



CITY OF PHOENIX COMPREHENSIVE BIKE MASTER PLAN

Technical Advisory Committee
Kick-off Meeting

August 29, 2013



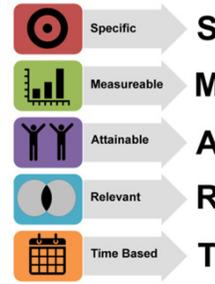
PHOENIX BICYCLE MASTER PLAN

- ◉ 20-year bike plan for Council adoption
 - Safer for bicyclists
 - More convenient
 - More comfortable
- ◉ Compatible with 2030 MAG Transportation Plan & Phoenix Complete Streets Policy
- ◉ Coordinate system with adjacent cities/region
- ◉ Input from other Departments, agencies & the community



GOALS

- Prioritized plan for bicycle improvements
- Provide connectivity
 - Throughout Phoenix
 - With adjacent cities/region
- Improve bicycle safety



GOALS

- Propose policies for bike facility implementation
 - Street Transportation
 - Planning and Development Services (zoning)
 - Transit
 - Parks
- Compete better for bike funding
- Identify barriers and solutions for bicycling



PROJECT TEAM

- ◉ Consultant Team - Lee Engineering, LLC
 - Jim Lee - Principal
 - Mike Cynecki - Project Manager
 - Yung Koprowski - Project Engineer
 - Chris Steele - Sr. Eng. Designer
- ◉ Subconsultants
 - Toole Design Group
 - Charlier Associates, Inc.
- ◉ Technical Advisory Committee
- ◉ Ad Hoc Citizens Task Force



TECHNICAL ADVISORY COMMITTEE

- ◉ Street Transportation
 - Wylie Bearup
 - Ray Dovalina
 - Tom Godbee - TS
 - Scott Logan - TS
 - Kerry Wilcoxon - TS
 - Joseph Perez - TS
 - Matthew Heil - PIO
 - Shane Silsby - PDP
 - Mark Melnychenko - PDP
- Jim Baker - Signals
- ◉ Police
 - Matt Giordano
- ◉ Chair, Env. Quality Comm. & Bicycle Subcommittee
 - Jeremy Stapleton



TECHNICAL ADVISORY COMMITTEE

- City Manager's Office
 - Albert Santana
 - Phil McNeely
- Mayor's Office
 - Colin Tetreault
- Aviation
 - Dean Zattair
- CED
 - Jeremy Legg
- Parks
 - Inger Erickson
 - Jarod Rogers
 - Jon Brodsky
- Planning
 - Katherine Coles
 - Mani Kumar
- NSD
 - Lysistrata Hall
- Valley Metro
 - Amanda Luecker
- Downtown Phoenix Partnership
 - Ray Cabrera
- ADOT
 - Mike Sanders
- MAG
 - Maureen DeCindis
- City of Tempe
 - Eric Iwersen
- City of Mesa
 - James Hash
- ASU
 - Jude Nelson



AD HOC TASK FORCE

- One representative from each council district
- Mayoral representative
- Three at-large representatives
- Also provide input to Complete Streets Policy and PSAP, etc.
- Applications due August 23
- Initial meeting in mid to late September



PROJECT OVERVIEW

- Eight tasks
- Project completion in March 2014
 - Community Outreach in September/October
 - Report to City Council in December
- Three TAC meetings
- Four Ad Hoc Task Force meetings



TASK 1 BACKGROUND REVIEW & RESEARCH

- Establish goals and objectives
 - TAC
 - Ad Hoc Task Force
- Review relevant plans and policies
 - Phoenix
 - Neighboring cities/agencies
- Research other bike policies/plans
 - Other cities & National organizations
- Identify bike projects in the pipeline
- Synthesize input from past "Bike Summits"



TASK 1 DELIVERABLES

- ◉ Task report summarizing revised scope, goals and objectives
- ◉ Task report summarizing a review of bike master plans & policies in other agencies and communities & Phoenix practices
- ◉ Synthesized input from prior Bike Summits

