



**Bike Share Programs:
Promoting Ridership & Ensuring Rider
Safety**




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Outline


- Background
- Bike Share 101
- Divvy Bike Share & Safety
- Problem Definition & Context
- Complete Streets
- Legislative Initiatives



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Chicago by the Numbers



- **Population:** 2.7 million; 3rd largest city in the U.S.
- **\$600-800** million/year for transportation
 - More than half from state or federal grants
- **Non-motorized** mode share: 38%
- **First** in the U.S. for regional auto congestion
- **~40** pedestrian & **~10** cyclist fatalities/year
- **1/3** of Chicago children are overweight; 17% are clinically obese

Public Safety Problem

Woman charged in car crash that kills toddler



Bicyclist killed in hit-and-run, driver arrested

Bicyclist killed by semitrailer while swerving to avoid car door

As Chicago has tried to transform into a bike-friendly city, advocates say more work is needed to keep cyclists safe

Public Safety Problem



- Over 130,000 crashes per year involving autos
- 1,200 – 1,500 crashes involving bicyclists each year (200-300 doorings)
- More than 3,000 crashes involving pedestrians each year
- Speeding is a major concern
- An unsafe city won't attract families, businesses, young talent...

Chance a person would survive if hit by a car travelling at this speed

20 mph	45 ft to	95%
30 mph	85 ft to	60%
40 mph	145 ft to	20%

Bicycle Crash Data

- Bike Crashes
 - 2011: 1,424 bike crashes
 - 2012: 1,396 bike crashes
- Dooring Crashes:
 - 2011: 300 dooring crashes
 - 2012: 251 dooring crashes
- In 2012 there were 6 fatal bike crashes

 **DIVY**
DIVIDE & SHARE

Bike Share Comes to Chicago

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MAYOR EMANUEL'S VISION

**“Create a world class
bike network and
increase cycling”**

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REALIZING THE VISION

- » Establish 100 miles of protected bike lanes by 2015
- » Create bikeways for all ages and abilities
- » Launch a “robust” public bike share program

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What is Bike Share?

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BIKE SHARE IN NORTH AMERICA



BIKE SHARE IS...

- » A new transit system for Chicago
- » Ideal for short trips and commutes
- » Allows you to pick up a bike at any station and return it to any other
- » Available 24/7 year-round



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CONVENIENT

Stations will be placed where people
WORK and **LIVE**



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COMFORTABLE

Front and rear fenders to protect clothing



Basket holds up to 20lbs; straps to hold loose items

Step through design and chain guard allows riders to wear suits or skirts

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AFFORDABLE

- » \$75 Annual Membership
- » \$7 24-Hour Pass
- » First 30 minutes of each ride are free



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SUSTAINABLE



- » Eco-friendly transportation option
- » Sponsorships and advertising ensure the system is self-sustaining and pays for its operation and expansion

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FOR CHICAGO

- » Will create up to **150** jobs
- » City-owned system
- » Operated by Alta Bicycle Share
- » Secure (minimal theft)
- » Performance driven

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Making It Happen

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STATIONS ARE EASY TO INSTALL

- » **FAST**
 - » Install under an hour
- » **GREEN**
 - » Solar-powered and wireless
- » **EASILY-MOVED**
 - » Portable



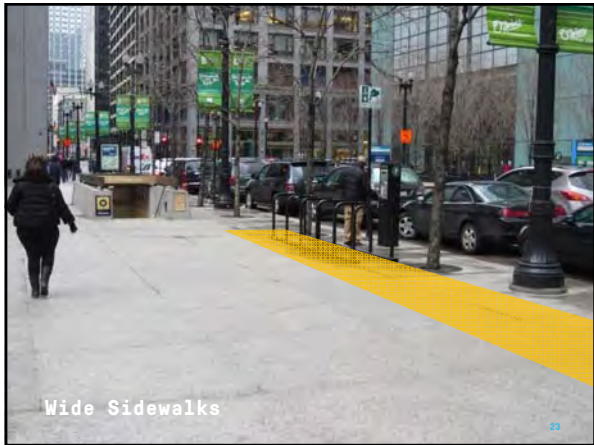
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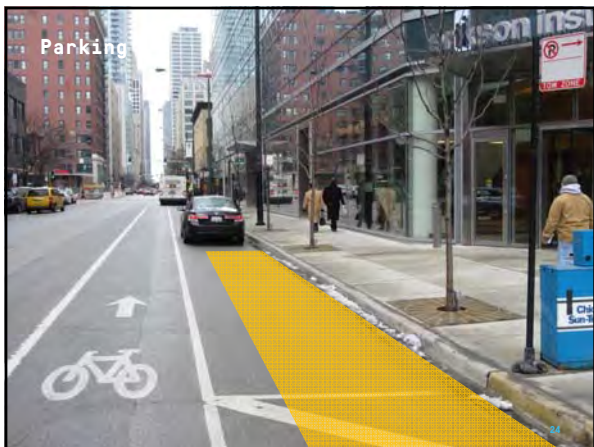
BIKE STATION SITING

