Saint Louis Great Streets INITIATIVE
LEARN · SHARE · PLAN · BUILD

Fundamentally, streets are public space

They do more than move cars.

HAIR SALON

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Great Streets

- Are **Great places**
- **Integrate land & transportation** planning
- Accommodate **all users and modes**
- Are **economically vibrant**
- Are **environmentally responsible**
- Rely on **current thinking**
- Are **measurable**
- **Develop collaboratively**

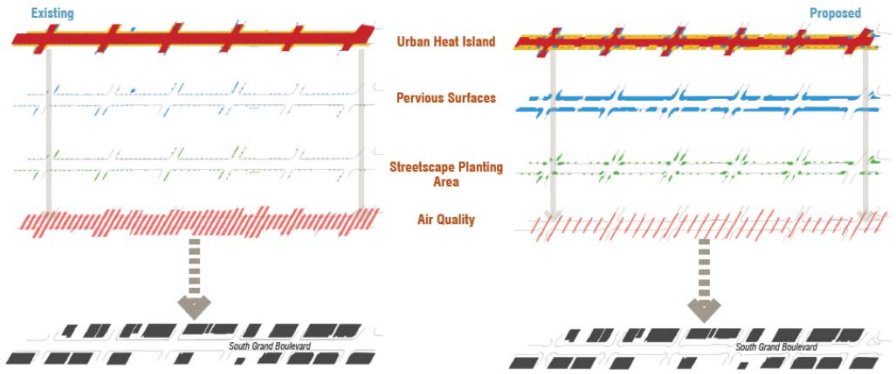
Program conceived

as a reaction to construction of roadways that ill serve their communities

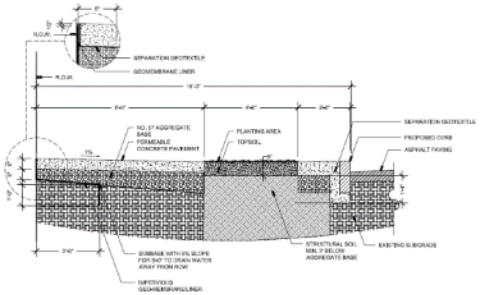
and the narrowly defined process that ensured that end result

as a carrot, not a stick

Planning with the environment:



- Accepted science (predictable outcomes)
- Address a range of measurable elements
  - water, light, sound, solar gain, energy consumption, biodiversity, education, etc.
- Makes practical sense
  - Reduce ongoing demand on resources (storm sewers, electricity, irrigation, maintenance)
  - Secondary benefits (ie: measures to improve air quality may also improve safety, etc.)
  - Extend the life cycle of what gets built
- Spaces that reflect local identity

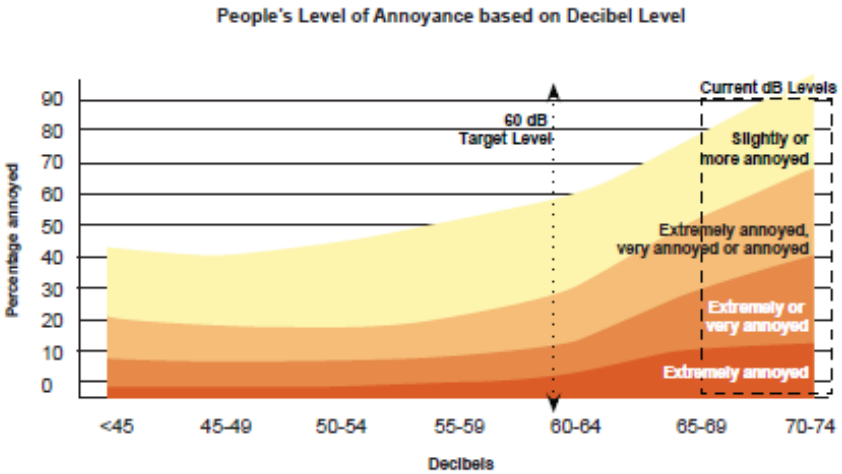


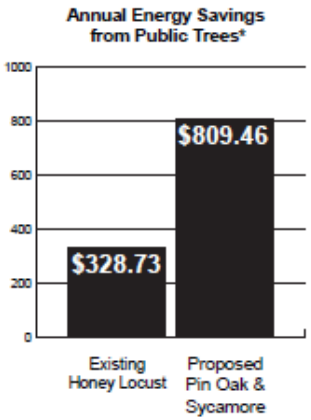
Green design should be well integrated into any plan.

