



HARRISONBURG | VA
FRIENDLY BY NATURE

Welcome to Harrisonburg

The Mission

- Explore popular area attractions in the City of Harrisonburg and the surrounding county.

→ Places around Harrisonburg; both well known and not

- Design Itineraries

→ Based on the numerous attractions throughout Harrisonburg that would appeal the most to teenagers

- Experience itineraries

→ We actually went out and tested these itineraries.

The Process

A. Explore

→ Read & reviewed Harrisonburg tourism's website and blog

B. Plan

→ Attended meetings with staff at Harrisonburg tourism

C. Create

→ Through research & insight created four themed itineraries

D. Test

→ Used itineraries to spend a day as a visitor in Harrisonburg to explore the area.

A Day in Historic Downtown

Purpose: To explore the heart of Harrisonburg

- Downtown Area
- Ruby's Arcade
- Jack Brown's Burger Joint





Escape in the Burg

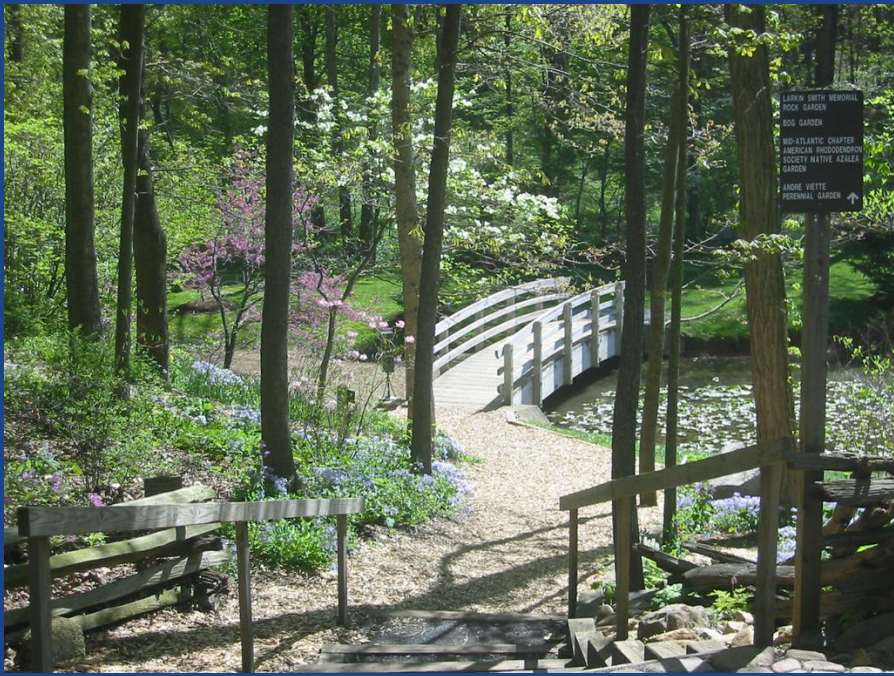
Purpose: to be able to 'escape' to Harrisonburg

→ Edith J. Carrier Arboretum

→ House of Clues

→ Hokkaido Japanese Steakhouse





A Rainy Day

Purpose: Discover attractions and events to do when there is bad weather.

→ Valley Lanes

→ Jump Park

→ Taste of Thai

→ J-Petal





JMU College Day

→ Purpose: To introduce teenagers to a potential future college.

→ Key Attractions

→ E-Hall

→ JMU UREC

→ JMU Bookstore





Bridgeforth Stadium



JMU Merch



Godwin Hall

Takeaways:

→ There are a whole lot of fun things to do here in our local community
that we were previously unaware of!



Itineraries can be found on the Department of Tourism's website:

<https://www.visitharrisonburgva.com/trip-ideas/>

Questions?



K9 Unit Police Department Project



Ian Comer, Sama Alsendi, Maggie Hernandez, Mazin Faeedi

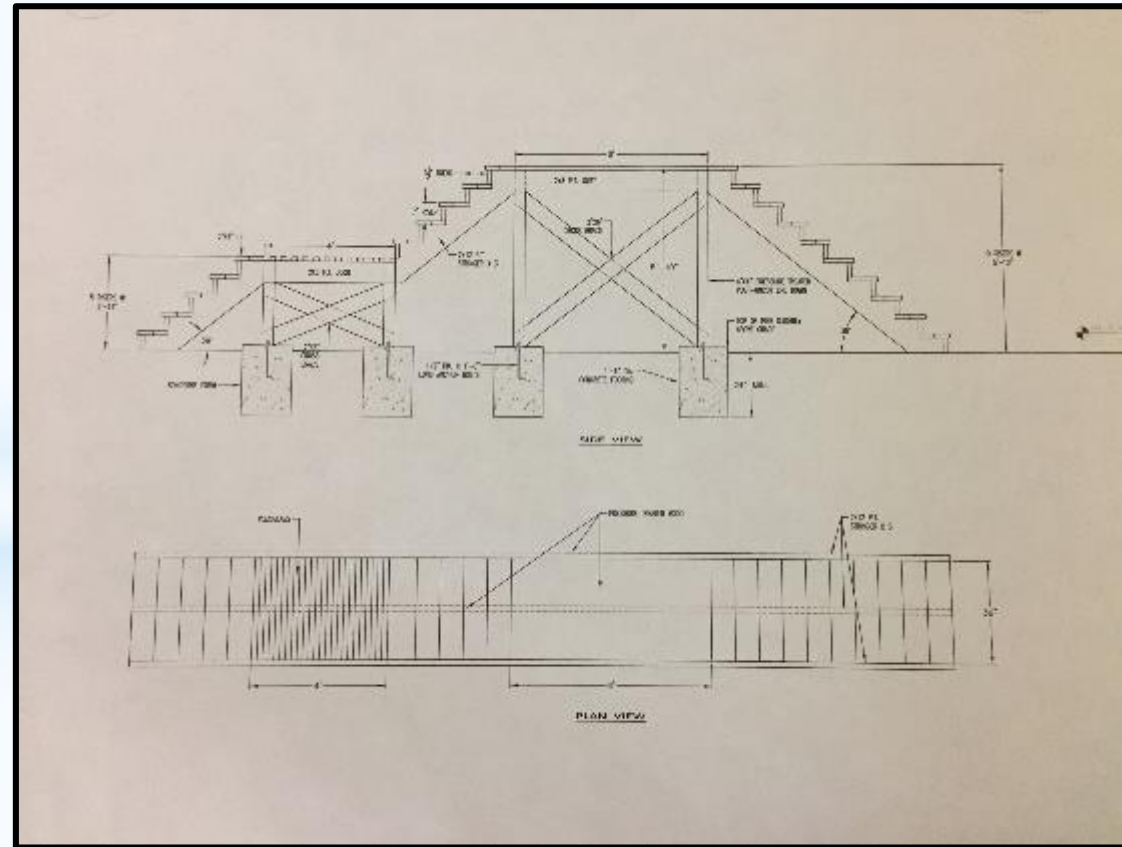
Why did we choose the K-9?

