

## **Express Lane Membership: Executive Summary for Pilot & Rollout Strategy**

A Scan & Go complement that addresses shrinkage and fairness for time-sensitive shoppers who prefer low-tech solutions.

### **Customer Pain Point**

Problem: Time-draining lines for bulk buyers frustrate loyal shoppers, ruining the *Costco Run!*

Solution: Introduce a \$400/year Express Lane (EL) membership.

Rationale: Offer all members the option to upgrade for faster, expedited checkout.

---

### **Lane activation/Sequence**

EL staff efficiency: When idle, EL staff support normal lanes until EL members arrive.

Staff activation: EL member approaches EL entrance, taps EL card on barcode reader.

Validation: Card scan confirms membership and triggers staff dispatch to Express Lane.

EL Staff: Once alerted, EL staff quickly move to EL lane, until customers have been serviced.

Staff Reallocation: After all EL members are served, staff return to supporting standard lanes.

---

### **Target Customers, Goals, Estimates**

Target Customers: Time sensitive customers who make over 125K a year.

Goals: Achieve 3% adoption at pilot store and ensure minimal wait times (< 5min) at EL.

Express Lane Wait Times: 3–5 minutes until reaching the cashier, even at peak hours!

---

### **Testing & Phased Rollout Plan**

Validation Testing: 7-item survey validates problem severity, willingness to pay, and fairness.

Validation Timing: The survey should be administered when shoppers are in line.

Pre-Pilot: Launch an EL lottery to build awareness and ensure fair access for all members.

Controlled adoption: Cap EL memberships at 300/month to manage scale and gather data.

Lottery Iteration: Adjust lottery membership limits based on demand and operation constraints.

---

### **Financial Forecasts and Estimates**

Pilot annual Cost: Cost of express lane is \$57K including staff, training and other updates.

Break Even Analysis: Only 142 members are needed to upgrade in order to offset \$57K cost.

3% Adoption Net Profit Potential: Express program adds **\$1,012,500<sup>1</sup>** per year per store.

Risks: Fairness Perceptions, peak time surges, survey validity.

---

<sup>1</sup> Marginal net profit per store assumes only **Executive members** upgrade to **EL** memberships implying greater profits if regular members upgrade directly to EL memberships

## THE PROBLEM

Biggest Costco Customer Pain Point:

**Time-draining lines for bulk buyers frustrate loyal shoppers, ruining the *Costco Run***<sup>23</sup>

## THE SOLUTION

Introduce an Express Lane (EL) program offering an expedited checkout experience for Costco members willing to pay **\$400/year** for fast, prioritized service.

### Solution Description

The express lane operates on a trigger-based model, activated when an EL member scans their card at the designated entry or checkout. This triggers an immediate staff response to open and operate the lane.

To maintain efficiency, the lane is only active when needed. When idle, the assigned EL staff assist with standard lanes, reducing overall wait times and improving labor utilization. If a surge occurs, additional staff—trained in EL operations—can temporarily shift from standard lanes to either support the existing Express Lane or open an additional EL lane. Once demand subsides, they return to their original positions.

**While EL members may occasionally wait behind other Express users, especially during high-traffic moments, the majority will reach the register in under 3 minutes—and even in edge-case surges, wait times are expected to stay below 5 minutes.**

The program leverages existing infrastructure (member ID scans, POS alerts), minimizing technical overhead. The value proposition is clear: the Express Lane membership offers high-earning, time-sensitive members a seamless checkout, while preserving Costco's reputation for both value and respect for members' time.

### **SOLUTION SEQUENCE:** triggers and responses

**Idle Mode:** With no EL members present, EL staff assist standard lanes to improve flow.

**Entry & Detection:** EL signage and card reader clearly identify the lane. Member scan sends real-time alerts to EL staff.

**Rapid Response:** EL staff immediately move to activate and operate the Express Lane.

**Surge Response:** If multiple EL members arrive, trained standard-lane staff may assist or open a second EL lane.

**Smart Load Monitoring:** Enhanced scanners count EL members to inform real-time staffing adjustments.

**Reallocation:** Once EL demand subsides, additional staff return to support standard lanes.

---

<sup>2</sup> [https://youtube.com/shorts/6HVnSPBtrSA?si=pL48aHluQhy\\_gC8U](https://youtube.com/shorts/6HVnSPBtrSA?si=pL48aHluQhy_gC8U)