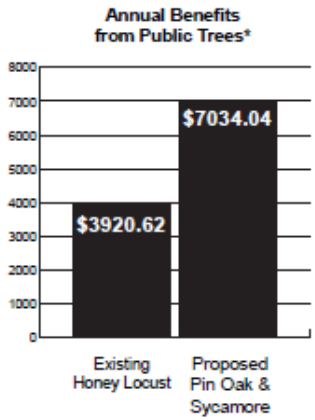
***"Silo'd"* green design is unsustainable.**

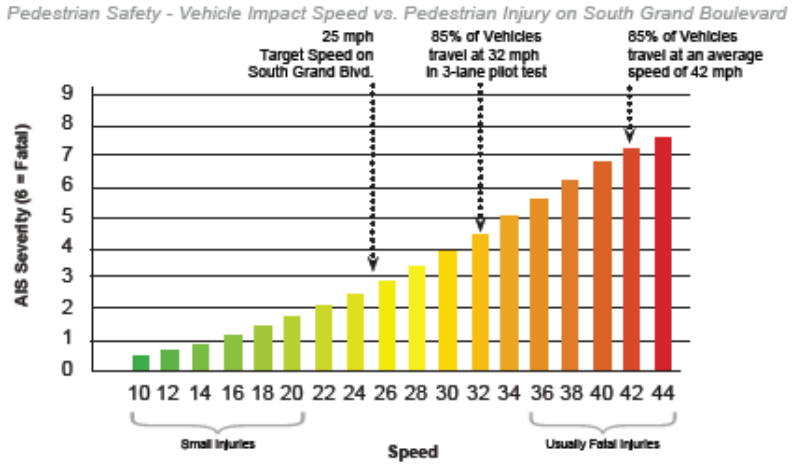
Only build what will be maintained.

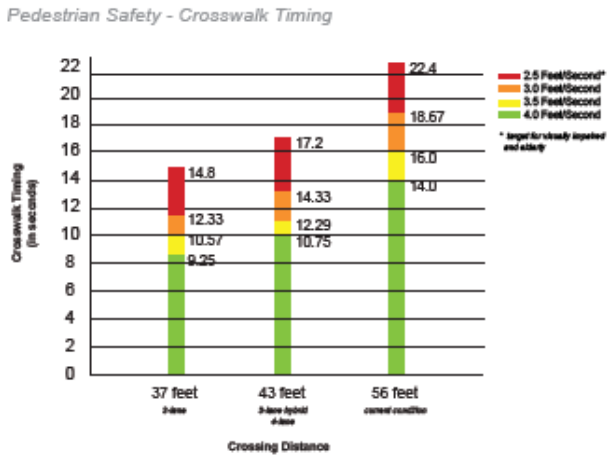
Property next to parks/trails has 6% premium