- * Hands on activity
- * Had the opportunity to work with a well known branch
- * Safety for our community.



Why make a new obstacle?

- * Dogs' safety
- * Introduction to new environments
- * Boosting confidence in public



Phases

- * Phase 1: Planning
 - * March 19-April 11
- * Phase 2: Material and Funding
 - * April 15-26
- * Phase 3: Building
 - * May 2-Present



Phase 1: Planning

- * Contact with other departments
- * Research on other K9 unit training
- * Visitation to k-9 training grounds

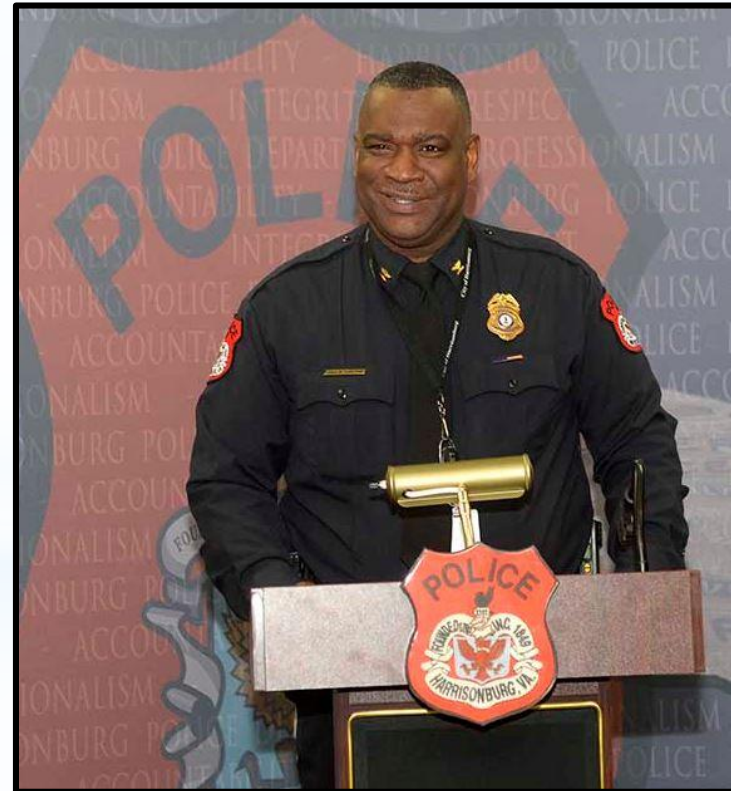


Phase 1: Planning



Phase 2: Materials and Funding

- * Meeting with Chief English
- * Special Operations Budget Request
- * Approved \$1000



Phase 2: Materials and Funding

- * Compatible companies
- * Convincing
- * Home Depot and Mongers discount
- * \$945



Phase 3: Building

* Hands on phase



Before Pictures



After Pictures



Conclusion

- * 114 Hours
- * Impact it has had on other communities.
- * Obstacle introduces a variety of potential situations.
- * Only use of force that can be recalled or taken back anytime.



Harrisonburg Pollinators

Samantha Little, Walker Thompson, Philip Hart, Sarah Earle



Why are pollinators important?

What are pollinators?

Pollinators: Animals that fertilize plants by moving pollen between them, allowing for the production of seeds and fruit. This process performed successfully allows for new generations of plants to grow.

Examples include...

- ❖ Moths
- ❖ Butterflies
- ❖ Bats
- ❖ Hummingbirds
- ❖ Bees



Local Food Production



- ❖ Pollinators are necessary for three quarters of our major food crop
- ❖ Decreases in food production are associated with decreases in pollinator population counts (Klein et al. 2005)
- ❖ Estimated \$217 billion global crop production from pollinator services (Gallai et al. 2008)

Food requiring pollination:

- Sugar Cane
 - Vanilla
 - Lettuce
 - Onions
 - Cheese
 - Meat



Local Ecosystem

Pollinators are major contributors to the overall health of an ecosystem



- Create food sources for other animals in ecosystem
- Prevent soil erosion by helping spread more seeds; creating more grown plants
- Help to control pest insects
- Presence of pollinator plants in an ecosystem are is appealing and can make the community seem more full of life

Existing Projects

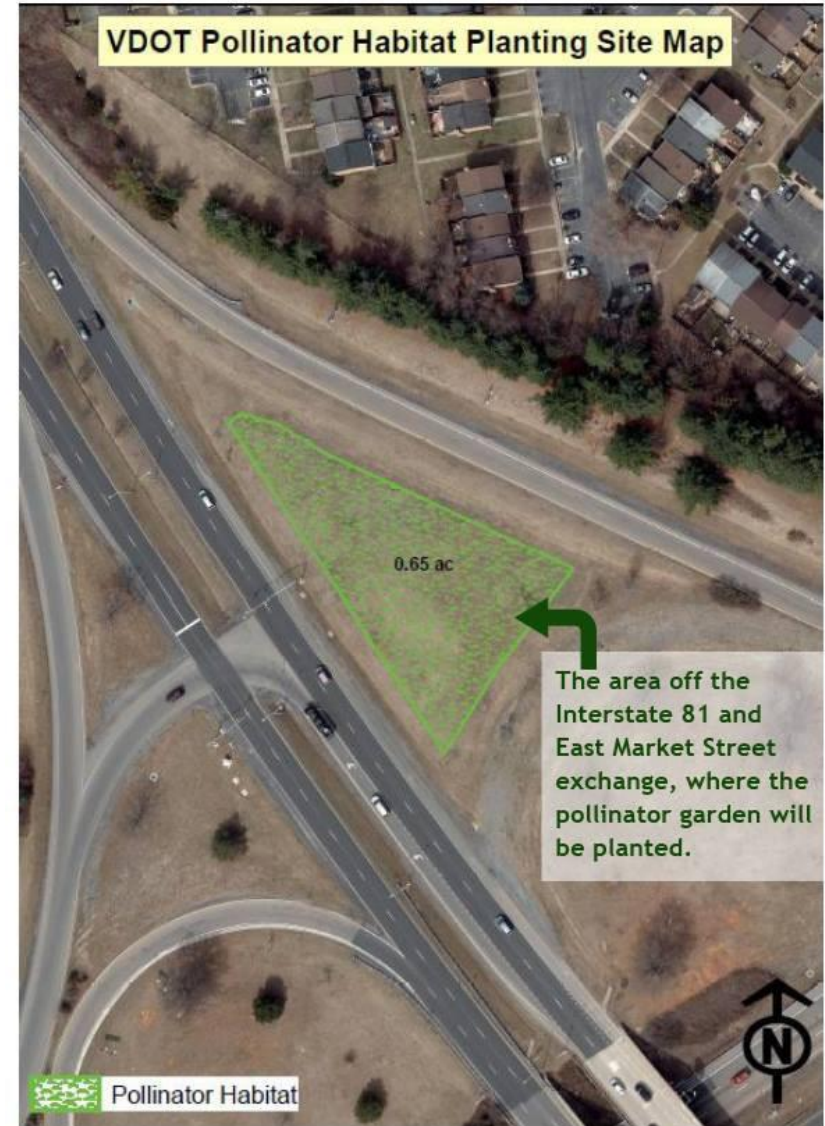
Existing Gardens

- ❖ Interstate exits
- ❖ Hillandale Park
- ❖ Westover Park
- ❖ Rain Garden in Purcell Park
- ❖ Pollinator Garden in stream restoration/conservation easement at Purcell Park
- ❖ Smithland Road Dog Park



