Public Meeting

South Lakefront Corridor Transit Study

City of Chicago Department of Transportation & Department of Housing and Economic Development

Funded by the Regional Transportation Authority

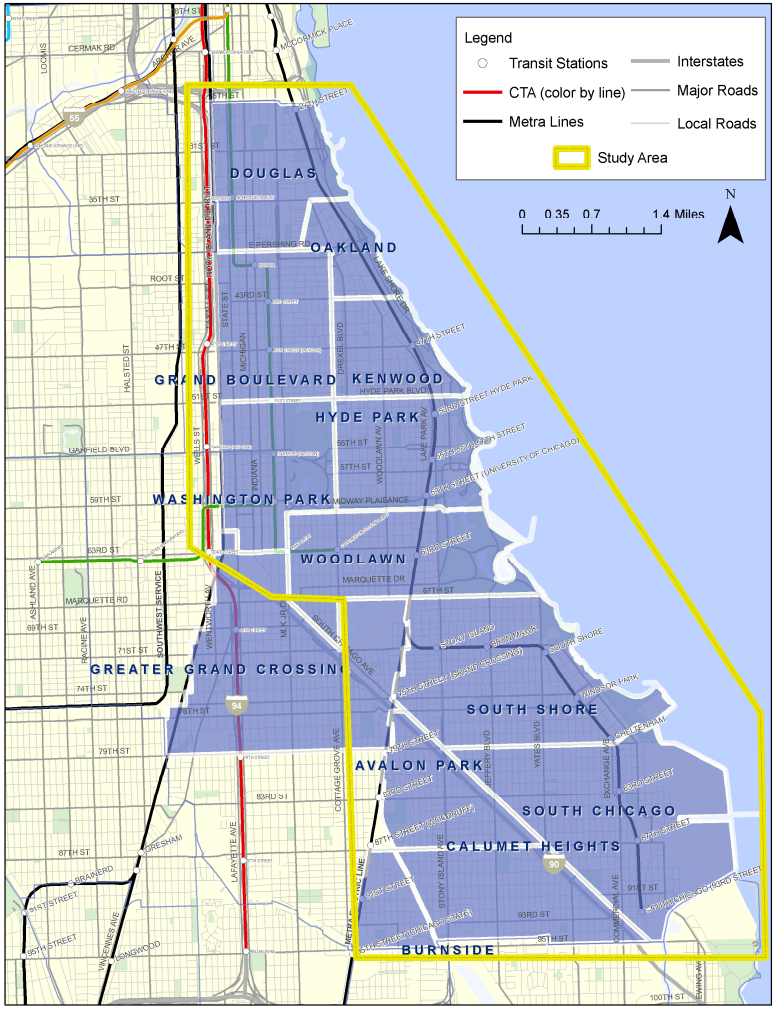
June 28, 2012

Agenda

- Review of Study Purpose and Process
- Findings on Example Projects
- Comparison of Key Measures
- Transit Oriented Development (TOD) Analysis Results

Study Goals and Study Area

- Goals
  - Enhanced mobility/ access to jobs and services
  - Promote economic vitality of communities in the study area
- Desired outcome
  - Consensus on reasonable options for subsequent study
- Timeframe for study
  - Completion summer 2012



Issues Identified by Community Stakeholders

- Safety/security concerns
- Lengthy travel times
- Key neighborhood linkages other than the Loop
- Customer comfort
- Frequency of service
- Seamless travel
- Knowledge of services
- Economically viable neighborhoods

Projects Already Moving Forward

- Projects underway
  - » Jeffery Bus Rapid Transit (BRT) – fall 2012
  - » Bus shelter real-time arrival information
  - » CTA Station Renewal Program
  - » Metra Electric District 59th/63rd Street station renovations including ADA accessibility
- In planning process
  - » Red Line extension (recommended as priority in "Go To 2040" the region's transportation plan)
  - » Chicago DOT to develop citywide BRT System Plan

The region has a large backlog of potential projects for Federal funding and they face strong national competition

O-H COMMUNITY PARTNERS

CAMBRIDGE SYSTEMATICS

Project Alternatives and Example Projects

#1: Improvements to Existing CTA Bus Network

Examples: New 83rd Street Bus Route, Enhanced Bus Service on King Drive

#2: Improvements to Existing CTA Rail Network

Example: Rail Station Enhancements

#3: New North-South Corridor Service

Example: Cottage Grove BRT or Streetcar

#4: New East-West Corridor Service

Examples: Garfield/55th Street BRT and 79th Street Enhanced Bus

#5: Changes to Metra Electric District Rail Service

Example: Gold Line Proposal

#6: Transit Oriented Development

Note: # for identification; does not indicate ranking.

Geographic Location of Example Projects

1a. New Bus Route on 83rd Street

- Definition
  - » Serves 87th Street Red Line Station
  - » Local bus stop spacing
  - » Service span – 6 a.m. to 10 p.m.
  - » Frequency
    - Every 15 minutes peak
    - Every 20 minutes off-peak
  - » Span and frequency to be adjusted as warranted by demand

Source: http://www.cityofchicago.org/city/en/depts/doit/supp_info/gis_data.html

1a. New Bus Route on 83rd Street
Findings

Capital Cost	Operating Cost	Estimated Ridership
$4M	$3M/year	5,300/weekday *many likely to be diverted from other bus routes*

Transit Oriented Development Impact	Funding
Low	Federal Jobs Access Reverse Commute (JARC) grant available to fund service for limited time
	Local match needed/funding very constrained
	Competing with restoration of other routes previously cut