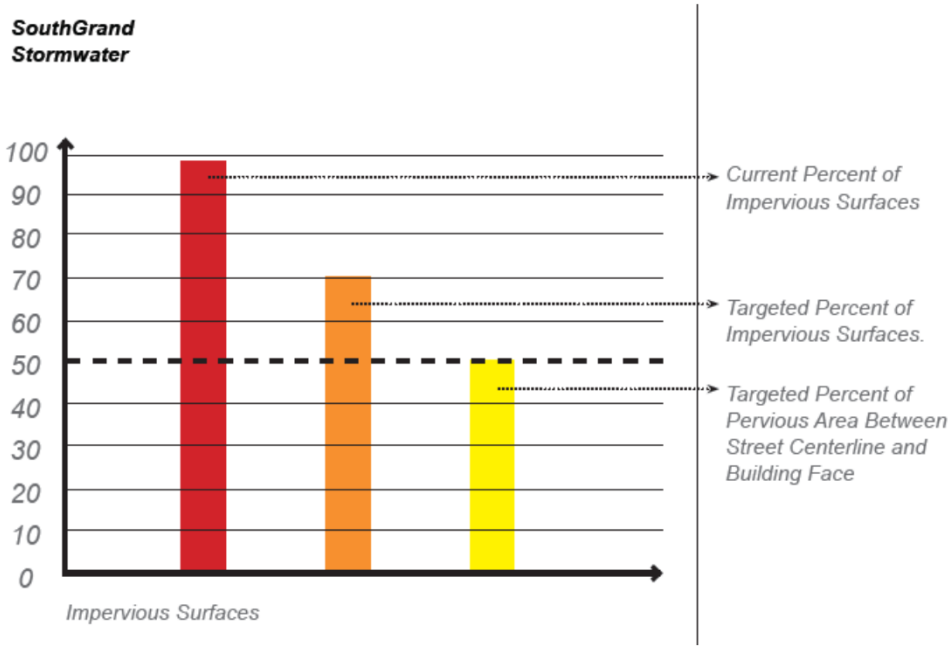






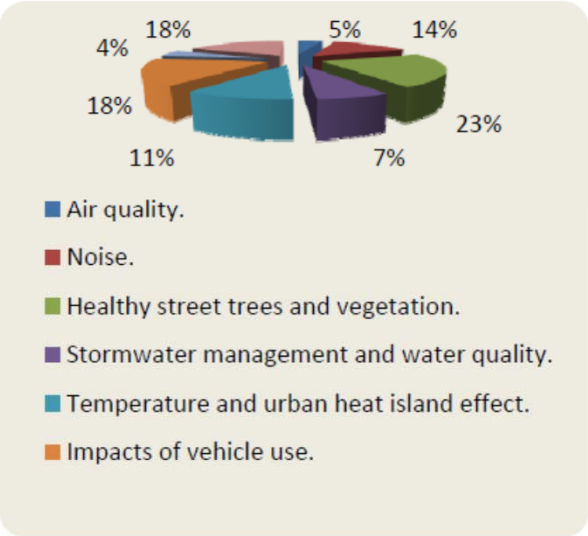
People spend 5% - 8% more when shopping / dining in high quality environments.

South Grand

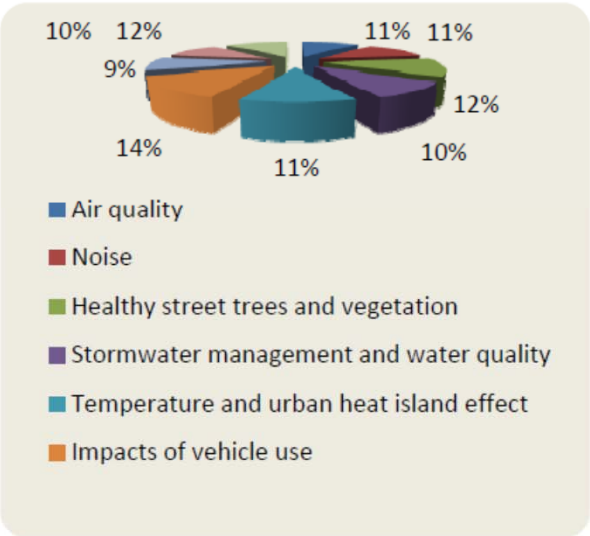


12.) The most important environmental issues to address on South Grand are… (Rank your top 3)