Interstate Exits

A small scale pollinator area at .06 acres on the southbound #247 exit ramp



Hillandale Area

First area was established in 2018

800 sq./ft and is located on the left side of Hillandale Drive across from the playground

Second area established in 2019 with Girl Scout

2,500 sq./ft and is located in the cul-de-sac at



Troop 1219



Westover Area

Includes a rain garden area

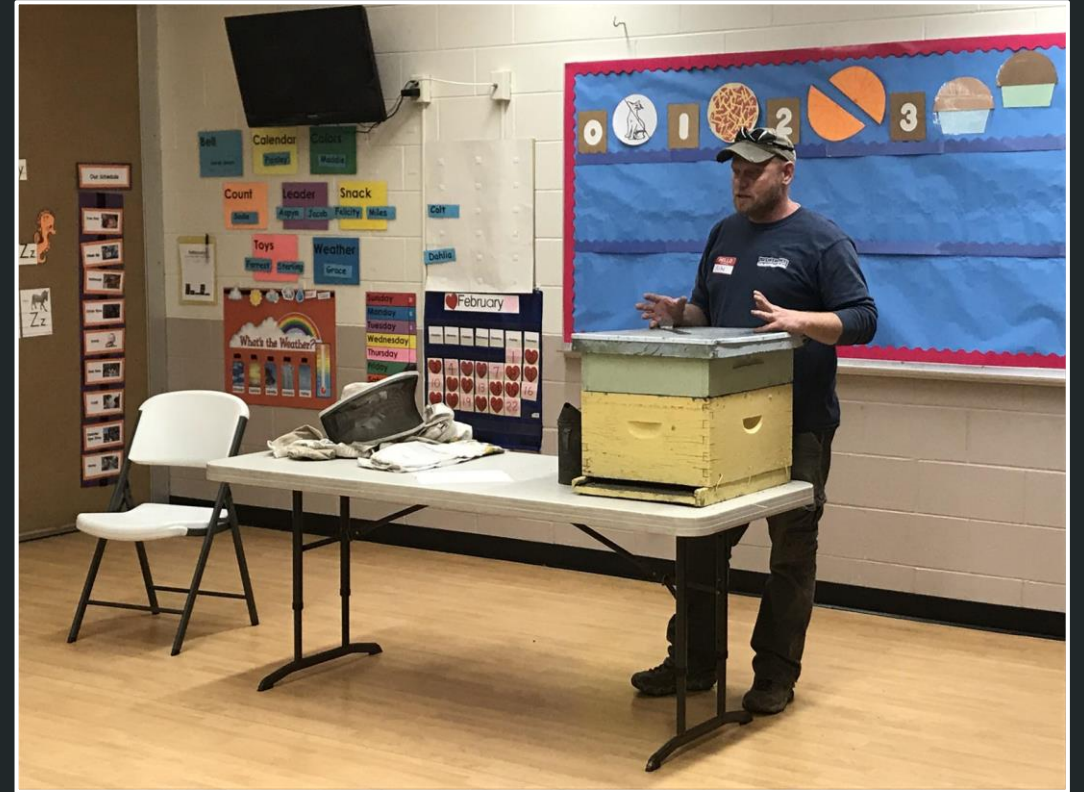
All landscape beds are being converted over to pollinator areas

4,500 sq./ft total



Pollinators in Your Backyard

Harrisonburg's initiative to share
its ongoing efforts to become a
pollinator friendly city



Future Projects

List of Future Projects

- ❖ Current Bee City Committee serving as annual event committee
- ❖ Adoption of resolution establishing Harrisonburg as a Pollinator-friendly city
- ❖ Establishing a Harrisonburg pollinator-related program, plan, and creation of pollinator city logo
- ❖ Bee Ordinance
- ❖ Liberty Park serving as the Pollinator Corridor education center and connector
- ❖ Planning and maintenance of pollinator spaces throughout the city