Overall Assessment

Relatively low cost improvement;
Need funding for local match

1b. Enhanced Bus Service on King Drive

- Definition
  - » Reinstates previous X3 King Drive Express service
  - » Same stop spacing and travel time as X3
  - » Service span
    - Rush hours only
  - » Frequency
    - Every 8 minutes on both express and local service
    - 4 minute service at express stops
  - » 14% faster than local service

Source: http://www.cityofchicago.org/city/en/depts/doit/supp_info/gis_data.html

1b. Enhanced Bus Service on King Drive
Findings

Capital Cost	Additional Operating Cost	Estimated Ridership
Assumed to use existing fleet	$1M/Year	Additional 1,000/weekday Would likely divert riders from bus and rail and attract some new riders

Transit Oriented Development Impact	Funding
Low	Operating funds are constrained
	Would compete with restoration of other routes previously cut

Overall Assessment

Low cost improvement;
Need to identify funding

2. Red/Green Line Rail Station Enhancements

- Complete station reconstruction not required due to recent rebuilds/renovations
- Implement ongoing maintenance and upgrade program
- Conduct periodic assessments of station conditions to identify refurbishment needs
- Identify targeted public infrastructure improvement immediately around stations
- Ensure representation of study area stations in pilots of programs
  - CTA station renewal program
  - Security cameras
  - Real-time information monitors

2. Red/Green Line Rail Station Enhancements
Findings

Capital Cost	Additional Operating Cost	Estimated Ridership
$.25-$1M per station	• Routine maintenance and upkeep • Surface cleaning and periodic deep cleaning/power washing • Utility costs at stations • Staffing of customer service, maintenance, and security personnel	Small but positive impact

Transit Oriented Development Impact	Funding
Small but positive impact	Operating funds are constrained

Overall Assessment

Moderate cost improvement;
Need to identify funding

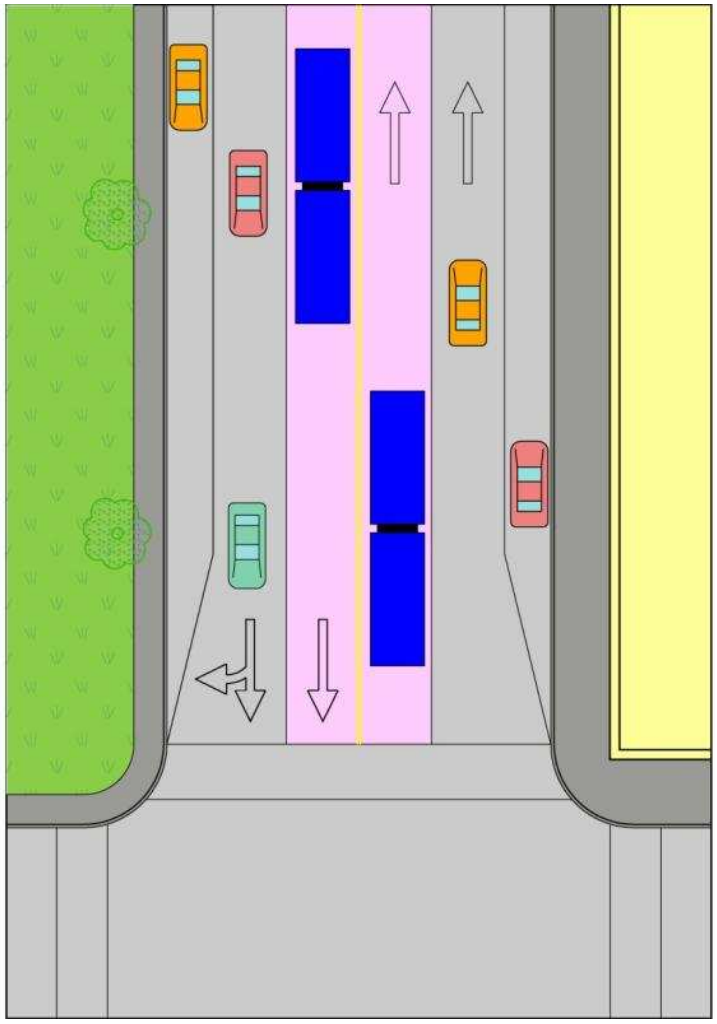
3a. Cottage Grove Bus Rapid Transit (BRT)

- Definition
  - » Dedicated lanes south of Roosevelt except five blocks
  - » Two BRT concepts
    - Low cost operating in curb lane
    - Rail-like "gold-standard" in median
  - » Transit signal priority
  - » Transit stations/low-floor buses/branding
  - » Off-board fare collection
  - » ½-mile stop spacing
  - » 25%-35% reduction in travel time
  - » Service span – 14-16 hours/day
  - » Frequency – every10 minutes peak, 15 minutes off-peak
  - » 20% reduction in Route #4 service

