	\$ 14,779,534
Waco	\$ 7,469,478	\$ 3,875,920	\$ 957,455	\$ 12,302,853
Wichita Falls	\$ 2,314,717	\$ 3,875,920	\$ 159,576	\$ 6,350,213
Yoakum	\$ 4,908,514	\$ 3,875,920	\$ 370,374	\$ 9,154,808

### Breakdown of Funding

Funding Category	Percentage
District Targeted	50%
District Systemic	25%
State Systemic	15%
District Off-System	10%

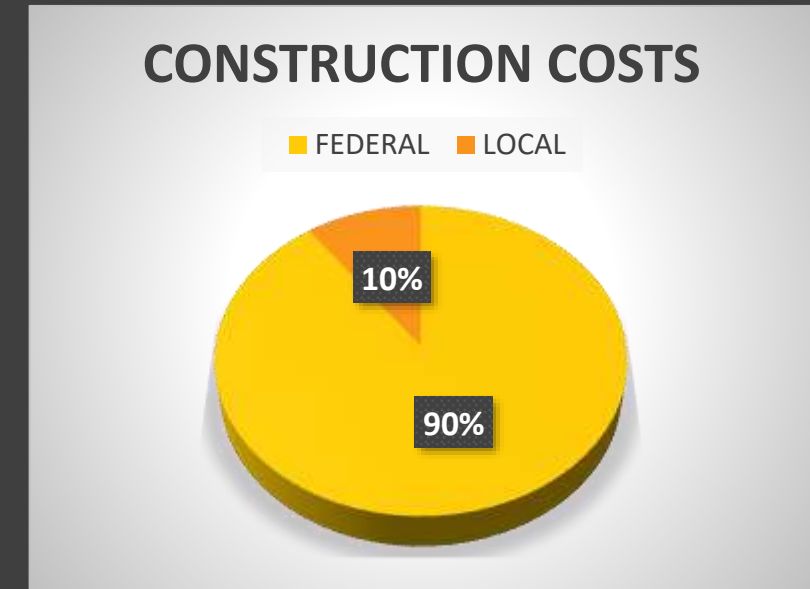




## What costs are local governments responsible for?

- Federal: 90% of Construction Costs\*
- Local: 10% of Construction Costs + Engineering, Environmental, ROW acquisition (if needed) and administrative costs
- Local governments responsible for 100% of the overrun costs once maximum obligated amount for a project is reached

\* Select projects that qualify for **G-match** receive 100% federal funding





## What is G-Match?

- Covers 100% of Construction Costs for certain projects
- All projects must conform to the guidelines for HSIP projects (meeting minimum SII if applicable)
- Examples of potentially eligible G-match projects include:
  - Traffic control signalization
  - Traffic circles (also known as "roundabouts")
  - Pavement markings
  - Installation of traffic signs, traffic lights, guardrails, impact attenuators, or concrete barrier end treatments





\* May qualify for G-Match

## POTENTIAL SYSTEMIC IMPROVEMENTS

- Illumination / Safety Lighting\*
- Rumble Strips on Stop-Controlled Approaches
- Installation of Roadside Flashers or Embedded LEDs for Stop Signs on Controlled Approaches
- "Intersection Ahead" Warning Signs\* Along Uncontrolled Approaches
- Systemically Treat Curves within a Geographical Area or Roadway Type
- Systemically Apply Pedestrian Treatments
- Roadway Widening (increase  $\leq 24'$  to  $28'$ )







Systemic:  
AMMANN RD CURVES

## Ammann Road Curves Safety Improvements Project

- Overall Condition Index (OCI) Score Below 40
- Reconstructs and soften both curves (requires ROW acquisition)
- Replaces approximately 1000 feet of pavement at each curve
- Includes addition of 4 foot shoulders, pavement markings and signage
- **Total Est. Construction Cost = \$2,017,043**



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**Systemic:  
AMMANN RD CURVES**