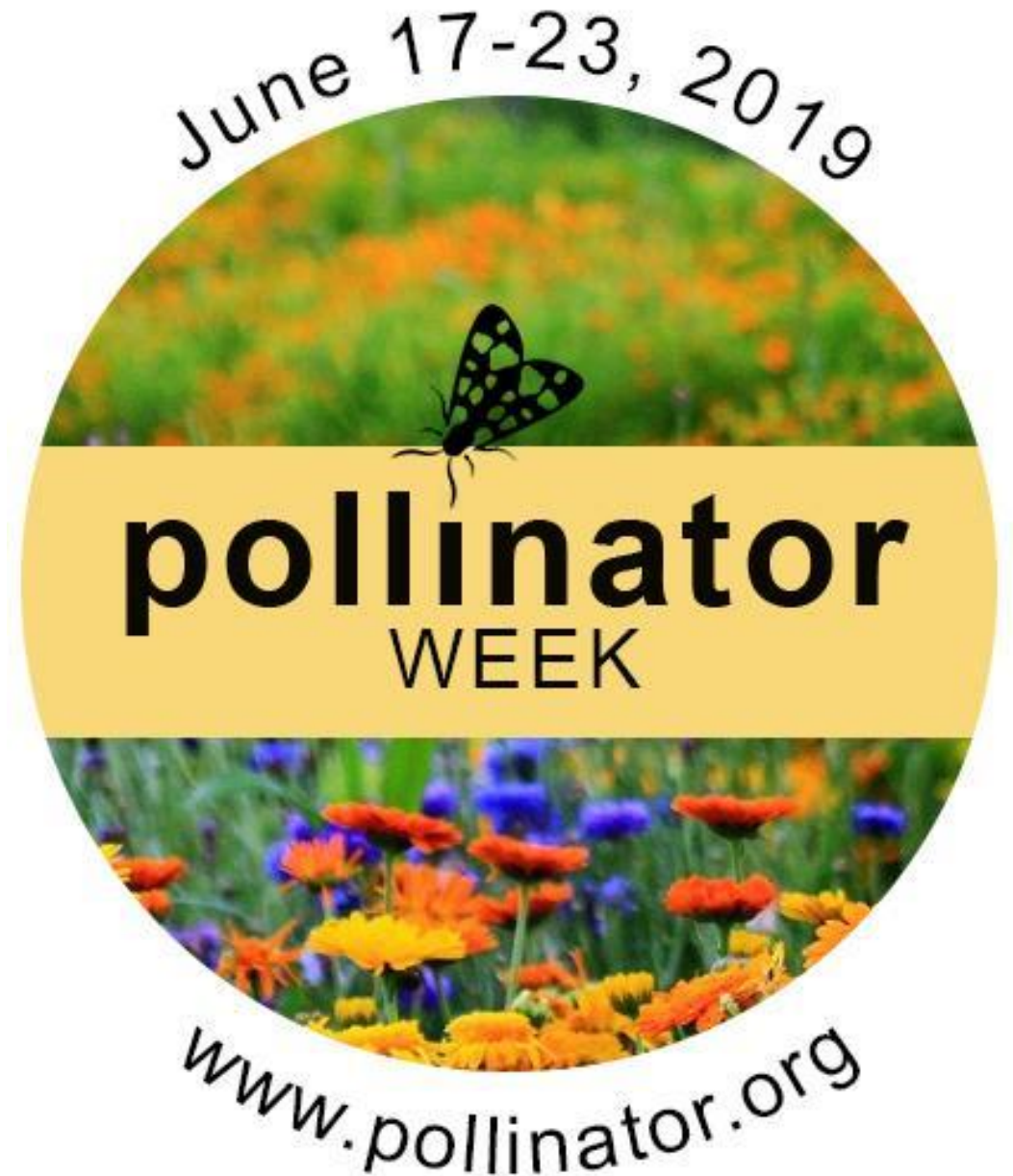
Liberty Park Project

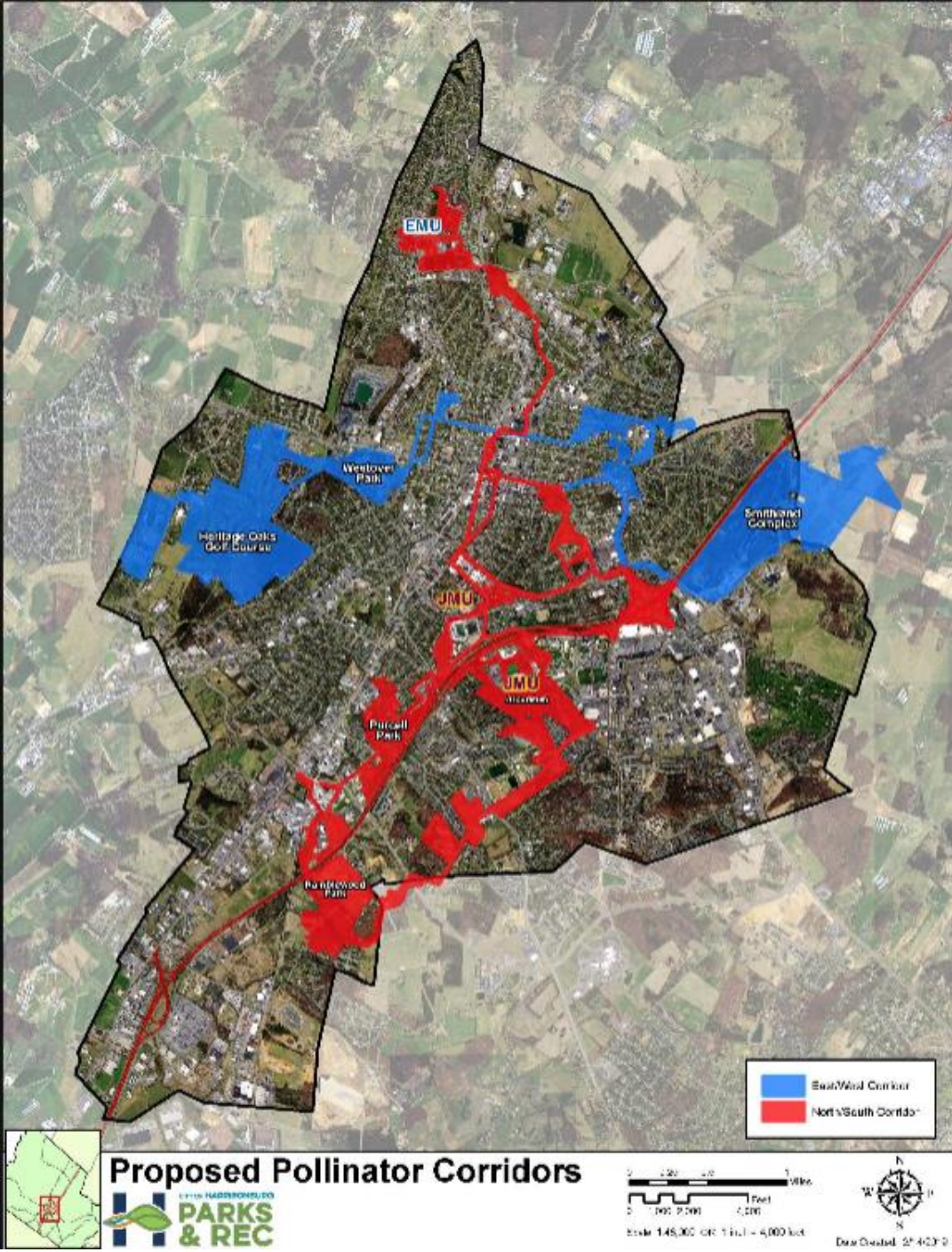
- ❖ Located downtown on
- ❖ N Liberty Street
- ❖ Existing pollinator garden → pollinator education center
- ❖ Project began on **May 1**



Summer Event

- ❖ Held during National Pollinator Week: June 17-23
- ❖ Turner Pavilion
- ❖ Games, educational activities, outdoor movie, food, etc.
- ❖ Business sponsors
- ❖ Volunteering opportunity





Proposed Pollinator Corridors

Use of habitat connectivity to increase efficiency and diversity amongst pollinators

Harrisonburg Pollinator Management Plan

Vision

- ❖ Locate and establish more pollinator habitats
- ❖ Establish a city-wide pollinator corridor
- ❖ Create an integrated pest management plan
- ❖ Create a renowned pollinator program
- ❖ Create partnerships with local universities, state agencies and
- ❖ Educate the public
- ❖ Continue to have an annual public pollinator event



Pollinator Committee



Initial Partnerships

- ❖ Jeremy Harold, Brittany Clem, Mike Hott (Parks and Recreation)
- ❖ Rebecca Stimson, Wes Runion (Public Works)
- ❖ Rachel Drescher (Community Development)
- ❖ Karl Shenk (The Natural Garden)
- ❖ Lisa Bauer, Nichole Barrows (JMU Arboretum)
- ❖ Amy Goodall (JMU)

Goals:

- ❖ Create a GIS Map of pollinator gardens
 - ❖ Map potential areas for pollinator habitats
 - ❖ Compile a resource list for grant/support opportunities
 - ❖ Continue efforts to install pollinator gardens
 - ❖ Organize annual pollinator event
-