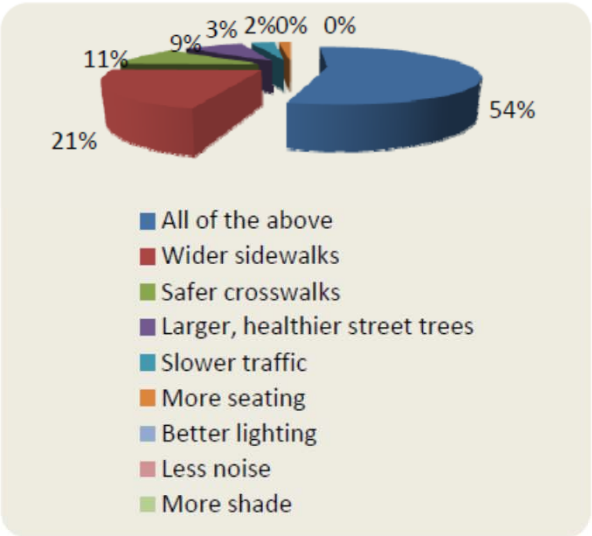
Keypad Polling



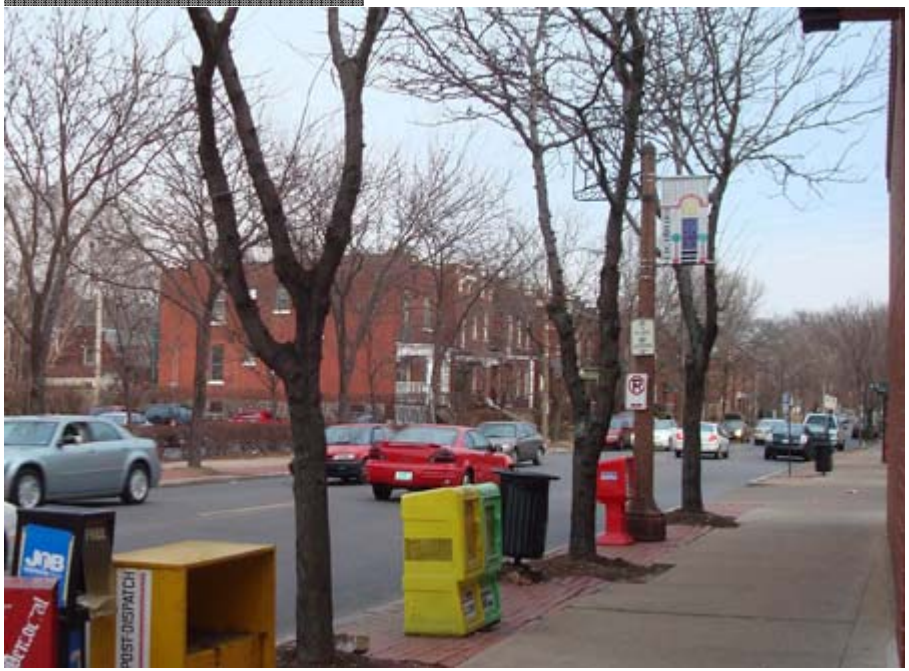
Online Polling



Street Survey



Before

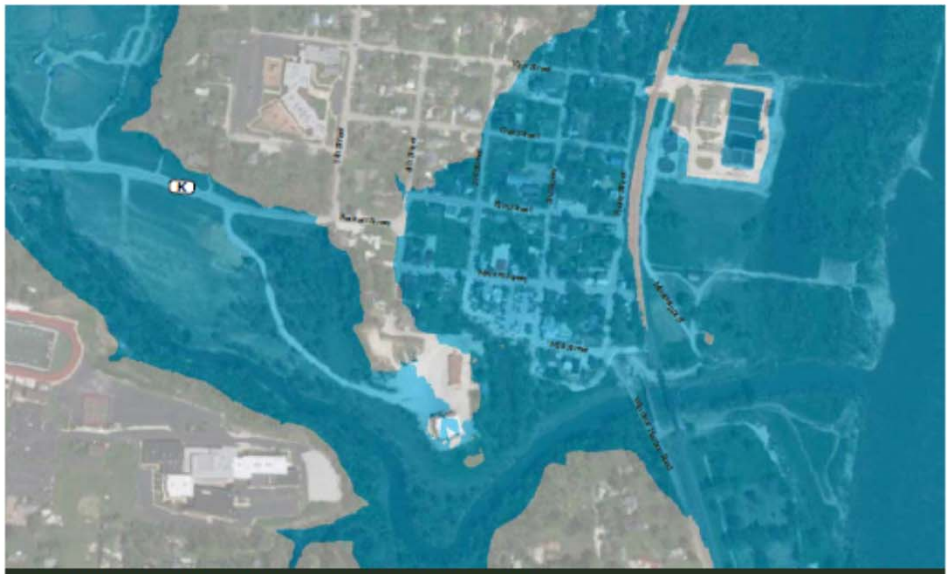


After

- Rain Gardens
- Pervious Pavement
- Pre & Post Construction Storm Water Analysis
- Education
- Planting Schedule
- Maintenance Routine
- Tree Wells - - -