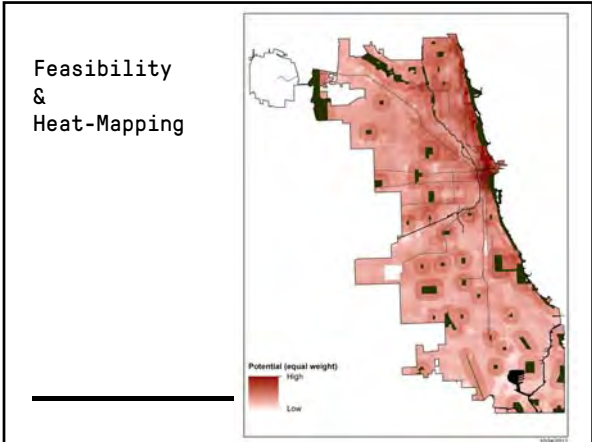
- » Convenient to users
- » On sidewalks wherever possible
- » Distance between stations
- » Technical considerations
- » Residents' suggestions

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DETERMINE NEIGHBORHOOD AREAS

Reviewed and synthesized results of:

- Outreach meetings
- Pop-up meetings
- Aldermanic meetings
- “400 service area” sites
- TIF districts
- suggest.divvybikes.com

ENGAGING CHICAGO RESIDENTS
 Chicagoans Can Suggest Stations Online

SUGGEST A STATION!
 Divvy has 300 stations all across the city and will be growing to 475 stations in 2014. We need your help deciding where to put them all.
 TELL US WHERE YOU WANT THEM AT SUGGEST.DIVVYBIKES.COM

CDOT
 Chicago Department of Transportation

STATION LOCATIONS

- 300 Stations to date
 - 3,000 bikes
- 475 stations and 4,750 bikes by 2015
- Station locations and bike/dock availability online and via CycleFinder App
- Bikes rebalanced 18 hours/day, 365 days/year

PLANNED 2015 EXPANSION

DI VVY

Planned Bike Share Expansion


CDOT
 Chicago Department of Transportation



How Does It Work?

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HOW IT WORKS

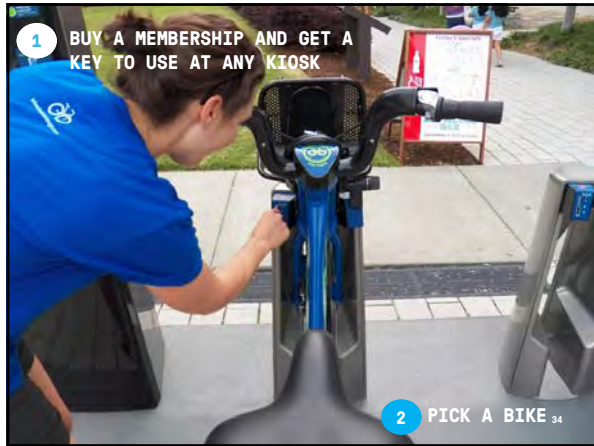


- 1. BUY**
Purchase access to the system for 24 hours or one year.
- 2. TAKE**
Unlock an available bike using your unlocking code or member key.
- 3. RIDE**
Ride an errand, grab a latte, commute to work, or ahead. Don't forget your helmet, and watch your ride time!
- 4. RETURN**
Lock the bike back at any station. Wait for the green light to confirm the bike is secure.
- 5. REPEAT**
Take as many trips as you want during your access period. Use any DIVVY bike, any time!