Planting Requirements

- ❖ Use of native herbs, flowers, and warm season grasses
 - All seed mixes or plugs should be of native origin
- ❖ Planting grounds should be surveyed and controlled for vegetative pest
- ❖ In small beds, wildflower plugs should be used and mulched appropriately
- ❖ Soil should be cleaned of thatch

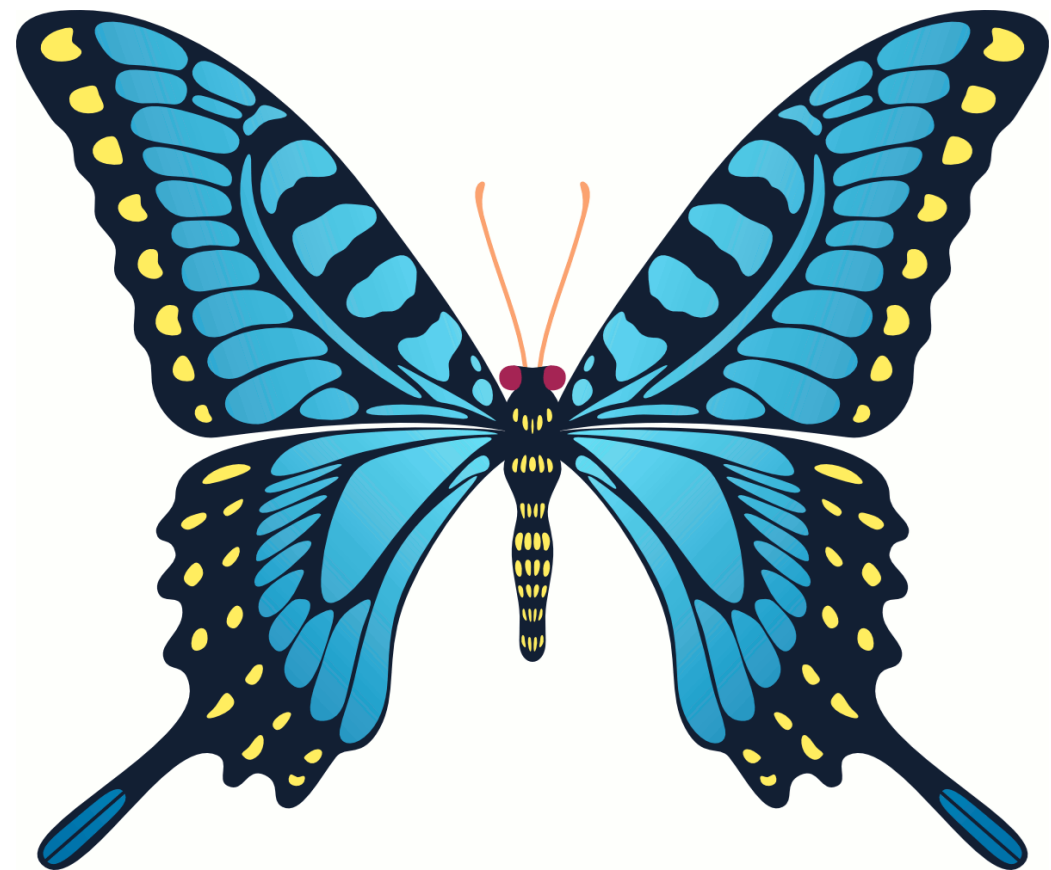


Post-Planting Pest Management

- ❖ Bi-weekly surveying for invasive vegetation
- ❖ Barrier fencing to prevent overbrowsing of nuisance deer
- ❖ Yearly mowing during the dormant season to encourage new growth
- ❖ Lack of insecticide use in or near pollinator habitat



Questions?



China Sword Impact on Recycling

By : Karla Delcid Cruz, Anne Penrod,
Katie Botticelli, Jerome Li

What is China Sword?

- Developed in 2017, China Sword is the name of the policy the Chinese government created to crack down on imports of contaminated recycling.
- Implemented on January 1st, 2018.
- China supplied its manufacturing industry by recycling “trash” into usable material.
- Imported 7 million tons of trash from the world in 2016, of which 300,000 tons were from the U.S.

China's Pollution

- In 2015, Beijing issued a Red alert warning to its citizens
- Schools and businesses closed
- Cause: Trash emissions, coal fire plants, vehicle emissions, construction, factory work



<https://www.mirror.co.uk/news/world-news/beijing-smog-pictures-before-after-6973550>

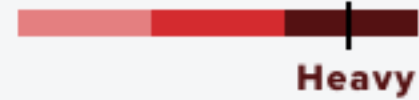
China Sword Timeline

2016	<ul style="list-style-type: none">• China was taking 7.3 million tons of paper, metal and plastic from countries including the US
JULY 2017	<ul style="list-style-type: none">• Contamination rate scheduled to increase to a 99.5% purity from 90%(2011?)• All imported trash required to meet standards
2017	<ul style="list-style-type: none">• Banned 24 types of recyclable material
2018	<ul style="list-style-type: none">• American citizens start to feel the impact as local recycling programs shut down



Virginia

i Effect



EFFECT KEY

Reported status of export restrictions and cost increases on local recycling

- Minimal** = Aside from the average market fluctuations, no major issues were reported.
- Noticeable** = Material is still moving, but with more difficulty, and local programs may be considering cuts.
- Heavy** = Recycling programs have been cut back, recyclable material is being disposed, or markets are shrinking.



Maryland

i Effect



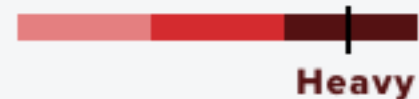
District of Columbia

i Effect



New York

i Effect




How it Affected Harrisonburg

- Recycling center, Van der Linde, collected single stream trash & recycling from cities including Harrisonburg to sell to China closed down mid-February.
- Opening of Recycling Convenience Center (March 2018) and Mobile Recycling Unit (Oct 2018) program
- Transition from curbside to citizen sorting their own recycling



Harrisonburg Recycling Units

- 
- Recycling Convenience Center
(#1 & #2 plastics, aluminum, cardboard, tin, plastic bags, paper)
 - * 2055 Beery Rd
 - Recycling Mobile Unit
 - * Mon-Simms School
 - * Tues-Westover Park
 - * Wed-Dream Come True Plygrnd
 - * Thur-Waterman Elementary
 - * Fri-Purcell Park
 - * Sat-Farmers Market
 - City Schools
 - * Mixed Paper & Cardboard



Other Communities in our Area

Broadway

- Closed down their recycling program that operated for 20 years and redirects their recyclables to Rockingham county landfill.

Elkton

- Shut their recycling program and start to send their trash to Rockingham Landfill

Bridgewater

- Despite having a community that funds and actively engages in their recycling program. It's closed due to financial reasons.