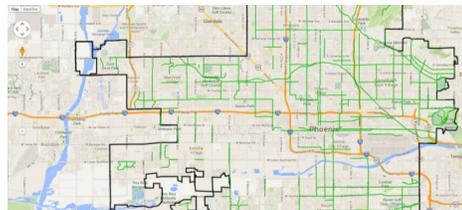


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TASK 2 COMMUNITY OUTREACH

- ◉ Conduct 4 “Master Bike Summit” community meetings
- ◉ Develop community outreach strategy
 - Wikimaps (TDG)
- ◉ National bike firm input (TDG/Charlier)
- ◉ Document public input



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TASK 2 DELIVERABLES

- Four (4) community Bike Summit meetings
- Presentation to the Phoenix Environmental Quality Commission
- Council Presentation
- Ad Hoc Task Force presentation
- Task report summarizing community input from Summit meetings and Wikimap input



TASK 3 INVENTORY BICYCLE SYSTEM

- Review & document existing bike facilities
- Identify obstacles & gaps in system
 - Missing links in Phoenix and connections to regional network & links to transit
 - Identify where space can be reassigned for bikes
 - Assess Phoenix practices & policies with respect to MUTCD, AASHTO, NACTO, etc.
- Evaluate existing ROW (gaps, missing links)
- Identify a range of bike facility design options



BIKE FACILITY OPTIONS

- Bike Route designation on maps
- Bike Route designation with signs
- Sharrows
- Bike lanes
- Colored bike lanes
- Cycle tracks
- Multipurpose trails
- Off-road bike trails
- Bridges/Tunnels
- Bike HAWK
- Other crossing treatments
- Bike racks
- Bike lockers
- Shower facilities
- Wayfinding signs & kiosks
- Phone apps
- Bicycle detection at signals
- Back-in angle parking
- Bike share stations



TASK 3 DELIVERABLES

- Task report documenting:
 - Inventory all bike facilities in Phoenix
 - Gaps in the existing network
 - Network obstacles and gaps
 - Criteria for retrofitting streets
 - Existing bike counts (MAG) - if available
 - Available ROW for gaps & missing links
 - Range of design options available for consideration



TASK 4

DETERMINE NEEDS AND PRIORITIES

- ◉ Review bicycling element goals & objectives
- ◉ Recommend evaluation process for candidate bike projects
- ◉ Identify project selection criteria for bicycle network
 - Provide bike accommodations where people live
 - Bike accommodations to within $\frac{1}{4}$ or $\frac{1}{2}$ miles
 - Serve transit-dependent communities
 - Coordinate with Bike Share
- ◉ Identify roster of candidate bike projects
- ◉ Create description sheets for each project



TASK 4 DELIVERABLES

- ◉ Task report detailing:
 - Evaluation criteria for assessing bike improvements
 - Selection criteria for bike projects
 - Roster of bike improvement projects
 - Education and Encouragement policies/practices
 - Detailed description sheets for each project



TASK 5 ANALYSIS OF SYSTEM NEEDS

- Develop capital & operational cost estimates
 - Planning level costs
 - Assessment of benefits
- Rank candidate projects
- Identify and evaluate traffic impacts
 - Evaluate effects of traffic lane reductions or parking removal



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TASK 5 DELIVERABLES

- Prioritized ranking of bike projects along with:
 - Planning level capital costs
 - Operating costs
 - Project benefits
 - Project impacts on traffic (where relevant)
- Presentation of Task 4 & 5 to Ad Hoc Task Force and TAC



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TASK 6 DEVELOP BICYCLE MASTER PLAN

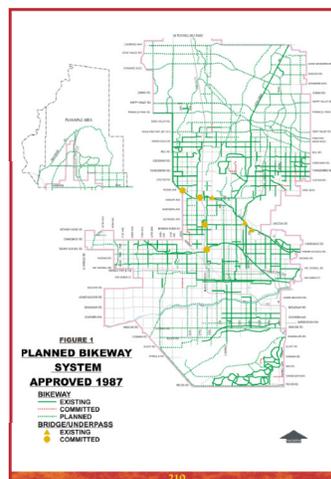
- Identify new “Best Practices” & innovations
- Develop preliminary Master Plan
 - 20-year build out
- Disseminate Master Plan for comment
- Prepare Final Master Plan
- Develop maps and diagrams
 - Compatible with ARCGIS



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TASK 6 DELIVERABLES

- Preliminary Bike Master Plan
- Final Bike Master Plan
- Maps of existing and proposed bicycle improvements