Kimmswick

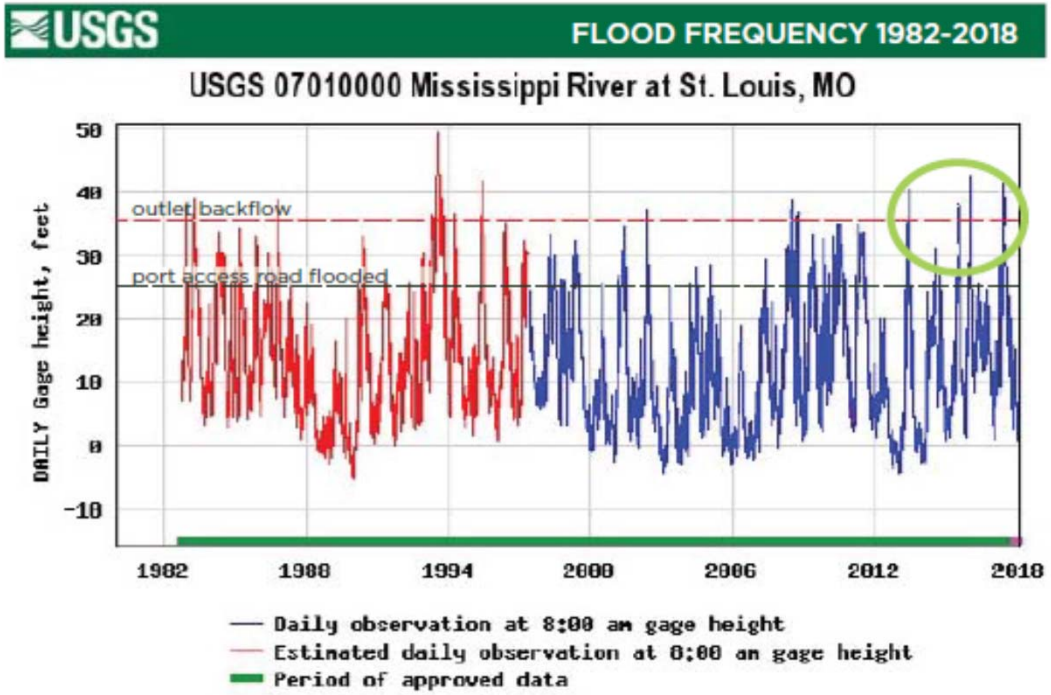
2 YEAR STORM FLOODING EXTENTS

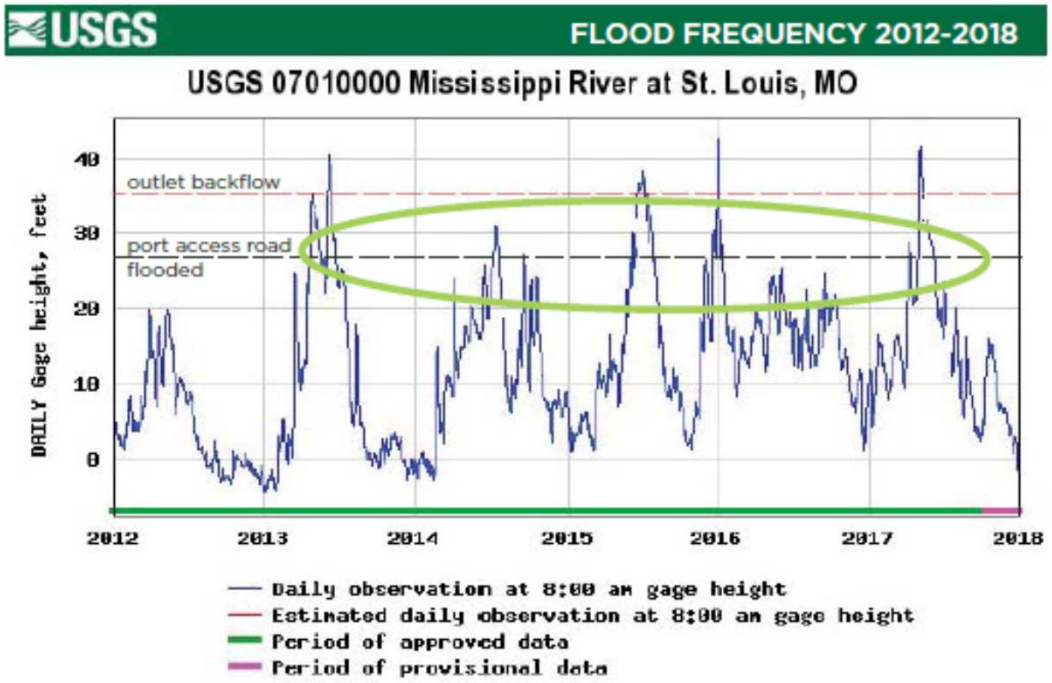


100 YEAR STORM FLOODING EXTENTS

AVERAGE WATER LEVEL IMAGE

FLOODING IMAGE


USGS
FLOOD FREQUENCY 1982-2018
USGS 07010000 Mississippi River at St. Louis, MO
DAILY Gage height, feet
50
40
30
20
10
0
-10
outlet backflow
port access road flooded
1982
1988
1994
2000
2006
2012
2018
Daily observation at 8:00 am gage height