What We Can Do Locally?

- Palm leaf utensils for the public schools
- Take advantage of zero waste stores
 - Bring Your Own
 - Friendly City Coop
- Drop off plastic shopping bags
 - Kroger, Food Lion, Target, Walmart
- Buy a reusable water bottle
- Don't use plastic straws unless necessary



<https://www.pamperedchef.com/shop/Cookware/Cookware+Utensils/Bamboo+Spoon+Set/1674>



REDUCE, REUSE, RECYCLE

What we consume and the packaging it comes in creates over a tonne of waste per household per year!

Landfills release large amounts of **methane** which contributes to **climate change**.



REFUSE

SAY NO TO PLASTIC BAGS!

Use cloth bags or a backpack when shopping. Aussies use up to **4 BILLION PLASTIC BAGS A YEAR**. They last from 20 - 1,000 years in the environment and are a major threat to wildlife.

14
TONNES OF GASES
PER YEAR

The average Australian household produces around **14 tonnes of greenhouse gases** per year.



RECYCLE

ALWAYS RECYCLE PAPER & CARD



Recycling paper and cardboard containers reduces waste to landfill by up to **27%** and saves trees!



RECYCLE

AVOID NON-RECYCLABLES

Avoid packaging that won't go in your recycling bin, like styrofoam. Plastic packaging marked code 1, 2 or 3 can usually be recycled; several councils now also accept codes 4 - 7. **Check with your local council.**



REDUCE

MAKE THE MOVE TO CLEAN ENERGY

Switch to solar hot water – good for the environment, good for your bill. Be sure to ask your electricity provider about switching to a renewable energy plan or check out **Diamond Energy** and **PowerShop**.



REDUCE

REDUCE YOUR ENERGY USE

Cut your household emissions by up to **10%** by using energy saving lightbulbs and up to **50%** reduction by choosing energy-efficient whitegoods. **Good for the planet, good for your electricity bill.**



COMPOST

Get a compost bin or worm farm for food scraps. Means less landfill & great for your garden.

Contact your local council for more information.



REUSE

DON'T THROW IT UPCYCLE IT!

Did you know that over **90%** of plastics & metals in mobile phones and batteries can be reused in new products. Upcycle with **Mobile Muster** and **Clean Up Australia**.



CHOOSE

Opt for environmentally friendly & ethically made products. To learn how to shop smarter in Australia, visit projectjust.com and ethical.org.au



REUSE

REFILL YOUR OWN DRINK BOTTLE

Single-use plastic bottles generate an enormous amount of waste that is ending up in landfill, oceans and waterways. Refill your own stainless steel or BPA-free bottle and **save money** too!

Recommended Solutions

High School Water Filling Stations



- One or two fillers depending on the price
- Encourage students to reuse the same water bottle
- Easier filling
- Counts how many plastic water bottles you save



TRANSPORTATION

Pedestrian Crossing Treatment Evaluation for Four Locations in City of Harrisonburg

Introduction

- Our group was tasked to evaluate pedestrian crossing conditions and to find potential solutions for four locations in the City, and to compare them to two existing crosswalks and VDOT crosswalk warrants.
- The locations were given by Public Works Department where citizens claimed to see people having trouble crossing the street.

Crosswalk Advantages

- Helping pedestrians find their way across complex intersections
- Directing pedestrians to the location of the recommended crossing path
- Providing a visible reminder to motorists that pedestrians may be present

Crosswalk Disadvantages

- May create a “false sense of security” for pedestrians
- Drivers may not expect unnecessary and unwarranted crosswalks.
- Excessive marked crosswalk installation can lead to increased installation and maintenance costs.

Requirements for Crosswalks

According to the VDoT

- The crossing should be on a direct route between places that attract or produce pedestrians.
- The crossing should see a minimum of **20 pedestrians an hour on average**. However, this can be reduced to up to 10 an hour if there is a high number of "vulnerable pedestrians".
- The location must be **300 feet** or more away from another crosswalk on the same road. High enough demand can change this.
- Drivers must be able to see the entire length of the crosswalk, including waiting areas at both ends.
- The crosswalk must not create a safety hazard.

- There are different types of crosswalks that are chosen based on VDoT standards
- VDoT categorizes crosswalks based on the road conditions and vehicles per day

454 Pedestrian Improvements Across Uncontrolled Approaches
 455
 456

Roadway Configuration	Roadway ADT and Speed Limit															
	1,500 to 9,000 VPD				9,000 to 12,000 VPD				12,000 to 15,000 VPD				More than 15,000 VPD			
	≤ 30 MPH	35 MPH	40 MPH	≥ 45 MPH	≤ 30 MPH	35 MPH	40 MPH	≥ 45 MPH	≤ 30 MPH	35 MPH	40 MPH	≥ 45 MPH	≤ 30 MPH	35 MPH	40 MPH	≥ 45 MPH
2 Lanes (undivided two-way street or two-lane one-way street)	A	A	B	B	A	A	B	B	A	A	B	B	B	B	B	C
3 Lanes with refuge island OR 2 Lanes with raised median*	A	A	B	B	A	B	B	B	A	A	B	B	B	B	B	C
3 Lanes (center turn lane)	A	A	B	B	A	B	B	B	A	B	B	C	B	C	C	C
4 Lanes (two-way street with no median)	A	B	C	C	B	B	C	C	B	C	C	D	C	C	C	D
5 Lanes with refuge island OR 4 lanes with raised median*	A	A	B	B	A	B	B	C	B	B	C	C	B	B	C	D
5 Lanes (center turn lane)	A	B	C	C	B	B	C	C	C	C	C	D	C	C	C	D
6 Lanes (two-way street with* or without median)	A	B	D	D	B	B	D	D	D	D	D	D	D	D	D	D

Source: Guidance for Installation of Pedestrian Crosswalks on Michigan State Trunkline Highways (Michigan Department of Transportation, 2014)

Condition A	Candidate site for marked crosswalk alone (standard if speed limit is 30 MPH or less, high-visibility if speed limit is 35 MPH or greater). Evaluate need for advance signing
Condition B	Potential candidate site for marked crosswalk. Location should be monitored & consideration given to providing a high-visibility crosswalk and/or warning signs (see Section 7.2)
Condition C	Marked crosswalks alone are insufficient. The crosswalk shall use a high-visibility pattern and other improvements (warning signs and/or geometric/ traffic calming improvements) (see Section 7.2) <u>will likely be necessary.</u>
Condition D	Marked crosswalks shall not be installed

Locations

Study Locations

- Grace Street @ Chesapeake Ave.
- South Avenue @ Grand Duke Apartments
- North Main Street @ Holly Hill Dr
- Chicago Avenue @ Waterman Dr