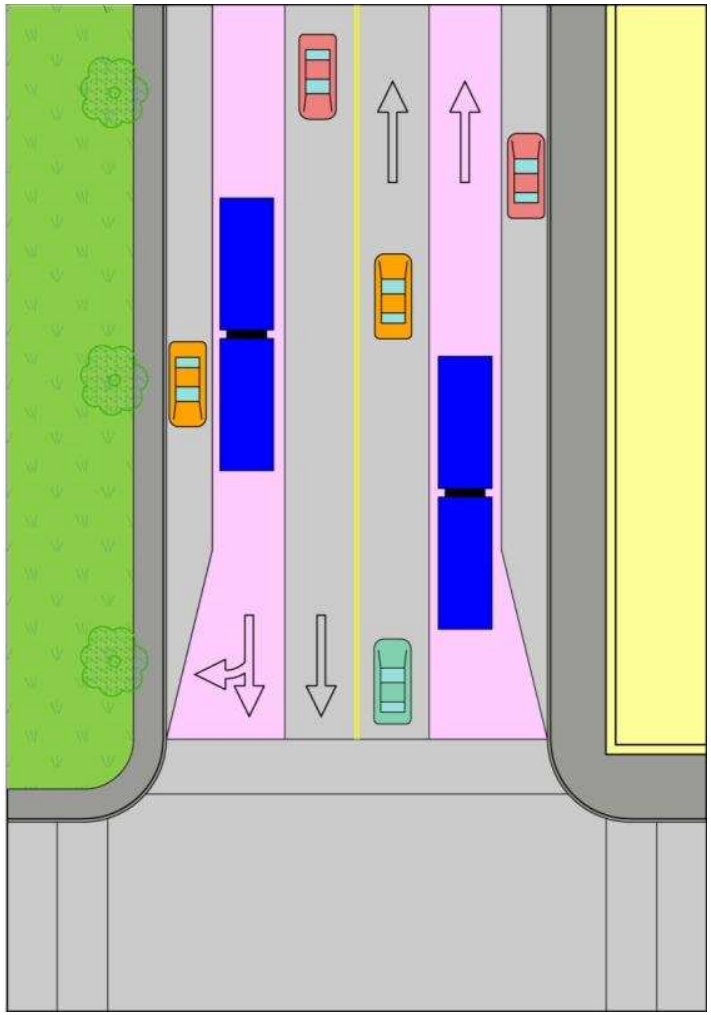
Two Alignment Options

3a. Cottage Grove BRT
Median or Curb Bus Lane

Median



Curb



3a. Cottage Grove BRT
Station Examples

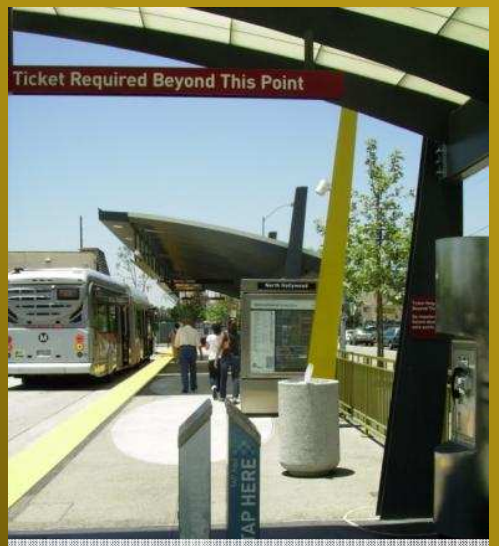
Highly Visible Pylon/ Distinctive Shelter

Real-Time Information

Kansas City MAX
(Photos from KCATA)

Level Boarding

Cleveland Health Line



Off-Board Fare Payment

North Hollywood Orange Line

3a. Cottage Grove BRT
Findings

Alternative	Capital Cost	Operating Cost	Estimated Ridership	Estimated Corridor Ridership Increase
Curb Running				• 12-17% • Likely to divert riders from local buses and attract some new riders
King Drive	$72M	$3-4M/Year	8,000/weekday	
Lake Shore Drive	$39M	$2-3M/Year	6,500/weekday	
Median				
King Drive	$148M	$3-4M/Year	8,100/weekday	
Lake Shore Drive	$65M	$2-3M/Year	6,600/weekday	

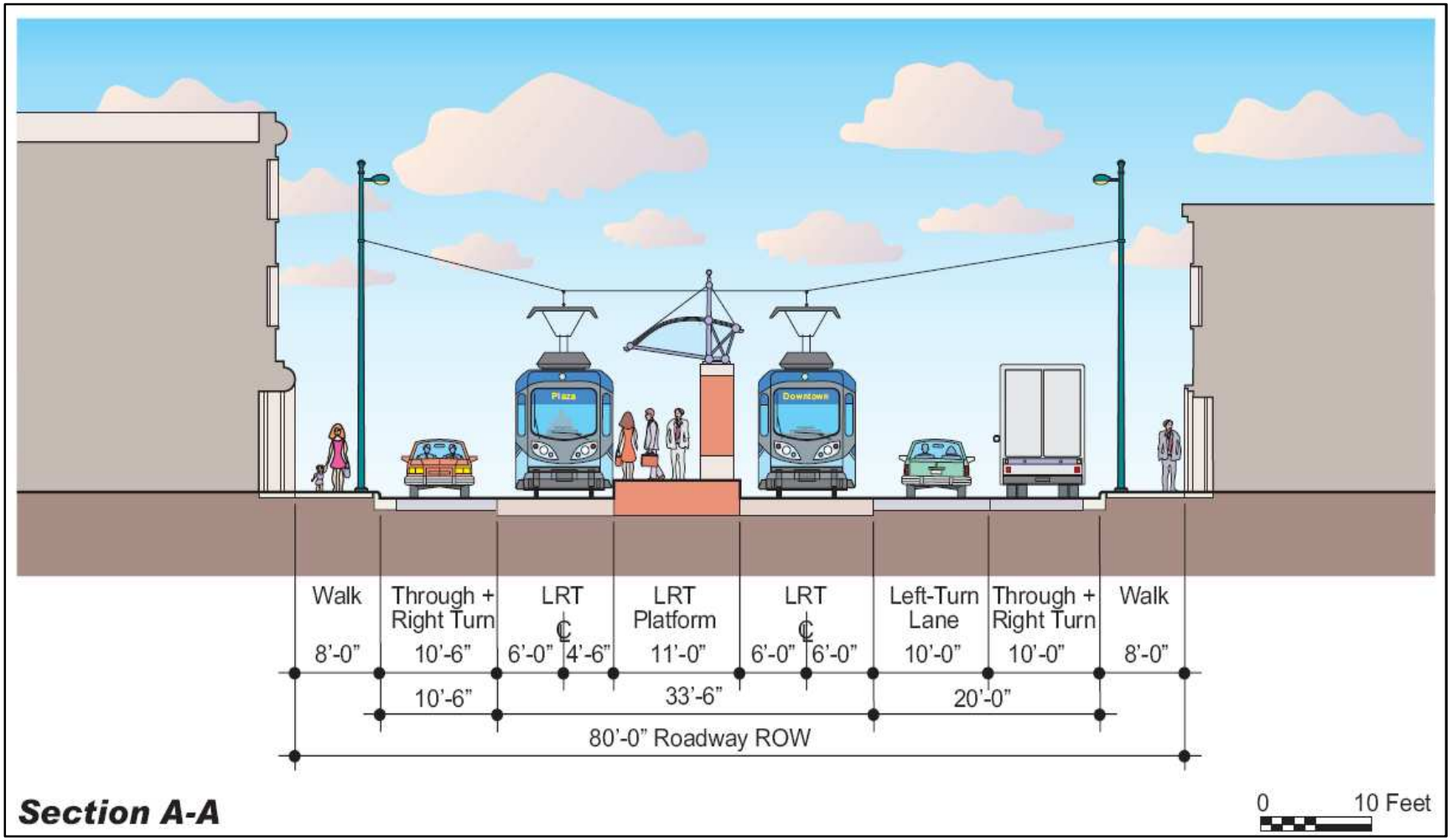
Transit-Oriented Development Impact	Roadway Impacts		Funding – Candidate for Federal Grant
	Parking	Traffic Level of Service (LOS) at Intersections	
Positive but modest	Curb running – 30% of parking removed Median-impacts at stations only	Low volume: Curb: LOS B Median: LOS B to C High volume: LOS D to F Based on existing traffic without rerouting or mode shifts	• Small Starts grant of 50% (up to $75M) if under $250M • Very Small Starts grant of 50% if cost under $50M • Needs local share

