



Chapel Hill Strategic and Financial Sustainability Plan

January 28, 2014

N NELSON
NYGAARD

meeting agenda

- Project Goals and Status Update
- Technical Discussion
 - Capital Funding/Fleet Replacement
 - Operations and Maintenance Staffing
- Public Outreach

strategic and financial sustainability plan

- Vision and Strategic Plan
- Organizational and Staffing Plan
- Funding and Financial Plan

- Intended to Position CHT for Continued Success
 - Ensure service is aligned with community goals
 - Adjust staffing and resources to reflect agency size, needs and community expectations
 - Set strategic vision for future growth and development
 - Respond to regional opportunities

project status update

- Organizational Assessment
 - Draft technical memo submitted early January 2014
- State of the System Report
 - Draft report submitted in early December 2013
- Public engagement and input
 - Start conducting outreach in February 2014



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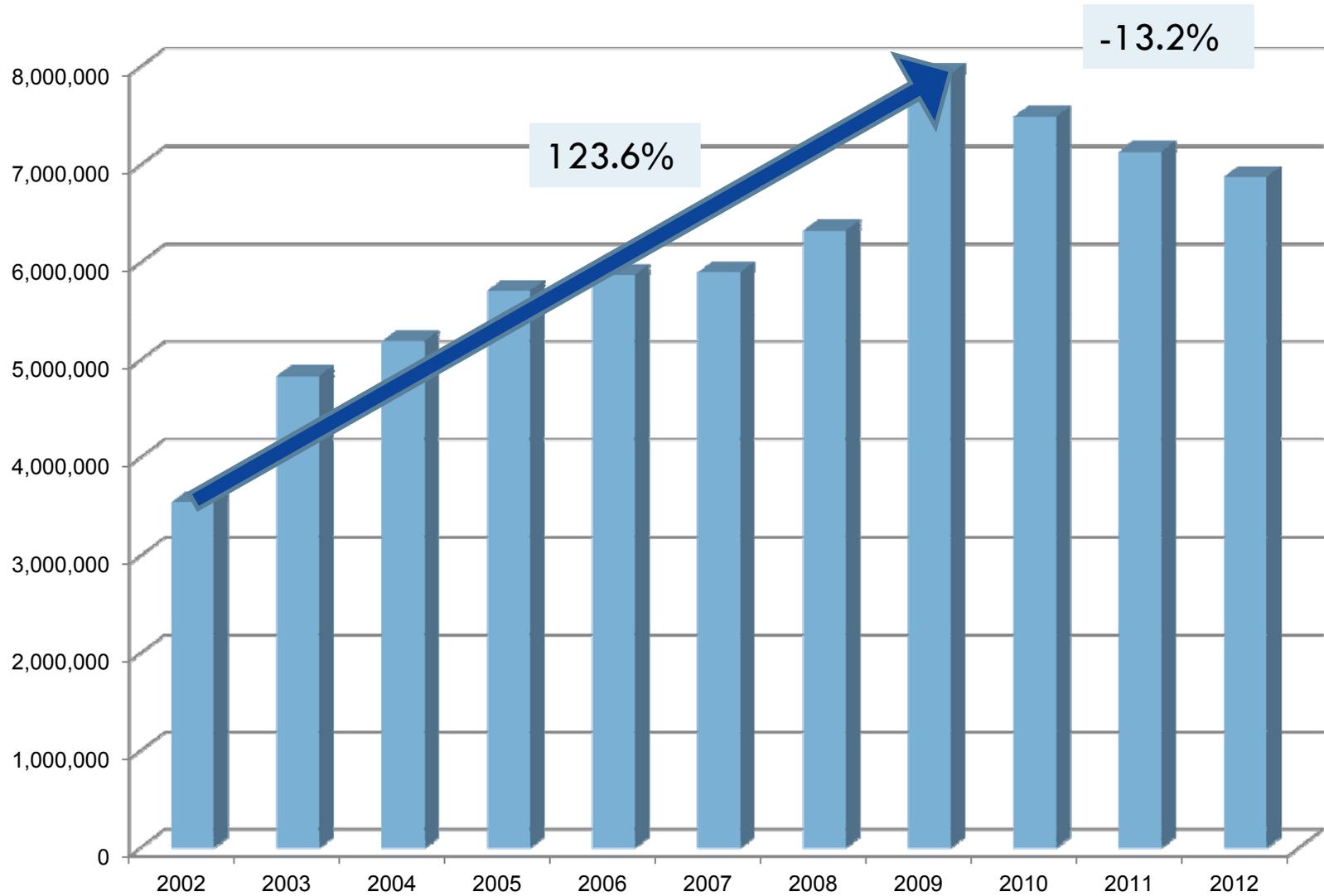
agency growth and development

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story of dramatic growth

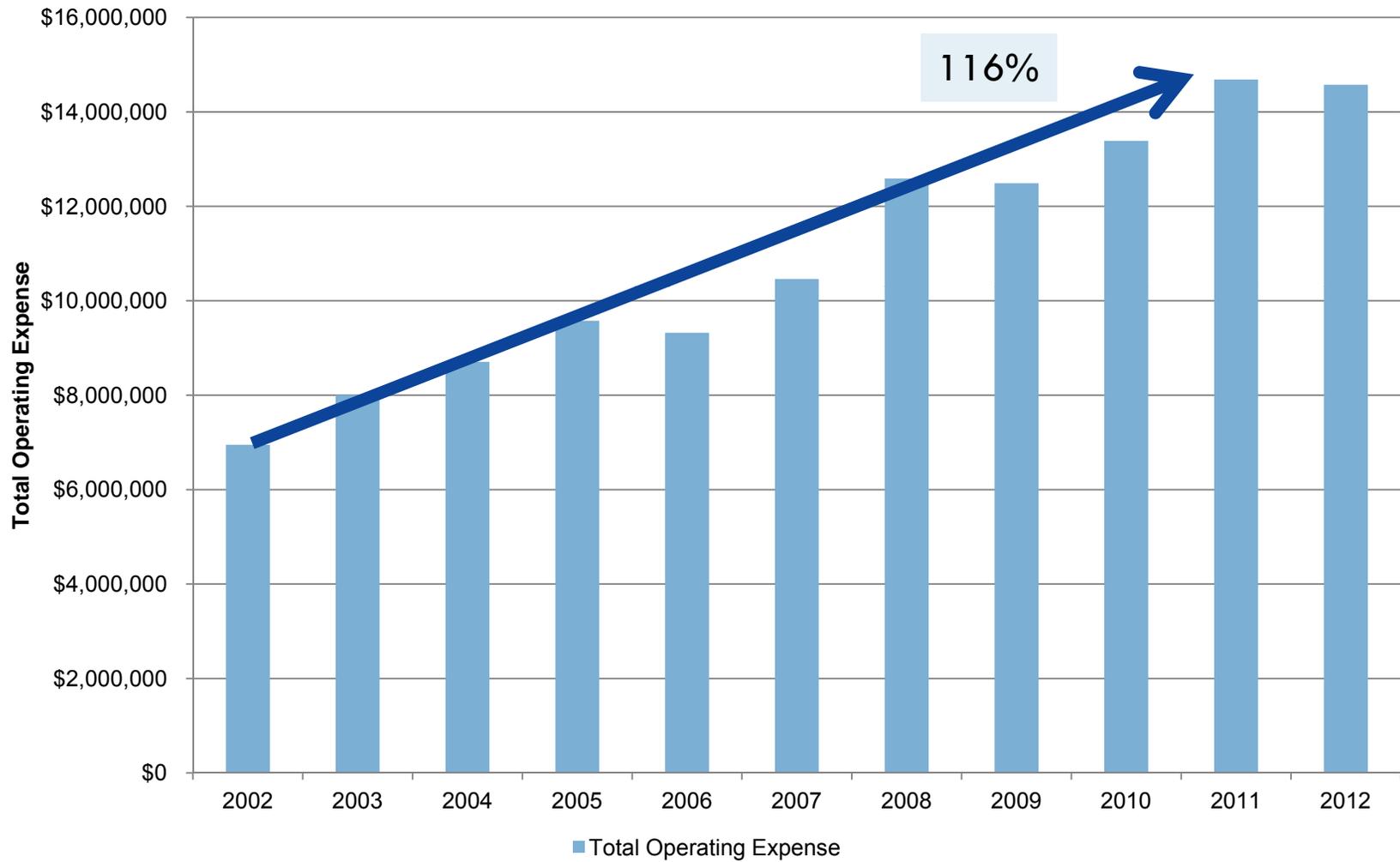
- CHT has nearly doubled in size between 2002 and 2012
 - Ridership
 - Amount of service provided
 - Operating budget/expenses