<sup>3</sup> <https://youtube.com/shorts/6hJJ9cX-yBY?si=-YpH-x6V5BK7N87V>

## KEY CUSTOMER TARGET:

---

Target Adopters (shoppers earning  $\geq$  125K+) ~34% of all members or 31M

- **Average target adopters per store** ~ 49K members
- **Adoption target** ~ 3% of total store members, 7.6% of target group (3,750 members)
- **Visit frequency:** ~24–30 trips annually; average spend (\$114–150 per visit)

Why this Target group:

A PYMNTS Intelligence survey of 2,878 U.S. consumers (January 2025) found that:

- **67%** of people used at least one convenience service (like grocery or meal delivery) in the past year.
- Among households earning **>\$100K**, this rate jumps to **75.3%**, compared to **59%** for lower-income households<sup>4</sup>

According to Empower's 2024 spending review<sup>5</sup>, the average American spends approximately **\$254 per month** on convenience services such as food delivery and ride-sharing. Given this established spending behavior, particularly among higher-income households, an additional **annual investment of \$270** for enhanced in-store convenience—such as the EL Membership—is a **reasonable and aligned extension of existing consumer habits**

---

<sup>4</sup>[https://www.pymnts.com/study\\_posts/the-price-of-time-when-consumers-opt-for-convenience](https://www.pymnts.com/study_posts/the-price-of-time-when-consumers-opt-for-convenience)

<sup>5</sup> <https://www.empower.com/the-currency/money/what-americans-spent-saved>

**WAIT TIME ANALYSIS:** How long will Express Lane (EL) members have to wait?

*Even during peak hours, Express Lane members wait less than 5 minutes—and in most cases, under 3 minutes—to complete checkout.*

### **Wait Time Assumptions**

- Peak customer load: ~1,298 customers per hour
- Off-peak customer load: ~811 customers per hour
- 3% of total shoppers use the Express Lane
- One dedicated Express cashier
- Each Express customer takes 1 minute to check out
- Customer arrivals follow a Poisson (random but steady) pattern
- Service times are approximately consistent (average of 1 minute per customer)
- Customers are served in order, with no skipping or abandonment
- The queue has no size limit (infinite capacity)
- Wait time reflects time spent waiting *before* checkout begins, not 1-minute service time
- No major crowd surges or system breakdowns assumed during modeling
- M/M/1 (single-server, steady-arrival, steady-service) queue model (Erlang-C formula.)
- One Express Lane serves ~3.9% of peak shoppers (~4,800) with <5 min waits<sup>6</sup>.

### **Erlang-C Wait Time Formula (M/M/1):**

For a **single server** system (like one Express Lane):

$$W_q = \frac{C(a)}{\mu(1 - \rho)}$$

Where:

- $W_q$ : Average wait time in queue (minutes)
- $\mu$ : Service rate (customers per hour)
- $\lambda$ : Arrival rate (customers per hour)
- $\rho = \frac{\lambda}{\mu}$ : Utilization (how "busy" the system is)
- $C(a) = \frac{\rho}{1-\rho}$ : Erlang-C formula for M/M/1

So:

$$W_q = \frac{\frac{\rho}{1-\rho}}{\mu(1-\rho)} = \frac{\rho}{\mu(1-\rho)^2}$$

### Wait time summary

Express Lane members experience minimal delays—even during peak traffic. With one dedicated cashier and 3% adoption, average wait times stay under 3 minutes, and never exceed 5. A single Express Lane can comfortably serve up to 4,800 members per store before additional lanes are needed.

---

<sup>6</sup> Regular lane staff can assist Express during surges, then return once flow stabilizes.

## TESTING AND VALIDATION

Validation of the Express Lane (EL) model will follow a structured, three-part survey approach:

- A. **Problem Validation** – to assess how frequently and intensely members experience frustration with long checkout lines.
- B. **Willingness-to-Pay Testing** – to determine whether a \$400 premium membership is perceived as a worthwhile tradeoff for convenience.
- C. **to isolate pricing perception bias.** Two framing variants will be tested: one positioning standard members as receiving a discount, the other positioning EL members as paying a premium. This A/B framing helps evaluate how fairness perceptions shift based on situation framing, not price. Additionally, it serves as a proxy to assess whether members might interpret tiered benefits as elitist or justified, helping surface fairness concerns between membership levels. This approach enables us to confidently answer the following questions:
  - A. Is this a problem customers truly care about?
  - B. Will enough members pay for a premium solution?
  - C. Do customers perceive the Express Lane model, and its pricing, as fair?