3b. Cottage Grove Streetcar

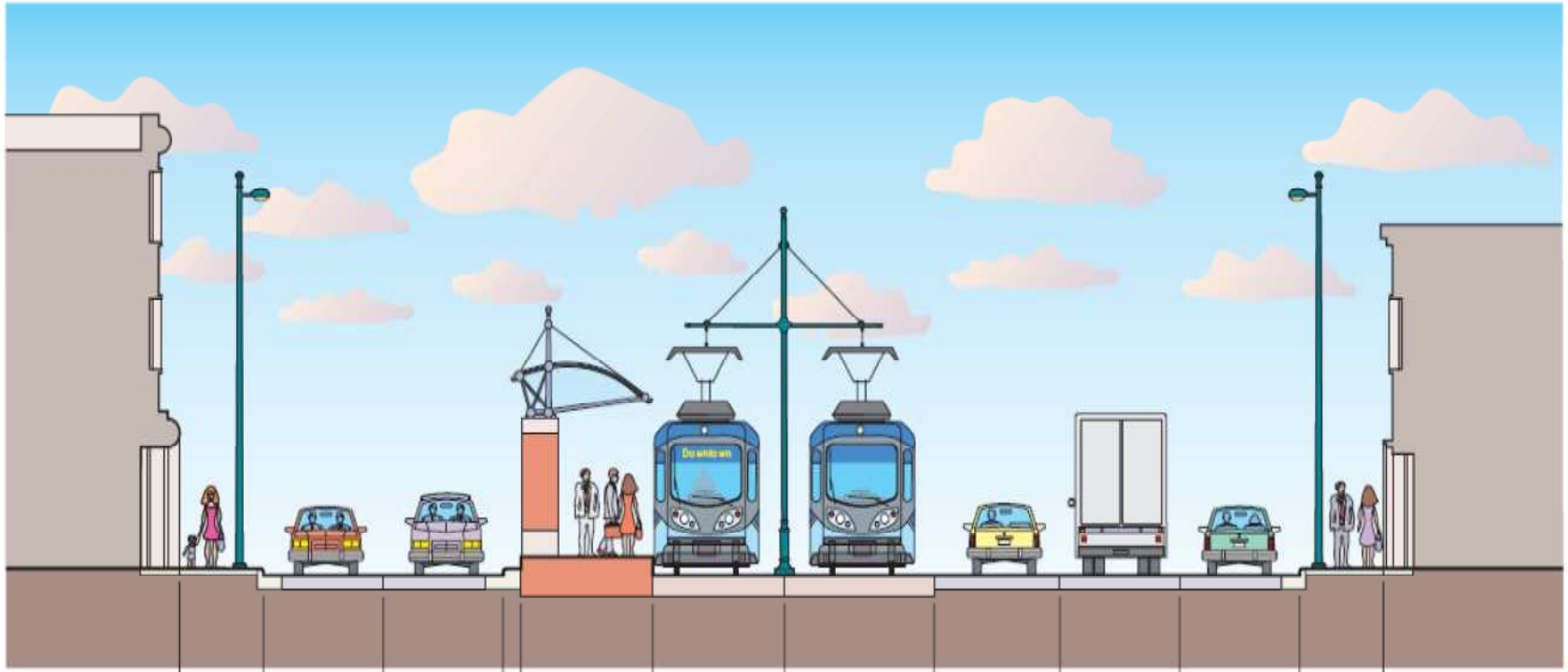
- Definition
  - » Phase 1 to 63rd Street (8 miles)
  - » Phase 2 to 95th Street (+4.4 miles)
  - » Exclusive median lanes (mixed traffic five blocks)
  - » Modern streetcars
  - » Maintenance facility
  - » ½ mile station spacing
  - » Transit signal priority
  - » 35% reduction in travel time
  - » Service span – 4 a.m.-1 a.m.
  - » Frequency – every 10 minutes peak/15 minutes off-peak
  - » 20% reduction in Route #4 bus

