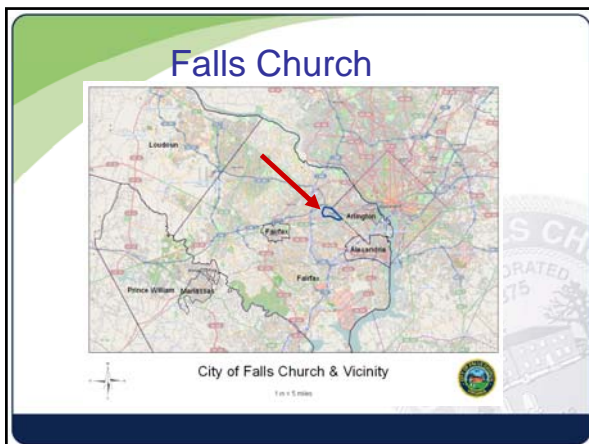


# A Comprehensive Approach to Pedestrian and Bicycle Planning:

A Case Study in the City of Falls Church

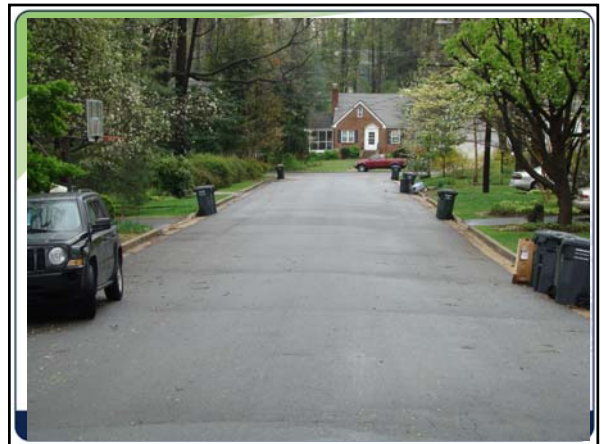
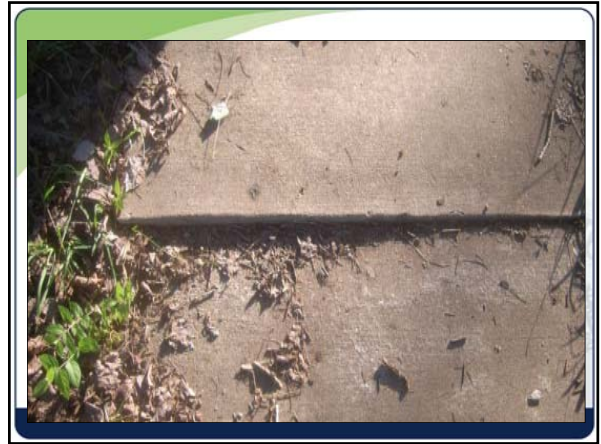
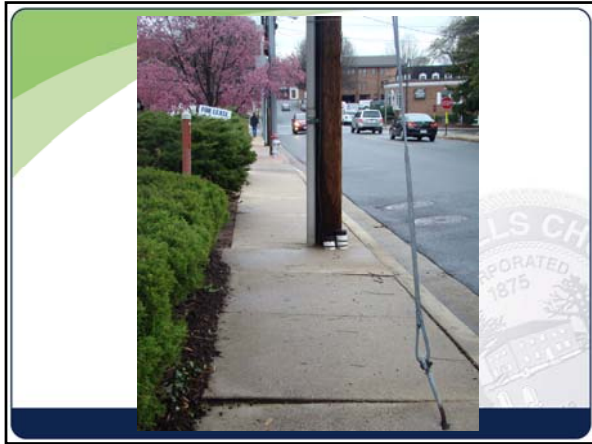




Overall, a great place to live and work!