Section A: Pain Point Validation ( Strongly Disagree [1] - Strongly Agree [6] )

- Item 1: ***Long checkout lines make the Costco experience frustrating for me.***
- Item 2: ***I would find it valuable to skip the regular checkout line entirely.***
- Item 3: ***I would use a dedicated lane that moves me ahead of other shoppers if it were available.***

Section B: Pricing and Value Proposition ( Strongly Disagree [1] - Strongly Agree [6] )

- Item 4: ***I would pay a premium to bypass standard checkout lines at Costco.***
- Item 5: ***Paying \$400/year for express checkout access—where I receive priority over standard lines and minimal wait times—is worth it to me.***
- Item 6: ***Having guaranteed Express-line checkout access—with minimal wait times—would make me shop at Costco more often.***

Section C: Fairness Perception of Express Lane ( Extremely Unfair[1] - Extremely Fair [6] )<sup>7</sup>

- Item 7 Version [A]: ***Costco members who are willing to wait in long checkout lines receive a discounted annual membership compared to the \$400 express lane members.***
- Item 7 Version [B]: ***Costco members who are unwilling to wait in checkout lines pay a \$400 premium compared to other members.***

---

<sup>7</sup> Two test versions with reverse framed inquiries to gauge fairness bias, anchoring, and willingness to pay

## **TESTING IMPLEMENTATION:** Who and When should shoppers take the survey?

To accurately capture shopper sentiment, the validation survey should be administered **while customers are actively waiting in line**, ideally during **peak congestion periods**. This timing ensures responses are collected **at the height of emotional engagement**, when **frustration is most acute** and perceptions of wait times, fairness, and checkout pain are clearest. By surveying in-the-moment, Costco can more precisely measure:

- **Problem severity** (emotional cost of waiting)
- **Willingness to pay** for expedited service
- **Perceived fairness** of a tiered checkout system

This real-time feedback yields stronger validation than post-visit surveys, which risk recall bias and emotional flattening.

## **PRE-PILOT IMPLEMENTATION:** Launch an Express Lane (EL) Lottery providing access to all members

In order to ensure that visibility and fairness are maximized among all members, the Express Lane lottery should be launched in-store and online during a 30-day pre-pilot period. All members should be eligible to enter, reinforcing inclusivity while maintaining the exclusivity of limited access. This open-entry model builds awareness of the new service, ensures broad exposure, and diffuses fairness concerns by offering every shopper a chance to participate.

To control early-stage implementation, EL memberships will be capped at 300 per month during the pilot. This controlled adoption enables Costco to monitor lane performance, staff responsiveness, and customer satisfaction while minimizing operational risk.

Lottery enrollment data and demand signals will inform monthly adjustments. If demand exceeds capacity, Costco can:

- Randomly select members from the pool to maintain fairness
- Automatically roll over unselected members into the next month's lottery
- Scale membership caps in response to staff readiness and service throughput

This phased, adaptive rollout ensures Costco can test, learn, and refine the program before expanding system-wide.

**UPGRADE IMPLEMENTATION:** When and how to transition to targeted membership outreach

Once initial awareness and fairness concerns have been addressed through the lottery rollout, Costco can shift to direct upgrade offers as the primary enrollment strategy. At this stage, the Express Lane (**EL**) is an established, visible service—making targeted outreach both efficient and appropriate.

Shoppers should be approached with EL upgrade offers while waiting in standard checkout lines, ideally after experiencing a noticeable delay. This moment captures peak frustration, making the benefit of expedited service immediately relatable. Seeing EL members bypass the line creates natural urgency and reinforces the value proposition.

Membership staff or digital prompts (e.g. app notifications, on-screen kiosk prompts) can present the upgrade offer in real time. This approach:

- Maximizes conversion by aligning the pitch with shopper pain
- Feels more relevant and justified now that lottery access has run its course
- Enables responsive scaling of EL membership without added perception risk

This post-lottery phase prioritizes precision: reaching the right shoppers, at the right time, with minimal overhead.

## FINANCIAL FORECASTS

1. **Annual Cost of Express Lane (EL):** \$57,000 for EL staffing and related expenses
2. **Break Even Analysis:** Only 142 EL members needed to offset 57K cost
3. **3% Adoption:** 3,750 member upgrades add \$1,012,500 in marginal net profit per store.
4. **Max Profit Before 2nd Lane:** 4,800 members yield \$1,282,500 annually—while keeping wait times under 5 minutes.
5. **Scaling Across US(591):** Would generate \$598.4 million in annual marginal net profit.