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TASK 7 PREPARE IMPLEMENTATION PLAN

- Prepare implementation sequence
 - 5 year (Short-term)
 - 10-year (mid-term)
 - 20-year horizon (long-term)
- Revise existing policies/procedures/plans
- Formulate implementation strategy
 - Facilities
 - Education and Encouragement
 - Monitor, maintain & security



TASK 7 DELIVERABLES

- Task report outlining short, mid and long-term strategies along with costs
- Recommendations of new bike design guidelines and policies
- Meetings with TAC and Ad Hoc Task Force



TASK 8 PREPARE FINAL REPORT

- Prepare Draft & Final report
- Prepare Master Plan presentation materials
- Present Bike Master Plan to Environmental Quality Commission & Council
 - Bicycle Initiatives Subcommittee
 - Council Transportation and Infrastructure Subcommittee



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TASK 8 DELIVERABLES

- Draft Bike Master Plan Reports
- Final Bike Master Plan Report
 - 25 copies of Final Report
 - 25 copies of full size (24" x 36") bike plan maps
 - 25 copies of 11" x 17" bike plan maps
- Presentations of Final Bike Master Plan
 - Environmental Quality Commission Bicycle Subcommittee
 - Council Transportation & Infrastructure Subcommittee



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SUBCONSULTANTS



TOOLE DESIGN GROUP—KEY STAFF



RJ Eldridge
Vice President

Project Manager



Tony Gammon, P.E.
Senior Engineer



Jim Elliott, AICP
Transportation Planner

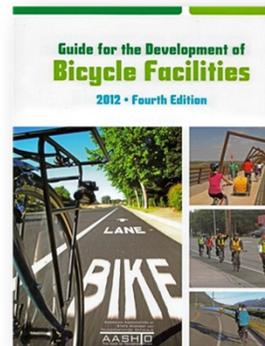


TDG—BICYCLE PLAN EXPERIENCE



TDG—NATIONAL EXPERTISE

- Author - AASHTO Guide for the Design of Bicycle Facilities
- Prime Contractor - National study to develop prioritization methods for bicycle facilities
- Prime Contractor - National study on best practices in bikeshare
- Member - National Committee on Uniform Traffic Control Devices



TDG—ROLE

- **Task 1**—Review of bike planning concepts, policies and plans
- **Task 2**—Develop Wikimap
- **Task 3**—Review analysis of Phoenix practices, policies and procedures
- **Task 4**—Assist with project selection criteria and project recommendations (bicycle parking facilities, amenities, education and encouragement policies)
- **Task 5**—Assist with framework for assessing bike project benefits
- **Task 6**—Assist with updating bicycle design guidelines



WIKIMAP—PHOENIX



City of Phoenix

STREET TRANSPORTATION DEPARTMENT

About & Help



WIKIMAP—WELCOME SURVEY

Welcome - Survey

What type of cyclist are you?*

- Ride anywhere
- Ride on most roads with medium-heavy traffic
- Ride only on trails and roads with lighter traffic
- Ride primarily on off-road trails
- Non-cyclist

During non-winter months, how often do you ride a bike for transportation or recreation?

- Rarely or never
- 1-2 times/week
- 3-5 times/week
- Every day, or almost every day

Do you ride your bike to work year-round or nearly year-round?*

- Yes No

What type of trips do you typically make by bicycle? (Check all that apply.)

- Bicycle commute to work
- Bicycle commute to school
- Bicycle to run errands
- Bicycle to dining or entertainment
- Bicycle to worship or civic events
- Bicycle to visit friends or relatives
- Bicycle for recreation

What is your home zip code?*

What is your age?*

- Under 18
- 18-25
- 26-40
- 40-65
- Over 65

What is your gender?*

- Female Male

Existing facilities
Google bike info

- Trails and paths
- Bike lane
- Bike-friendly road

Route comments

- Route I ride (high-stress)
- Route I ride (low-stress)
- Route I'd ride if improved