### The City of Falls Church

- Located in Northern Virginia, 10 miles West of Washington, D.C
- 2.2 Square Miles
- 11,000 population – highly educated, affluent
- Full service locality – police, schools, library, public works, public utilities, human services
- City staff ~250 (including summer temporary staff)
- Annual City Budget of ~\$70M
- High level of citizen involvement
- Unusual in level and array of services





### The Problem

- Existing sidewalks in poor condition
- No/partial sidewalks on a number of streets
- City receives ad-hoc requests for repairs/construction and/or new sidewalks on a regular basis
- **City does not have a process to evaluate requests and prioritize improvements**

### The Solution

- Do a comprehensive evaluation
  - Quantity: How many problems/streets without sidewalks
  - Quality – What is the nature of the problem (Cracks, heaves, etc)?
- Create a Master Plan to implement bicycle and pedestrian network improvements for the entire City

### Public Meetings

- 3 up front meetings
- 60 people attended
- Held walk/bike tours



### Pedestrian, Bicycle and Traffic Calming Advisory Committee



### Safe Routes to School Advisory Committee



### Interactive Web Tool

Allowed users to pinpoint areas requiring improvement for pedestrians and bicyclists—over 700 comments

### Interactive Tool – Sample Results

Interactive Tool Survey Results  
Difficult Intersection Crossings

Q10: Where are difficult intersection crossings?

Highest rated difficult intersection crossings:

1. WBOD Trail / N. Wake Street Ave (11%)
2. WBOD Trail / N. Washington St / Fairfax Dr (8%)
3. Great Falls St / WBOD Trail / Lincoln Avenue (7%)
4. Lee Highway / Condon Trail / S. Maple Ave (6%)
5. Pennsylvania Ave / Ross Pl (5%)

83 responses received

Note: Located just outside the City limits.

### Data Collection

- Evaluated 800 City blocks
- Collected data from every street
- Noted every sidewalk, curb ramp deficiency

### SIDEWALK INVENTORY

Legend

- UNEVEN SIDEWALK SLOPE
- UNEVEN SIDEWALK
- DRIVEWAY SLOPE
- UNPROTECTED SIDEWALK
- SIDEWALK

### The Data

- 766 locations of uneven sidewalks
- 496 damaged or cracked sidewalks
- 129 locations of obstacles in the sidewalk (utility poles, posts, etc)
- 48 locations with guy-wires
- 353 locations with no sidewalks

**How do we prioritize these areas?**


### Project “Buckets”

Construct New Sidewalks

Sidewalks to repair



### Project "Buckets"



- Each bucket has many projects
- This bucket has 353 projects
- City has limited funding
- City cannot improve every location immediately
- **How do we determine which projects to implement first?**

### Methodology

- City developed 8 criteria to evaluate each location that does not have a sidewalk
- Criteria consider whether the street is on a
  - route to school,
  - route to Metro,
  - park connectivity plan,
  - along a commercial corridor
- Streets that meet more criteria = greater need for sidewalk than streets that meet few/no criteria

### Methodology

- But, how should we weight each criterion?
- Some criteria more important to the community than others
- Weighting necessary in order to develop an implementation plan
- Need a #1 project

### Pedestrian, Bicycle and Traffic Calming Advisory Committee

### Exercise

- Take a few minutes to rank the 8 criteria in order from 1-8
- 1 = most important
- 8 = least important

### Exercise

	Policy Criteria	Safe Routes to School	Transit Route	Primary Route to Metro Station	Within 1/4 block of commercial corridor	Park Connectivity Master Plan	Partial Sidewalk or Sidewalk Connection	Pedestrian Level of Service
Conference Example 1								
Conference Example 2								
Conference Example 3								
Sum								
Average								
<b>Tier</b>								

### Exercise

	Policy Criteria	Safe Routes to School	Transit Route	Primary Route to Metro Station	Within 1/4 block of commercial corridor	Park Connectivity Master Plan	Partial Sidewalk or Sidewalk Connection	Pedestrian Level of Service
Ped Bike Advisory Committee Ranking	2	1	2	2	2	3	3	3
Conference Ranking								

### Values


- Exercise is a statement of values of the community (in this case, the classroom)

### Values

- Exercise is a statement of values of the community (in this case, the classroom)
- Falls Church Values:
  - Routes to school – highest value
  - Routes to parks, transit, commercial areas, and adherence to policy – middle value
  - Partial sidewalk, roadway functional classification – lowest value