# Existing Conditions



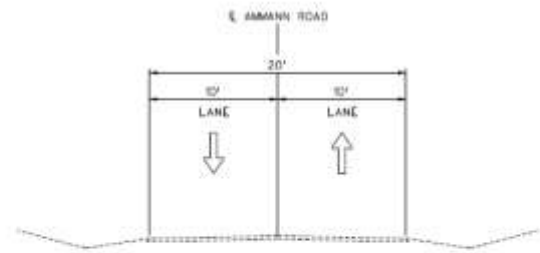
**Ammann Road**

1 Minor Injury Reported;  
Field Visits Indicate  
Numerous Unreported  
Crashes

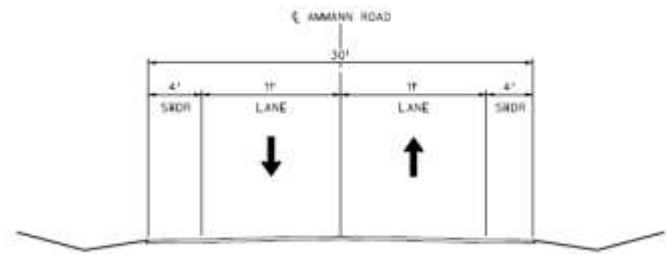


# Systemic: AMMANN RD CURVES

# Proposed Concept



EXISTING TYPICAL SECTION



PROPOSED TYPICAL SECTION

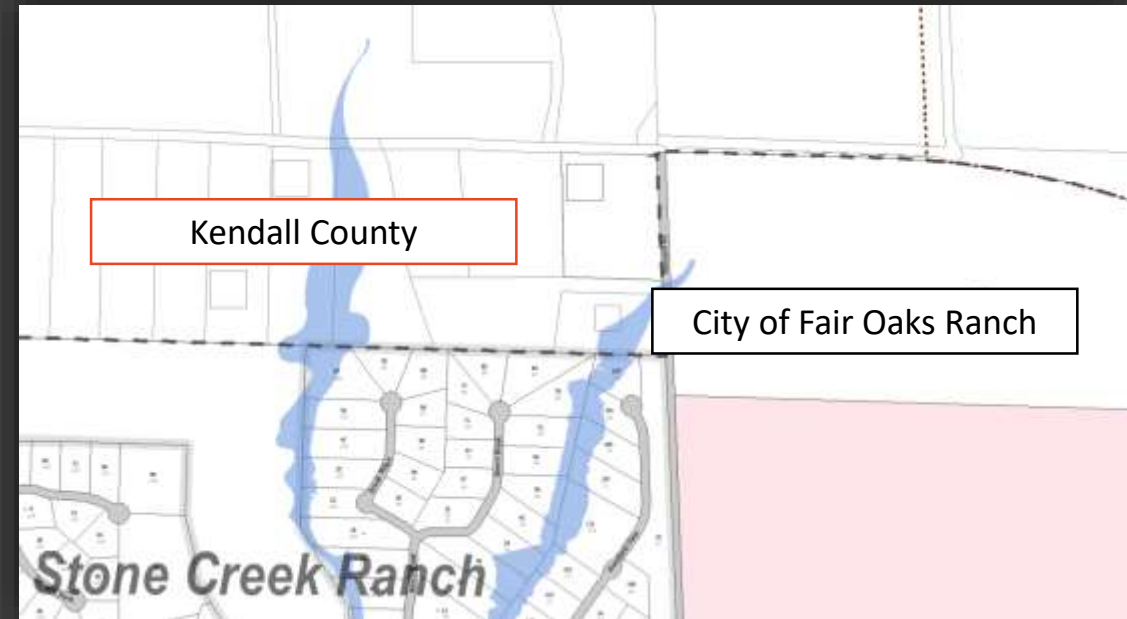




## Systemic: AMMANN RD CURVES

### Kendall County Coordination

- The project limits include both the City of Fair Oaks Ranch and Kendall County
- Kendall County Engineer supportive of the project and potential cost-sharing arrangement
- Project recommended by the KCBFOR Transportation Committee
- Recent accidents have raised awareness among City and County leadership



