



AMES TRANSIT FEASIBILITY STUDY

Final Study Recommendations

For Public Review and Comment

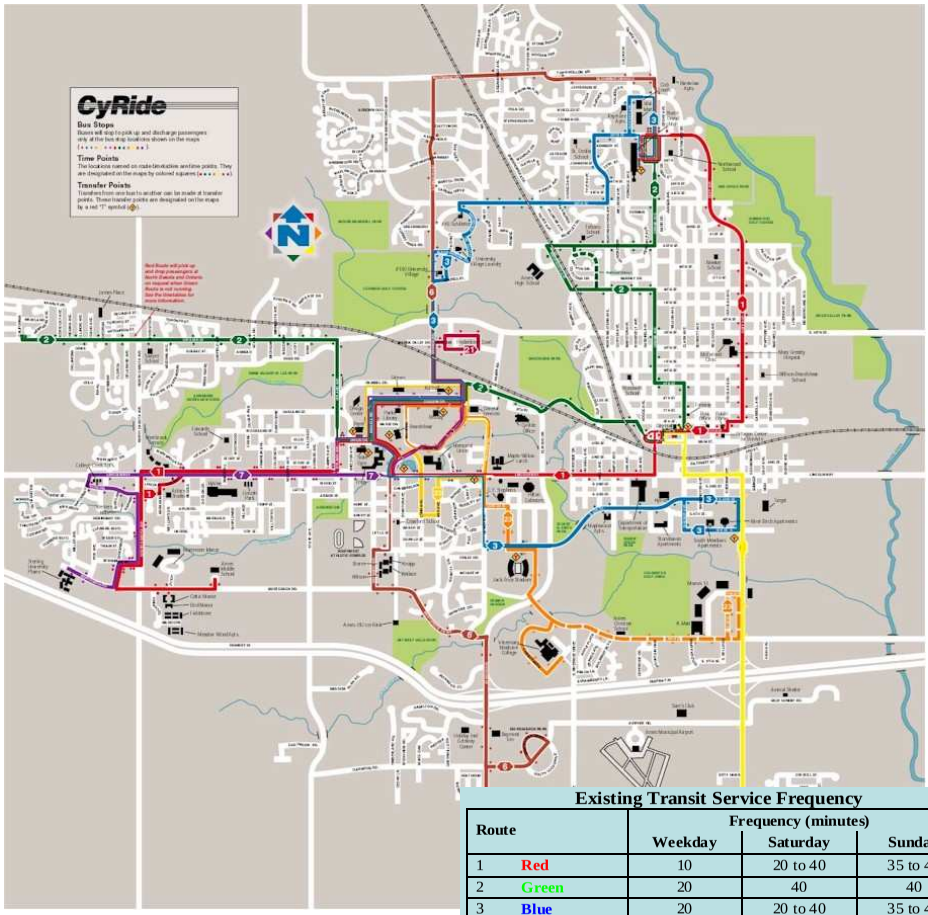
October 2007

Meeting Agenda

- Existing Service
- Future Service –Transit Feasibility Study
- Study
  - Purpose/Goals
  - Methodology
  - Recommendations
- Next Steps
- Questions and Comments

Existing CyRide Services

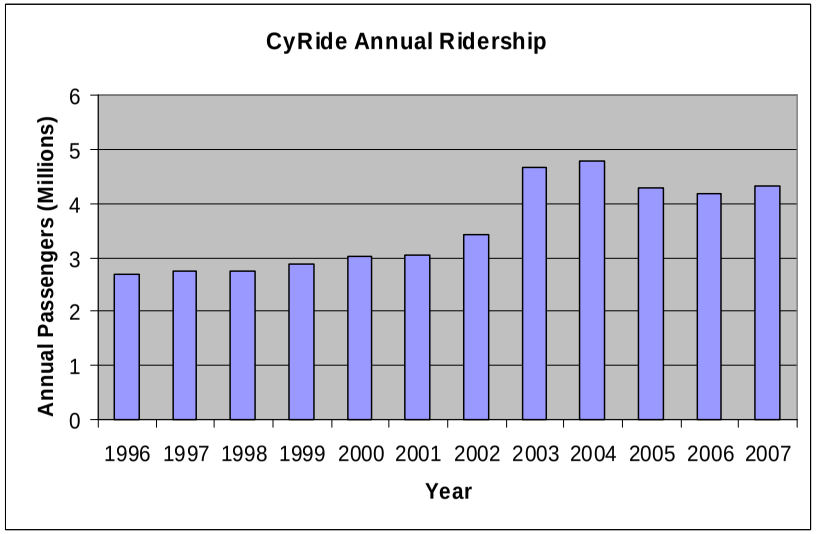
- Currently operate 10 fixed routes plus dial-a-ride, Moonlight Express
- Service covers approximately 75% of city
- Service operates 6:30 am to 12:30 am weekdays
- Reduced schedule on weekends
- Regular fare is $1.00
- ISU Students ride for free with ID Card