### Prioritization Methodology

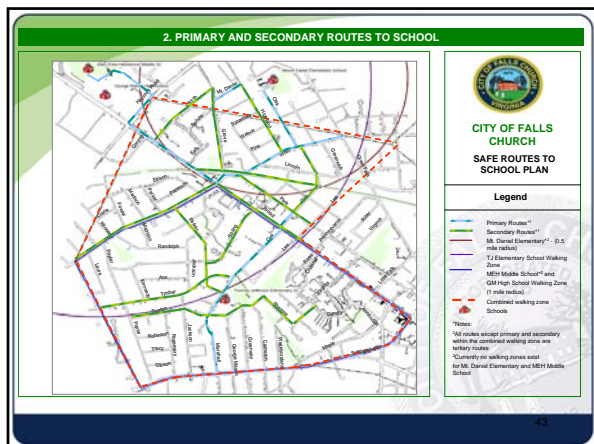
- Go through checklist of criteria
- Assign points to each criterion
- Each project receives a score
- Highest score = highest need



### Criteria for Evaluation of Streets for New Sidewalks

- Is street along Safe Routes to School Route?





### Criteria for Evaluation of Streets for New Sidewalks

New Sidewalks

1. Is street along Safe Routes to School Route?
2. Is street on a primary route to Metro?

44



### Criteria for Evaluation of Streets for New Sidewalks

New Sidewalks

1. Is street along Safe Routes to School Route?
2. Is street on a primary route to Metro?
3. Is street on a transit route?

46

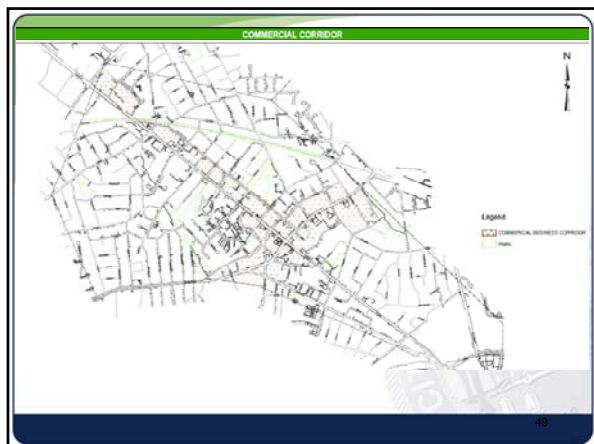


### Criteria for Evaluation of Streets for New Sidewalks

New Sidewalks

1. Is street along Safe Routes to School Route?
2. Is street on a primary route to Metro?
3. Is street on a transit route?
4. Is street within 1 block of a commercial corridor?

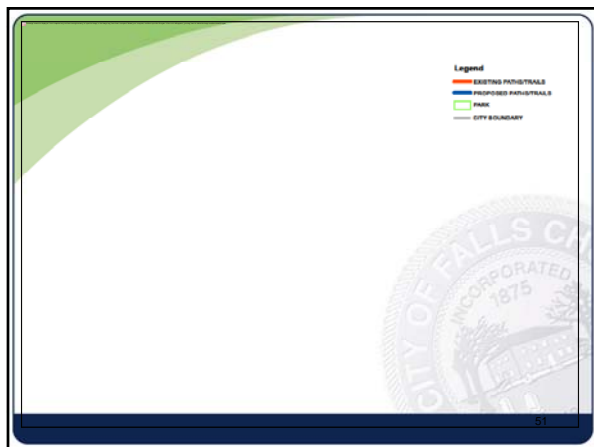
48



### Criteria for Evaluation of Streets for New Sidewalks



1. Is street along Safe Routes to School Route?
2. Is street on a primary route to Metro?
3. Is street on a transit route?
4. Is street within 1 block of a commercial corridor?
5. Is street on park connectivity map?