Point comments

- Barrier to biking
- Place I bike to
- Place I would like to bike to



WIKIMAP—ADD POINTS

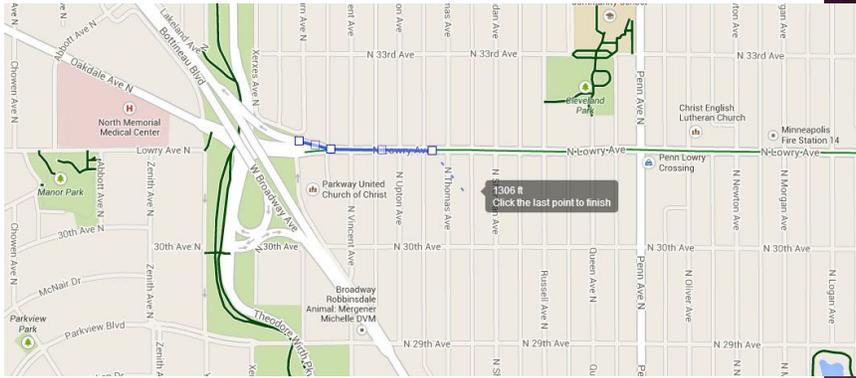
Add Point ✕

Select point type and then place on map.

- Barrier to biking
- Place I bike to
- Place I would like to bike to



WIKIMAP—ADD LINES



WIKIMAP—FILL OUT SURVEY

A screenshot of a survey form titled "Description". The form contains the following text and fields:

Description

Add a description and comment to your new route

Category: Route 1 ride (high-stress)

Please Finish the Survey Below

What makes this route high-stress?*

- High-speed traffic
- Too much traffic
- Not enough space on road
- Bad pavement
- Lack of bicycle facility
- Trail too narrow
- Other (fill in below)

Other: _____

Comments: _____

Submit Cancel



CHARLIER - KEY STAFF

◉ Jim Charlier

- President/Principal



- Nationally recognized expert in urban transportation planning
- Transportation planner on Reinvent Phoenix project

◉ Terri Musser

- Project Manager



- Nationally recognized expert in bicycle/pedestrian planning and design



CHARLIER - MULTIMODAL TRANSPORTATION PLANNING FOCUS

- ◉ Auto Travel, Circulation, and Access
- ◉ Transit System Planning and Development
- ◉ Bicycle and Pedestrian Planning and Design
- ◉ Context-Sensitive Infrastructure Design
- ◉ Smart Growth Planning and Urban Form
- ◉ Sustainable Transportation Policy



OUR APPROACH TO BICYCLE MASTER PLANNING

- ◉ Network Planning
 - seamless links between street and trail networks
 - innovative mix of facility types
 - solutions to overcome travel barriers
- ◉ Community Input
 - unique plans to address specific community needs
- ◉ Complete Streets Policies
 - Bicycle accommodation along and across streets



CHARLIER PROJECT TEAM ROLE

- ◉ Assist in finalizing Goals and Objectives
- ◉ Integrated Bike Planning between Departments
 - Planning and Development Department
 - TOD Planning
- ◉ Reinvent Phoenix Project Liaison
 - Gap projects and lessons learned
- ◉ Phoenix Complete Streets Policy (On Hold)
 - Separate Project (if approved)
 - Draft bicycle element



REINVENT PHOENIX

- Charlier Associates:
Reinvent Phoenix Project Team Role
 - Thoroughfare Type Standards (support)
 - Coordinated Bicycle and Pedestrian Design (support)
 - TOD Parking Strategy (lead)
 - Complete Streets Designs (advisory)
 - Conceptual Thoroughfare Phasing Plans (advisory)



REINVENT PHOENIX

- Gateway Charrette (April), Gateway TOD Report (July)
 - Street Typology (support)
 - Pedestrian Priority Network (support)
 - Bicycle, Transit & Street Networks (support)
 - Detailed Design Prototype - 24th Street (support)
- Eastlake Charrette (August), Eastlake TOD Report (pending)
 - First Parking Strategy Workshop (lead)
 - Infrastructure & Safety Workshop (lead)



EXISTING BIKEWAY SYSTEM



WORKSHOP INPUT

- Goals and Objectives for Phoenix
- Barriers to bicycling
 - Physical
 - Policy
 - Legal
 - Other



WORKSHOP INPUT

- Suggestions for improving bike system
 - Facilities (bike lanes, parking, showers)
 - Guidance (maps, signs, wayfinding)
 - Education
 - Encouragement
 - Laws
 - Enforcement
 - Other



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QUESTIONS/INPUT

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- Yung Koprowski
 - 602-955-7206
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