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City of Bloomington Sustainability Action Plan Transportation Meeting 2

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Complete and Compact Communities

Current Situation in Bloomington

Factors that contribute to complete and compact communities:

- City Connectivity - “good”
- Multi-Modal Transportation (drive, bus, bike, walk)
- Mode-Share Split
- Complete Streets Policy
- Walkability - “fair”
- Vehicle Ownership
- Funding
 - Alternative Transportation Fund: \$21,576,706 for 2018-2040
 - Federal Surface Transportation Block Grant and Highway Safety Improvement Program funds also



Complete and Compact Communities

Recent Trend of Expanding Miles of Bike Paths

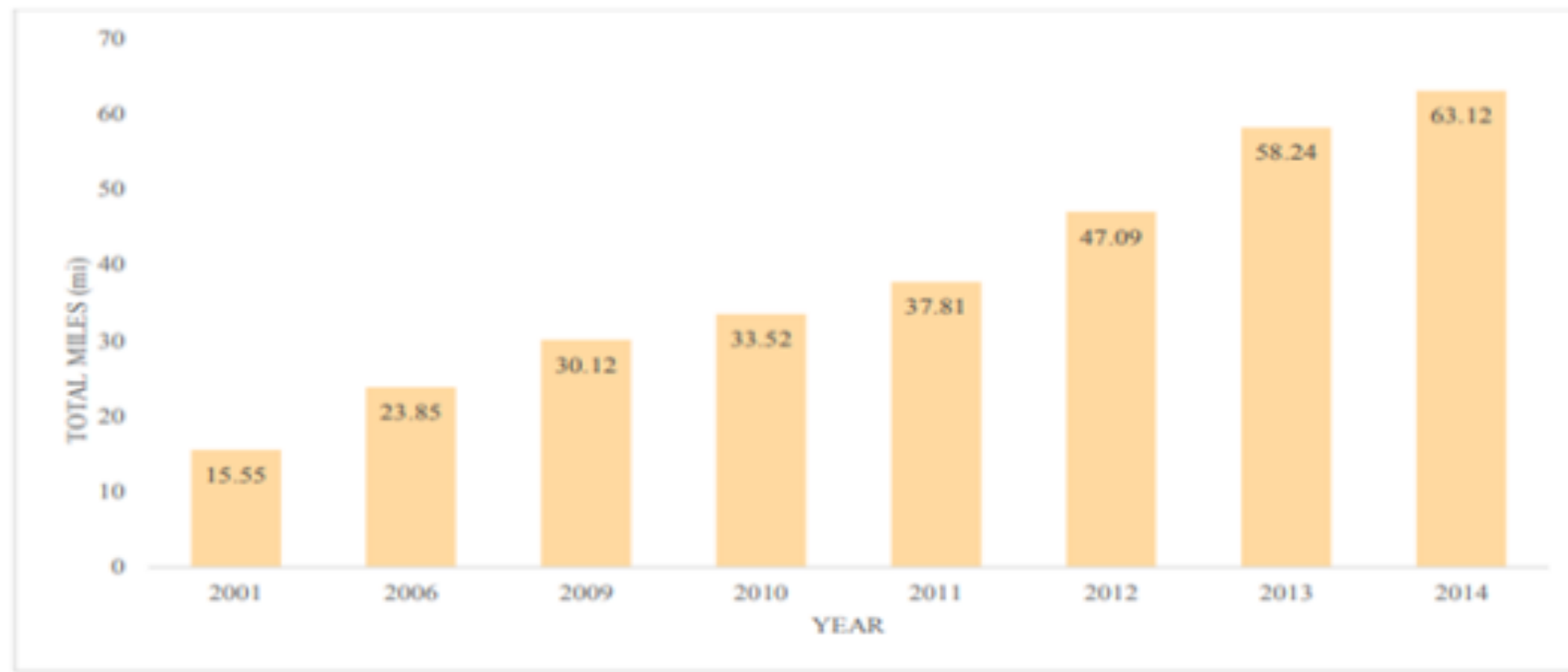


Figure 3. Bloomington bikeways, paths, and trails (2001-2014). Source: *Vince Caristo, City of Bloomington, Bicycle and Pedestrian Coordinator. Personal Communication. May 2015.*