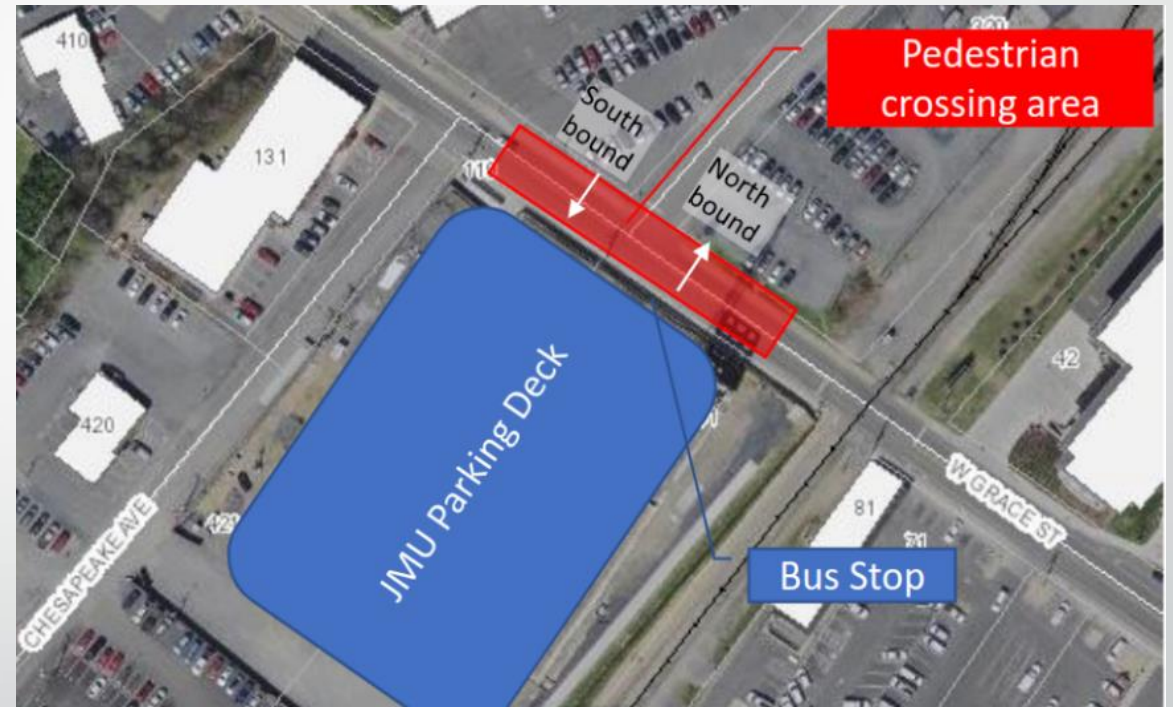
Existing & Designed Crosswalks

- Neff Avenue @ Sunchase Dr
- Reservoir Street @ Norwood Street

Existing Conditions

Grace St. @ Chesapeake Ave.

Number of Lanes	Two lanes
Width of Crossing	28ft
Sidewalk	Both sides
Speed Limit	25mph
Distance to next Crosswalk	300ft



Existing Conditions

South Ave. @ Grad Duke Apartments

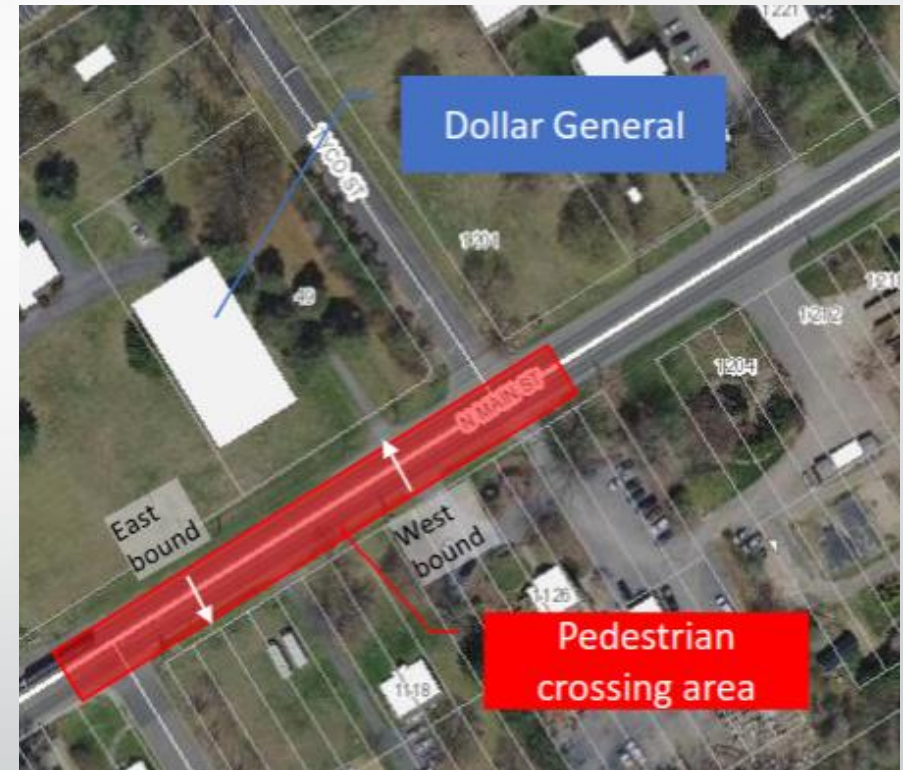
Number of Lanes	Two lanes
Width of Crossing	40ft
Sidewalk	Both sides
Speed Limit	25mph
Distance to next Crosswalk	700 ft



Existing Conditions

North Main St. @ New Dollar General

Number of Lanes	Three Lanes
Width of Crossing	36ft
Sidewalk	No at east side
Speed Limit	35 mph
Distance to next Crosswalk	2,670 ft



Existing Conditions

Chicago Ave. @ Waterman Dr.

Number of Lanes	Two lanes
Width of Crossing	24ft
Sidewalk	No on East side
Speed Limit	25mph
Distance to next Crosswalk	2,200 ft



Data Collection



Data Collection

Location	Pedestrian Count (ped/hr)	Vehicle Count (veh/hr)
Neff Ave @ Sunchase Dr		
Morning Peak	5	735
Mid-Day Peak	18	1,700
Evening Peak	28	2,600
Reservoir Street @ Norwood Street		
Morning Peak	9	1,300
Afternoon Peak	3	510
Evening Peak	8	1,160

Data Collection

Location	Pedestrian count (ped/hr)	Vehicle count (Veh/hr)
Grace Street @ Chesapeake Ave Parking deck		
Morning Peak	21	630
Mid-Day Peak	21	650
Evening Peak	20	630
North Main Street @ Dollar General		
Moring Peak	5	630
Mid-Day Peak	0	530
Evening Peak	2	640

Data Collection

Location	Pedestrian count (ped/hr)	Vehicle count (Veh/hr)
South Ave		
Evening Peak	10	520
Chicago Ave @ Dollar General		
Evening Peak	20	450