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**Systemic:  
ROLLING ACRES TRAIL  
WIDENING**

## Rolling Acres Trail Road Widening

- Overall Condition Index (OCI) Score Below 55
- Full Depth Reconstruction, Drainage Improvements, and Utility Adjustments
- Replaces approximately 2786 feet of pavement (41% of Roadway CIP project)
- Includes addition of 4 ft shoulders, pavement marking and signage
- **Total Est. Construction Cost = \$2,059,517**

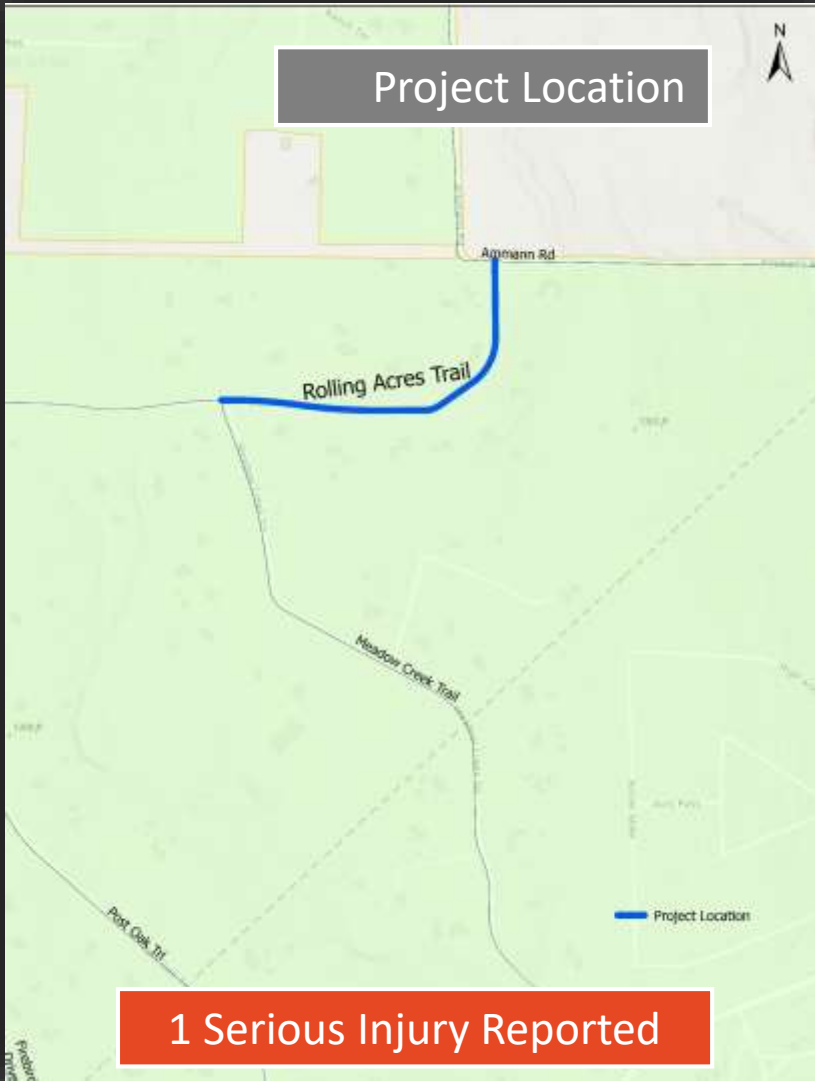


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# Systemic: ROLLING ACRES TRAIL WIDENING