change in ridership



■ Source: National Transit Database

change in operating expenses



■ Source: National Transit Database

growth creates issues and opportunities

- **Capital planning/fleet replacement**
- **Staffing/organizational structure**
- Governance/management structure
- Long term funding
- Regional transit network development
- Local service design
- Maintaining operational efficiency
- Marketing and information systems
- Supporting local community goals and aspiration



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capital planning and fleet management

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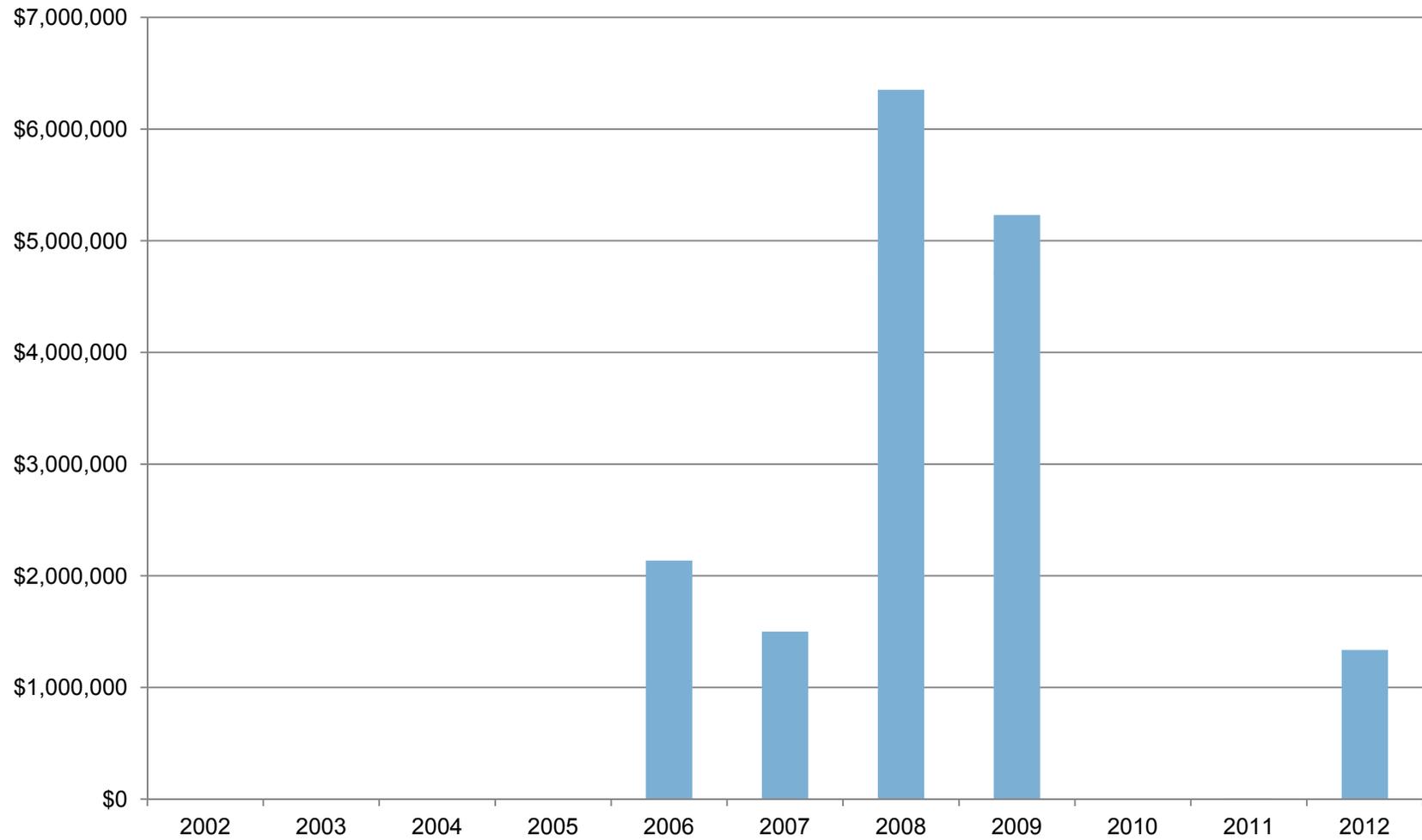
fleet management - background

- Federal Transit Administration talks in terms of vehicle's "useful life"
- Based on vehicle age and miles
- Varies by vehicle type
 - Larger, heavier vehicles tend to have a longer "useful life"
 - Buses - 12 year vehicles
 - Demand response – 4 to 5 year vehicles