Complete and Compact Communities

Recent Trends in Bus Ridership

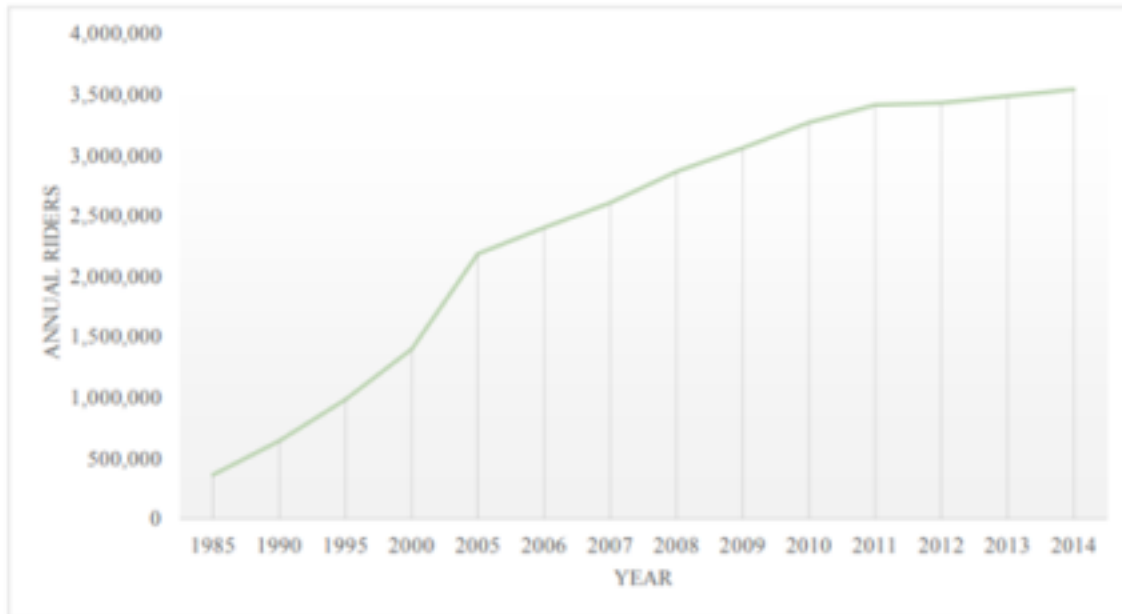


Figure 4. Total annual bus ridership for Bloomington Transit (1985-2014). Source: *Lew May (Bloomington Transit, Director). Personal Communication. June 2015.*