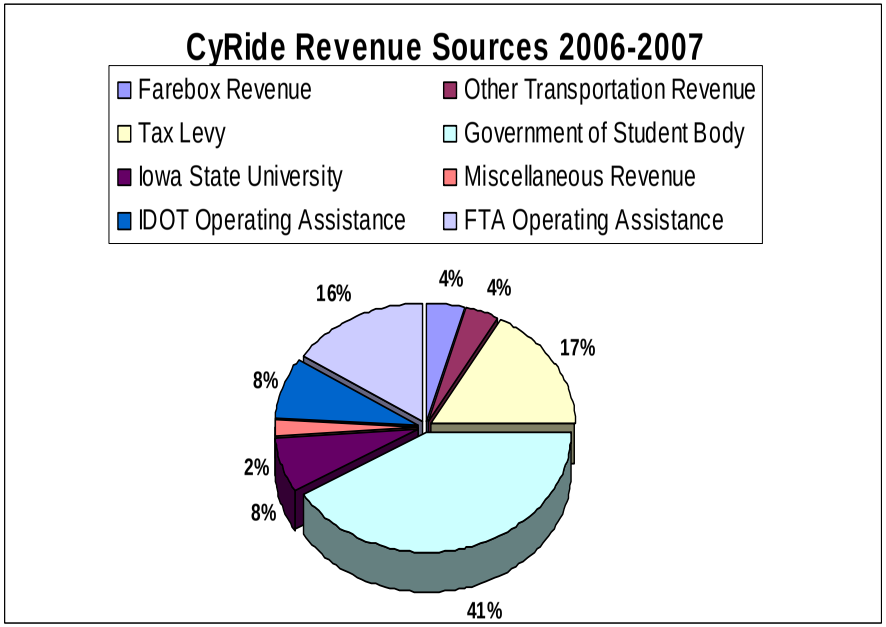


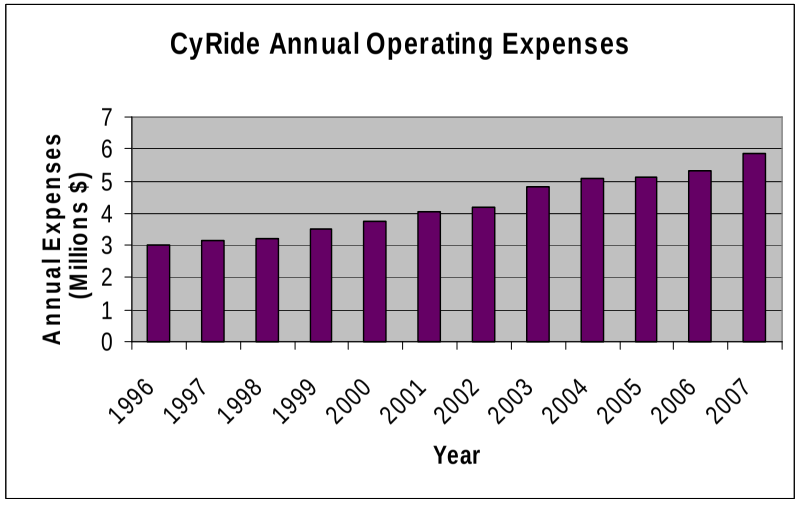
Existing Transit Service Frequency

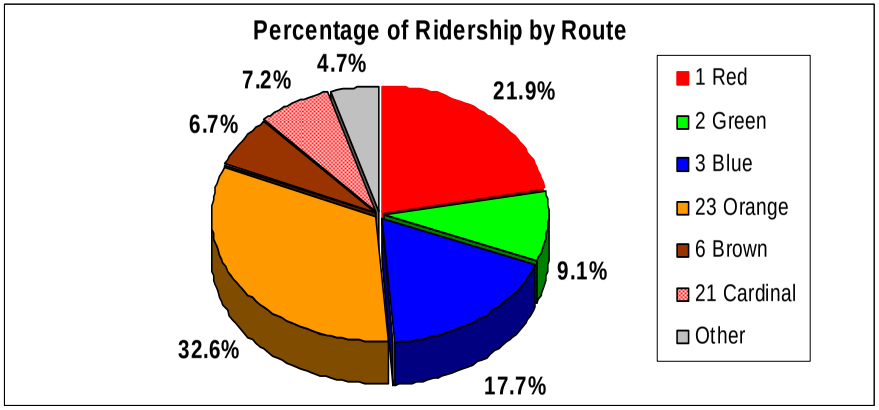
Route		Frequency (minutes)		
		Weekday	Saturday	Sunday
1	Red	10	20 to 40	35 to 40
2	Green	20	40	40
3	Blue	20	20 to 40	35 to 40
4	Gray	60		
5	Yellow	30	30	
6	Brown	20	40	
7	Purple	40		
21	Cardinal	7		
22	Gold	20		
23	Orange	3		