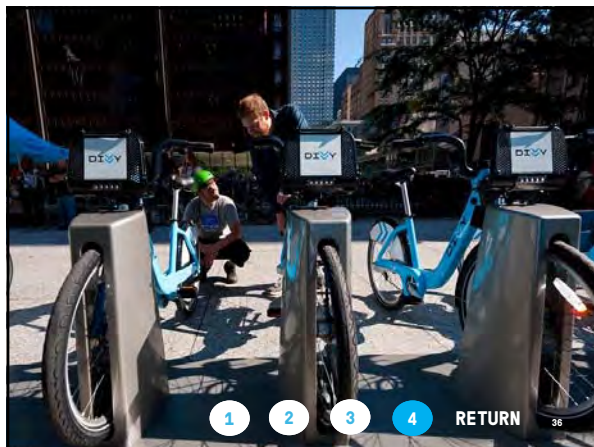
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HOW IT WORKS









DIVVY TO DATE

- 3.3 million trips
 - 2.1 million member trips
 - 1.2 million 24-hour trips
- 23,000 annual members
- 6.9 million miles traveled
- Average trip = 18 mins



BIKE SHARE IN CHICAGO

- **On average, Divvy members save \$760 per year on personal travel costs.** This translates into more disposable income for neighborhood shopping and to more opportunities to use local businesses.
- **Divvy access makes establishments more attractive to bike share members.** 80% of Members are “somewhat more likely” or “much more likely” to patronize a business that is near a Divvy bike station.
- **Divvy members are big fans.** 97% of Members are “satisfied” or “very satisfied” with Divvy. When asked how likely they are to recommend Divvy to a friend on a scale of 1 to 10, Members responded on average with 9.1.

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BIKE SHARE IN CHICAGO

- **62% of Members have started riding a bike or taking public transit to work more often since joining Divvy.**
- **Members are using Divvy for multiple kinds of trips. They “sometimes” or “often” use Divvy for the following purposes:**
 - Go to/from work: 84%
 - Social/entertainment: 82%
 - Shopping/errands: 78%
 - Go to/from transit: 76%
 - Exercise/recreation: 57%
 - Go to/from school: 17%



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BIKE SHARE SAFETY PROGRAMS

- Safety messages on the Divvy website, kiosk, map frame, and between the handlebars of every bike.
- Membership packet includes an *Everyday Biking Guide*.
- Gold Level of the League of Illinois Bicyclists' Bike SafetyQuiz, an online bike safety course.
- Every member receives a \$10 off helmet coupon and access to bike deals that include 10% off accessories and 20% helmets at participating shops.
- Safety video contest and other safety programs.
- Safety-in-numbers




Bike Infrastructure & Complete Streets



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Bikeway Planning in Chicago – Pre 2011



Prior to 2011...

- 2001 – best big city for bicycling
- ~1% of work trips by bike
- Emphasis on bike lanes and marked shared lanes

Bikeway Planning in Chicago – Pre 2011



- Bikes and Peds get leftover space

- We simply ignored their needs altogether, pretending they don't exist



Complete Streets Policy

The **safety** and convenience of **all users** of the transportation system, including pedestrians, bicyclists, transit users, freight, and motor vehicle drivers shall be accommodated and **balanced** in all types of transportation and development projects and through **all phases** of a project so that **even the most vulnerable** – children, elderly, and persons with disabilities – **can travel safely** within the public right of way.



Complete Streets Policy



“... all users ... shall be accommodated and balanced ...”

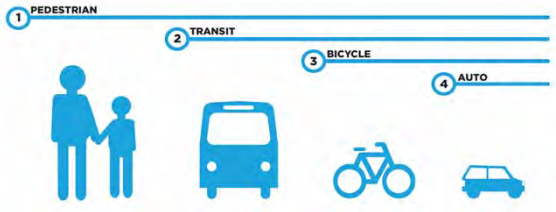

Complete Streets Users



- **Pedestrians** – Countdown Signals, Safety Campaigns
- **Cyclists** – New Bikeways, Bike Sharing
- **Transit** – Rebuild systems, Implement Bus Rapid Transit
- **Motorists** – Traffic Signal Interconnects





Complete Streets Design Guidance
Baseline Mode Hierarchy

Chicago's Bike Renaissance

Mayor Emanuel's Transition Report – May 2011

- Improve street safety by reducing fatalities and crashes
- Build 100 miles of protected bike lanes
- Build bikeways that are comfortable for all ages and abilities
- Introduce a citywide bike share system

Four Types of Cyclists

Streets for Cycling Plan 2020

Citywide plan creating a world-class network of bike facilities that are safe and comfortable for all Chicagoans

- Released in December 2012
- Over 600-mile network of Neighborhood Bike Route, Crosstown Bike Routes, and Spoke Routes
- Bike facility within 1/2 mile of every Chicagoan



Chicago Streets for Cycling Plan 2020

Chicago's Bike Renaissance



From 2011 on...