fleet management - background

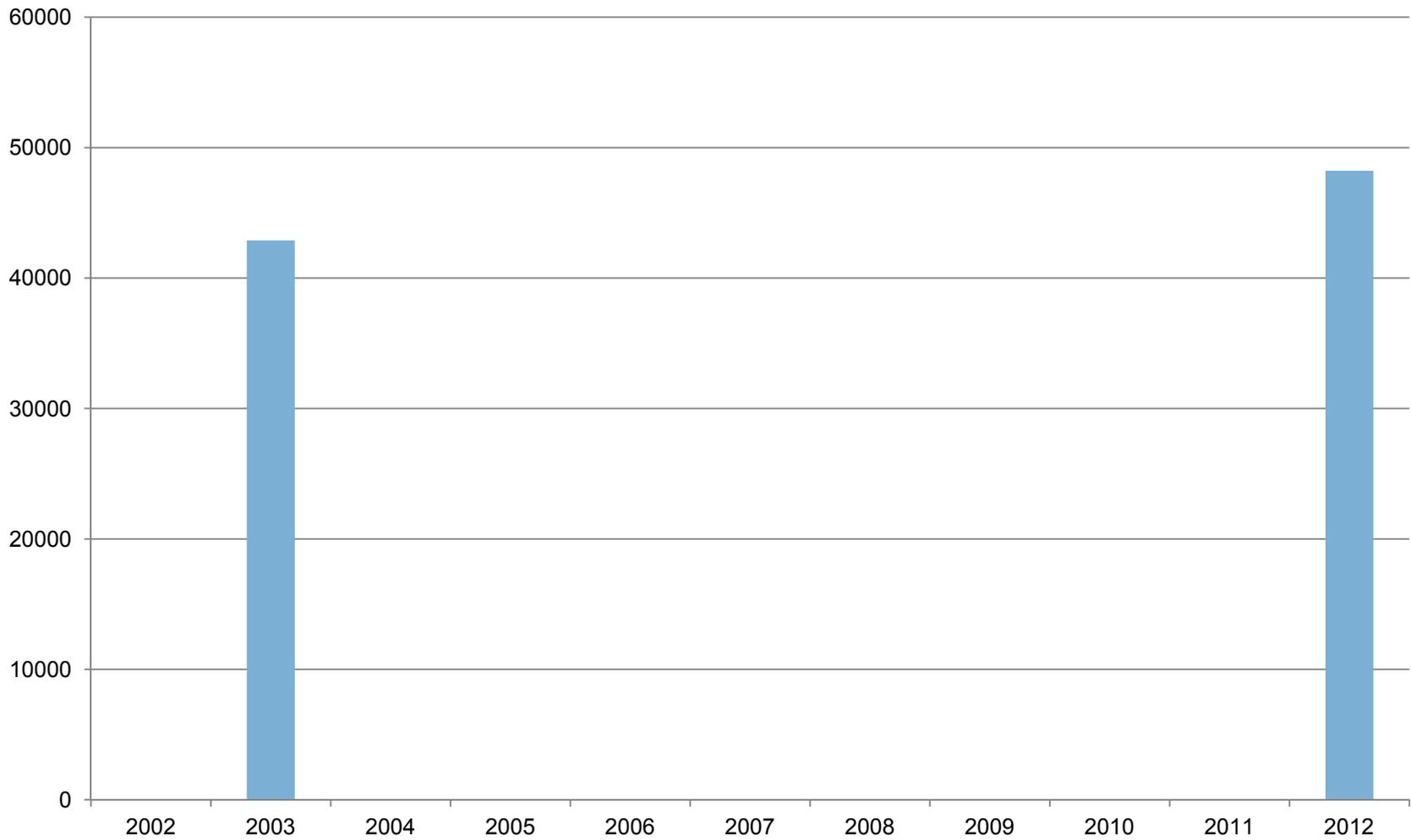
- “Typical” transit capital project funding profile
 - Federal funds - up to 80%
 - State of North Carolina – 10%
 - Local funds – 10%
- Used to have a lot of opportunities for ‘grants’
 - Federal earmarks
 - ARRA funds
- **Challenges for Chapel Hill Transit**
 - Old formulas don’t hold
 - Federal grants “flexed” for operating assistance
 - Support from State is diminishing

historical spending on fixed route vehicles



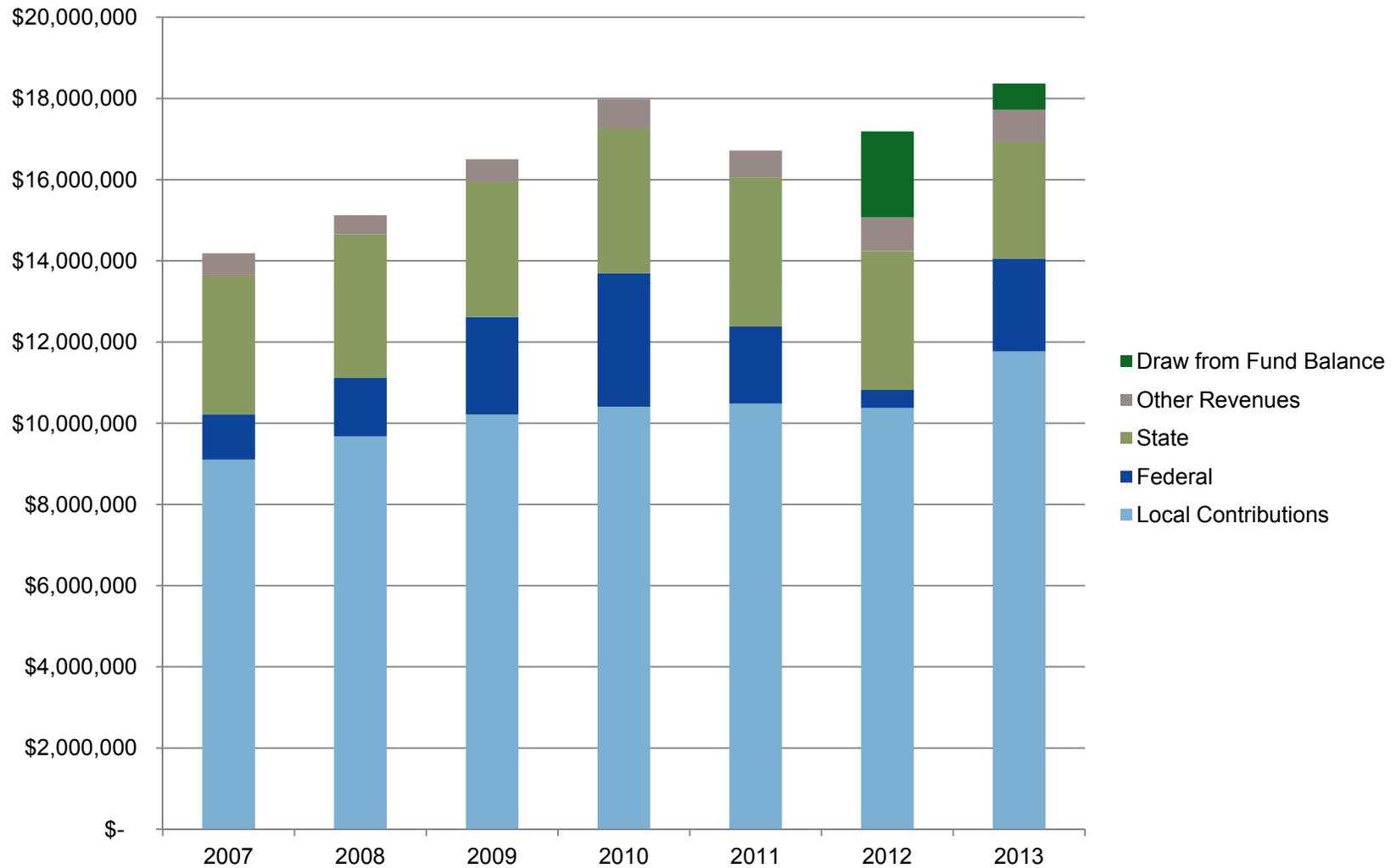
■ Source: National Transit Database

historical spending on service vehicles



■ Source: National Transit Database

chapel hill transit funding sources



existing capital funding program

- Currently, there is no asset management program or vehicle replacement plan
- Historically contributions to capital improvements uneven
 - Funding is intended to cover capital and operating expenses
 - Capital savings come from remaining operating budget/operational savings
- Some capital purchases – especially vehicles – have been postponed

