| Table 4: Cost Benefit Analysis | | | | | | | | | | | |
|---|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|--------------------|
| Constant Costs in 2010 \$ | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Total |
| Base Project | \$2,100,000 | NA | \$2,100,000 |
| Upgrade Facility as indicated in ALT 1 | \$2,900,000 | NA | \$2,900,000 |
| oppliace raciney as maleated in AET 1 | 72,300,000 | 10/ | 147 (| 147 | 10/ | 10.1 | 147. | 10.0 | 147. | 147. | <i>\$2,300,000</i> |
| Capital Cost of purchasing 2 electric buses | \$2,000,000 | NA | \$2,000,000 |
| Annual O&M for electric buses | \$0 | \$60,000 | \$60,000 | \$60,000 | \$60,000 | \$60,000 | \$60,000 | \$60,000 | \$60,000 | \$60,000 | \$540,000 |
| Annual O&M for diesel buses | \$30,000 | \$30,000 | \$30,000 | \$30,000 | \$30,000 | \$30,000 | \$30,000 | \$30,000 | \$30,000 | \$30,000 | \$300,000 |
| Installation of PV system on the parking | | | | | | | | | | | |
| garage | \$6,000,000 | NA | \$6,000,000 |
| Total | \$13,030,000 | \$90,000 | \$90,000 | \$90,000 | \$90,000 | \$90,000 | \$90,000 | \$90,000 | \$90,000 | \$90,000 | \$13,840,000 |

| Table 5: Project Benefits | | | | | | | | | | | |
|--|-----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| Benefits | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | Total |
| | | | | | | | | | | | |
| Annual Ridership Increases | 42,783 | 240,554 | 240,554 | 240,554 | 240,554 | 67,800 | 67,800 | 67,800 | 67,800 | 67,800 | 1,344,001 |
| Reduction in Annual VMT by other | | | | | | | | | | | |
| passenger vehicles | 3,210,642 | 3,210,642 | 3,210,642 | 3,210,642 | 3,210,642 | 3,210,642 | 3,210,642 | 3,210,642 | 3,210,642 | 3,210,642 | 32,106,420 |
| Vehicle operation cost savings ¹ | \$9,000 | \$27,000 | \$27,000 | \$27,000 | \$27,000 | \$27,000 | \$27,000 | \$27,000 | \$27,000 | \$27,000 | \$252,000 |
| Savings due to state of good repair ² | \$15,000 | \$45,000 | \$45,000 | \$45,000 | \$45,000 | \$45,000 | \$45,000 | \$45,000 | \$45,000 | \$45,000 | \$420,000 |
| Reduction in power consumption ³ | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$100,000 | \$1,000,000 |
| Total cost per unit reduction in CO ₂ | | | | | | | | | | | |
| emissions (ton) | \$297,251 | \$1,671,330 | \$1,671,330 | \$1,671,330 | \$1,671,330 | \$471,066 | \$471,066 | \$471,066 | \$471,066 | \$471,066 | \$9,337,903 |
| Reduction in diesel costs | \$279,742 | \$304,119 | \$328,496 | \$352,873 | \$377,250 | \$401,627 | \$426,004 | \$450,381 | \$474,758 | \$499,135 | \$3,894,385 |
| Total | \$700,993 | \$2,147,449 | \$2,171,826 | \$2,196,203 | \$2,220,580 | \$1,044,693 | \$1,069,070 | \$1,093,447 | \$1,117,824 | \$1,142,201 | \$14,904,288 |

\$3 per ton of CO₂ emitted

http://www.ccap.org/docs/resources/677/CCAP%20Smart%20Growth%20-\$%20per%20ton%20CO2%20 June%202009 %20FINAL.pdf

| Table 6: Safety Benefits | | | | | | | | | | |
|------------------------------------|------|------|------|------|------|------|------|------|------|------|
| Safety Benefits | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Reduction in fatalities | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 | 0.61 |
| Reduction in fatalities | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Reduction in crash injuries | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 |
| Reduction in property damages from | | | | | | | | | | |
| crashes | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 |

Countywide Average annual Crashes = 7200 (pedestrian and motorist) Of the crashes, 1500 are parking lot crashes

| Table 7: Safety Benefits | | | | | | | | | | |
|------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Safety Benefits | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Reduction in fatalities | \$1,589,536 | \$1,589,536 | \$1,589,536 | \$1,589,536 | \$1,589,536 | \$1,589,536 | \$1,589,536 | \$1,589,536 | \$1,589,536 | \$1,589,536 |
| Reduction in crash injuries | \$792,000 | \$792,000 | \$792,000 | \$792,000 | \$792,000 | \$792,000 | \$792,000 | \$792,000 | \$792,000 | \$792,000 |
| Reduction in property damages from | | | | | | | | | | |
| crashes | \$70,000 | \$70,000 | \$70,000 | \$70,000 | \$70,000 | \$70,000 | \$70,000 | \$70,000 | \$70,000 | \$70,000 |
| Total | \$2,451,536 | \$2,451,536 | \$2,451,536 | \$2,451,536 | \$2,451,536 | \$2,451,536 | \$2,451,536 | \$2,451,536 | \$2,451,536 | \$2,451,536 |

Countywide Average annual Crashes = 7200 (pedestrian and motorist) Of the crashes, 1500 are parking lot crashes

| Table 8: Net Total Benefits | | | | | | | | | | |
|------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Net Total Benefits | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Benefits + Safety Benefits | \$3,152,529 | \$4,598,986 | \$4,623,363 | \$4,647,740 | \$4,672,117 | \$3,496,230 | \$3,520,607 | \$3,544,984 | \$3,569,361 | \$3,593,738 |

| Table 9: Addt'l Job Opportunities | | | | | | | | | | |
|-----------------------------------|------|------|------|------|------|------|------|------|------|------|
| Additional Jobs Created | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Management | 1 | NA | NA | NA | 1 | NA | 1 | NA | NA | NA |
| Professional | 1 | 1 | 1 | 1 | 1 | 1 | 1 | NA | NA | NA |
| General Contractors | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | NA | NA |
| Electrical & Technical | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Operations and Maintenance | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | NA |

Footnotes

- 1: 3% of total O & M Costs
- 2: 5% of total O& M Costs
- 3: Reduction in power consumption is assumed to be \$100,000 annually
- 4: National Transportation Statistics http://www.bts.gov/publications/national_transportation_statistics/pdf/entire.pdf
- ** http://www-fars.nhtsa.dot.gov/Main/index.aspx
- *** Average annual Accidents in Collier County provided by county