Existing CyRide Services





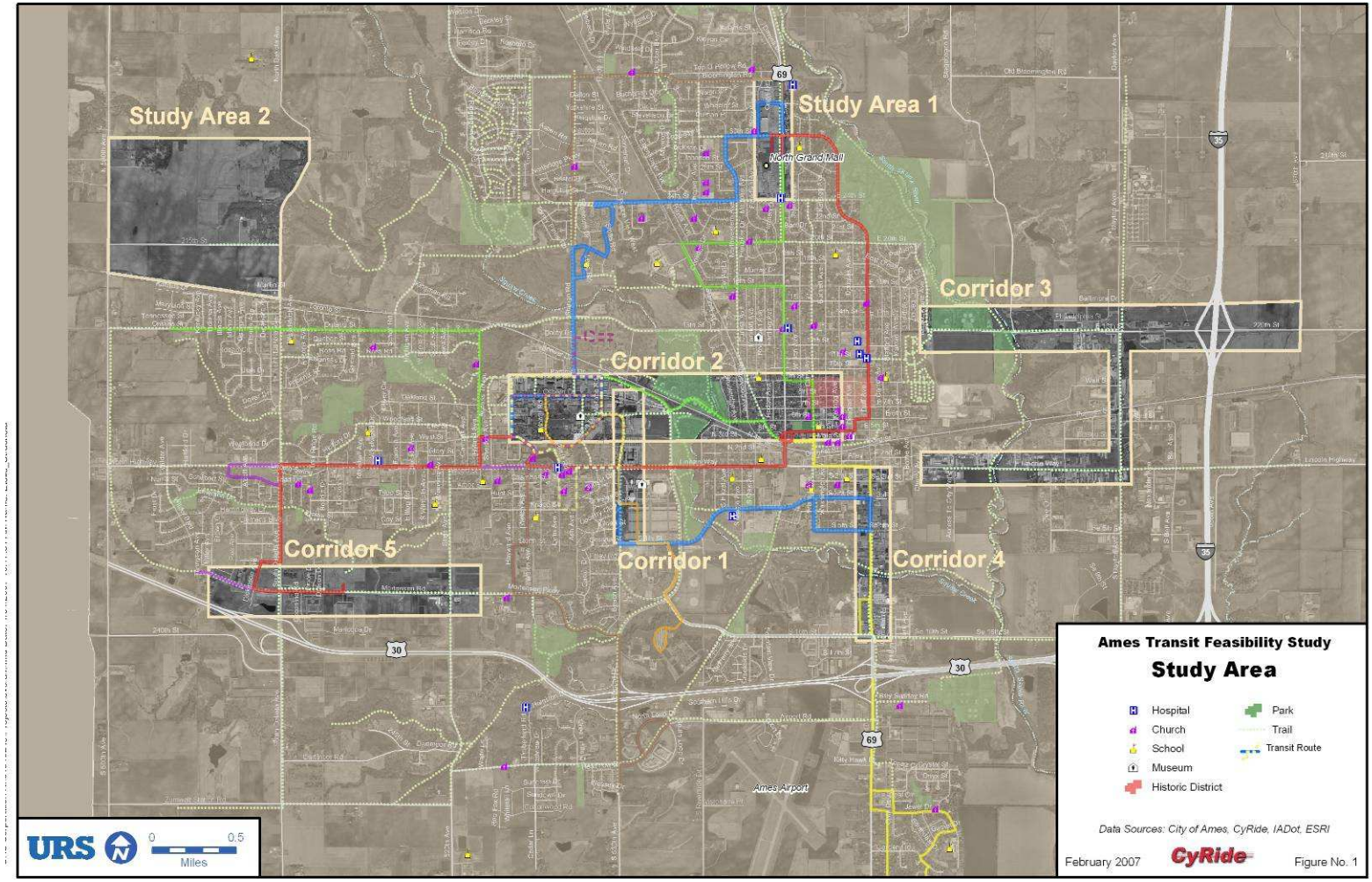




Feasibility Study Purpose/Goals

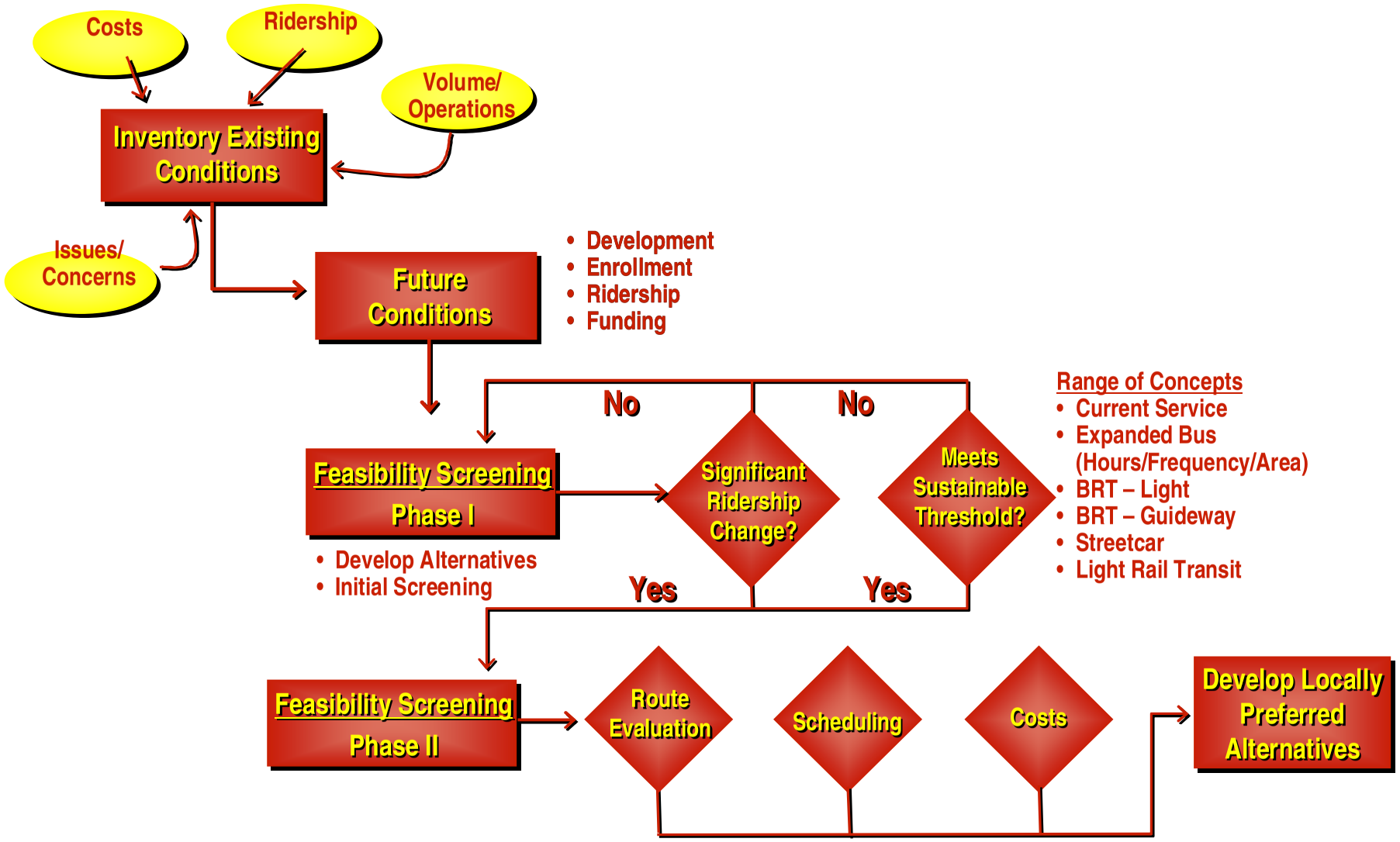
- **Evaluate Need** -the need for and feasibility of new or modified transit services for selected transportation corridors.
- **Provide Information** - regarding the feasibility of transit improvements in selected corridors
- **Prioritize Corridors**
  - **Prioritization based on:**
    - **Current Issues Identified by Focus Groups, Staff, Route Analysis**
    - **Future Transit Ridership & Needs**
    - **Alternatives Assessment**
      - Adjacent Impacts
      - Consistency with Plans
      - Performance
    - **Cost Versus Feasibility to Fund**
      - Local Sources
      - State/Federal Sources