Estimated daily observation at 8:00 am gage height
Period of approved data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2015
2016
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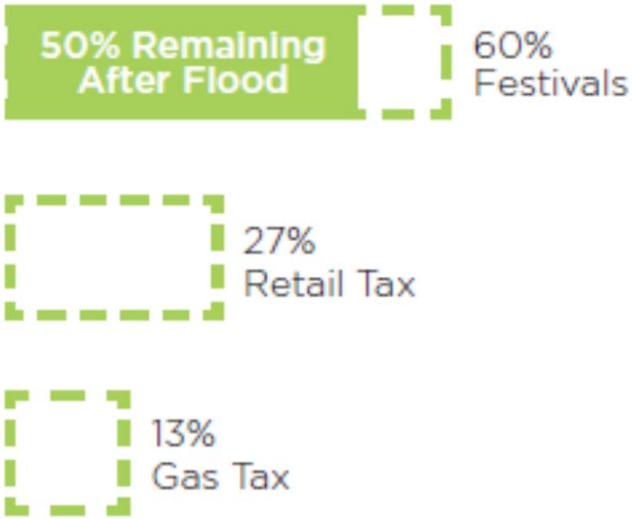
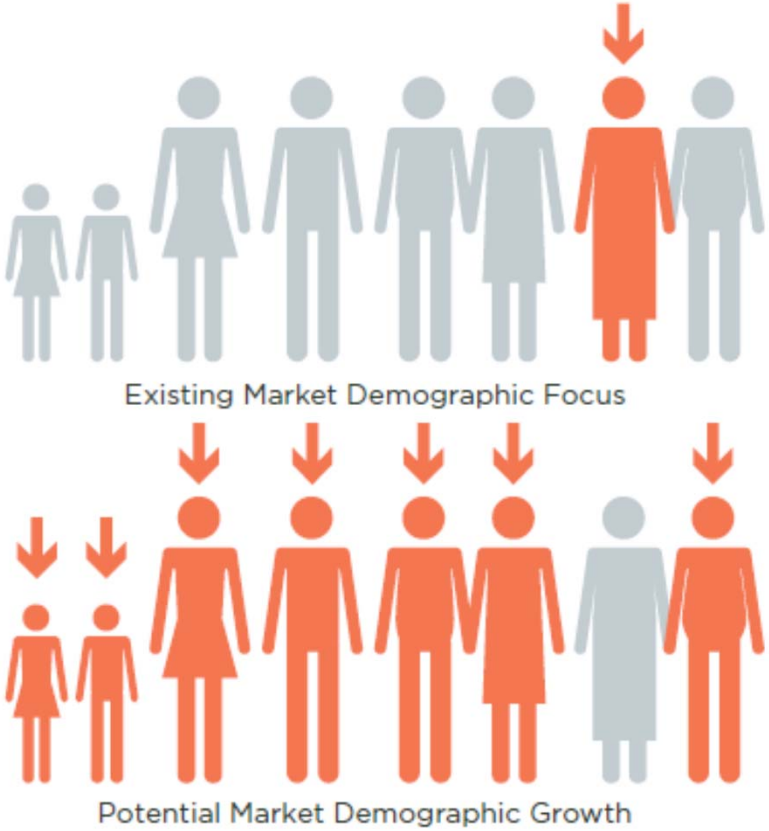
Daily observation at 8:00 am gage height
Estimated daily observation at 8:00 am gage height
Period of approved data
Period of provisional data



