

Comprehensive Bicycle Master Plan

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Environmental Quality Commission
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City of Phoenix
Street Transportation Department



What is the Bicycle Master Plan?

- 20-year plan
 - Building on 1988 bond program investment
 - Improving environment for bicycling
- Compatible with Complete Streets and Downtown Transportation Studies
- Input from other Departments, agencies and the community
- Developed by:



City of Phoenix

STREET TRANSPORTATION DEPARTMENT



LEE ENGINEERING

25
YEARS
OF EXCELLENCE



Toole Design Group



Charlier Associates, Inc.



Why is the Bike Plan Important?

- Promotes a healthy lifestyle and a transportation alternative
- Identifies barriers and solutions for bicycling
- Plans for connectivity improvements throughout Phoenix and to/from adjacent cities
- Proposes new policies for bike facilities
- Improves Phoenix's ability to compete for funding





Advisory Groups

- **Technical Advisory Committee (TAC)**
representatives from 32 agencies and City of Phoenix Departments
- **Pedestrian and Biking Ad Hoc Task Force**
12 citizens:
 - Bicycle Advocates
 - Recreational and commuter cyclists
 - Bike and pedestrian safety professionals
- Task Force Goal: **Serve in an advisory capacity to the City on initiatives and policies that enhance pedestrian and bicycling mobility and safety**



Ad Hoc Task Force Members

- Suzanne Day, D-1
- Bob Pane, D-2
- Leslie Dornfeld, D-3
- Robert Dalager, Lisa Parks, D-4
- Bob Boschee, At-Large
- Feliciano Vera, Chair
- Haley Ritter, D-5
- Susan Bookspan, D-6
- Libby Coyner, D-7
- Gene Holmerud, D-8
- Edward Jensen, At-Large
- Erika Keenan, At-Large





Concerns Voiced by Task Force Members

- Not enough city funding for bike program
- Need more enforcement to protect bicyclists
- Better educate police
- Bike lane maintenance (debris, potholes, etc.)
- East/west connectivity in Central Phoenix
- Discontinuous bike lanes at intersection approaches
- Improve the Sonoran Bikeway



Concerns Voiced by Task Force Members

- Need to balance bicyclist and pedestrian space needs in planning/design
- Focus on certain corridors (e.g., Central Ave, 3rd St, Dobbins Rd, etc.)
- Need institutional focus shift in departments to support biking policies
- Need an aesthetically pleasing “user-friendly” Bike Master Plan document to garner support



Bike Master Plan Vision



“MAKING CONNECTIONS”

In 20 years, Phoenix will be a Platinum-level Bicycle Friendly Community. It will be safe and easy to bike anywhere in the city. A well-connected infrastructure network will link people and places, making bicycling a preferred option for daily transportation, recreation and healthy lifestyles.



Bike Master Plan Chapters

1. Benefits
2. How to Use the Plan
3. Vision and Areas of Excellence
4. Past and Present
5. Policies and Perceptions
6. Opportunities and Investments
7. People and Places (Equity)
8. Safety
9. Arterial and Collector Streets
10. Connections and Collaboration
11. Bikes and Transit