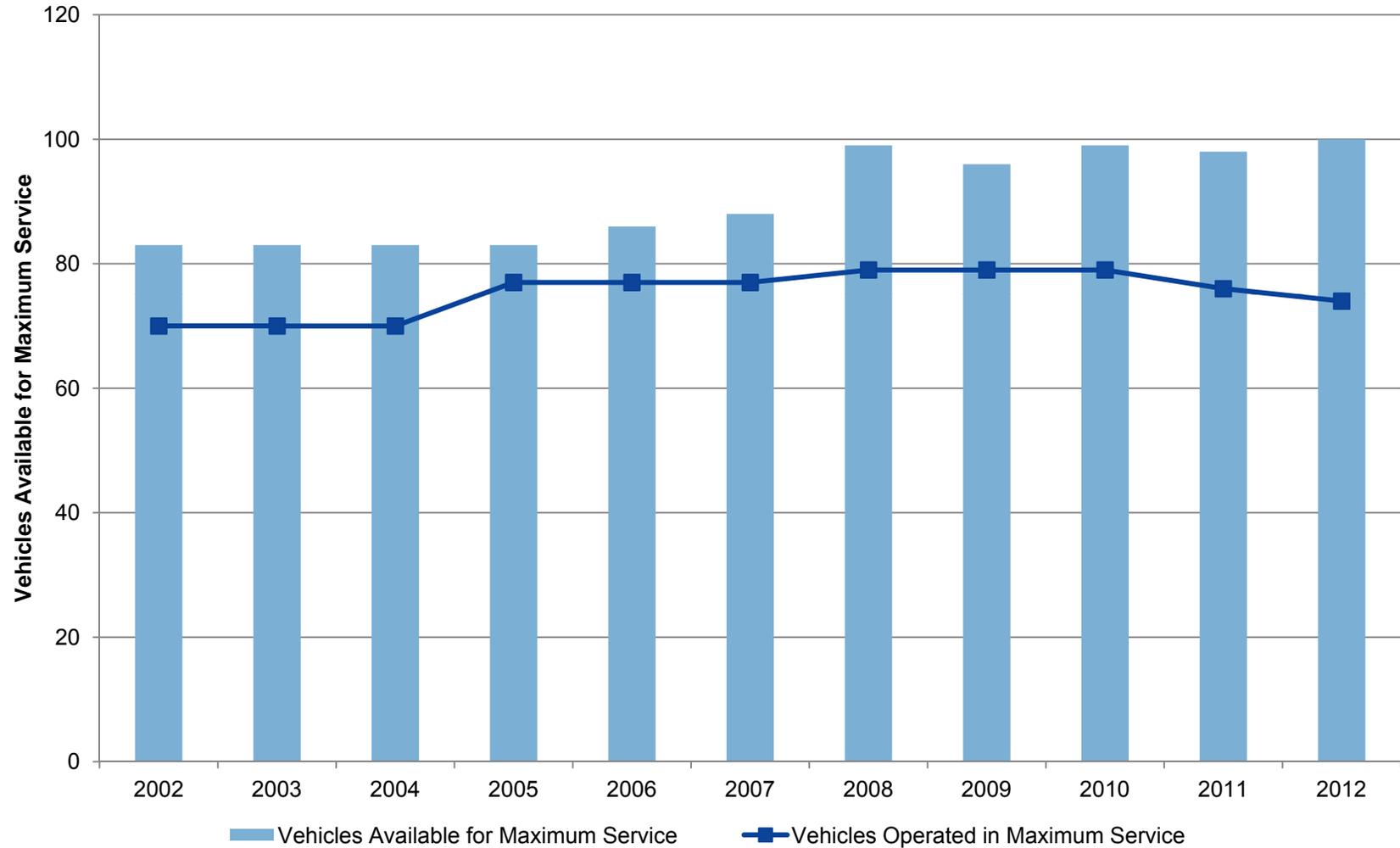
fleet management and replacement

challenges

- Diversity of vehicles
 - Fleet consists of many different types (“makes”) of vehicles
- Demand associated with peak service
- Fleet age
 - Fleet is old and aging