### Resource Cost Per Store MVP (annual)

1. Express line staffing (1 employee <b>supports normal lanes when idle</b> <sup>8</sup> )	\$45,000
2. New EL membership card production per year	\$2,000
3. <b>System Integration</b> <sup>9</sup>	\$2,000
4. Marketing and Signage awareness campaign	\$5,000
5. Maintenance and <b>Supplies</b> <sup>10</sup>	\$3,000
Annual MVP Total Cost:	<b>\$57,000</b>

### Break Even Analysis

- Each store needs to enroll just **142 EL members** at \$400/year to fully cover the \$57,000 annual program cost. Everything above that is profit.

### Achieving 3% adoption: marginal profit contribution (3750 members upgrade to \$400)

- At a 3% adoption rate (3,750 members upgrading from Executive), the EL program contributes **\$1,012,500** in marginal net profit per store, assuming a \$270 profit per member.

### Express lane capacity (4,800): profit limit before second lane needed

- With 4,800 EL members upgrading from the Executive Costco membership, the program generates **\$1,282,500** in marginal net profit per store—all while maintaining wait times under 5 minutes (**even during peak times!**) with just one Express Lane.

### Implication of US Store wide 3% adoption

- If 3% of members adopted EL membership nationwide, Costco would generate approximately **\$598.4 million in annual marginal net profit** across all 591 U.S. stores.

---

<sup>8</sup> Express employee moves to Express Lane once Express Customer triggers barcode with Express membership card triggering alert for team-members to staff the lane. Otherwise, when idle, the Express employee will support normal lanes to expedite service for normal customers. A win-win for all!

<sup>9</sup> One-time tech setup to link member ID to POS for priority trigger

<sup>10</sup> Scanner for Express customer trigger



**RISKS AND MITIGATION OPTIONS:** what could go wrong, and what should be done about it?

**1. Surge Overload in Express Lane**

**Risk:** Too many EL members arrive simultaneously.

**Monitor:** Card reader counts & timestamps; queue/staff lag.

**Mitigate:** Train backup EL staff; convert low-traffic lanes.

**Iterate:** Set triggers (e.g., 3+ = 2nd staff); review weekly.

**2. Insufficient Staff Readiness / Cross-Training Gaps**

**Risk:** Staff slow or unfamiliar with EL operations.

**Monitor:** EL scan-to-activation logs; manager spot checks.

**Mitigate:** EL response training in onboarding + refreshers.

**Iterate:** Run 1-minute drills; staff feedback on unclear steps.

**3. Perceived Elitism by Standard Members**

**Risk:** EL visibility causes dissatisfaction.

**Monitor:** Normal lane pulse surveys; complaint tracking.

**Mitigate:** Market EL as time-saving, not exclusive; respectful signage.

**Iterate:** A/B signage ("Fast Track" vs. "Express"); measure tone shifts.

**4. Tech Malfunction (Scanner/POS Alert Fails)**

**Risk:** EL not triggered = frustration + delay.

**Monitor:** Faulty scan reports; manual activation logs.

**Mitigate:** Dual triggers (entry + checkout); manual fallback SOP.

**Iterate:** Monthly tech audits; swap hardware if failure >2%.

**5. Express Lane Underutilization**

**Risk:** Low adoption undermines ROI.

**Monitor:** Upgrade conversion rates; EL use frequency.

**Mitigate:** In-line offers; 1-month or prorated trials.

**Iterate:** A/B messaging ("save time" vs. "skip line"); test sign impact.

**6. Survey Signal Inaccuracy**

**Risk:** Weak sentiment data from bad timing/design.

**Monitor:** Survey completion rate, timing, and quality.

**Mitigate:** Administer during peak wait; limit to 7 core Qs.

**Iterate:** Test timing windows; adjust by sentiment clarity.

## **CLOSING THOUGHTS:** Why Express Lane can complement Scan & Go

As Scan & Go gains traction for its app-based convenience, Costco has an opportunity to offer a parallel service that meets the needs of a broader customer segment. Express Lane (**EL**) membership delivers a faster checkout experience without relying on personal tech or shifting shrinkage risk onto the store.

Unlike Scan & Go, EL does not depend on shopper tech proficiency, cart-size compatibility, or trust-based scanning behavior. It preserves operational control while offering members the dignity of choice—opt in for speed, or continue using standard checkout.

By keeping staff in the loop, EL reduces friction for bulk buyers, non-digital users, and those seeking reliability over novelty. This makes EL a natural complement to Scan & Go—not a replacement, but an alternative path to efficiency.

This dual-path model enhances the overall member experience:

- It diversifies service options without compromising Costco's value ethos
- It reduces checkout friction across shopper types
- It allows innovation to scale inclusively, rather than selectively

Costco can lead in customer-first innovation not by choosing one experience over another—but by offering the right experience for the right member, at the right moment.