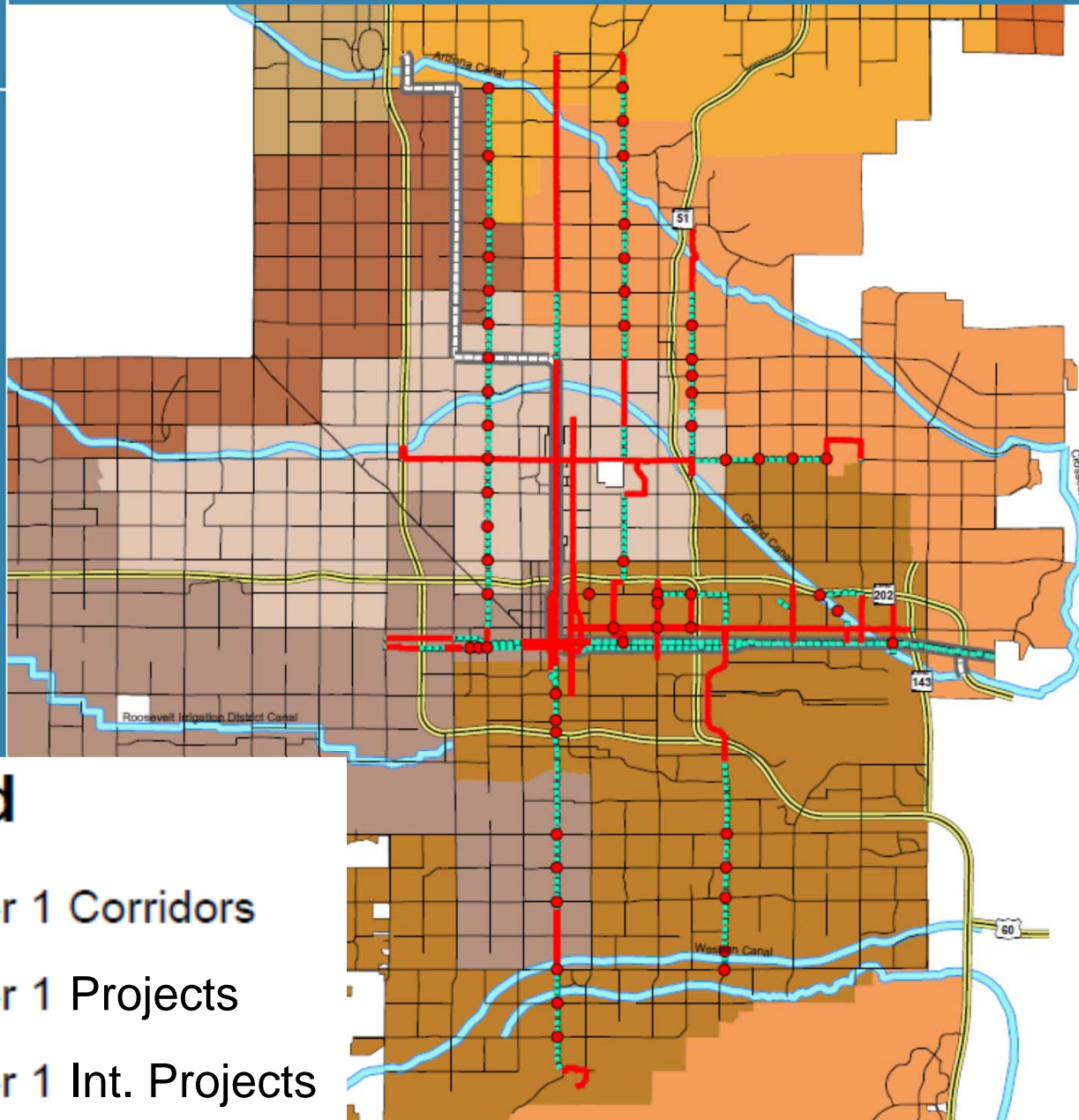


Tier I Priority Corridors for Bicycle Improvements

Location	Prioritization Rank	Corridor Length (miles)
3rd Street from Indian School Rd to Buckeye Rd	1	3.49
24th Street from Van Buren St to Baseline Rd	2	5.32
Central Ave from Mountain View Rd to South Mtn Park	3	16.66
20th Street from Grand Canal Trail to Glendale Ave	4	3.77
Osborn Rd from I-17 to 40th Street	5	6.27
12th Street from Mountain View Rd to Washington St	6	9.15
15th Avenue from Dunlap Ave to Jefferson St	7	8.31






Tier I Priority Corridor Map



SHEA BLVD	(10600N)
MTN. VIEW RD	(9800N)
DUNLAP AVE	(9000N)
BUTLER DR	(8500N)
NORTHERN AVE	(8000N)
ORANGEWOOD AVE	(7500N)
GLENDALE AVE	(7000N)
LINCOLN DR	(6500N)
McDONALD DR	(6000N)
STANFORD DR	(5500N)
CHAPARRAL RD	(5000N)
CAMELBACK RD	(4500N)
INDIAN SCHOOL RD	(4100N)
OSBORN RD	(3400N)
THOMAS RD	(2900N)
OAK ST	(2300N)
McDOWELL RD	(1600N)
ROOSEVELT ST	(1000N)
VAN BUREN ST	(300N)
HARRISON ST	(400S)
BUCKEYE RD	(1200S)
DURANGO ST	(2000S)
UNIVERSITY DR	(2800S)
ELWOOD ST	(3600S)
BROADWAY RD	(4400S)
ROESER RD	(5200S)
SOUTHERN AVE	(6000S)
VINEYARD DR	(6800S)
BASELINE RD	(7600S)
SOUTH MTN. AVE	(8400S)
GUADALUPE RD	(9200S)
MINERAL RD	(10000S)
ELLIOT RD	(10800S)