Source: http://www.cityofchicago.org/city/en/depts/doit/supp_info/gis_data.html

3b. Cottage Grove Streetcar Design
With 80-Foot Right-of-Way



3b. Cottage Grove Streetcar Design
With 100-Foot Right-of-Way



Section A-A

3b. Cottage Grove Streetcar
Findings

Alternative	Capital Cost	Operating Cost	Estimated Ridership	Estimated Corridor Ridership Increase	Ridership Notes
Phase I	$240M	$6M/Year	8,100/weekday	16%	Will generate new ridership as well as divert local bus riders
Phase I+II	$370M	$9M/Year	11,500/weekday	23%	

Transit Oriented Development Impact	Roadway Impacts	Funding – Candidate for Federal Grant
Positive Future development could increase ridership	• Significant street reconstruction • Traffic level of service impacts similar to median BRT • Unmetered parking removal near stations	• Small Starts grant of 50% (up to $75M) if capital cost under $250M • Needs local share

3a/b. Cottage Grove BRT and Streetcar
Overall Assessment

BRT

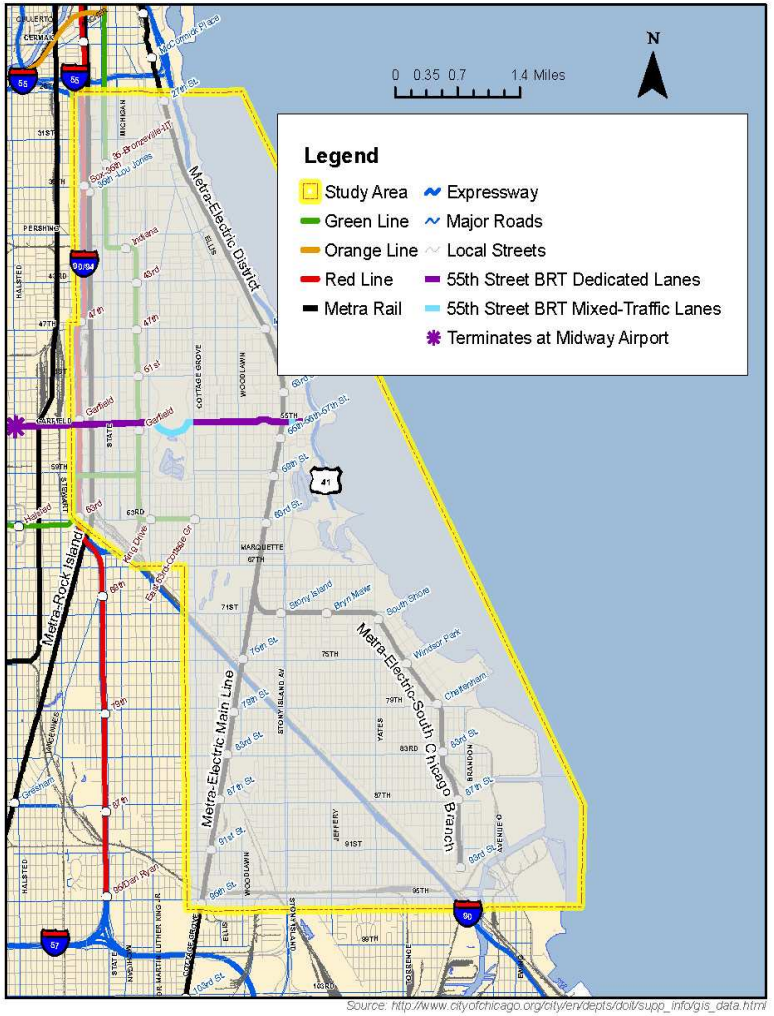
- Increased overall corridor ridership
- Lower cost than streetcar – varies depending on alignment and amenities

Streetcar

- Higher ridership than comparable BRT
- Higher potential development impact
- Phase 1 benefits are north of 63rd Street only
- Full corridor is longer than typical streetcar route

4a. Garfield/55th BRT

- Definition
  - » 55th Street – Museum of Science and Industry to Midway Airport
  - » Mostly dedicated lanes (as feasible)
  - » Transit signal priority
  - » Off-board fare collection
  - » Transit stations/branding/ low-floor buses
  - » ½-mile stop spacing
  - » 25-35% reduction in travel time
  - » Service span – 14-16 hours/day
  - » Frequency – every 10 minutes peak/15 minutes off-peak



Source: http://www.cityofchicago.org/city/en/depts/doit/supp_info/gis_data.html

4a. Garfield/55th BRT

Capital Cost	Operating Cost	Estimated Ridership	Estimated Corridor Ridership Increase
$71-$136M	$4M/year	4,800-4,900/weekday *Would divert some riders from existing bus and attract some new riders*	21-23%

Transit-Oriented Development Impact	Roadway Impacts	Funding – Candidate for Federal Grant
Positive, modest	• Where dedicated lanes are possible, traffic impact is modest • 27% of parking removed	• Small Starts grant of 50% (up to $75M) if capital cost under $250M • Needs local share

Overall Assessment

Moderate capital cost, low operating cost and moderate ridership

4b. 79th Street Enhanced Bus

- Definition
  - » South Shore Drive to Western Avenue
  - » Queue jumpers at selected intersections (three)
  - » Shelters/low-floor buses
  - » Transit signal priority
  - » ½-mile stop spacing
  - » 12% reduction in travel time
  - » Service span –14-16 hours/day
  - » Frequency – every 10 minutes peak/15 minutes off-peak
  - » Possible off-board fare collection