- Emphasis on cycle tracks and buffered bike lanes
- Goal of 5% of work trips by bicycle

Protected Bike Lanes



Kinzie Street



Safety for All Roadway Users

NYC Protected Lanes

- Injury crashes to all street users down 56%

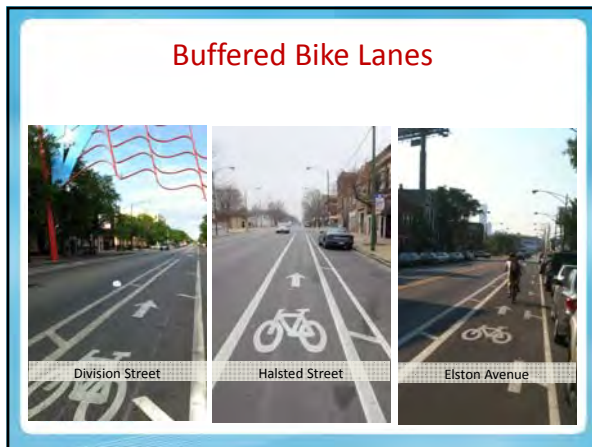
Montreal Protected Lanes

- 28% reduction in injury on streets with cycle tracks vs. those without
- Preferred by women, children and seniors

DC Protected Lanes

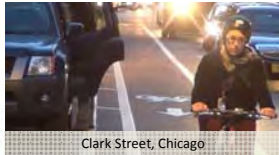
- Cyclists believe cycle tracks are safer (96%), easier (98%), more convenient (98%) and would go out of their way to ride them (93%)





Buffered Bike Lanes

- Encourages proper lateral positioning
 - Motorists park closer to curb
 - Bicyclists ride outside door zone (85% - early findings)
 - Greater distance between moving motorists and cyclists
- Better sightlines on roadways with numerous driveways and alleys



Clark Street, Chicago



Halsted Street, Chicago

Neighborhood Greenways

- Low volume residential street that encourages bicycling and pedestrian activity
- Conducive to bicyclists and pedestrians of all ages and abilities
- Accomplished using traffic calming, pavement markings, signage and intersection crossings treatments
- Minimize cut through motor vehicle traffic, but does not prohibit it



Berkeley, CA



Portland, OR

Dearborn Street Complete Street



Dearborn Street - Before



Dearborn Street - After

Dearborn Street Complete Street

- Bike lane adjacent to turn lane (no mixing)
- Designed to eliminate conflicts
- Supplementary signage



Dearborn Street Complete Street

- Special features to alert pedestrians
- Bicycle-friendly bridge treatments
- Permanent installation this spring



Since May 2011

- 90 miles of new bikeways
- 18.5 miles of protected bike lanes
- 49.5 miles of buffered bike lanes



Moving Forward – Proving the Benefits



- Safety and use data
- Business impacts
- Partnerships and collaboration with others



Bike & Pedestrian Safety

- CDOT Directly Educates 80,000 people through direct education.
- CDOT Coordinates with Chicago Police to enforce behavior dangerous to cyclists
- City of Chicago updated Municipal Code to support the expansion of cycling.



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Bike & Pedestrian Safety Outreach

- CDOT Staff work with the public at all kinds of events: Festivals, Block Parties, Schools, Parks and on the Street.



CHICAGO DEPARTMENT OF TRANSPORTATION

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Bike & Pedestrian Safety Ordinance Amendments

- Brings the Municipal Code of Chicago into compliance with Illinois State Statutes
- Raises fines for cyclists that break traffic laws
- Doubles the fines for dooring when motorists open their doors in front of oncoming cyclists



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Bike & Pedestrian Safety Ordinance Amendments

- Installing LOOK! bike and ped safety stickers in all cabs with BACP



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Rules of the Road

- 12 years or older must ride on the street
- Always ride with traffic
- Obey all traffic signals
- Stop for pedestrians in crosswalks
- Helmet use strongly recommended



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Targeted Enforcement

- CDOT has coordinated with Chicago Police since 2008 working on targeted enforcement: Stopping Cyclists and motorist who engage in dangerous behaviors for cyclists and pedestrians.



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