Feasibility Study Purpose/Goals



Ames Transit Feasibility Study

Feasibility Analysis Process



Alternative Transit Modes

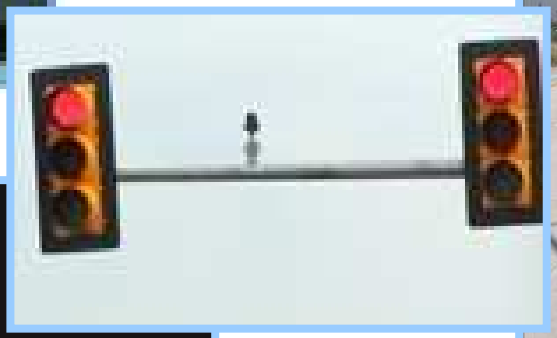
			Typical Station Spacing (Miles)	Typical Operating Speed (MPH)	Power	Typical Daily Ridership	Capacity per Vehicle (Seats/Total)
	**Standard Bus**	Standard buses generally operate in mixed flow on city streets	0.25	10 to 25	Diesel	100 to 5,000	40/70
	**Bus Rapid Transit**	BRT is an integrated system of facilities, services, and amenities that collectively improves the speed, reliability and identity of bus transit. Generally operates at least partially in exclusive right of way with frequent service.	0.5 to 1.0	20 to 55	Diesel /Hybrid	5,000 to 10,000	55/105
	**Trolley or Streetcar**	A trolley or streetcar generally operates in mixed flow on city streets with power provided by overhead wires. Generally intended for shorter trips with frequent stops.	0.25	10 to 25	Electric Overhead Wire	5,000 to 10,000	35/115
	**Light Rail Transit**	A moderate to high capacity transit system operating 2 to 3 car trains in semi-exclusive right of way with power provided by overhead wires.	0.5 to 1.0	20 to 55	Electric Overhead Wire	10,000 to 40,000	75/150

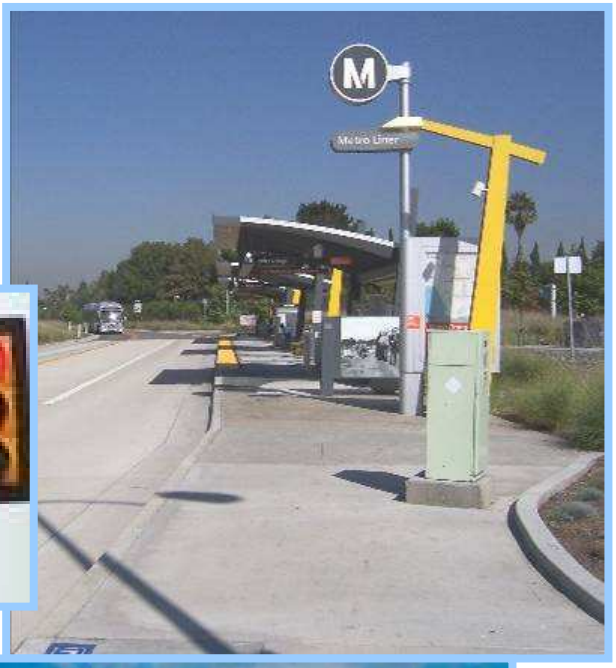
Recommendation - Corridor 1
Iowa State Center to Central Campus