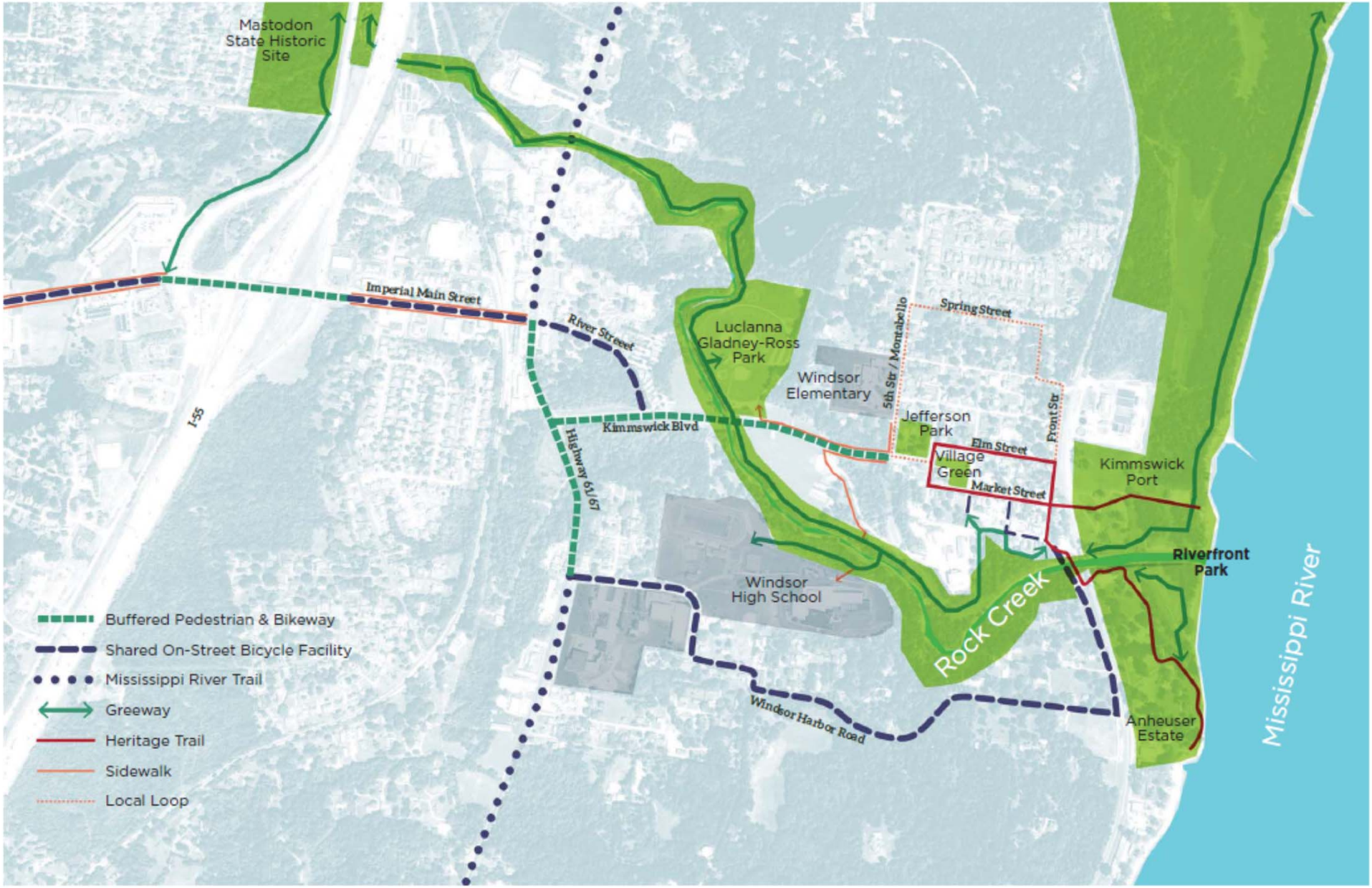
*Based on 2017 budget numbers

CITY REVENUE: The annual budget varies yearly. Flood defense can deplete it 50 percent or more.



MARKET GROWTH OPPORTUNITY: Women over 55 make up the majority of Kimmswick's current market. There is great opportunity to expand commerce connecting with other age demographics

- Reengage the city with the Water
  - Rock Creek and the River
  - Connections, quality space, activity
- Watershed drainage
  - Divert around town
  - Improve outlets / controls
  - Formalize strategy for site detention
    (enhance public space and increase pervious)
- Flood Protection
  - Tailored barrier
  - Affordable
- Develop local resources
  - Diversify economy
  - Fortify municipal organization
  - Expand municipal revenues