Legend

-  Tier 1 Corridors
-  Tier 1 Projects
-  Tier 1 Int. Projects



Tier I Summary* (Partially Funded)

- 8 corridors (67 on-street miles)
- 32 project miles (48% of on-street miles)
- 29 segment/50 intersection projects

*\$4 million planning-level cost estimate
(GOAL = 80% completion in 5 years)*

** Does not include ReInventPHX Corridors and Projects*



Tier II Priority Corridors for Bicycle Improvements

Location	Prioritization Rank	Corridor Length (miles)
Maryland Ave from 43rd Ave to 20th St	9	6.55
3rd Av/5th Av - Washington/Jefferson Streets to the Arizona Canal	10	10.44
Oak Street - Central Ave to east city limits (56th St)	11	8.04
7th Ave – Coral Gables to Deer Valley Drive	12	4.00
Grand Canal	13	18.69
Ray Road from Chandler Blvd to I-10	14	3.67
Missouri Ave from 43rd Ave to 24th St	15	7.02
48th Street from Guadalupe Road to Pecos Road	16	4.95
Indian Bend Wash east of SR-51	17	3.78
40th St - Shea Blvd to Union Hills Rd	18	5.49
Union Hills Drive – west city limits (51st Ave) to Tatum Blvd	19	11.03



Tier II Summary (Unfunded)

- **13** corridors (76 on-street miles, 22 off-street miles)
- **33** project miles (43% of on-street miles)
- **29** segment/69 intersection projects
- **39** canal crossing projects

\$14 million planning-level cost estimate

\$ 9.3 million additional cost to pave Grand Canal bank

(GOAL: Identify new funding source in 5 years)



Tier III Priority Corridors for Bicycle Improvements

Location	Prioritization Rank	Corridor Length (miles)
32nd St – Dreamy Draw Park (Northern Ave) to Rose Garden Lane	22	6.68
Cave Creek Wash north of the Arizona Canal	23	6.64
Roeser Road – 19th Ave to east city limits	24	7.09
Baseline Road from 75th Ave to 48th St	25	13.95
Arizona Canal	26	16.72
Highline Canal	27	13.41
Southern Ave to east city limits	28	13.99
Chandler Blvd from 19th Ave to I-10	29	7.72
Dobbins from 51st Ave to 20th Street	30	7.33
Western Canal	31	13.27
Cave Creek Road – 7th St to Carefree Highway	32	17.61
Brookway Road from 407th Ave to 40th St	33	17.00



Tier III Summary (Unfunded)

- **16** corridors (117 on-street miles, 64 off-street miles)
- **55** project miles (47% of on-street miles)
- **39** segment/69 intersection projects
- **56** canal crossing projects