- **Recommendation - Implement Bus Rapid Transit (BRT) – Replace Orange Route**
- **Frequency – 5/10 Minutes**
- **Route – Combination Mixed-Flow/Dedicated Transitway**
- **Special Vehicle:**
  - Articulated
  - Low Floor
- **Enhanced Stops/Stations**
- **Intersection Improvements**
- **Maintenance Facility Replacement/Expansion**
- **Federal Funding – Very Small Starts Eligible**

Cost:
$6.2 Million Construction/Buses
$390,000/Year O&M Savings

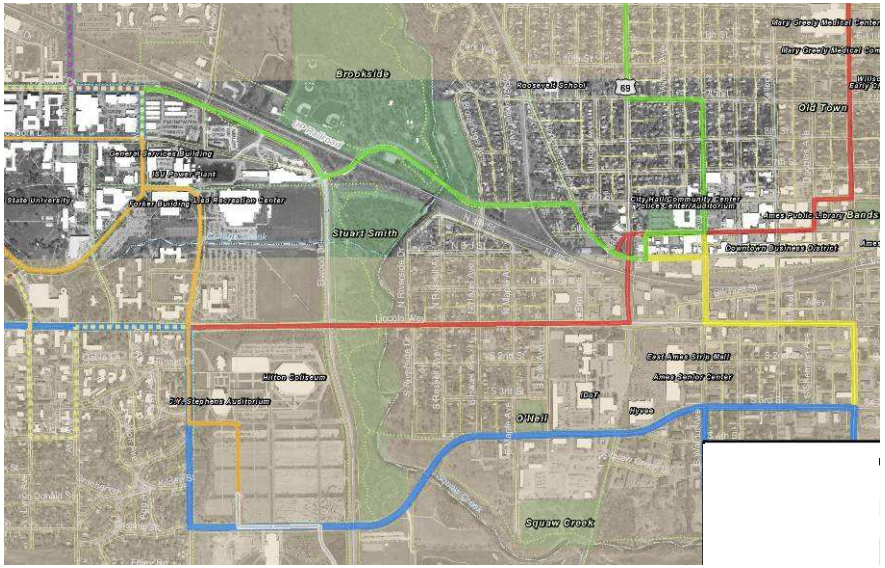
Recommendation - Corridor 1
Iowa State Center to Central Campus





Recommendations - Corridor 2
ISU to Downtown Ames

- **Recommendation - Maintain Current Service (No Action)**
  - **Red Route**
  - **Green Route**
- **Ridership Does Not Support a Higher End Alternative including the Dinky streetcar** (initial reason for this study)



– **Lower Ridership** (320 daily trips from DT to campus; No growth anticipated in ISU enrollment and/or employment. No growth in downtown Ames.)

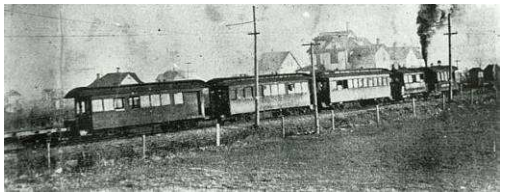
– **High Capital Costs** ($43.5-81.6 million for 2 miles of guideway, vehicles & maintenance facility. Grade separations for Union Pacific tracks necessary)

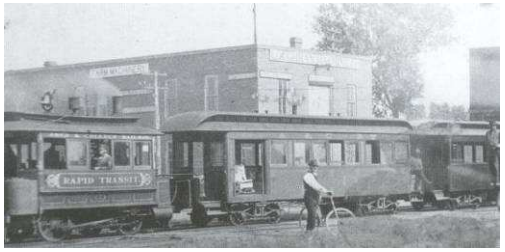
– **High Maintenance Costs** ($1.19 million; floodplain issues; impacts to existing streets)

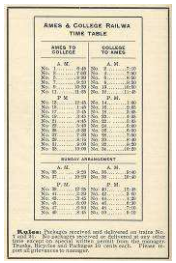
What was the Dinkey?