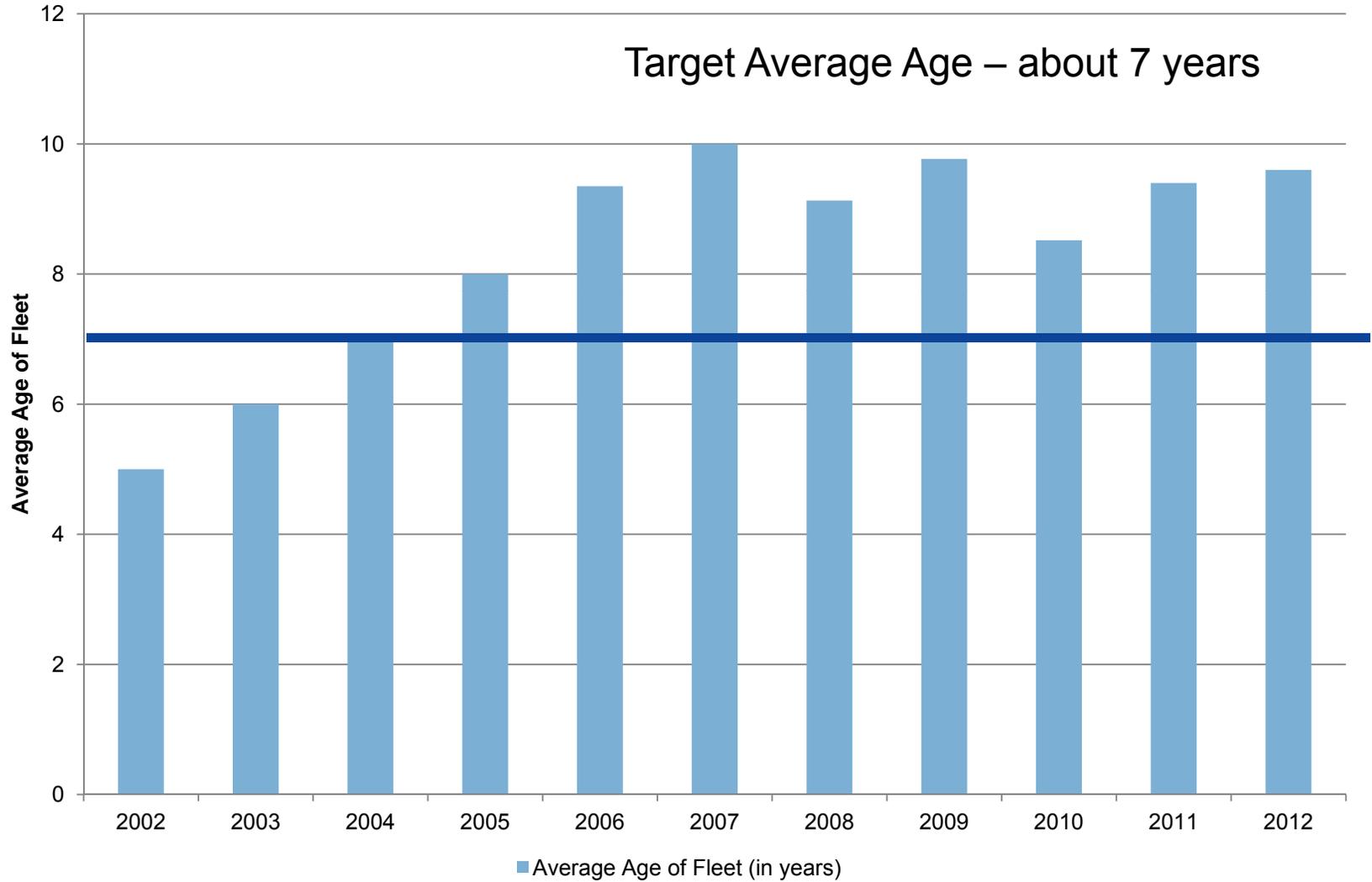


vehicles available and operated in maximum service



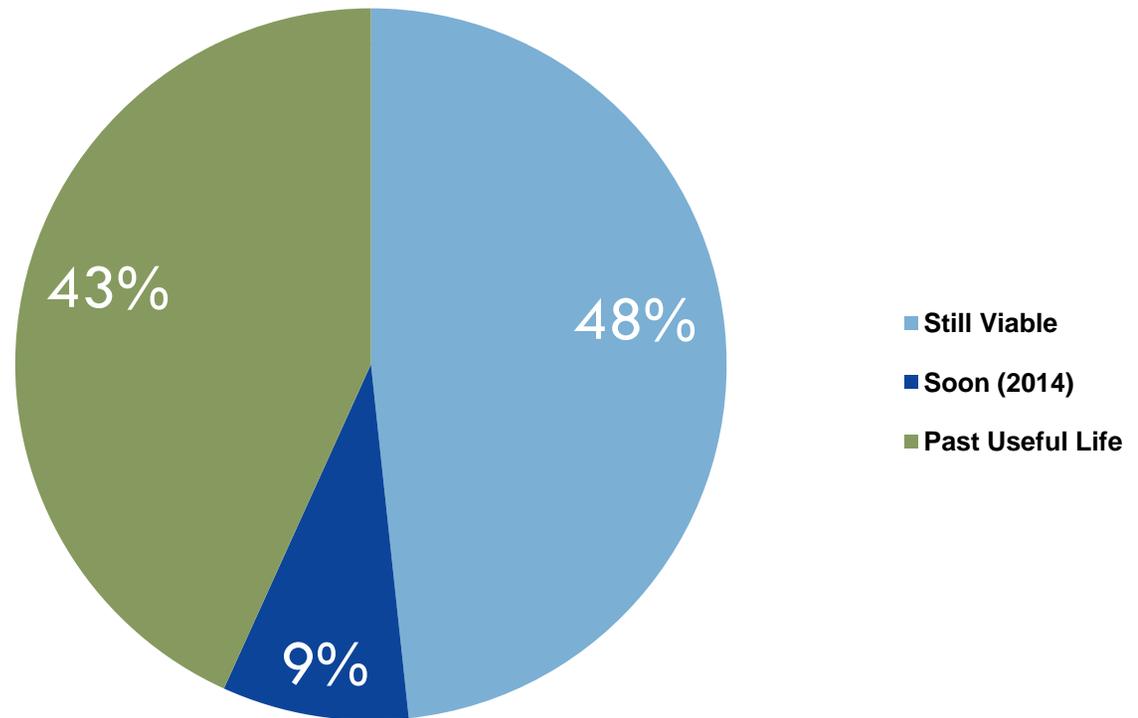
■ Source: National Transit Database

average age of fixed route vehicles (in years)



vehicles past useful life

- Over half of fleet are close to or beyond their useful life
 - All 19 demand response vehicles
 - 42 out of 99 fixed route vehicles
 - 15 vehicles more than 15 years old



■ Source: Chapel Hill Transit

challenge: start replacing vehicles

status update

- 99 Fixed-Route Vehicles
 - 42 vehicles (40% of fleet) beyond their useful life now
 - 19 vehicles (20% of fleet) beyond their useful life in 2016
- Demand Response Vehicles
 - Total of 19 vehicles
 - All 19 vehicles (100%) are beyond useful life now
- Additional need for Service Vehicles
- Expect to purchase a minimum of 61 vehicles between now and 2024
 - ***Assumes no net increase in service***

potential purchase scenario

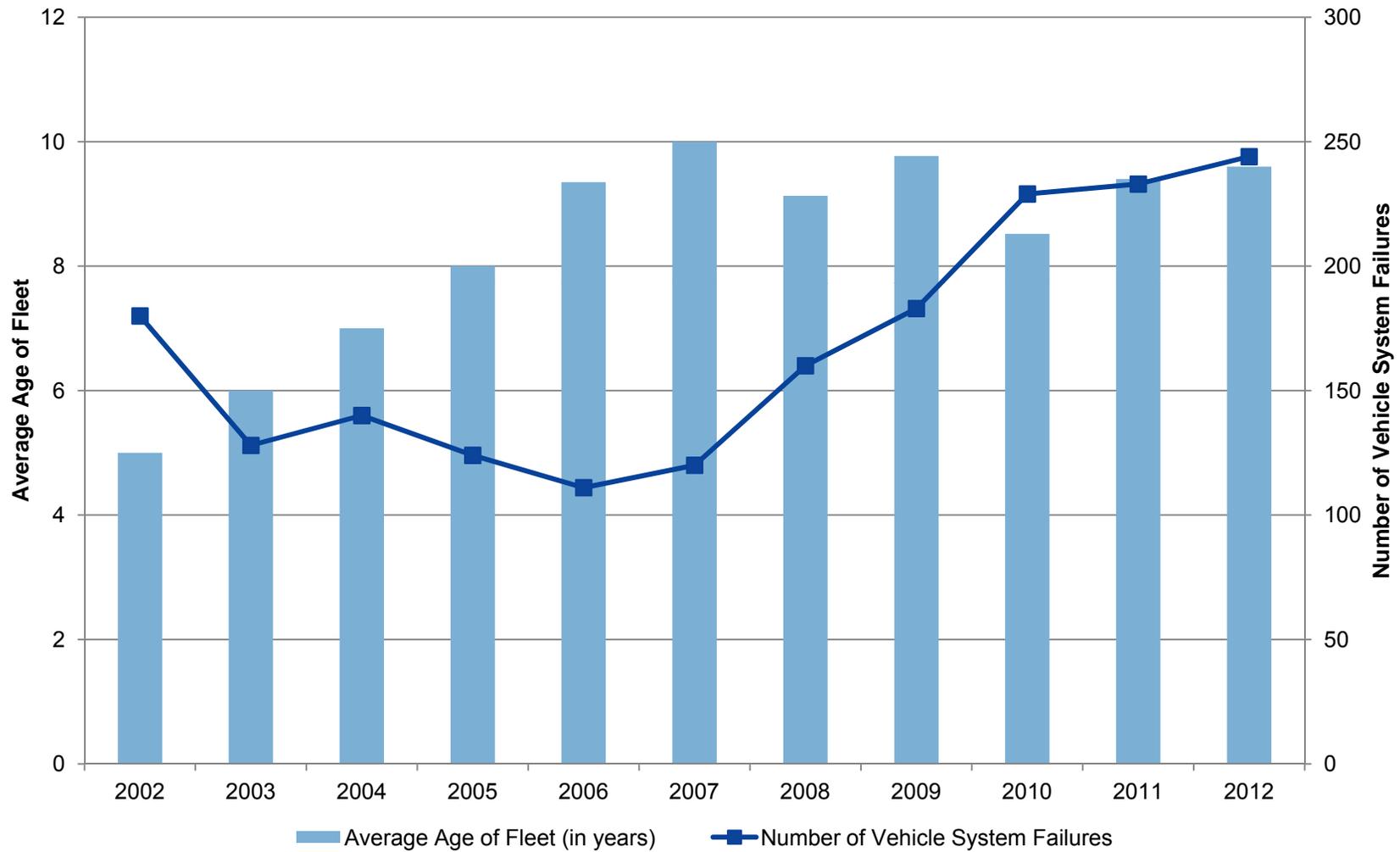
- 2014 – 2015 - purchase 12 vehicles
 - 3 buses oldest vehicles purchased in 1995 and 1996
 - 5 oldest demand response vehicles
 - 4 oldest service vehicles
 - **Estimated cost - \$2.86 million**