Source: http://www.cityofchicago.org/city/en/depts/doit/supp_info/gis_data.html

4b. 79th Street Enhanced Bus
Findings

Capital Cost	Operating Cost	Estimated Ridership	Estimated Corridor Ridership Increase
$18-$27*M *Higher cost includes off-board fare payment	$6M/year	10,900/weekday *Would divert most riders from existing bus and may attract some new riders*	5%

Transit Oriented Development Impact	Roadway Impacts	Funding – Candidate for Federal Grant
Low	TSP/Queue Jumps may impact traffic; impact could not be measured	• Very Small Starts grant of 50% if capital cost under $50M • Needs local share

Overall Assessment

Low capital cost, moderate operating cost and high ridership

5. South Chicago Branch – Gold Line

- Definition
  - » New station at 35th Street
  - » Costly capacity improvements may be needed at Millennium Station and on Main Line
  - » Frequency –
    - Every 10 minutes peak
    - 15-20 minutes off-peak
  - » Service span –
    - 6 a.m.-midnight

5. South Chicago Branch – Gold Line
Findings

Capital Cost	Potential cost of about $350M, *excluding* undetermined cost for capacity expansion that may be needed at Millennium Station and Main Line
Operating Cost	$56-$60M/year ($32-$36M more than current costs)
Estimated Ridership	13,400/weekday Likely to draw riders from CTA bus and rail, including express buses; attract some new riders
Estimated Corridor Ridership Increase	61%

Transit Oriented Development Impact	Funding
Positive but modest	Federal and local funding will be a challenge

Overall Assessment

- Very costly for limited new transit ridership
- Challenging funding outlook
- Fare integration anticipated by 2015 and benefits can be assessed

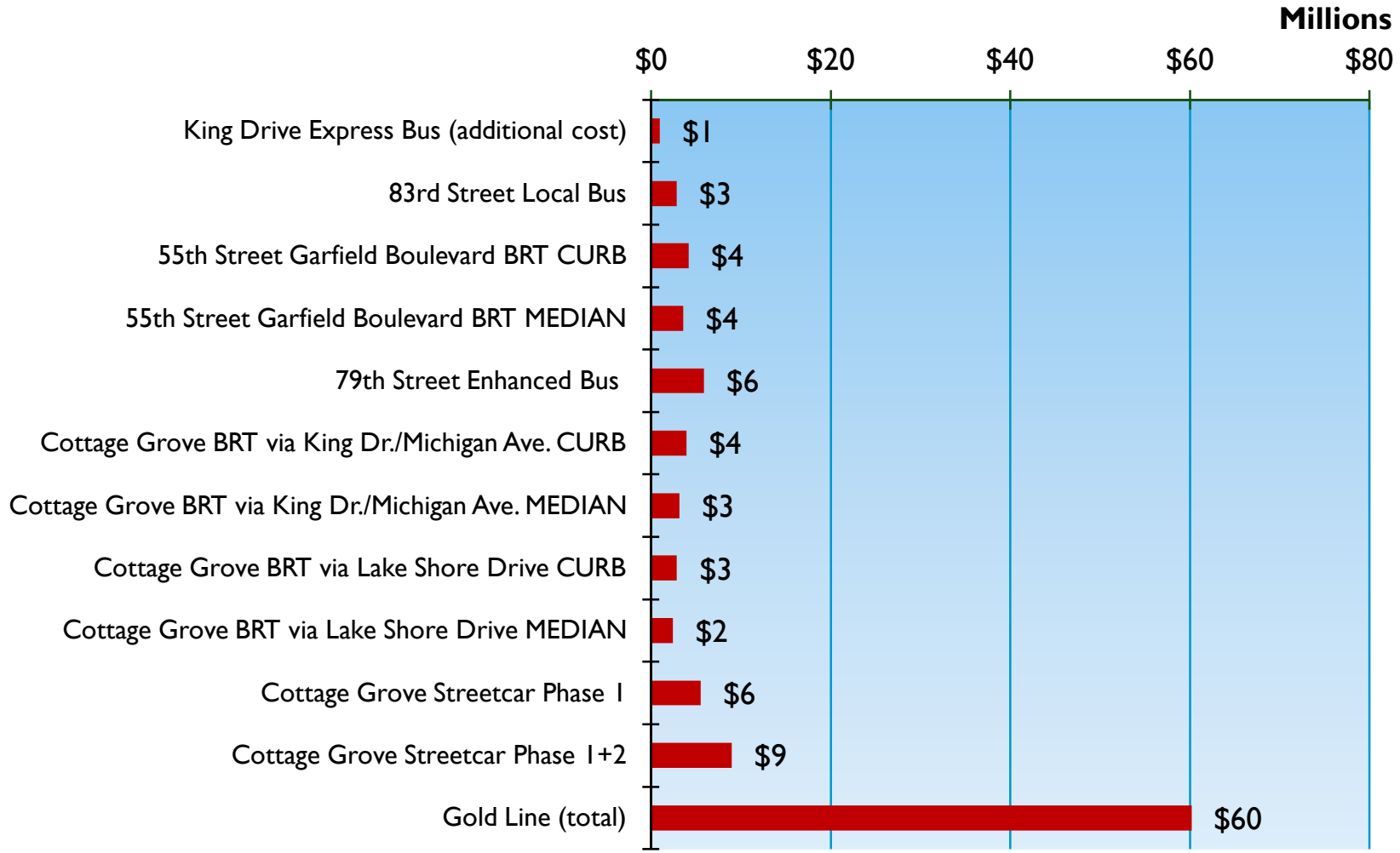
Comparison of Estimated Ridership Impacts