- *In 1868 when the Iowa Agricultural College was formally opened, the matter of transportation between the railway station and the institution, a distance of two miles, was a problem that confronted the town people and the college people, which were separate and distinct populations at that time, and this being a time when electric cars were still a dream and automobiles had not even been dreamed of, all the primitive laws of locomotion and transportation were resorted to in keeping up with the demand of the college and the town.*

- *In 1890, the Iowa Agricultural College signed an agreement with the Ames Street Railway Company to construct and operate a standard gauge railway to be operated by steam motor or other motive power as may be determined. On the Fourth of July, 1891, the Dinkey made its first run between downtown Ames and campus*





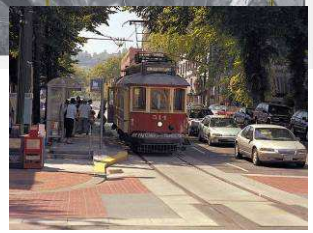


- *Streetcars carried passengers between downtown Ames and campus on the steam-powered Dinkey from 1891 to 1907, and on the Ft. Dodge, Des Moines & Southern Railroad's electric-trolley, interurban line from 1907 to 1929. In 1913, it was reported that the streetcar carried 133 people per hour. The fare remained constant at a nickel for 35 years until, in 1926, the fare was raised to seven cents. The streetcar was replaced by bus service in 1929.*

- *The Dinkey:*
  - *made it possible for faculty to live downtown and commute to the College;*
  - *carried school children from 4th Ward to downtown school;*
  - *facilitated the transport of construction materials to campus during a period of great growth;*
  - *was integral to town and campus life for 16 years, bonded the two communities, and furnished many memories of the good old days.*

Source: Ames Historical Society

Corridor 2 – Street Car Options



Ames Transit Feasibility Study

Recommendations - Corridor 3
13th Street to Proposed Mall

- **Recommendation - Extend Standard Bus Service to Regional Retail Site**
- **Follow Development**
- **900 Riders Per Day**
  - 700 Mall
  - 200 Presently Unserved Area
- **20-30 Minute Headway**
- **Red or Blue, But Not Both**
  - Ridership Does Not Support Both

Cost:

- **$660,000 New Buses (2)**
- **$600,000/Year for O&M**

Recommendations - Corridor 4
South Duff

- **Recommendation - Maintain Current Service (No Action)**
- **Ridership (Current/Future) Does Not Support:**
  - **More Frequency**
  - **Extended Hours –**
    - Currently 40 riders/day = 185 riders in 2030
    - Estimated that improving frequency/hours would increase ridership in 2030 to 225 passengers; only 40 more passengers than "No Action"
    - Capital Needs: 2 additional buses ($660,000)
- **Big Box commercial use**
  Pedestrian friendly difficult to achieve for high use

Recommendations - Corridor 5
Mortensen Road

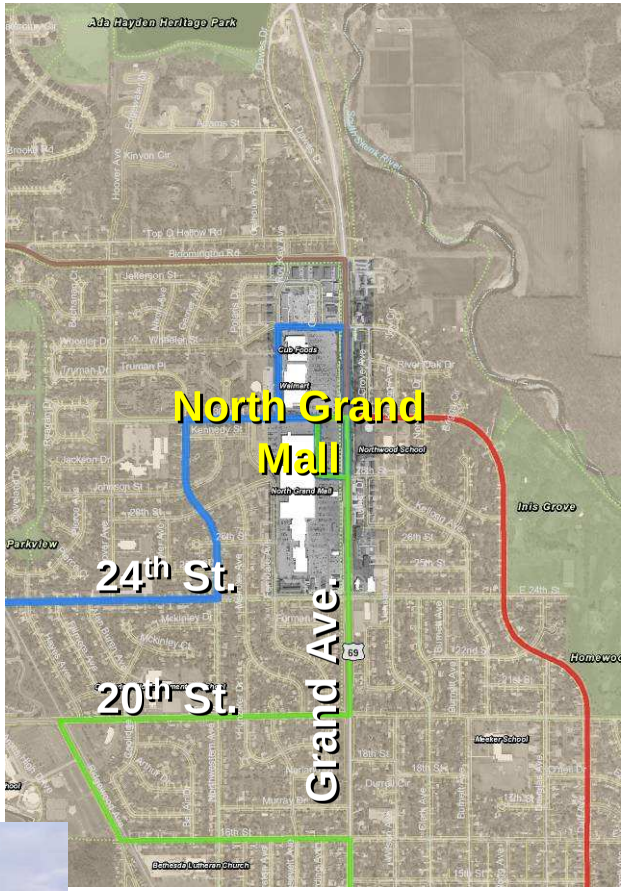
- **Recommendation - Add Articulated Buses**
- **Two Artic Bus Runs – Replaces 3 standard bus runs**
- **Reduce "Extras"**
- **Negative: Maintenance Facility Limitations:**
  - Storage
  - Maintenance
- **Coordinate with Corridor 1-BRT Recommendation:**
  - Maintenance Facility