- 2015 – 2016 - purchase 14 vehicles
 - 4 buses (1998 vehicles)
 - 6 demand response vehicles
 - 4 service vehicles
 - **Estimated cost \$3.4 million**

implications of no action

- Increased maintenance costs
 - More expensive to maintain
 - Higher fuel costs
 - Leads to increased cost per service mile
- More road calls
 - Decreased service reliability
 - Requires additional mechanical staff
 - Further drives up operating costs
- Impacts on CHT image
 - Negative perceptions on service quality
 - Negative perceptions on safety
- Limits opportunities for service growth and development
 - Can't operate service without vehicles

average age of fleet and vehicle failures



■ Source: National Transit Database

options

potential options and strategies

- Financial/funding Strategies (manage revenue)
 - Purchase vehicles
 - Requires significant investments in short term
 - Leasing/Financing
 - Spreads payments out over several years
 - Grant analysis
 - Likely available for a very small portion of the need
- Service Options (reduce expenses)
 - Reduce intensity of peak period service
 - Reduce number of routes
 - Contract out demand response service (EZ Rider)
 - Potential for operating cost savings



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staffing and organizational structure

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staffing and organizational structure

Three issues to discuss today:

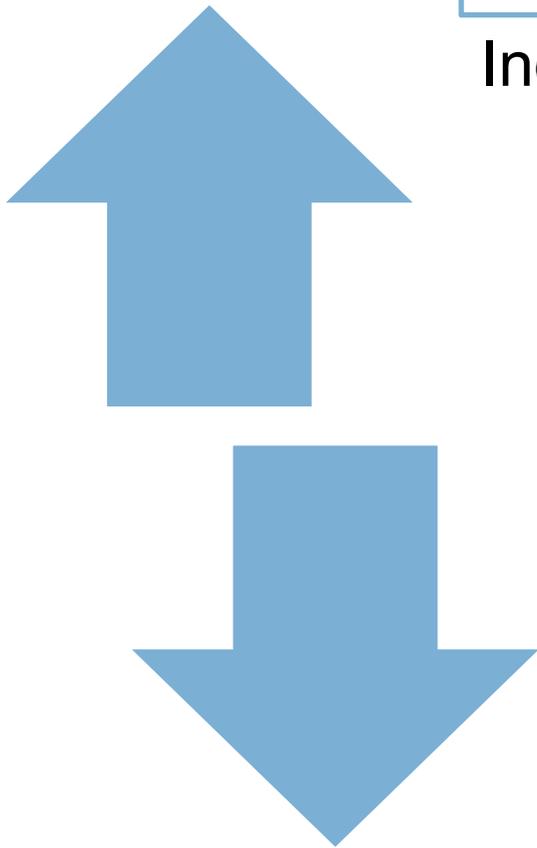
- Operator staff levels
- Maintenance – mechanics staff levels
- Basic management structure

existing staffing levels and organizational structure

- Operations – Annual Revenue Hours per Operator

CHT – 1,510 (2013)