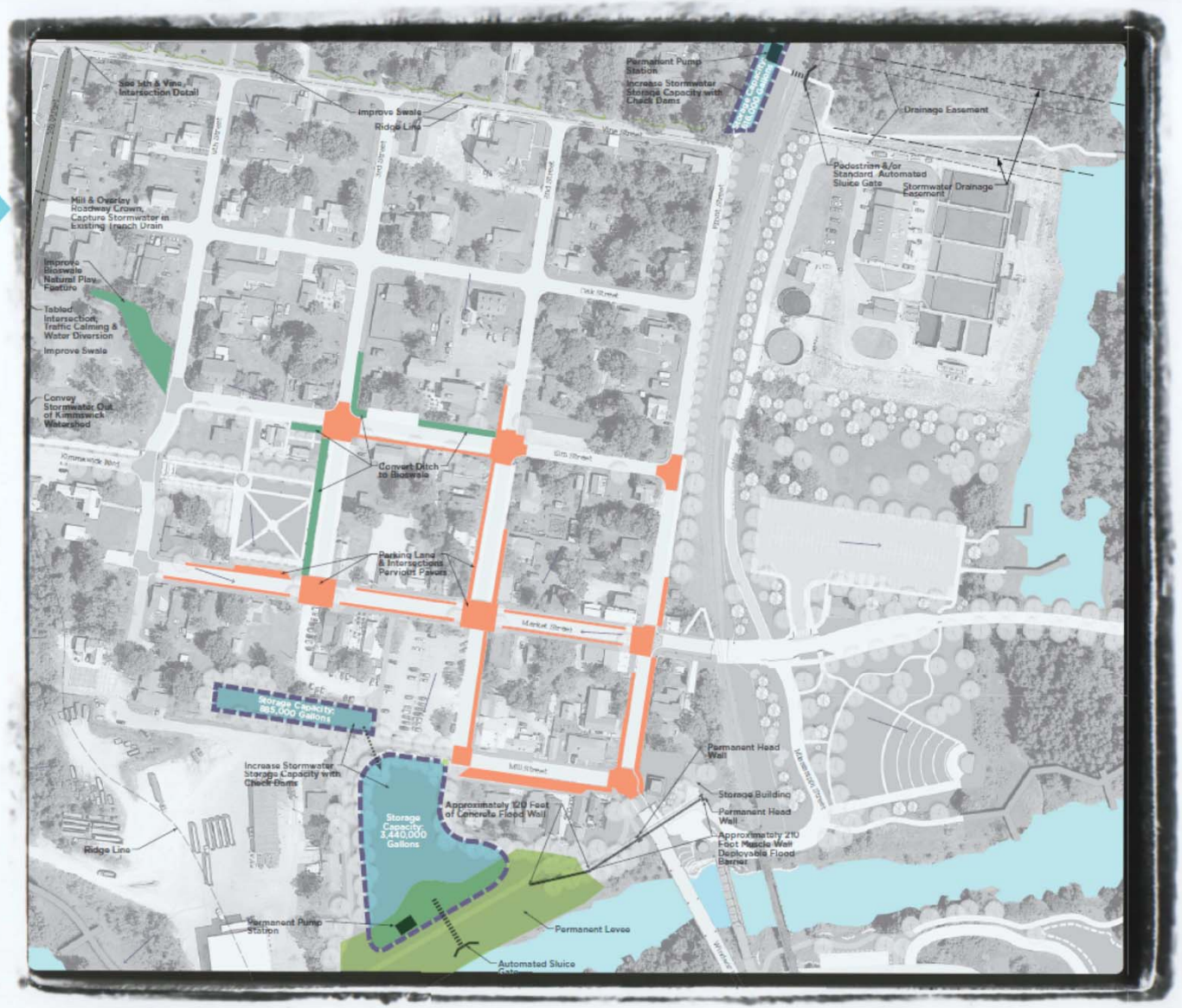


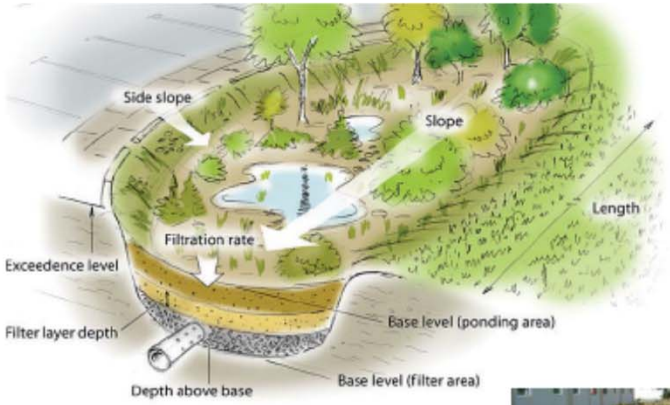
17 Confluence Park & Local Connectivity

FLOOD DEFENSE: It's the little things that count. Diverting runoff, slowing and retaining stormwater in swales, designing soils and pavement for infiltration and creating pockets to store water result in big help against flooding.

LEGEND

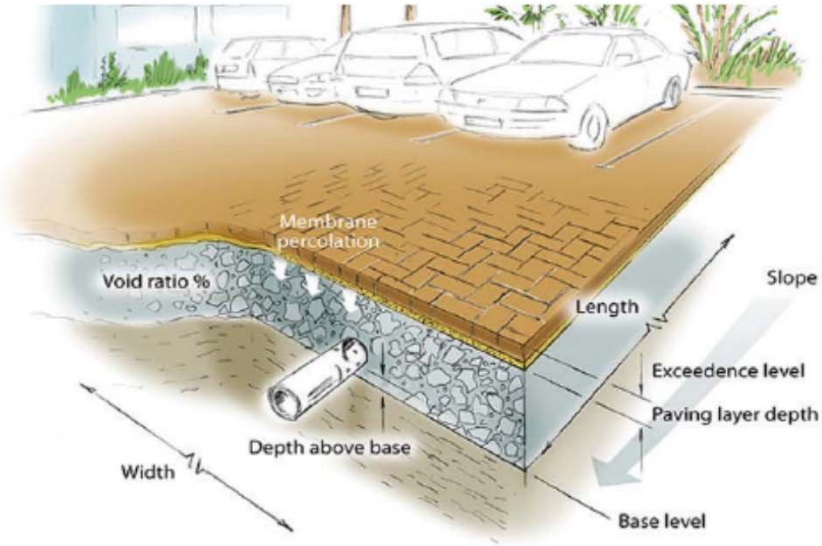
- Permeable Paving
- Improved Bioswale
- Permanent Levee
- Existing Waterway
- Roadway Renovation
- Stormwater Flow
- Ridge Line
- Improved Swale Lines
- Inlet & Underground Pipe
- Deployable Flood Barrier
- Floodwall
- Permanent Pump Station
- New Outlet Gate
- Catch Basin





BIOSWALE EXAMPLE

BIOSWALE DECK



MARKET STREET

Windsor Elementary School
Jefferson Park
Kimmswick Village Green
3rd Street Bioswale & Stormwater
Active Street Edge/ Heritage Trail
Observation Tower/Public Restroom
Sewer Plant
Screen Sewer Plant
Parking
Riverfront Park
Kimmswick Port
Fishing Dock
Amphitheater
Boardwalk
Rock Creek
Windsor Harbor Road at Rock Creek
Anheuser Estate
Mississippi River
Delta Queen
Kimmswick Port Overlook
Riverside Steps
River Trail
Levee Trail
Oak Street
Big Street
Market Street
Mill Street
Regional Connectivity
MATCH PREVIOUS PAGE

A1. PERMANENT FLOOD BARRIER

Above: Flood Barrier Solution

Above: Deployable Barrier in Action

$1M to $5.5M LOWER THAN CORP OF ENGINEERS

3.4M GALLON RUNOFF STORAGE

8 to 27 DAYS ACCESS GAINED

INCREASE COMMERCE

MAINTAINED HISTORIC AESTHETIC

INCREASED FINANCIAL RESILIENCE

Accomplishes KIMMSWICK GOALS

- Community Supported
- Flood Protection
- Maintain/Enhance Quality of Life
- Enhance Historic Character

Clear communication is essential