\$10.8 million planning-level cost estimate

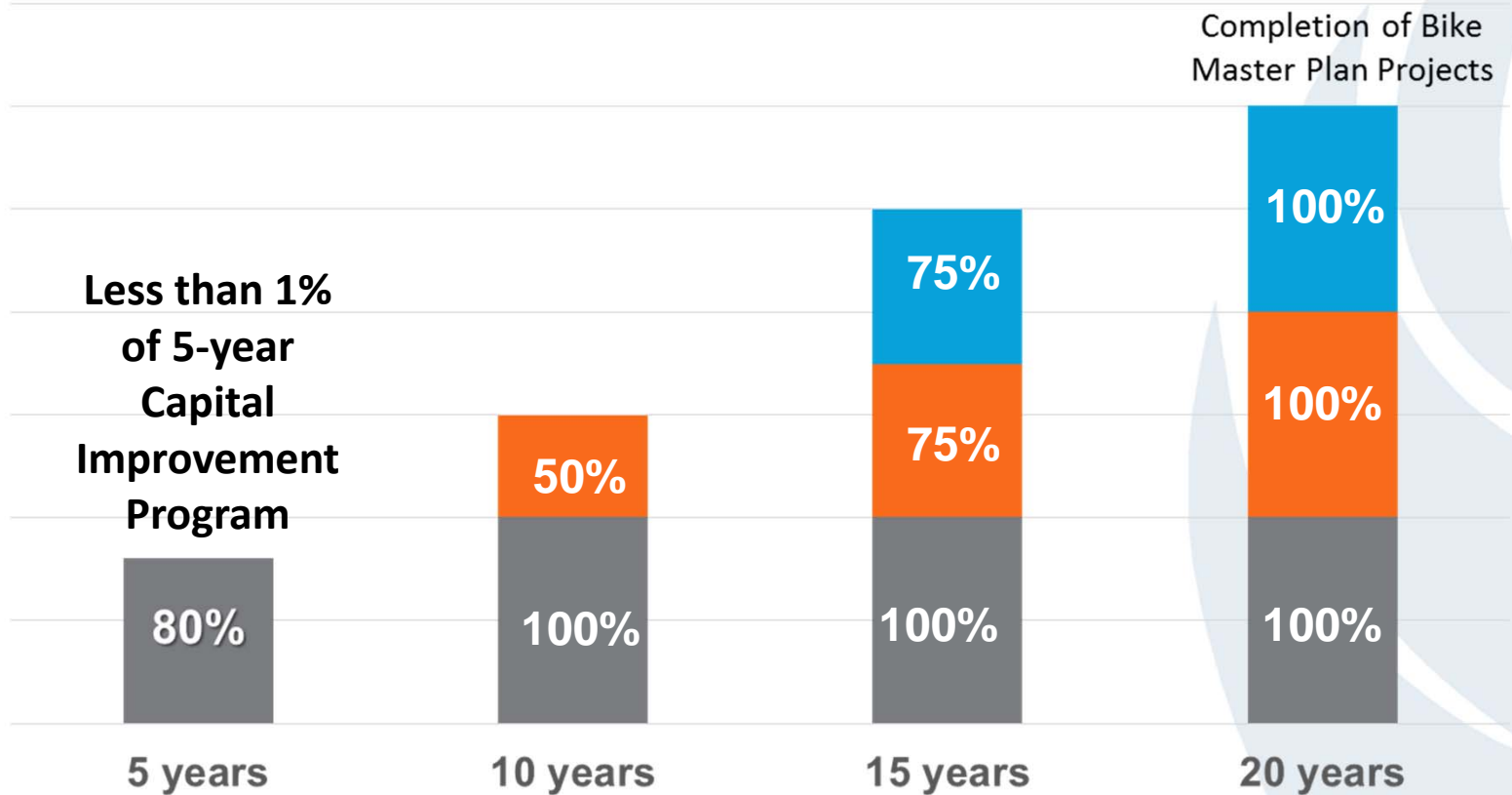
\$14.6 million additional to pave Arizona, Highline, Western, and CAP Canal banks

(GOAL: Identify new funding source in 5 years)