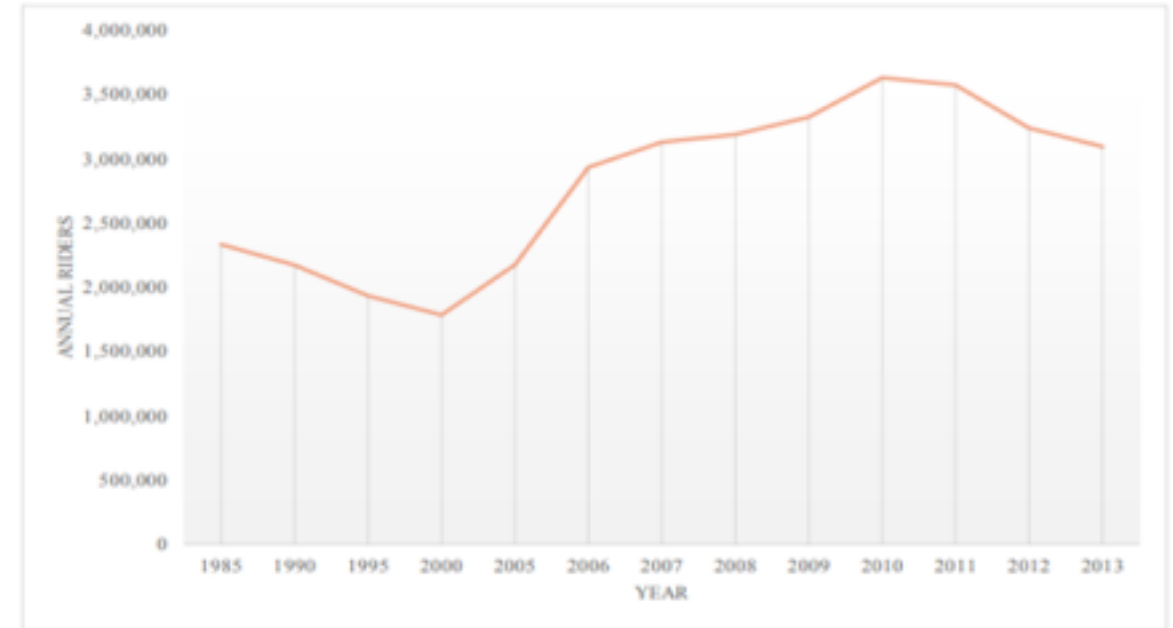


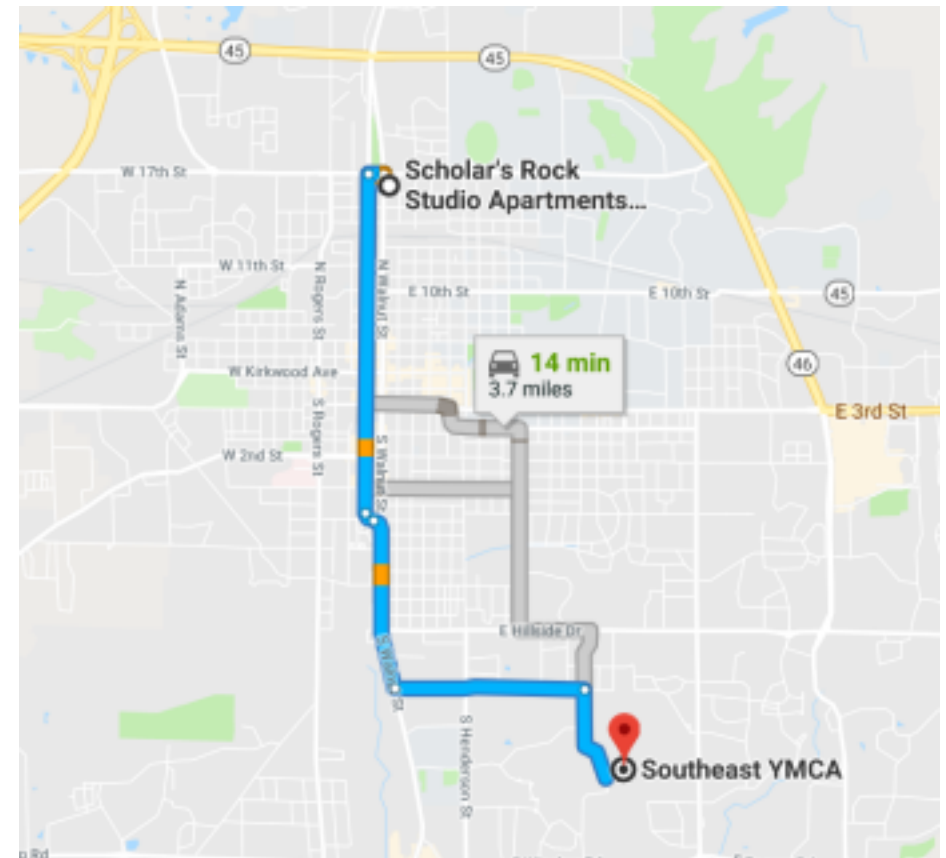
Figure 5. Total annual IU bus ridership (1985-2013). Source: *adapted to reflect calendar years from http://iubus.indiana.edu/campus_bus/information/index.aspx*



Complete and Compact Communities

Current Situation in Bloomington

- **Scenario:** North-side resident living at 1300 N. Walnut wants to go to YMCA, 2125 S Highland Ave
- **Route options:**
 - 1. Drive personal automobile: 14 minutes to travel 3.7 miles for fastest route.
 - 2. Public bus: Served by Lines 1, 2, 4, 5, 6L, 7, 9 – route requires 2 buses and 45-88 minutes of travel time which almost certainly would increase with wait time during bus exchanges
 - a. No Sunday service – in ideal conditions, trip takes 50 minutes total including walking to and from bus stops
 - b. Routes 1, 4, 5 are less frequent, only every 60 minutes, M-Sat
 - c. Route 2, less frequent on Saturdays
 - d. Standard bus fare is \$1, so round-trip would cost \$4
 - 3. Cycling: 19 minutes to travel 3.4 miles, limited bike-friendly streets or paths
 - 4. Walking: 67 minutes, travel 3.4 miles
- **Considerations (weather, traffic, safety, hazards):** Bicycle route can be achieved entirely on bike-friendly roads





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Community Goals Found in Bloomington Documents

- Increase multi-modal transit systems, including by linking different modes of transport through actions such as bike rack installations on buses, use of smart vehicle technology, and ride/car/bike-share programs. (Source: BCP/MTP)
- Provide a safe, efficient, accessible, and *connected* system that emphasizes walking, public transit, biking, and shared travel methods and reduce overall dependence on individual automobiles (Source: MTP)
- Connect different modes of transit across walking, biking, and public transit to improve mobility and accessibility, transit, community, safety, and preservation of existing systems (Source: Transform 2040 Plan)
- Improving the city's connectivity and multi-modal transportation system (Source: Complete Streets)



Complete and Compact Communities

Metrics Found in Bloomington Documents

- Mode-share split
 - 61.2% drive alone, 14.6% walk, 8.52% carpool, 6.6% public transit, 4.6% bike, 4% work home in 2015 (Source: US DATA)
 - 70 % drove alone to work in 2001 (Source: BEAP)
- Multi-modal transportation
 - Bus ridership: 3.5 million annual riders in 2014
 - Bike lane miles: 63.12 miles in 2017
- Vehicle ownership
 - Average of 2 cars per household, 15.1 min average commute time
- Walkability
 - percentage of people walking to work/school; sidewalk, path, and trail mileage; estimated walking trips per household per day; crash rates for walkers; number of known sidewalk and ramp ADA violations; percentage of streets that meet “Complete Streets” criteria; frequency and variety of pedestrian education courses offered by the city; pedestrian areas in the community that lack crosswalks, crosswalk signs, sidewalks, or need repair work.