### Criteria for Evaluation of Streets for New Sidewalks

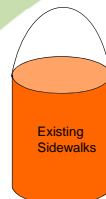


Highest number of points  
=  
Greatest sidewalk need

### Project "Buckets"



### Existing Sidewalks "Bucket"

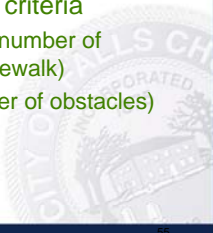


- Existing sidewalks with deficiencies  
This bucket has hundreds of projects
- **How do we determine which projects to implement first?**




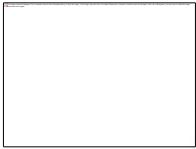


### Existing Sidewalks Evaluation

- Ranking all projects within this category
- Using similar scoring/ranking methodology, but different criteria
  - Compliance score (ratio of number of deficiencies to length of sidewalk)
  - Obstacle score (total number of obstacles)
  - Right of way score



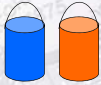

55

### Implementation

### Project Deliverables

- Master Plan
  - Document –
    - Priorities (Tiers),
    - Policies (Traffic Calming, Complete Streets)
    - Design Guidance
  - Database
  - Mapping
- ADA Compliance Plan

### Not Delivered With the Project...

- Universal Endorsement / Willingness
- Funding
- Expressions of the communities values




### Easy Part - Funding


- Operation & Maintenance Funds
  - Local maintenance funds – limited
- Capital Program Funds
  - Reprogrammed existing unspent SYIP funds
  - Grant Opportunities
    - SRTS
    - RSTP / CMAQ
    - HSIP
    - TIGER / ARRA



### Putting It In the Ground

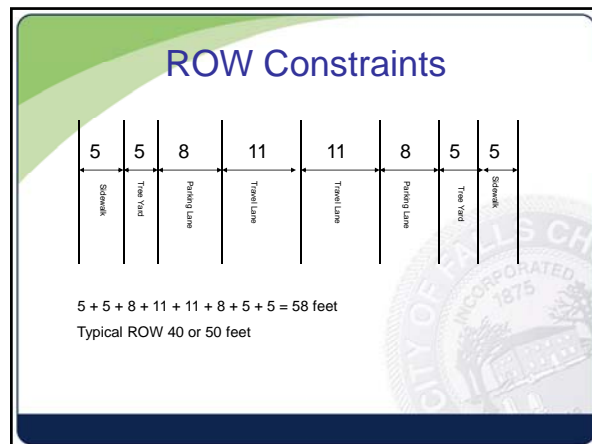
- Limited ROW
- New standards for sidewalks, bicycle accommodations
- Existing on-street parking
- Community input

**How do you balance these values?**



**DRAFT Falls Church Street Typology and Sidewalk Standards**

Street Type	Includes	Travel Lanes	Transit Service	Pedestrian Facility	Option 2
Major Arterials	Broad Street, Washington Street	4	Yes	10 ft sidewalk, 10 ft landscape	10 ft sidewalk, 10 ft landscape
Minor Arterials and Collectors / Commercial	Roosevelt Boulevard, Annandale Road, Park Avenue, N. Maple Avenue (Park to W. Jefferson), Little Falls Street (Broad to Great Falls), W. Jefferson Street, S. Maple Avenue (Gibson to S. Washington Street)	2-4	No	8 ft sidewalk, 6 ft landscape	5-8 ft sidewalk, 0-6 ft landscape
Minor Arterials and Collectors / Residential	West Street, Hillwood Ave, Lincoln Ave, Columbia Street, Oak/Marshall, Little Falls Street (Great Falls to City line), Great Falls Street, North Roosevelt Street, South Roosevelt Street	2	No	6 ft sidewalk, 4 ft landscape	5-6 ft sidewalk, 0-4 ft landscape
Residential	All other streets	2	No	5 ft sidewalk, 5 ft landscape	5 ft sidewalk, 0-5 ft landscape



### Little Falls Street



- Road Width = 32 ft
- Sidewalk = 4 ft (one side)
- City ROW = 40 ft
- Available ROW = 0 ft on sidewalk side; 4 ft on other side
- Policy = 2 sidewalks