Data Analysis & Recommendation

Locations	Pedestrian count (ped/hr)	Vehicle count (Veh/day)	VDOT Crosswalk Warrant	Other Considerations	Recommendation
Neff Ave @ Sunchase Dr					
	20	11,000	C	Already in place	No action
Reservoir Street					
	5	9000	None	Safe route to school project	Monitor

Data Analysis & Recommendation

Locations	Pedestrian count (ped/hr)	Vehicle count (Veh/day)	VDOT Crosswalk Warrant	Other Considerations	Recommendation
Grace St. @ Chesapeake Ave					
	20	4900	A	None	Normal crosswalk to be implemented
South Ave.					
	10	5000	A	Many children	Normal crosswalk to be implemented

Data Analysis & Recommendation

Locations	Pedestrian count (ped/hr)	Vehicle count (Veh/day)	VDOT Crosswalk Warrant	Other Considerations	Recommendation
North Main St.					
	<5	8000	None	No sidewalks	Add sidewalks on North Main St. Re-evaluate later
Chicago Ave.					
	20	5500	A	Speed Study	Add a normal crosswalk

Conclusion

- Crosswalks should be installed on South Ave, Grace St, and Chicago Ave.
- Only standard crosswalks are required per the warrants.
- Addition of a sidewalk on North Main St.
- Further consideration needs to be taken during design process for speed and sight distance.

“Handle With Care”



Proactively supporting & reducing trauma for
City of Harrisonburg's Youth in Public Schools.

Introduction – Hello & Thanks...

- Our project: Reduce the impact of trauma in schools through concept called “**Handle With Care**” (3 simple steps)
- What we have done: **Worked to recruit collaboration among:**
 - ✓ City Fire Dept
 - ✓ City Police Dept
 - ✓ Harrisonburg Rescue Squad
 - ✓ Harrisonburg City Public Schools
 - ✓ City Manager’s Office
 - ✓ Harrisonburg-Rockingham Emergency Communications Center
 - ✓ Harrisonburg-Rockingham Crisis Intervention Program
 - ✓ Harrisonburg-Rockingham Community Services Board

Mental Health & Trauma – It's real...

- ✓ Over **20%** of America's youth: **diagnosed** with a mental health disorder.
- ✓ **Suicide** - leading cause of death ages 15-24.
- ✓ Over **70%** of youth in juvenile justice systems have a mental illness.
- ✓ **37%** of students who suffer from a mental illness drop out of school.
- ✓ Unresolved childhood trauma may result in:
 - ✓ Life of crime
 - ✓ Depression
 - ✓ Anxiety
 - ✓ PTSD
 - ✓ Other mental illnesses

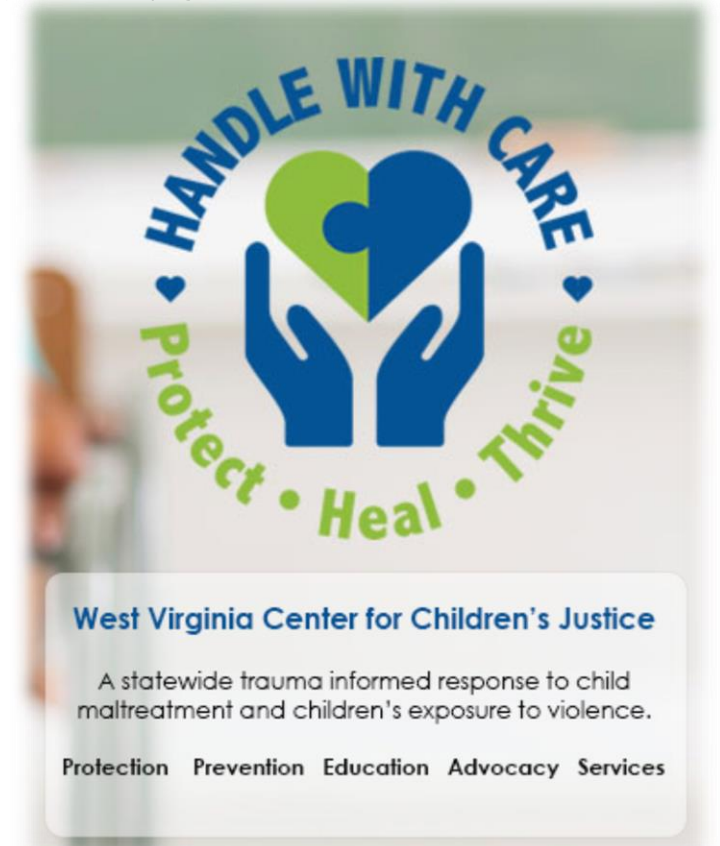


What is “Handle With Care”?

GOAL: *To promote safe and supportive homes, schools, and communities that protect children, and help traumatized children heal and thrive.*

Originated Charleston WV Suburb - 2013 (pilot)

- Today: all 55 counties in WV
- Maryland
- Texas
- Georgia
- Australia
- **Virginia:** Tazewell only, with several others coming onboard soon



How will HWC work?



Collaboration Among:

- City Emergency Responders:
 - Harrisonburg Police
 - Harrisonburg Fire
 - Harrisonburg Rescue
- Emergency Communication Center
- City Public School System
- Regional Crisis Intervention Program (CIT)



Step 1: Emergency Responders



1. Arrive at scene:

- Police call
- Fire call
- Rescue call

2. Identify students (if any) affecting/involved:

- Simply obtain students name and school

3. As soon as feasible, HRECC contacted by phone for a

“Handle With Care Notification”

Step 2: HRECC



1. “Handle With Care Notification” received by phone
2. Dispatcher brings up the Alpha Page System, & enters:

Handle With Care:
James Frakes, Stone Spring Elementary

That Alpha Page will be pre-designed to be sent to:

- **City School Central Office Staff Members (3)**
- **School Resource Officers**

Step 3: City Central Office & Schools



1. Central Office's Role:

- a. Student name and school is validated
- b. School Principal & others notified prior to the start of school

2. School's Role:

- Being supportive throughout the day
- Gently engaging open communications
- Recognizing the need to consider other resources (School Guidance, etc.)

The Only Goal:

Make sure the child is Handled With Care at school that day, to provide support during their stressful experience.



The Outcome:

Success Through Collaboration

City of Harrisonburg:

Police

Fire

Rescue

Emergency Communications

Harrisonburg City Schools

Harrisonburg/Rockingham CIT

Community Services Board

McNulty Center



Long Term Effects of “Handle With Care”



Project Specifics: Moving Forward...

1. Legally cleared through:
 - ✓ City Manager's Office
 - ✓ City Public School System
2. Stakeholders wish to immediately pursue planning & employee training during the summer months...
3. Will go into effect the 1st day of school: **Aug. 20th**
4. Cost: ***\$ Zero Dollars***

Thank You City Council...



*...for our opportunity to leave our
City School System even better than we found it.*

HHS Service Learning, Class of 2019