Project Name	Weekday Ridership on Service	Percent Increase in Corridor Ridership
83rd Street Local Bus	5,300	N/A
King Drive Express Bus (additional)	1,000	4%
Cottage Grove BRT via King Drive and Michigan Avenue	8,000-8,100	15-17%
Cottage Grove BRT via Lake Shore Drive	6,500-6,600	12-14%
Cottage Grove Streetcar Phase I	8,100	16%
Cottage Grove Streetcar Phase I+II	11,500	23%
55th Street Garfield Boulevard BRT	4,800-4,900	21-23%
79th Street Enhanced Bus	10,900	5%
Gold Line	13,400	61%

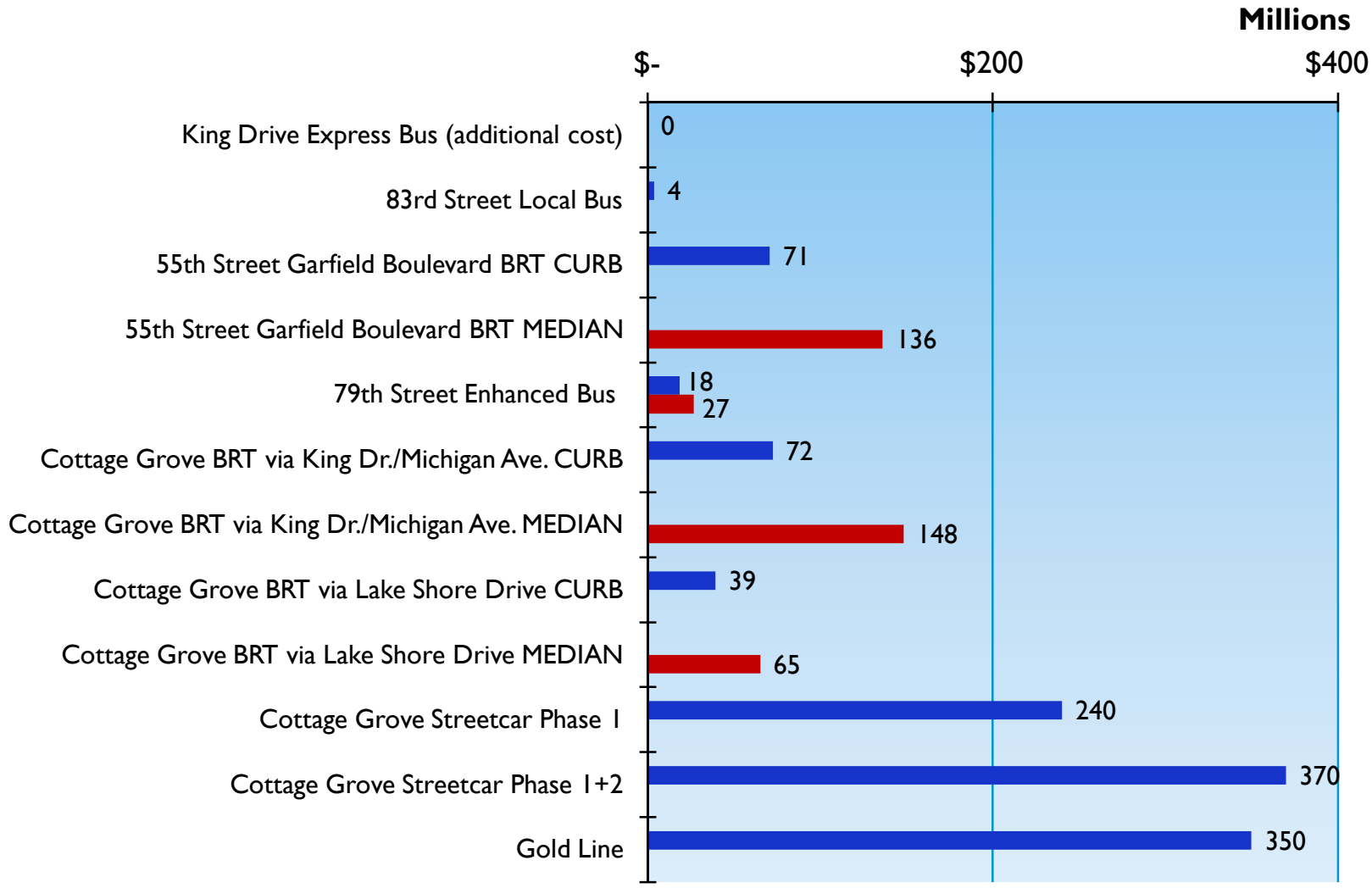
For comparison

- CTA local bus routes average 11,000 weekday riders
- CTA express bus routes average 5,000 weekday riders

Estimated Annual Operating Costs (in Millions)



Estimated Capital Costs (in Millions)



Note: Gold Line costs excludes any capacity expansion.