Cost:

- **$1.9 Million for Articulated Buses (4)**
- **$750,000 Retrofit of Maintenance Facility**
- **$565,000/Year O&M Savings**

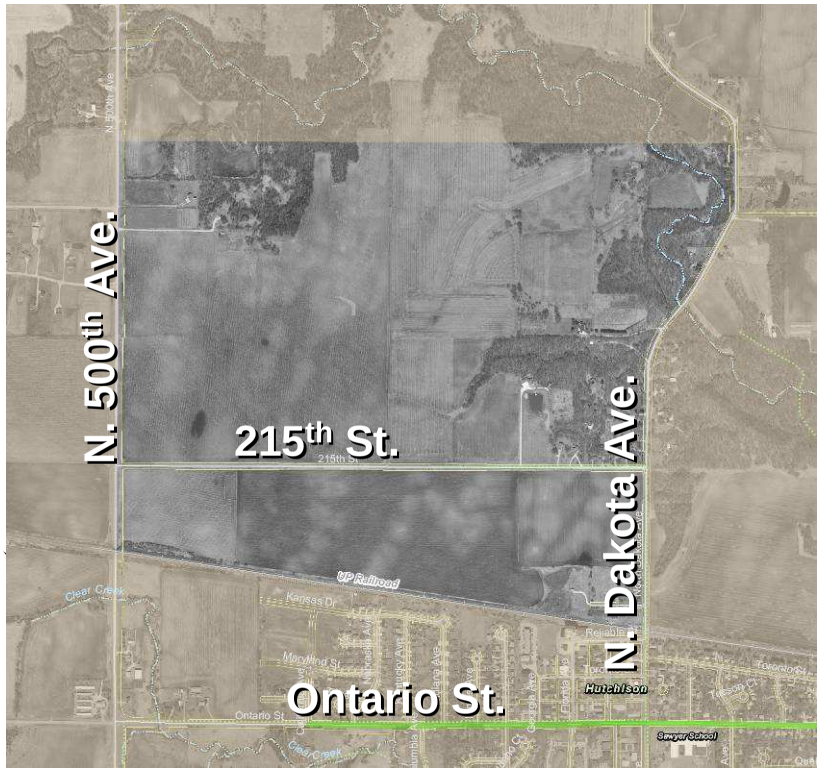
Recommendations – Study Area 1
North Grand Mall

- **Recommendation - Maintain Current Service (No Action)**
- **Mall Expansion Adds 140 Passengers/Day in 2030**
- **Does Not Support Service Expansion**
  - Excellent service to North Grand Mall currently with four routes serving area.
  - Red/Green/Blue/Brown total corridor ridership = 570 pass/day in 2030
  - Increasing frequency only increases riderhip by 40 passengers/day over “No Action”



Recommendations - Study Area 2
Northwest Growth Area

- **Recommendation - Add Service for NW Growth Area (Fieldstone)**
- **After Substantially Developed**
- **Frequency:**
  - 12 Minute Headway if Extend Green
  - 30 Minute Headway on New Dakota Route
- **Two Choices**
  - Branch From Green Route
  - New Service On North Dakota to Lincoln Way



Cost:

- **$660,000 for Buses (2)**
- **$680,000/Year for O&M**

Next Steps in the Process

- **Public Comments Phase-** Receive Comments on Recommendations through November
- **Board Decision on Recommendations -** December
  - Consider all recommended transit improvements in light of public comments submitted
    - Corridor 1 – Iowa State Center to Campus
    - Corridor 3 – New Mall/Lincolnway/E. 13th
    - Corridor 5 – Mortensen Road
    - Study Area 2 – Fieldstone Development
  - Discuss funding of recommendations
  - Decide on funding Implementation Plan for Corridor 1 BRT
- **Facilities Master Plan Update**
- **Questions?**

Please fill out a comment sheet!