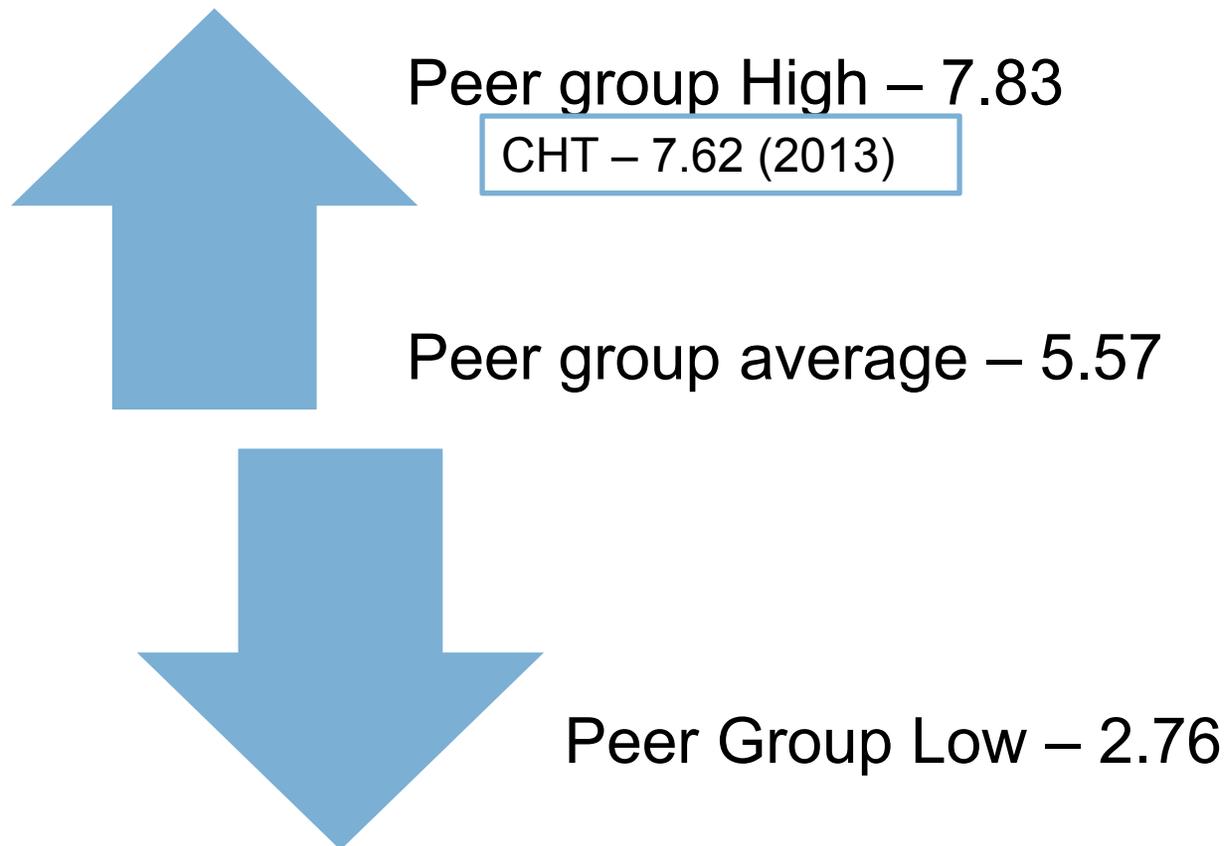
Industry High – 1,500



Industry Low – 1,100

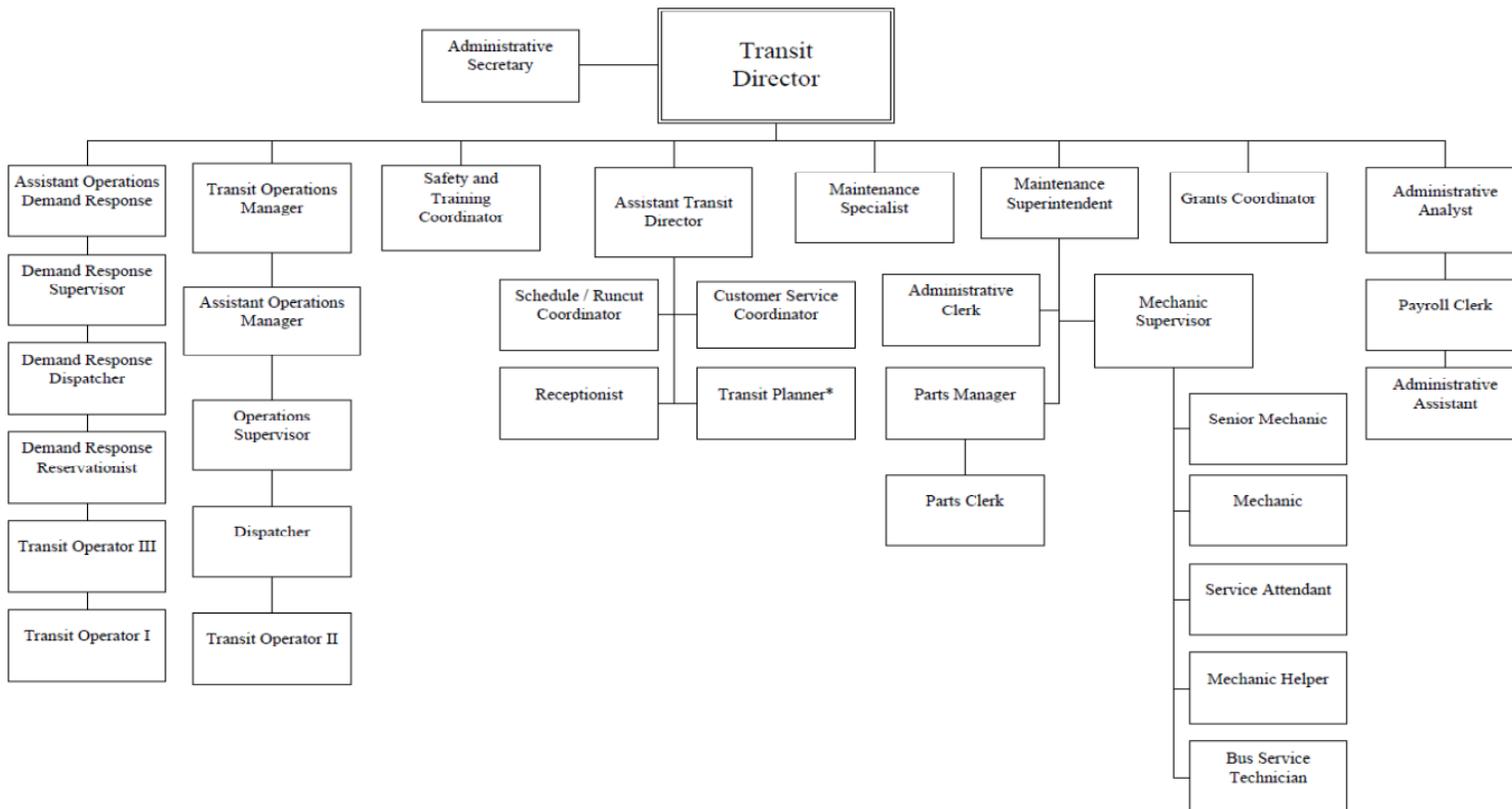
existing staffing levels and organizational structure

- Maintenance – Full size buses per full time mechanic



existing staffing levels and organizational structure

■ Management Organization

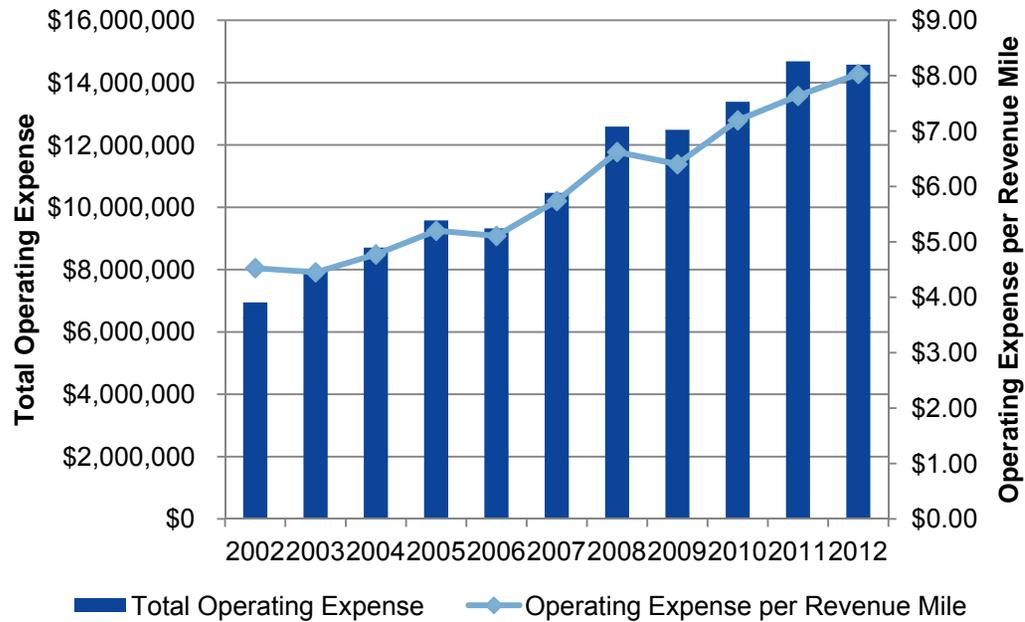


issues leading to challenges

- Rapid growth
- Academic calendar/schedule
- Peak service needs
- Issues in maintaining stable workforce
 - CHT hiring effected by hiring freeze procedures within Town
 - Operators needing to “work up” to cover supervisory positions
 - High rate of overtime
 - Family Medical Leave Act (FMLA) leave
 - Long commutes