# Existing Conditions



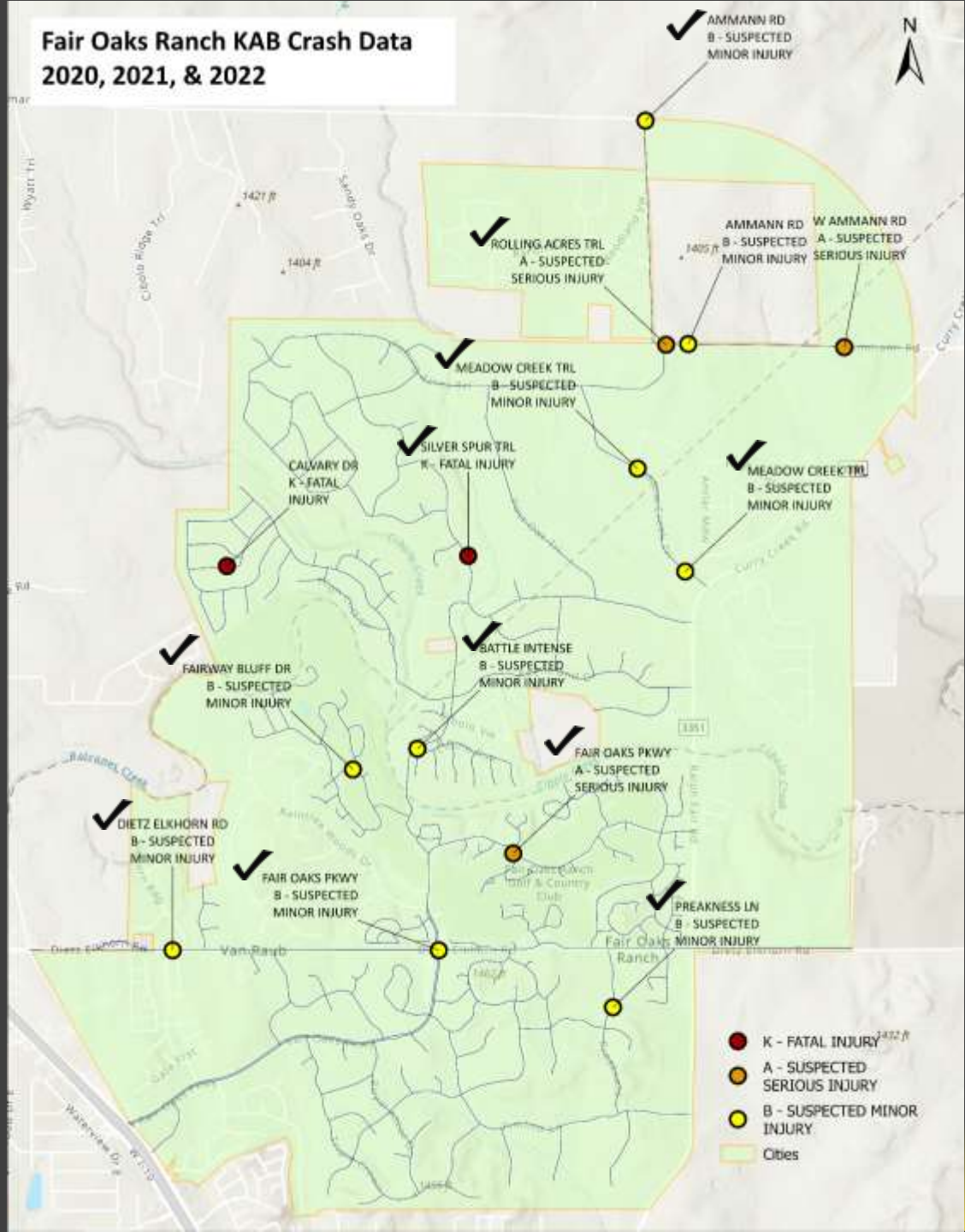


# TARGETED IMPROVEMENTS

The following locations include crashes that may be preventable with HSIP work codes:

- Ammann Road – Widen to Add Shoulder**
- Battle Intense – Widen to Add Shoulder**
- Dietz Elkhorn West – Widen to Add Shoulder**
- Fair Oaks Parkway – Intersection Improvement**
- Fair Oaks Parkway – Widen to Add Shoulder**
- Fairway Bluff – Widen to Add Shoulder**
- Meadow Creek Trail – Widen to Add Shoulder**
- Preakness Ln – Widen to Add Shoulder**
- Rolling Acres Trail – Widen to Add Shoulder**
- Silver Spur Trail – Widen to Add Shoulder**

**Red/Orange** = \$4M SII calculation cost  
**Yellow** = \$330K SII calculation cost  
 Max project cost dependent on work code crash reduction factor





Targeted : SILVER SPUR

## 10/5/2020 - Fatal Injury

Monday 2:13 PM

- Contributing Factors: Driver inattention; Fatigued or Asleep; Wrong side – not passing
- Manner of Collision: Opposite Direction – both going straight

### Targeted Countermeasures (Crash Reduction Factor / Service Life)

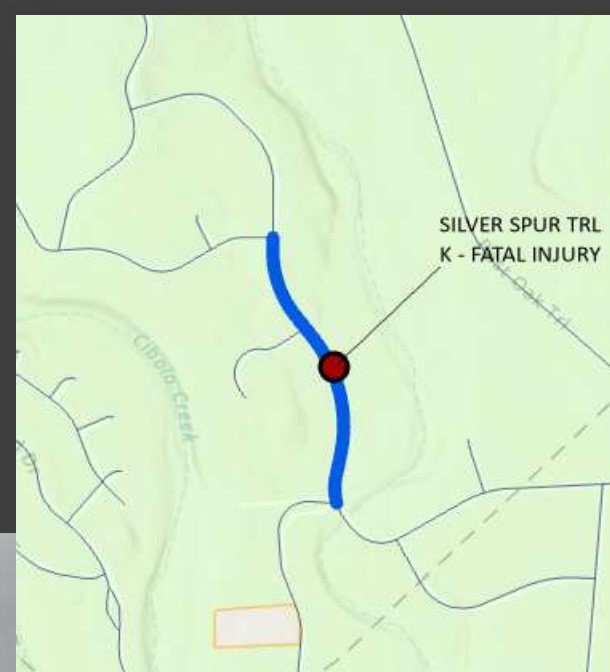
- 502 Widen Lanes (30% /20 Yrs) Up to \$5M
- 504 Construct Paved Shoulders 1-4 ft (25% /20 Yrs) Up to \$4M
- 404 Install Center Striping (65%/4 Yrs) Up to \$2.5M
- 543 Profile Centerline Markings\*\* (7%/5 Yrs)
- 137 – Install Chevrons (25%/10 Yrs) Up to \$2.5M

All work codes dependent on available HSIP funding and require 10% LG Cost Participation + Engineering + ROW

\*\*Cannot Submit Standalone Profile Markings

Standalone Striping may qualify for G-match

Each work code was calculated individually; a combination would impact (increase or reduce) the value







## KEY TAKEAWAYS

- ✓ \$2.8M of funding is available for HSIP projects; on some projects, 100% of construction costs may be covered leaving only the engineering, environmental, ROW, and administrative charges as the City's responsibility
- ✓ The current City of Fair Oaks Ranch Roadway CIP will require general debt obligations and/or a voter-approved Bond Program---taking advantage of the HSIP available funding may save our taxpayers millions of dollars
- ✓ There is no obligation to participate until an Advanced Funding Agreement with TxDOT is signed



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## NEXT STEPS



### Step 1

Council identifies project(s) that the City would like to pursue



### Step 2

Staff refines scope and cost estimates



### Step 3

Staff submits projects to TxDOT by Dec 15th



### Step 4

TxDOT announces approved projects in March 2024



### Step 5

If project is approved, enter into AFA Agreement with TxDOT

The current available funding (\$2.8M) requires a project let date of September 2026 - August 2027.



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# QUESTIONS / DISCUSSION / DIRECTION

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