

Tree Planting Along CSAH 152

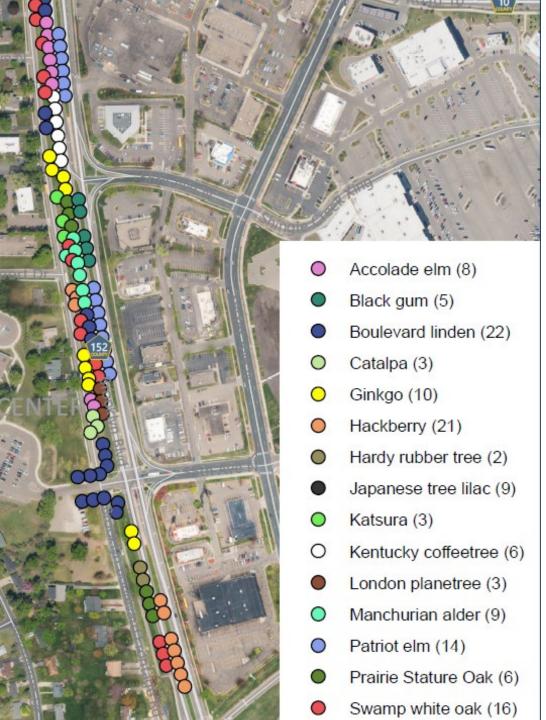
- Brooklyn Boulevard (CSAH 152) in Brooklyn Center was recently reconstructed
- Trees were removed along **this stretch** of the corridor- about 3/5 of a mile
- i-Tree Landscape calculations show that these two census blocks have a 3.5% tree canopy cover, and a 51.7% impervious surface cover
- Hennepin County is going to replant 137 trees along the highlighted stretch.
- What benefits will these trees provide?

CO2 Total 1,100 1,000 Cumulative US Dollars (\$) 900 800 700 600 500 400 300 200 100 2020 2022 2026 2029 Year

Breakdown of tree benefits

Breakdown of Tree Benefits

- Over the next ten years, these 137 trees will provide \$1,036 worth of quantifiable benefits
- This figure does not include stress reduction, traffic calming, urban heat island effect reduction, and decreased road maintenance costs
- During this ten year period, the trees will intercept a total of 145,450 gallons of rainfall and help avoid 42,259 gallons of stormwater runoff.
- This is especially beneficial as the corridor abuts many parking lots and other impervious surfaces.
- It is also worth noting that trees produce more benefits as they mature, and these benefits will only increase after the ten year period.



Why Focus on Ten Years?

- According to a 2007 rapid assessment of ash and elm trees by the Minnesota Department of Natural Resources, 10% of Brooklyn Center's tree canopy is comprised of ash trees
- Due to Emerald Ash Borer (EAB) in the next ten years, nearly every ash tree in the county will be dead
- This is one of the reasons that the county is striving to plant heavily and diversely along this corridor
- The 137 trees will be from 15 different species, most of which are underrepresented in the area

■ CO2 Total 1,100 1,000 900 Cumulative US Dollars (\$) 800 700 600 500 400 200 2020 2022 2029 Stormwater Air Quality CO2 Total 7,000 €6,000 Cumulative 1,000

Breakdown of tree benefits

2032

Year

2026

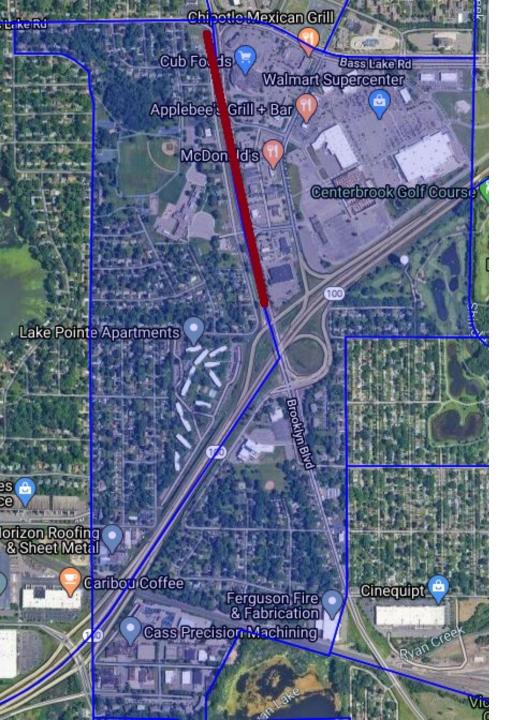
2020

2038

2044

Looking Further Ahead

- The second graph shows the quantifiable benefits of the tree planting over the next twenty-five years
- The vertical red lines serves as an indication of ten years since the tree planting, to aid in the visual comparison
- It is evident that the benefits are not linear, but increase along with the maturity of the trees
- Over the next 25 years, the trees provide \$6,980 worth of quantifiable benefits, as opposed to just \$1,036 from 10 years
- Trees are the only public infrastructure that increases in value over time



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- This portion of corridor that is being replanted after a reconstruction project could serve as a good example of the value of dense and diverse tree plantings along corridors, especially in areas with low canopy cover and diversity.
- As the urban heat island effect is exacerbated and canopy loss and invasive pests become are increasing, plantings like this may become more commonplace in an attempt to curtail these issues.