Complete and Compact Communities

Metrics Used in Other Cities

- Multi-modal transportation systems
- STAR Communities reporting only
- Mode-share split (STAR community: BE 7: Outcome 1)
 - Goal: max 60% of SOV transportation, min 5% for biking and walking, and 25% for biking, walking, and transit combined.
 - Ann Arbor, MI and Iowa City, IA achieved
 - Columbia, MO and Lawrence, KS not achieved
 - College Station and West Lafayette not members of STAR Communities



Complete and Compact Communities

Metrics Recommended in STAR

- **BE-3: Compact and Complete Communities**
 - Outcome 1: Density, destinations, and transit: residential density, employment density, transportation availability, diverse uses (at least 7)
 - Outcome 2: Walkability: sidewalks on both sides, crosswalks, street trees
 - Action 1 - 3: Demonstrate plans and strategies that support compact, mixed-used development, identify areas appropriate for mixed use on official future land use map
 - Action 4: Require STAR-walkability standards for new developments
 - Action 8: Establish design review board, neighborhood commission, or similar appointed citizen body
 - Action 10: Increase number of households with access to transit



Complete and Compact Communities

Metrics Recommended in STAR (Cont'd)

- BE 6: Public spaces
 - Action 3: adoption of regulatory strategies and incentives connecting public parks and spaces by transit modes
- BE 7: Transportation Choices
 - **Outcome 1:** Mode-Share Split: drive alone, walk, bike, or public transit breakdown (journey-to-work)
 - **Action 2:** Complete Streets Policy: adoption of policy
 - Action 5: Implementation of two types of enforcement programs to ensure multi-modal safety
- CE-2: Greenhouse Gas Mitigation
 - **Action 8:** promoting the establishment of programs to increase alternate transportation and low-emissions vehicles
- EJ-2: Green market development
 - Outcome 1: : Community resource efficiency, demonstrate reduced GHG emissions over time
- NS-4: Outdoor air quality
 - Action 5: partnership with regional organizations to support transportation management and promote alternative transit modes and rideshare programs



Metrics Recommended in ISO 37120 and Complete Streets

- ISO
 - Indicator 18.2: km of light passenger public transport system per 100,000 population
 - Indicator 18.3: annual number of public transport trips per capita
 - Indicator 18.4: number of personal automobiles per capita
 - Indicator 18.5: percentage of commuters using a travel mode to work other than a personal vehicle
 - Indicator 18.7: km of bicycle paths and lanes per 100,000 population
- Complete Streets:
 - # of walks per household per day
 - # streets that meet Complete Streets criteria (10)
 - Generally, encourages metrics or plans which relate to safety, connectivity, multi-modal transit, comprehensive and forward-thinking planning



Complete Streets





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Complete Streets



Source: NYC DOT, <https://www.citylab.com/transportation/2013/11/brief-history-how-bike-lanes-became-hip/7465/>



Complete Streets





Complete and Compact Communities

Actions Used in Other Cities

- Civil and Safe Multi-Modal Transportation
 - Ann Arbor: Transportation Demand Management Program, Commuter Challenge, *Go!pass* Program, Ride-sharing system, *getDowntown* program
 - College Station: Regular reviews of multi-modal transit plan
 - Engage current transit providers to expand and enhance transit services between activity centers and dense residential areas
 - Lawrence: Establish an off-street location for a regional and/or local transit hub and multimodal transfer center
 - Columbia: Integrate and connect all travel modes
 - long-range land use and transportation planning coordinated at regional and local levels



Complete and Compact Communities

Actions Used in Other Cities

- Complete Streets Policy adoption
 - Most benchmarked cities have adopted Complete Streets policies
 - These policies mostly just state a requirement to incorporate Complete Streets policies into future transportation planning documents funded by the City
 - Exception of West Lafayette, IN and Lawrence, KS
 - Massachusetts recognized as best Complete Streets examples



Complete and Compact Communities

Actions Recommended in STAR

- Demonstrate a comprehensive plan that supports compact, mixed-used development (BE-3 Action 1)
- Adopt regulatory strategies that permit or incentivize increased residential and employment densities and diverse uses in transit-served areas and areas identified for compact, mixed-use development (BE-3 Action 3)
- Provide bus transit within a 1/4 mile of local households (BE-3 Outcome 1)
- Adopt a Complete Streets Policy (BE-7 Action 2)
- Improve mode-share split for work commutes: specifically to reduce SOV commuting (BE-7 Outcome 1)
- Establish programs to increase alternate transportation and low-emissions vehicles (CE-2 Action 8)



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Thank You

Questions and Answers