implications of shortages

■ Cost per Vehicle Revenue Mile



- Portion spent on overtime/overtime costs
- Safety
- Turnover and absenteeism
- System disruptions

opportunities to improve situation

- Expand/hire operators
 - Conduct analysis of staffing availability and need for both fixed route and paratransit
 - Hire enough operators to fill in supervisory positions as permanent hires fixed route and paratransit
 - Maintain annual operator staff to meet academic calendar needs
 - annual staff model
 - Update overtime policies and practices
 - Update absence policies and practices

- Hire Mechanics
 - Goal -- reach average peer group ratio of full size buses per full time mechanic

- Reorganize Management Organization
 - Larger workgroups to expand flexibility

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public outreach plan

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outreach goals

- Engage CHT community in planning for agency future
- Ensure strategic direction reflects community preferences and priorities
- Build momentum and support for future efforts
 - Potentially increased funding

proposed strategies - toolkit

- Staff and Stakeholder Interviews
- Project Website
- Online Engagement
- Informal In-Person Forums
- Transit Summit
- Public Work Sessions
- Presentation Materials

immediate next steps

- Establish Online Presence
 - Project Web Page
 - Project fact sheet, indicative schedule, contact information
- Hold Transit Workshops
 - Collect public input on community vision for CHT
 - Hold 2 to 3 public workshops
 - Mid-to late February
 - University of North Carolina (Student Union)
 - Carrboro Community Center
 - Hold 2 to 3 “focus group” meetings with special interest groups
 - Seniors
 - Limited English Proficiency groups

immediate next steps

- Develop online interactive tool
 - Build a Transit System Tool
 - <http://bouldertransitdesign.com/>
- Opportunities and Challenges
 - Great educational issue
 - Start front end education about trade-offs and investments
 - Collect input from a broad range of users and non-users
- Draft version of tailored tool ready for review in February
- Go live in March 2014

interactive tool – outcomes and goals

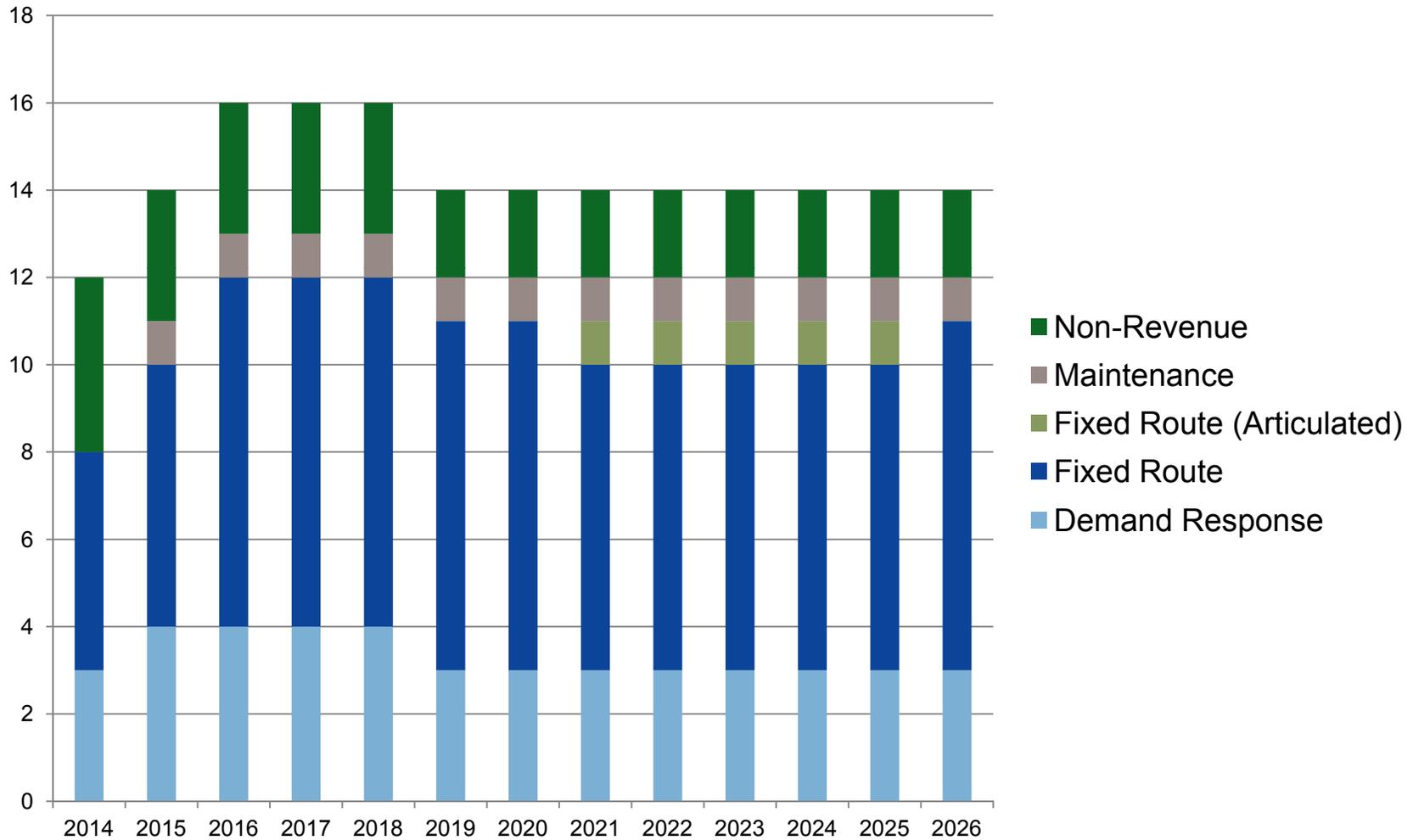
- Education and engagement
 - Understand choices and trade-offs
 - Set expectations
- Development momentum and excitement
 - Game is ‘fun’ and encourages participation
 - Build constituency
- Focus on service and system development
 - More straight-forward
 - Easier to understand and communicate
 - Support development of strategic vision



Bethany Whitaker
47 Maple Street, Suite 103
Burlington, VT 05401
(802) 922-9760
bwhitaker@nelsonnygaard.com

Tim Payne
1402 Third Avenue, Suite 1200
Seattle, WA 98101
(206) 357-7524
tpayne@nelsonnygaard.com

Lifecycle Vehicle Requirements (2014-2026)



Source: Nelson\Nygaard adapted from Chapel Hill Transit

10 year vehicle replacement plan