6. Transit-Oriented Development (TOD)

- Definition
  - » Higher-density, mixed-use development pattern that makes it easier to walk and use transit
  - » Also called – ***Transit-Friendly Development*** (TFD), since Chicago is already highly transit-oriented

- Ingredients needed
  - » Available land in station areas
  - » Economic climate for private development
  - » Supportive land use plans and public policies
  - » Transit-Friendly Design features, e.g., sidewalks, plazas, trees, etc.
  - » Permanent transit investment of significant scale

Transit-Oriented Development
Recommendations

- Ensure that public policies are supportive
  - » Use TFD Typologies as guidelines for development scale, character, and use for all station areas
  - » Review zoning and infrastructure planning
  - » Implement pedestrian and bicycle access and safety initiatives
- Set the stage for the longer term
  - » Utilize Tax Increment Financing (TIF) for public sector planning, infrastructure, and site assembly/preparation
  - » Encourage concept planning – coordinate infill and new private sector developments
- Market TOD candidate neighborhoods
  - » Leverage active community economic development and neighborhood networks

Recommendations
Focus Development Around Transit Stations by Transit-Friendly Design Typology

Major Activity Center
- Large residential, retail, commercial, and mixed-use projects

Local Activity Center
- Moderately large residential, retail, commercial, and mixed-use projects

Dense Urban Neighborhood
- Large residential infill projects with some supporting retail adjacent to station

Urban Neighborhood
- Infill residential projects of same scale as neighborhood with some retail or higher density residential adjacent to station

Service Employment District
- Large-scale service employment and institutional uses

Manufacturing Employment District
- Large-scale manufacturing, R&D, and flex-space employment uses

Findings
Station Areas Most Likely to Support New/Future Transit Friendly Development

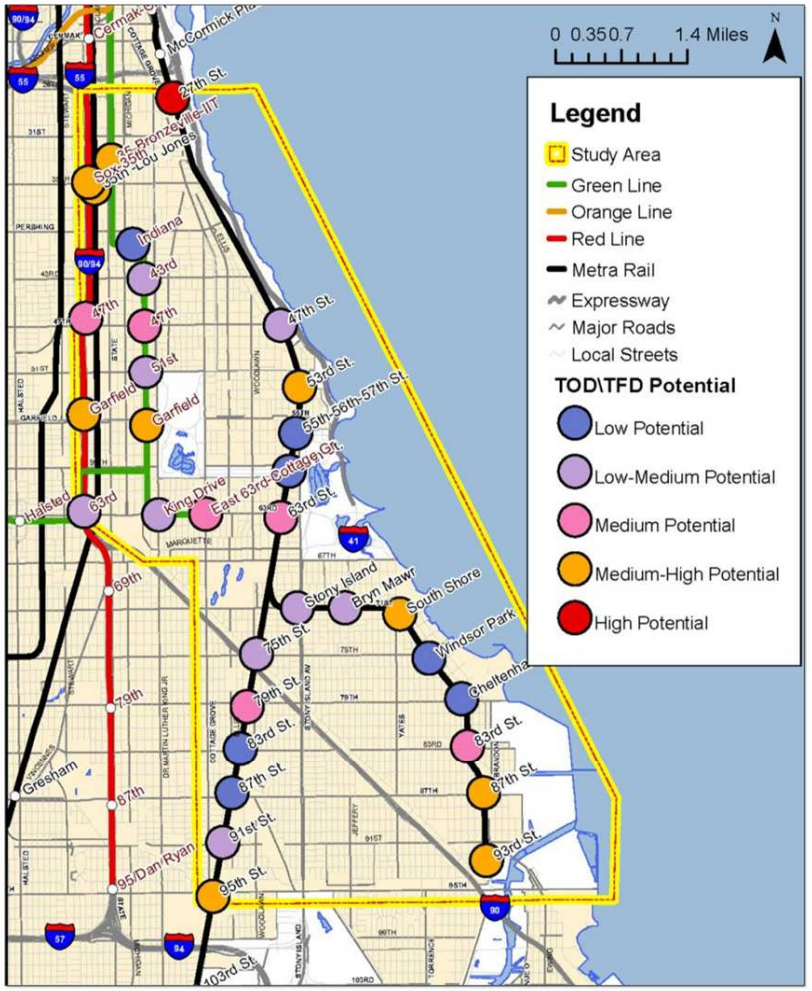
CTA Green Line
- IIT/35th/Bronzeville
- 47th Street
- Garfield
- East 63rd – Cottage Grove

CTA Red Line
- 35th/Sox Park
- 47th/Dan Ryan
- Garfield/Dan Ryan

Metra Electric District Main Line
- 27th Street
- 51st to 53rd Street
- 79th Street
- 63rd Street
- 95th Street/CSU

Metra Electric District South Chicago Branch
- South Shore
- 83rd Street
- 87th Street
- 93rd Street

Metra Rock Island District
- 35th Street-Lou Jones



Note: Based on analysis of current character, population and employment density, current real estate trends, and availability of land.

Potential Next Steps

- Identify potential funding
  - » Identify local funding to match any existing or potential Federal grants for new services
  - » Identify sources of ongoing operating funding
  - » Be ready to pursue new Federal grants under a new transportation bill for the highest priority projects
- Establish clear priorities
  - » Continue to monitor station conditions and identify those most in need of attention
  - » Evaluate priorities for BRT and other new corridor services in Chicago DOT BRT Plan
  - » Monitor ridership and need for more service on express bus routes and on Metra once fare integration is implemented
  - » Evaluate demand for Gold Line

Potential Next Steps (continued)

- Advance Implementation
  - » Ensure representation of study area stations in CTA's maintenance and capital programs
  - » Work with communities to implement enhancements around stations
  - » Recommend that Metra implements programmed station improvements once the state bonding funds are released
  - » Recommend that the Gold Line is considered in Metra's current and future strategic planning processes
  - » Consider incremental improvements
  - » Conduct more detailed evaluation of traffic and parking impacts of corridor improvement proposals and discuss options with the community
  - » Pursue TOD and market the candidate neighborhoods

Study Conclusion

- Please provide comments on the example projects via comment form

- Summary Report by end of summer
  - » Detailed descriptions of example projects
  - » Shorter descriptions of other projects in each category

Questions and Answers

Thank you for your input!