Infrastructure Implementation GOALS

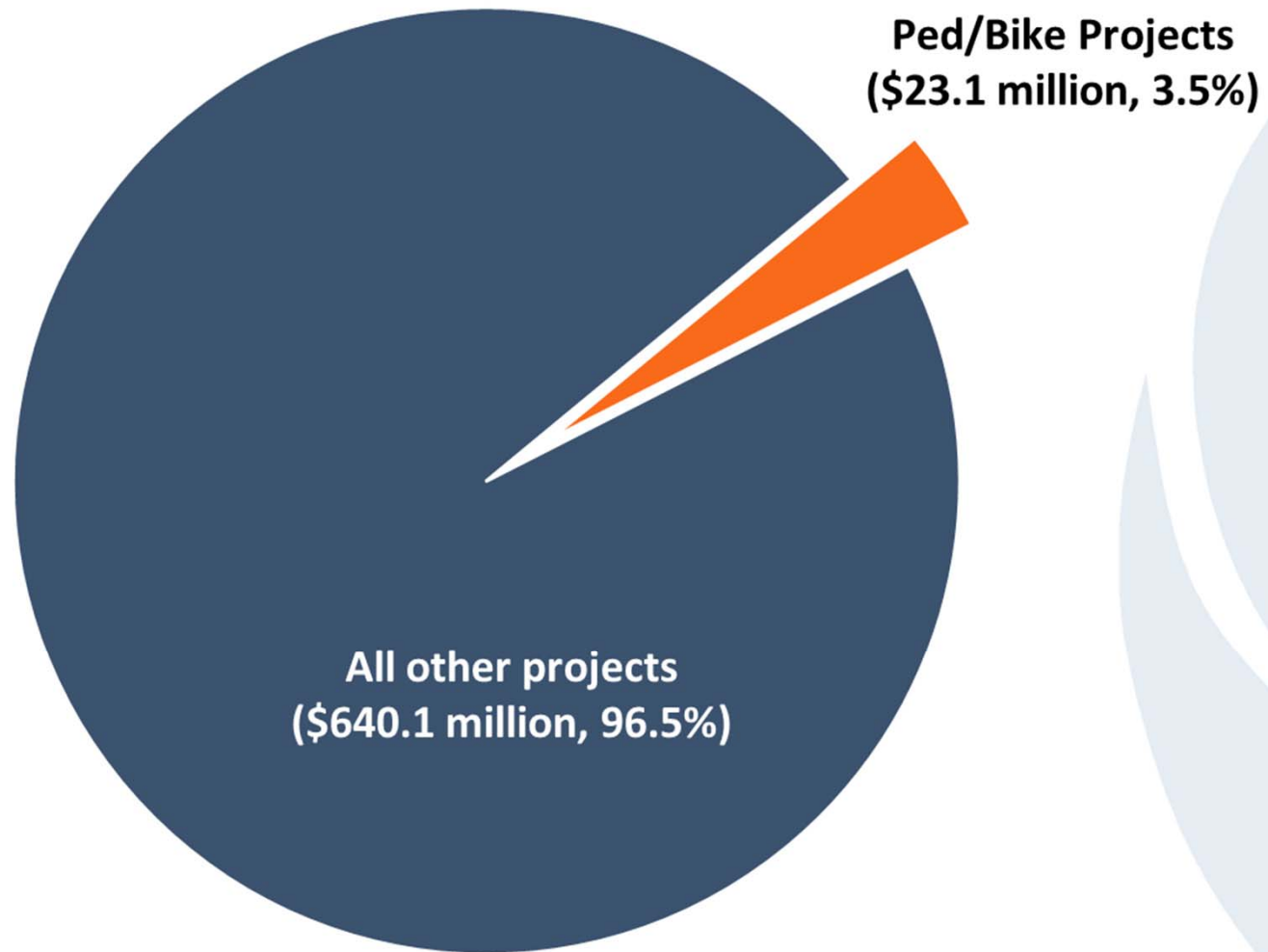
■ Tier I ■ Tier II ■ Tier III



NEW FUNDING SOURCE REQUIRED

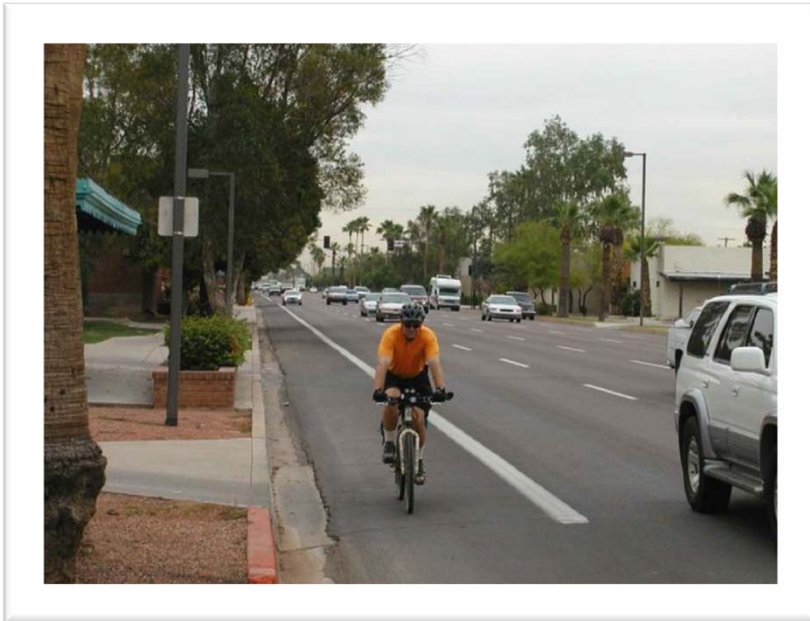


Existing Ped and Bike Projects in 5-Year CIP (2014-19)





Examples of On-Street Bike Facilities



Standard bike lane



Shared bike lane



Example for Intersection Improvements

- Possible signal improvements
- Vehicle detection
- Pavement markings





Example for Canal Crossing Projects



Bike HAWK
(Tucson Example)



Summary

- **\$52.7** million to complete priority corridor projects (Tiers I, II and III) in 20 years
- Current CIP funding cannot pay for infrastructure needs identified in Bike Master Plan
- Ad Hoc Task Force members voted to adopt tiered bike project improvements proposed in the Bike Master Plan





Funding Bike Infrastructure Improvements - CHALLENGES

- Smaller-scale bike projects will continue annually but with limited funding
- New funding sources must be identified to implement Bike Master Plan such as:
 - AHUR or GO Bonds
 - Future tax increases
 - Public/private partnerships
 - Federal/state funding
 - Joint agency projects
 - Etc.





Questions?

